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THE EXTERNAL DESIGN PHASE OF THE BREEDING AND MULTIGENERATION SUPPORT SYSTEM: A TRACKING AND DECISION SUPPORT SYSTEM FOR NCTR

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Prepared for the
National Center for
Toxicological Research

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Energy Division
Transportation and Systems Research Section

THE EXTERNAL DESIGN PHASE OF THE BREEDING AND MULTIGENERATION SUPPORT SYSTEM: A TRACKING AND DECISION SUPPORT SYSTEM FOR NCTR

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BREEDING MULTIGENERATION SUPPORT SYSTEM

EXTERNAL DESIGN

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THE EXTERNAL DESIGN PHASE OF THE BREEDING MULTIGENERATION SUPPORT SYSTEM: A TRACKING AND DECISION SUPPORT SYSTEM FOR NCTR

R. Strand, T. L. Cox, A. Sjoreen, and D. Alvic

ABSTRACT

The National Center for Toxicological Research (NCTR) is the basic research arm of the U. S. Food and Drug Administration (FDA). The NCTR has upgraded and standardized its computer operations on Digital Equipment Corporation VAX minicomputers using Software AG's ADABAS data base management system for all research applications. The NCTR is currently performing a large study to improve the functionality of the animal husbandry systems and applications called Breeding/Multigeneration Support System (BMSS). When functional, it will operate on VAX equipment using the ADABAS data base management system, TDMS, and COBOL. Oak Ridge National Laboratory (ORNL) is supporting NCTR in the design, prototyping, and software engineering of the BMSS. This document summarizes the external design elements that include data entry screens, screen reports, summary and status reports, and functional definitions of screen and report data. ORNL will provide research support to NCTR in the additional phases of systems life cycle development for BMSS. ORNL has prepared this document according to NCTR's Standard Operating Procedures for Systems Development.

1. INTRODUCTION

This document defines a Breeding Multigeneration Support System (BMSS). This system is being designed, prototyped, and engineered to aid the National Center for Toxicological Research (NCTR) in its animal husbandry and experimental testing activities. NCTR is a component of the Food and Drug Administration (FDA). Support for this effort is authorized through Interagency Agreement DOE No. 1860-A024-A1 between the Department of Energy (DOE) and the FDA.

The BMSS will be engineered to serve four major groups of users at NCTR:

1. the animal technicians who use the system to enter animal data and supervisors who monitor their work;

2. principal investigators who will be monitoring an experiment and using the data for later analysis;

3. User Services personnel who must maintain the system; and

4. Quality Assurance personnel who monitor data quality.

The BMSS will replace the current BREEDING INFORMATION SYSTEM (BIS). The BMSS system is needed because the current system's hardware is antiquated and difficult to maintain. In addition, the current system, BIS, is incompletely documented. The BIS currently operates on International Business Machines (IBM) and IBM Modular Computer (MODCOMP) hardware. NCTR is currently phasing this out and is consolidating all of its computer systems onto DEC equipment. Because the current BIS operates interactively on a MODCOMP Computer Processing Unit (CPU) with the master data base residing on an IBM 4341, BIS must be rewritten for DEC equipment. Creating a new BIS will include an analysis of the data collection needs for the BREEDING colony as well as EXPERIMENTAL BREEDING. The BMSS development will result in a system that more accurately meets the needs of the NCTR's Animal Husbandry and experimental breeding personnel.

All system design and development follows NCTR's standard operating procedures and life cycle management guidelines (see reference 9, Section 1.1. REFERENCES, PAGE 2). The next (second) stage of NCTR life cycle management is the internal design. The completed internal design document will identify specific logical and physical file design as well as data base design and processing specifications.

The EXPERIMENTAL BREEDING/MULTIGENERATION portion of BMSS will use capabilities of the new BREEDING System and the existing INLIFE System.

1.1. REFERENCES

A number of documents are available to ORNL for the design and engineering of BMSS and to NCTR for the review and approval of BMSS.

The available documents are:

1. Research Proposal for Development of BREEDING/MULTIGENERATION Support System, submitted to National Center for Toxicological Research, Jefferson, Arkansas.

2. Task Order No. 1 for the Requirements Phase of the BREEDING/MULTIGENERATION Support System.

3. Interagency Agreement between the Food and Drug Administration (FDA) and the Department of Energy (DOE), Oak Ridge Operations (ORO). (DOE Number 1860-AO24-A1, FDA Number 224-87-0004).

4. INLIFE External Design, dated April 14, 1986.

5. INLIFE Data Collection System User's Guide NCTR Division of Resource Information Management Systems (DRIMS) Doct. 4141-INL-1.0.

6. INLIFE Phase I Technical Documentation (DRAFT).

7. NCTR Automated Research Support System (NARSS) Data Definition Document dated 10/22/87.

8. NARSS Project Status Report dated June 19, 1984.

9. Toxicology Data Management Systems: Systems Development Guidelines, Standard Operating Procedures, TDMS Document 4505-SDG-2.0.

10. BREEDING Information System Terminal Operation Procedures, dated April 4, 1977.

11. BREEDING Information System Functional Specifications, prepared March 21, 1977.

12. Standard Operating Procedures for BREEDING Information System, dated November 1982.

13. Guide to Accessing New BREEDING Information System Data Base, prepared by Mike Holland, SISD on March 7, 1977.

14. NCTR Computer Systems Designed for Toxicologic Experimentation III. BREEDING Information System, prepared by Ron Barsh.

15. Requested Changes and Additions to BREEDING Information System, prepared by Charlie Schmieder in October 1987.

16. Code of Federal Regulations - Good Laboratory Standards Practice, Subpart A--General Provisions, Chapter 1, Part 160, July 7, 1987.

17. BREEDING Information System Data Base Record Segment Definitions, received from Ron Barsh dated October 22, 1987.

18. BREEDING Information System Flags Values, received from Ron Barsh dated October 22, 1987.

19. BREEDING Information System List of Reports and Identification Numbers.

20. Kathy Carroll's Requirements List (this is a list of requirements constructed by Ms. Carroll, a contractor for NCTR.

21. March 7, 1977 Memorandum from Mike Holland. "Guide to Accessing New BREEDING Information System Data Base".

22. Copies of reports: BS-013, BS-015, BS-016, BS-017, and BS-018.

23. Copies of the two Daily Reports: BS-002 and BS-003.

24. Automated BREEDING Information System with copies of reports and descriptions.

25. Six Flowcharts: (1) BIS Edit (Low Level), (2) E2GENER (Low Level Flow), (3) UPDATE (Low Level Flow), (4) E2GENER (High Level Flow), (5) UPDATE (High Level Flow), (6) BIS Data Flow.

26. Standard Operating Procedures for the BREEDING Information System.

27. INLIFE Data Collection System Report Formats and Descriptions, #4114-INL/REP-1.0, November 1986.

28. INLIFE Data Collection System Report Formats and Descriptions, #4114-INL-REP-1.1 DRAFT.

29. INLIFE Group II Reports.

30. BREEDING MULTIGENERATION SUPPORT SYSTEM: REQUIREMENTS ANALYSIS, 04-FEBRUARY-1988, ORNL (DRAFT). 93 pp.

31. Requirements Analysis Report For The NCTR Automated Research Support System. Prepared by System Development Corporation, June 1984. 30 pp.

32. INLIFE Error Correction System Terminal Operator Guide, DRIMS 3311-INEC-1.1. Prepared by BIOTECHNICAL SERVICES, INC., for UNISYS under contract with National Center for Toxicological Research. June 15, 1988.

33. INLIFE Table Maintenance System Terminal Operator's Guide, DRIMS 4311-INL/TBM-1.0. December 4, 1987.

34. INLIFE Liaison Experiment Startup Standard Operating Procedures, DRIMS Doct 4545-INL/ES-1.0.

35. NARSS Physical ADABAS File Diagram--Proposed June 8, 1988.

36. NARSS Data Definition--Proposed June 9, 1988.

37. Code of Federal Regulations Title 21-Food and Drugs-Chapter 1--Food and Drug Administration, Department of Health, Education, and Welfare, Nonclinical Laboratory Studies Good Laboratory Practice Regulations (Part II). Federal Register, Vol 43, No. 247. December 22, 1978.

2. SYSTEMS FLOW

The proposed BMSS will be designed to service three functional areas at NCTR---breeding, experiments, and experimental breeding (Figure 2.1). These three areas are either operational or are currently being established. The box in Figure 2.1 defines the generic functions required by investigators in the three functional areas.

The Breeding Information System (BIS) is the existing system for the first functional area. BIS keeps track of breeding pairs, assigns Unique Identification Numbers (UINs), allows observations on the animals to be recorded, and helps maintain the integrity of the animal strains being produced. The BIS also tracks genealogical history and produces daily, weekly, and ad hoc reports on the status of the breeding colony. Animals are considered removed from this system when they are allocated to an experiment or are disposed of.

The second functional area, testing and evaluating animals within an experiment, is being serviced by the INLIFE system. INLIFE stores observations on test animals and tracks animals throughout an experiment and maintains historical data bases as well as reports.

The third functional area of Experimental Breeding (EB) (also called MULTIGENERATION studies) is being established to test and evaluate animals where multiple generations of animals are required. Hence, EB must have capabilities of BIS and INLIFE, along with new capabilities, such as treating pups in a litter as individuals.

In summary, BMSS will encompass all the capabilities and functions shown in Figure 2.1. The sections that follow will discuss each of these functional areas in more detail and present diagrams of data flow as presently defined by available documentation.

2.1. BREEDING INFORMATION SYSTEM

The current BIS contains the information required for maintaining the NCTR breeding colony and for providing animals needed for experiments. Figure 2.2 displays the flow of data through the current BIS. Currently, two CPUs service BIS. The MODCOMP serves as the data entry CPU and produces certain reports, while the IBM serves the needs of data base maintenance and produces other reports. The

Figure 2.1. BMSS---General Capabilities and Functions

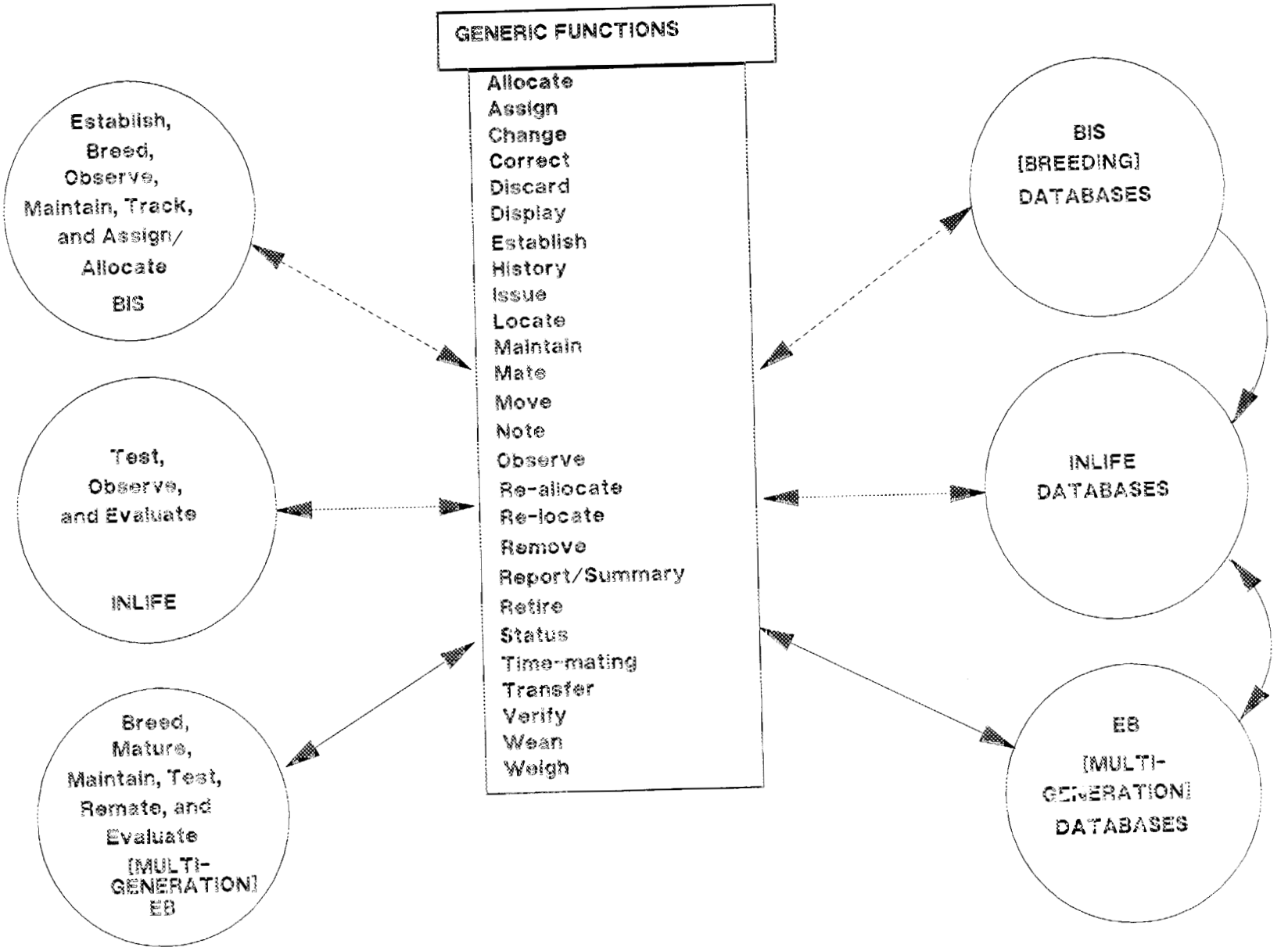
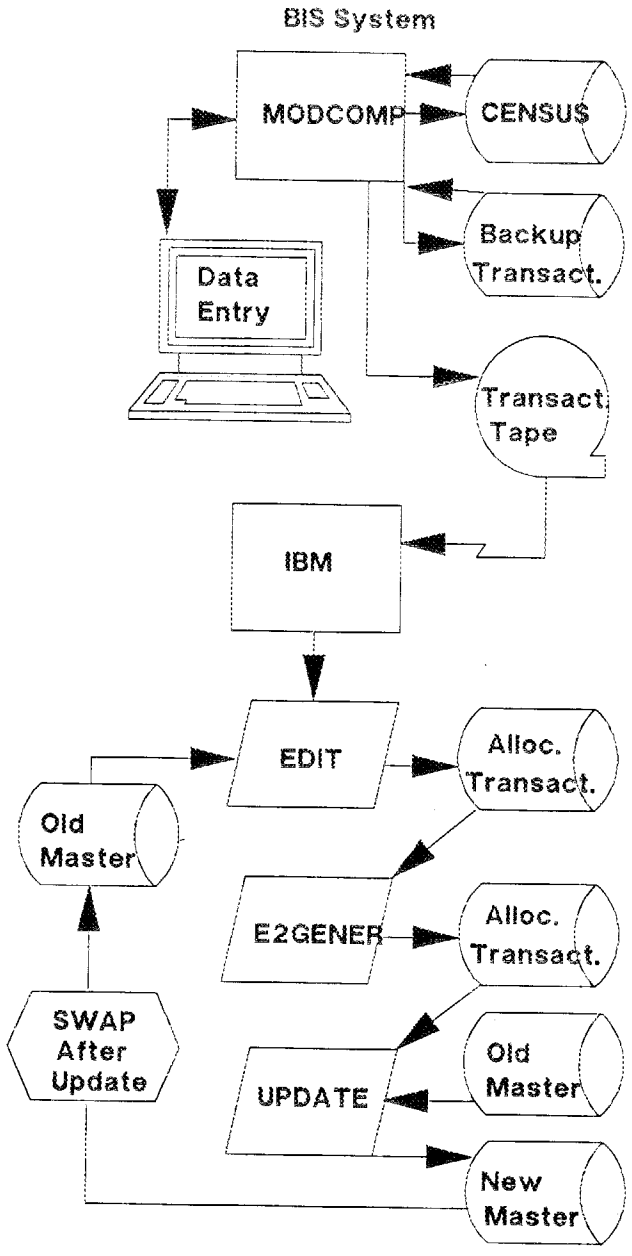


Figure 2.2. NCTR BREEDING INFORMATION SYSTEM (BIS)



transaction files are transmitted from the MODCOMP tapes to the IBM where the transactions are edited. Information is then merged with the transaction information and retrieved by update programs operating on the master data base. Printing of reports and forms is performed for each step of the transaction processing. The current system requires a great deal of file management and resources to oversee the initialization and maintenance of all of the files. The system uses overnight batch update as opposed to on-line access and update of the data base. The current system supplies both a genetic trace of the animals in the colony and maintains data on animal status and numbers. The current BIS meets almost all of the user's needs for the breeding colony. The new system is being engineered to allow retirement of the hardware on which the present BIS resides. The enhancements that have been requested are included in this analysis.

The current BIS requires about two megabytes of on-line disk storage on the disk drives attached to the MODCOMP hardware. The archival data base presently resides on the IBM 4341 and is estimated to be about 250 megabytes. This file contains daily transactions and is used to generate standard reports on the breeding colony. The INLIFE facility used to produce identification cards which are attached to animal cages (e.g., breeding pairs) in the breeding colony will be used in the breeding portion of BMSS.

2.1.1. Functions

Table 2.1 contains all the functions in the current BIS and INLIFE as defined in the Requirements Analysis (Table A.1 in Appendix A of Reference 30, page 5). Also included in Table 2.1 are functions identified as potential candidates for use in Experimental Breeding that were not included in the current BIS or INLIFE. New functions identified for BMSS since the publication of the Requirements Analysis include:

- "Tracking Animal Orders" (Report BS017, Appendix B of this document),
- "Enter Allocation Data" (Screen A.3),
- "Weigh Animals--Group," and
- "BMSS Identification Function" (Screen A.1).

Table 2.1. Functions Required for Breeding and Experimental Breeding.

	SCREEN(S)	BREEDING	EXPER. BREEDING
CURRENT BIS FUNCTIONS			
Assign breeder as feeder	A.14	X	X
Assign feeder as breeder	A.14	X	X
Breed animals		X	X
Change animal status (Assign litter animal status)	A.14	X	X
Change cage status without moving cage	A.11	X	X
Determine reason for transfer out	A.15	X	X
Discard animal (Removal)	A.15,16	X	
Display data for animal technicians	A.6,7,0,9,13	X	X
Enter Demonstration Mode		X	
Enter Monitor Mode		X	X
Establish breeders	A.14	X	X
Identify animal destination		X	
Introduce a new strain	A.10	X	
Remove animal for analysis	A.15	X	X
Maintain feeders		X	X
Maintain the Breeding Colony		X	
Move a cage within a room or the colony	A.12	X	X
Female littered	A.18	X	X
Note pregnancy	A.17	X	X
Observe animals	A.17, 18	X	X
On-line correction		X	X
Process cages		X	X
Put animal in issue cage	A.19	X	
Transfer animals out of breeding colony	A.4	X	
Remove dead animal	A.15	X	X
Sign off the system		X	X
Sign on to the system	A.1	X	X
Transfer to a new breeder cage		X	X
Verify mark	A.4	X	X
Wean animals	A.14	X	X
Weigh animals--individual	A.4	X	X

Table 2.1. (Continued)

	SCREENS	BREEDING	EXPER. BREEDING
PROPOSED BMSS FUNCTIONS			
Allocate animal to an experiment (In BIS)	A.4	X	
Manual entry of data		X	X
Print log book		X	X
Error Correction		X	X
Weigh animals--groups			X
BMSS identification	A.1		X
Enter allocation data	A.3		X
Tracking animal orders	A.5	X	
CURRENT INLIFE FUNCTIONS			
Logon		X	X
Main Menu, Identification Information		X	X
Interactive Data Collection		X	X
Procedure Definition Screen			
Schedule Definition Screen			X
Balance Calibration Screen		X	X
Identification Correction Screen		X	X
Cage Menu Screen			
Process Container Weights		X	X
Cage Observations and Notes			X
Select Animal Process			X
Selection of unscheduled actions			X
Re-Identify Animals on Cage Screen			X
Animal Weight Process			X
Clinical Observation Process			X
Clinical Observation Table Screen			X
Site Table Screen			X
Size/Color Table Screen			X
Observation Summary Screen			X
Feed Check Screen			X
Death Check Screen			X
Cage Relocation Screen			X
Remove Animal Screen			X
Reason for Removal Screen			X
Selection Dispositions Screen			X

Table 2.1 identifies the functions from BIS, INLIFE, and new experimental breeding functions that will be used in BMSS. Functions transferred from INLIFE to Experimental Breeding may undergo some modifications in order to meet the Experimental Breeding requirements; however, the current functions as they exist in INLIFE will not be modified.

All of the functions identified for use in Table 2.1 will be designed and engineered or copied from INLIFE and modified in the BMSS. The input and output data used by these functions are included in Appendix D. Figure B.1 through B.6 in Appendix B of the BMSS Requirements Document (04 February 1989) are data flow diagrams for the BMSS. They are not reproduced in this document.

2.1.2. Data Elements and Their Relationships

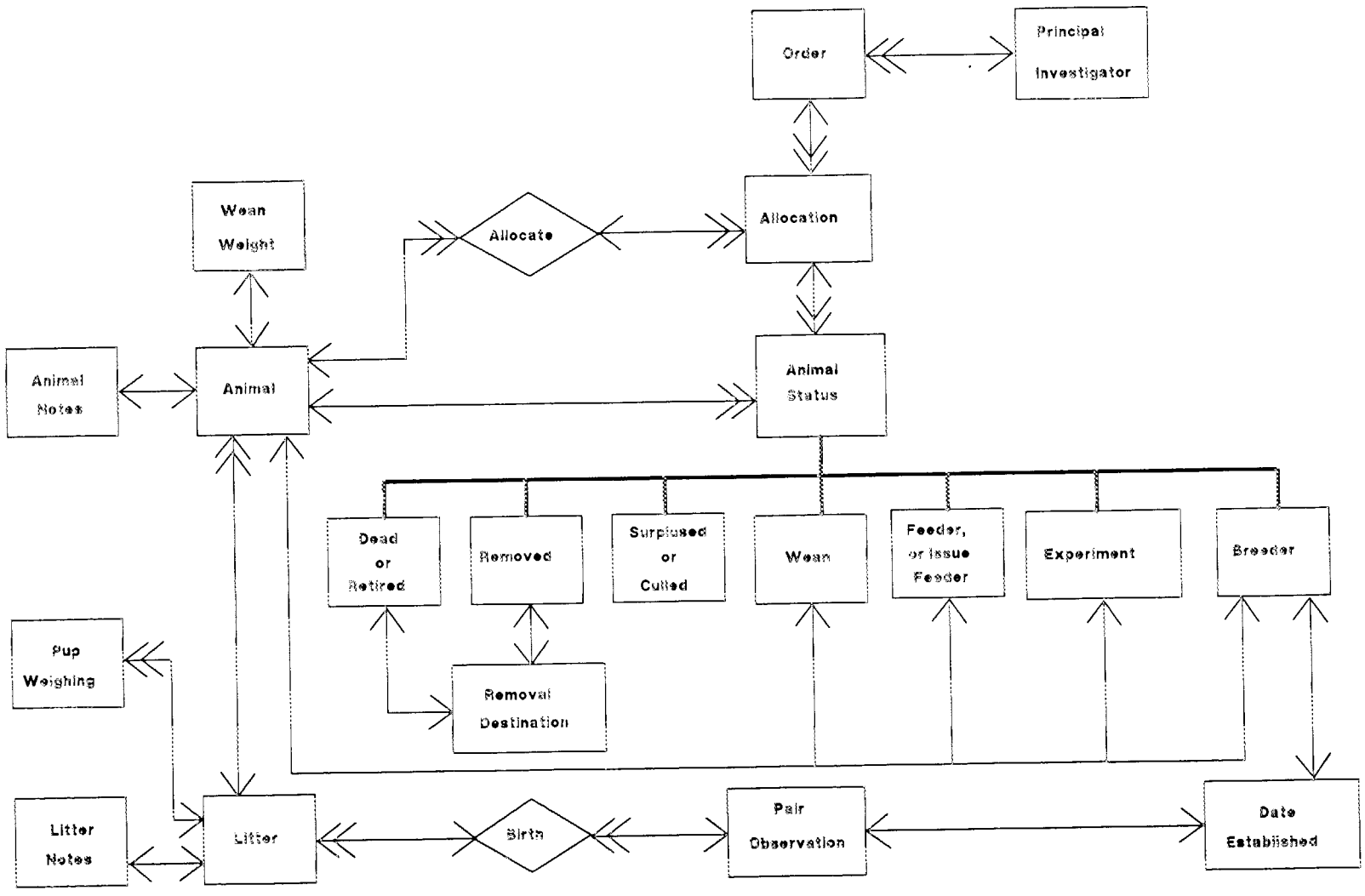
Section 7 contains a discussion of the data elements that will be used in BMSS. All data elements as currently identified in the proposed Breeding and EB reports are defined in Appendix D of this document. The current Breeding and EB output report descriptions, physical layouts, and the data elements included in them are shown in Appendix B (Parts B.1-B.2). Cross-references between the reports and the data dictionary are given in Appendix C (See Section 7 for more detail).

2.1.2.1. Entity Relationships

Figure 2.3 is an entity diagram for the proposed system. Each box in the diagram represents an entity. The lines represent how the entities relate to each other. A single-headed arrow means a single relationship and double-headed arrow means many relationships. Thus, one-to-one, one-to-many, and many-to-many relationships are defined in the diagram.

There are other symbols on the diagram that further explain the relationships. A diamond represents an "action." An action is a required process or any other activity that relates one entity to another. Inclusion of actions into entity diagrams is optional, but does convey added information about the interaction of data elements. For example, from Figure 2.3 it is shown that an "animal" can undergo "allocation." This relationship is shown to be one-to-one. The action that brings this about is "allocate." In common terms, an animal is allocated to an experiment by using the process of allocation.

Figure 2.3. Modified Entity Diagram for BMSS



Heavy lines in this entity diagram represent classification; such is the case in the entity disposition in Figure 2.3. Animals are assigned a disposition category of breeder, feeder, surplused, or sent to pathology, chemistry, or microbiology. Each category in the classification is mutually exclusive.

2.1.2.2. Logical Structure

The proposed logical structure of the BMSS data as shown in Figure 2.4 is relational. Each entity is shown as a rectangular box. Within each box are the data elements that define or describe the entity. The heavy lines on Figure 2.4 show the data element relationships between the entities. The connected data elements are the "key" or "relational" data elements. All data elements included in this diagram are classified as "noncalculated" data elements (See Section 7 for more detail).

2.1.3. Current Paper Reports

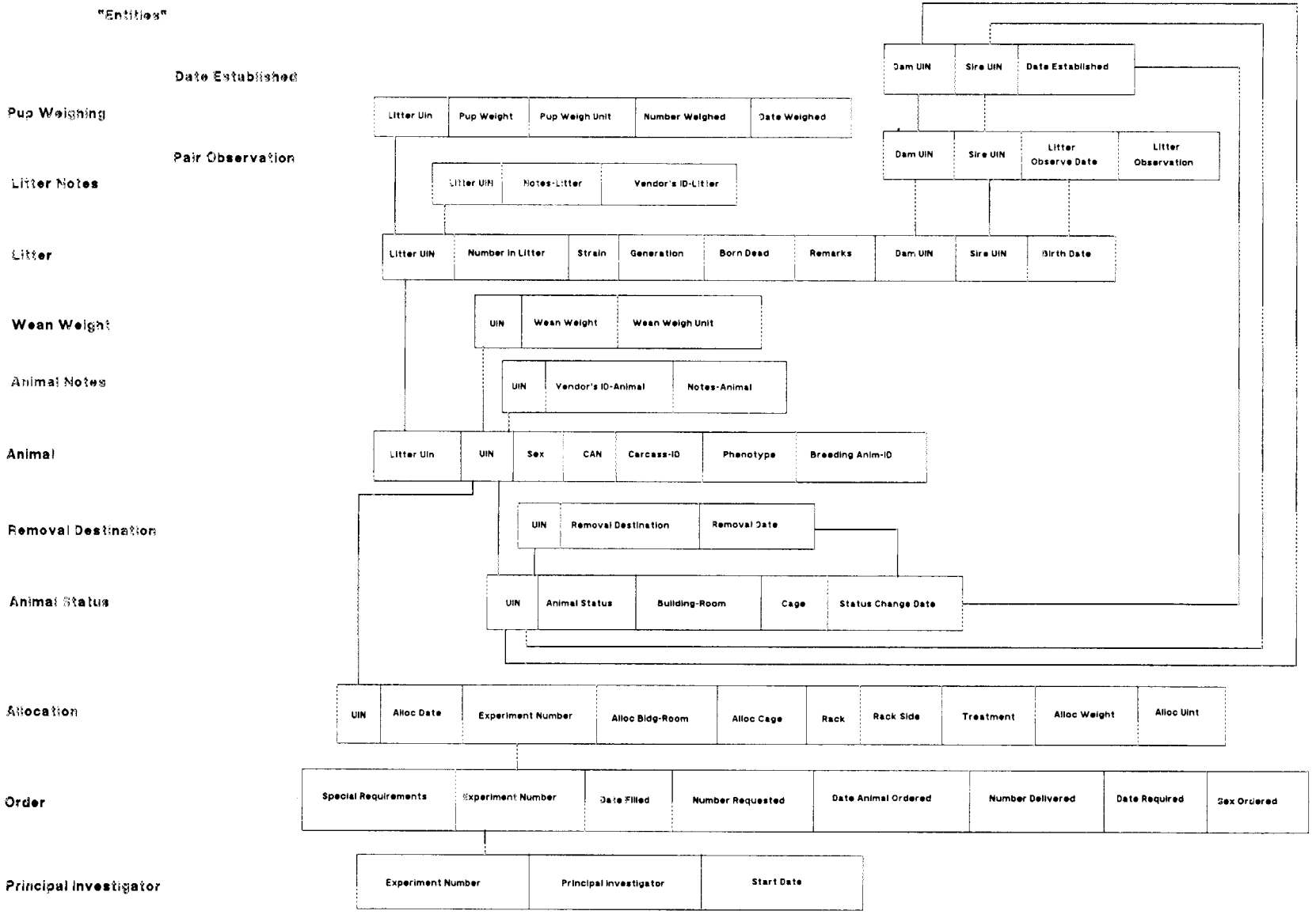
Appendix C summarizes all formats, descriptions, and data for those reports defined in Appendix B as of the date of this document. These will be modified as required during the life cycle process.

2.2. INLIFE SYSTEM

The INLIFE System is the first of the major modules designed to function as a component of the NCTR Automated Research Support Systems (NARSS). It is currently operational and supports several major functions: Interactive Data Collection, Change Logoff and Experiment/Test functions, Reporting and INLIFE System Access. Other functions of manual Data Collection, Supervisory Monitoring and Database Error Correction are being documented.

INLIFE provides for the data collection, validation, storage, and reporting of information collected on animals used in experiments. Animals are assigned to an INLIFE experiment through an allocation process in the current BIS. When the animals are removed from INLIFE, a Removal Reason and Disposition, which is a required field, may be entered in the animal's record. All data on animals used in the system are maintained indefinitely. The animal UIN provides a link back to the BIS. The Carcass

Figure 2.4. Proposed Logical Structure for BMSS



Identification number (CID) provides a link to the systems that maintain pathology and other diagnostic information.

INLIFE modules will be copied and modified (where appropriate) as part of the BMSS software engineering effort. However, a large part of the functionality and software will be used in the EXPERIMENTAL BREEDING component of BMSS.

2.2.1. INLIFE Functions

Table A.4 in Appendix A of the Requirements Document lists the functions currently operational as part of INLIFE. The input and output data used by these functions are included in the table. Figures B.8 through B.38 in the Requirements Analysis Document are data flow diagrams which represent the relationships of the INLIFE functions.

2.2.2. INLIFE Data Elements

The INLIFE data elements are contained in the NARSS Data Definition Document, dated October 22, 1987, and will not be repeated in this document.

2.2.3. Current Status and Limitations of INLIFE

INLIFE is currently fully tested and operational with documentation being prepared for all the procedures. Specific capabilities required by EB have been identified in this document. As EB approaches its start date of April 1989, the required functions will be more clearly identified. The next phase of the BMSS will elaborate on EB's internal needs by reviewing the INLIFE and BMSS proposed functions, data entities, and output needs.

2.2.4. INLIFE Environment

INLIFE is designed to run on DEC's VAX 7XX or 86XX series machines under the VMS operating system. It is written in COBOL with Terminal Display Management System (TDMS) as the screen generator and data entry tool with input into DEC's Records Management System (RMS) files. The data base is maintained on the VAX machines using ADABAS.

The INLIFE hardware includes a terminal system consisting of a balance, a barcode reader, a DIGITAL VT220 terminal or equivalent, a DIGITAL VT220 or equivalent keyboard, and an interface box.

2.2.5. Operation and Maintenance

INLIFE is currently in operation at NCTR and is maintained by Division of Resource Management Staff (DRIMS) and subcontractors. The design and development of BMSS will make no changes to the current operation and maintenance arrangement.

2.3. EXPERIMENTAL BREEDING (MULTIGENERATION Studies)

EXPERIMENTAL BREEDING (EB) will combine many of the functions currently available in the existing INLIFE and BIS systems. All of the INLIFE functions will be copied and made available to EXPERIMENTAL BREEDING. In addition, the current BIS functions dealing with allocation, breeding, and littering will be available. These functional areas will allow scientists and animal technicians to perform experimental protocols which deal with multiple generations. EXPERIMENTAL BREEDING will contain all the data checking, validation, and quality control procedures contained in BIS and INLIFE to ensure that the data stored in the EB meets NCTR and FDA standards for Good Laboratory Practices (see reference 37, Section 1.1.).

2.3.1. Why EXPERIMENTAL BREEDING is Needed

EXPERIMENTAL BREEDING is needed for MULTIGENERATION studies. It will allow scientists to store and access EB data that must be kept entirely separate from the BREEDING data. EB will perform functions that are a part of INLIFE or are needed to breed animals within experiments. It will also ensure that the genetic trace data in BREEDING will not be corrupted by EB data.

2.3.2. EXPERIMENTAL BREEDING Functions

The functions of EB are comprised of both BREEDING and INLIFE functions. Some BREEDING and INLIFE capabilities must be modified for use in EB. The data flow diagrams for INLIFE in Figures B.7 through B.37 along with the BREEDING functions in Figures B.38 to B.40 illustrate this relationship. These are found in the Requirements Analysis document.

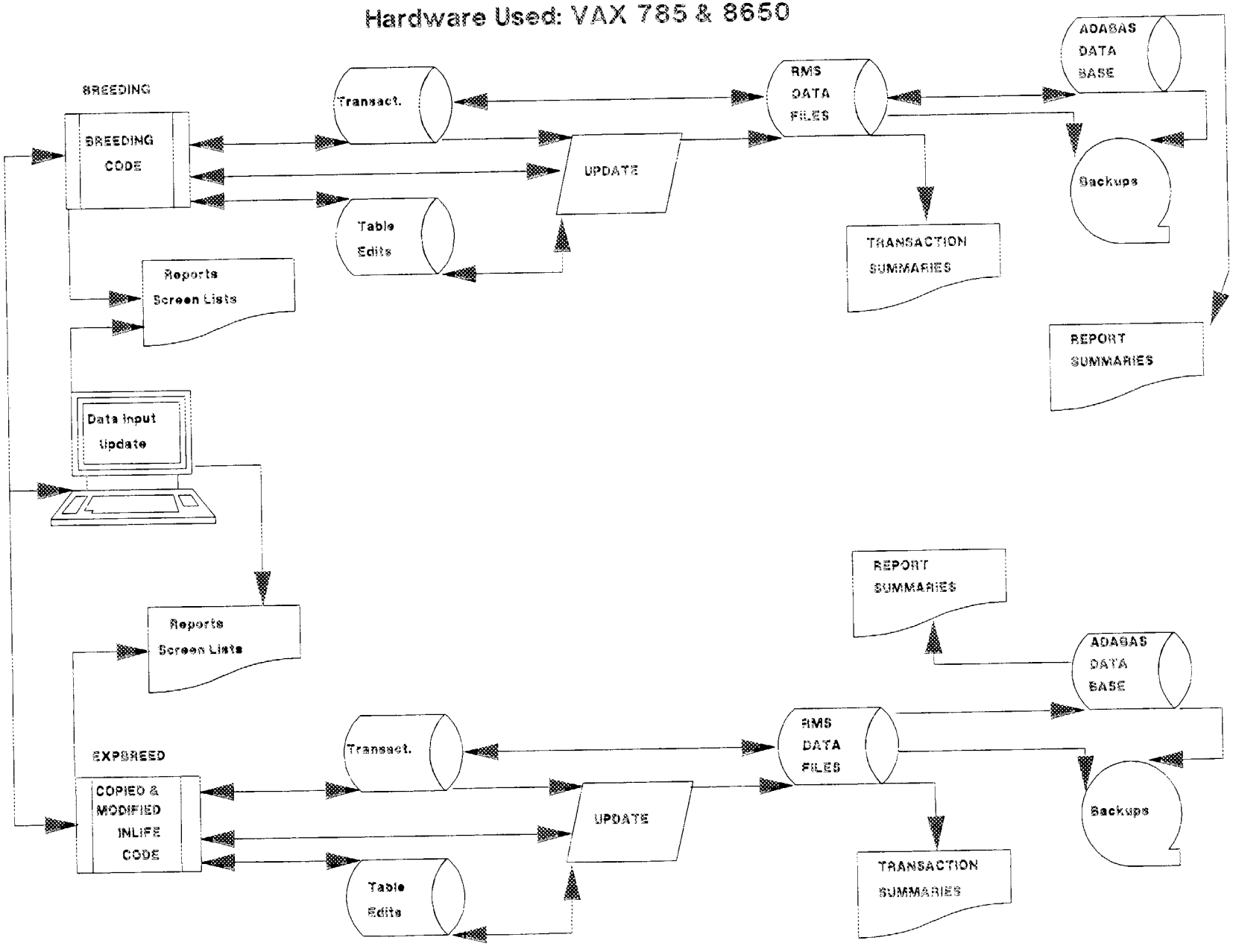
BMSS will need all the capabilities of INLIFE. In addition, the revised capabilities for BREEDING will be enhanced, where necessary, to take into account the needs of EB. For example, while the old BIS presently only allows an animal to be allocated once, BMSS will allow an animal to be allocated to several experiments in sequence. New reports will also be engineered for BMSS. Examples are the Fertility report, Pup-Weight-at-Weaning and Disposition report, and the Pup Weights report.

2.4. BMSS DATA COLLECTION SYSTEM

Figure 2.5 presents the current view of how the BMSS will function in the VAX environment. Note that EXPERIMENTAL BREEDING is envisioned as a separate system at the lower left of the figure. It is being designed as a series of functions requiring the newly designed capabilities of BREEDING and the existing capabilities of INLIFE copied and modified appropriately. The details of screens and tables required for EB are described in the sections that follow. The table edits for screen entry and transaction edits will be assigned and maintained using NCTR's Table Maintenance System (TMS). The flow of BMSS as diagrammed in Figure 2.5 may change during internal design as more detailed analysis of the impacts of BMSS on CPU and disk resources is performed. In particular, the use of TDMS/RMS for data input and transaction logging with input of the transaction file to ADABAS for master file update versus using

Figure 2.5. Proposed NCTR BMSS System Flow

Hardware Used: VAX 785 & 8650



ADABAS/NATURAL for screen entry, transaction logging and data base update via direct calls. These alternatives need to be carefully evaluated on the basis of resource requirements, quality, and maintainability of the data. The exchange of information from screens to files to reports will be identified in the internal design document.

3. TERMINAL SCREEN LAYOUTS

BMSS terminal screens for both data entry and display are described in the following sections. The BREEDING screens have been completely re-designed; therefore, they are discussed in the most detail. The INLIFE screens will not be modified in this task, so they are only listed. The MULTIGENERATION screens are a combination of the BREEDING and INLIFE screens. The discussion of the MULTI-GENERATION screens will refer to material in the other sections, rather than duplicating it.

3.1. SCREEN STANDARDS

The data input screens and display screens for BMSS are shown in Figs. A.1 through A.20 (Appendix A). These screens conform to the NCTR screen standards which were used during the development of the INLIFE screens. Because the MULTIGENERATION component of BMSS will use both BREEDING and INLIFE screens, the two sets of screens must have compatible formats. A sample of the standard as it applies to the BREEDING screens is shown in the Animal Assignment screen in Fig. A.14. The screen has three sections, divided by horizontal lines. The top section contains header information, including the screen name on the upper left and the date and time on the upper right. The bottom section contains information about function keys. Data entry occurs in the center section. Note that there will be a help message for each data entry field and a help screen for each data entry field.

The BREEDING portion of BMSS will be entered from the NARSS main menu. The new BREEDING functions that must be added to the NARSS main menu are listed in Table 3.1. The first screen to appear to animal technicians will be the equipment identification screen. If a cage is entered next, rather than a function, the Display Cage screen for that cage will appear.

Table 3.1. Functions to be added to NARSS main menu

New Functions
Enter BREEDING Allocation Data
Enter System Orders
Produce BREEDING Reports
Begin BREEDING Animal Room Actions
BREEDING Manual Data Entry
Monitor BREEDING Terminal
BREEDING Demonstration Mode
Enter MULTIGENERATION Allocation Data
Produce MULTIGENERATION Reports
Begin MULTIGENERATION Animal Room Actions
MULTIGENERATION Manual Data Entry
Monitor MULTIGENERATION Terminal
MULTIGENERATION Demonstration Mode

3.2. METHOD OF DATA ENTRY

3.2.1. Function Selection

Each of the animal room functions will be represented by a key, either with a specially marked key cap or with the first letter(s) of the action. Function selection via menus will not be used. The animal room functions are listed in Table 3.2. A new function will be selected by pressing one of those keys upon finishing any screen function. Special modes of operation, such as 'Sequential Wean' will be entered with 'Ctrl-W' (sequential wean), 'Ctrl-A' (all cages), or 'Ctrl-L' (all littered cages).

Table 3.2. Animal Room Functions

Key	Function
O	Log Off BREEDING
A	Allocate
N	New Animal Entry
S	Assign Status
F	Remove - Final Action
	(Dead, Cull, Surplus, Chem, Path, Micro)
R	Retire
P	Pregnant or Plugged
L	Littered
I	Issue
C	Change Cage Status
M	Move Cage
D	Display - plus - (see note)
C	Display Cage
R	Display Retirement Candidates
U	Display Unproductive Breeders
F	Display Feeders by Minimum Age
W	Display Room Work Summary
O	Display Animal Orders
Cntl-W	Sequential Wean
Cntl-A	All Cages
Cntl-L	All Littered Cages
PF2	Help
Gold-T	Display table
Gold-N	Erase all data on this screen and start over

Note:
Pressing the D function will display the prompt:
Cage, Work Summary, Orders, Feeders, Retire., or Unprod.?: X
and then the type of display is selected.

When a special mode has been selected, the mode set will be displayed on the upper right portion of the screen. Within a special mode, all data entered for the first cage will be used as the default response for subsequent cages. For the sequential wean, the age will be prompted for and entered from the keyboard. The mode will be terminated whenever any one of these control sequences is next entered. As actions are performed on the same cage, the previous actions remain on the screen in the order in which they were performed (Fig. A.20). Selecting a new cage clears the screen after final data edits are performed.

There are three possible ways to proceed to the next action when the prompt "Enter Function or Cage:" appears:

(1) Press Return to continue the cage sequence, if one of the processing aids was previously selected.

(2) Enter a cage number to perform the same function on an individually selected cage, if no processing aid was selected.

(3) Press an action key (or keys) to perform a new function on the same cage.

The BREEDING functions that are not strictly animal room functions will be accessed from the NARSS main menu. These functions are listed in Table 3.1.

3.2.2. Data Entry

Data entry will be on fill-in-the-blank screens with prompts, like the Animal Assignment Screen in Fig. A.4. Each data item will be prompted by a message on the last line in the center section of the screen. In general, entry of words may be accomplished by entry of the first letter of the word, such as 'm' for male or 'b' for black in the phenotype field. No check digit will be used in entering numeric data. Note that some fields, such as date and time, are display only. Also some fields, such as cage number, may be either typed in or read by a bar code reader.

Inconsistent data will not be allowed. For example, in New Animal Entry (Fig. A.10), when the strain code entered does not have more than one phenotype, no entry will be allowed in the phenotype field. After the technician has edited the data on the screen to correct errors, inconsistencies will be checked again. For example, if a number is entered for the 'Count=' for males, but no 'Gen=' is entered, the operator will have to correct one of the two fields before continuing to a new function or cage.

As an example of this process, entry of data for the Animal Assignment function (Fig. A.14) will proceed as follows:

Step 1. (a) If a particular cage is needed, the prompt "Enter cage number:" will appear on bottom of the center section of the screen. The cage number will be either typed in or bar coded at this point. The cage number will be checked to determine that it is a valid cage for that room and that the cage is not empty (i.e., that there are animals in the cage available to be assigned.) If an invalid cage number is entered, an error message (either "That cage does not exist in this room." or "There are no animals in that cage.") will appear and re-entry of the cage number will be required.

Step 1. (b) If a special processing mode has previously been selected, the first appropriate cage will automatically be selected.

Step 1. (a or b) The appearance of the screen after a valid cage is selected will be as follows for a breeder cage containing a litter of 4 animals with no special mode selected.

```
==========================================================================
Assignment                    Breeder Cage Number 1234          01 Jul 88 09:00
Operator 12345                Room 123-1234
Males                   Females
01 May 88               01 May 88          Block                Original Block
1A-1234567 P            1A-1234568 N       1A-1234569           1A-1234569
Count=01 Gen=0001       Count=01 Gen=0001  Count=04 Gen=0002     Count=04 01 Jun 88
--------------------------------------------------------------------------
Current  Phen/   --- New ---                CAN or CID
Status Sex Obs  #  Status  Cage  Reason Disposition  or EXP  UIN Assigned



Enter Status: X
--------------------------------------------------------------------------
Gold N - Erase Data, Restart Screen;
PF2 - Help; Gold T - Phen. Table; Enter - Cont. sequence;
Cntl W - Sequential Wean; Cntl L - Littered Cages; Cntl A - All Cages
==========================================================================
```

Note that the 'P' next to the male's UIN means that the male is present in the cage and the 'N' next to the female's UIN means one female is present and she has ear clip 'none'. Also, strain 1A has no phenotype designations.

Step 2. Enter the status. Either 'b' for breeder or 'l' for litter would be valid status entries here. Alternatively, no assignments could be performed to this cage by pressing 'Enter' to check the cage data or to continue the cage sequence, if a special processing aid has been selected. Any other entry will cause the error message 'Invalid status' to appear and re-entry of the status will be required. If 'l' were entered, the screen would then appear as below.

```
==========================================================================
Assignment                  Breeder Cage Number 1234          01 Jul 88 09:00
Operator 12345              Room 123-1234
Males                 Females
01 May 88             01 May 88          Block                Original Block
1A-1234567 P          1A-1234568 N       1A-1234569           1A-1234569
Count=01 Gen=0001     Count=01 Gen=0001  Count=04 Gen=0002    Count=04 01 Jun 88
--------------------------------------------------------------------------
Current   Phen/   --- New ---                  CAN or CID
Status Sex Obs  #  Status  Cage  Reason Disposition  or EXP  UIN Assigned
Litter



Enter Sex: X
--------------------------------------------------------------------------
Gold N - Erase Data, Restart Screen;
PF2 - Help; Gold T - Phen. Table; Enter - Cont. sequence;
Cntl W - Sequential Wean; Cntl L - Littered Cages; Cntl A - All Cages
==========================================================================
```

Step 3. Sex may be 'm' or 'f' for breeders or 'm', 'f', or 'u' (unsexed) for litter animals. Assume that 'm' has been entered.

Step 4. Enter Phenotype. If the strain of the litter animal was one which could be assigned a phenotype, the phenotype prompt would appear next. The strain in the example has only one phenotype, and so this step is bypassed. The phenotype prompt does not appear on the screen.

Step 5. The next prompt is for count. For this example, the count must be a number between 1 and 4 (or less if fewer than 4 male litter animals are present). An invalid entry will cause an error message ('Not that many of that sex.') to be displayed and will require reentry of the count. (Note that if 'breeder' had been selected as the status and only one animal of the sex selected was present, the prompt for 'Count' would not appear. A count of 1 would be automatically filled in by the system.) Assuming that '1' was entered for the count, the screen would appear as shown below:

```
==========================================================================
Assignment                  Breeder Cage Number 1234          01 Jul 88 09:00
Operator 12345              Room 123-1234
Males                 Females
01 May 88             01 May 88          Block                Original Block
1A-1234567 P          1A-1234568 N       1A-1234569           1A-1234569
Count=01 Gen=0001     Count=01 Gen=0001  Count=04 Gen=0002    Count=04 01 Jun 88
--------------------------------------------------------------------------
Current   Phen/   --- New ---                  CAN or CID
Status Sex Obs  #  Status  Cage  Reason Disposition  or EXP  UIN Assigned
Litter  M       1

Enter New Status: XX
--------------------------------------------------------------------------
Gold N - Erase Data, Restart Screen;
PF2 - Help; Gold T - Phen. Table; Enter - Cont. sequence;
Cntl W - Sequential Wean; Cntl L - Littered Cages; Cntl A - All Cages
==========================================================================
```

Step 6. At this point the new status is entered. For a litter or breeder animal, the new status may be 'b' for breeder or 'f' for feeder. If an invalid entry is entered, an error message ('Not a valid status.') is displayed and re-entry of the status is required.

Step 7. The next prompt is for the new cage number. This may be typed in or entered with a bar code reader. The new cage must be appropriate for the animal's new status; if the animal has been assigned as a feeder, the new cage may not contain a breeder animal, and vice versa. If this type of error occurs, the message 'Destination incompatible with status - reenter' appears, and the cage number must be re-entered. If the cage number entered is not valid for that room, the message 'That cage does not exist in this room' appears, and the cage number must be re-entered.

After these data are entered correctly, the data entry for the assignment of one animal is finished, and the UIN will be assigned (only for litter animals). If the new status entered was 'feeder', the screen will appear as shown below.

```
Assignment                Breeder Cage Number 1234          01 Jul 88 09:00
Operator 12345            Room 123-1234
Males                     Females
01 May 88                 01 May 88          Block          Original Block
1A-1234567 P              1A-1234568 N       1A-1234569     1A-1234569
Count=01 Gen=0001         Count=01 Gen=0001  Count=04 Gen=0002 Count=04 01 Jun 88
-----------------------------------------------------------------------------
Current   Phen/    --- New ---                CAN or CID
Status Sex Obs  #  Status  Cage  Reason Disposition  or EXP  UIN Assigned
Litter  M       1  Feeder  6789                      1A-1234569


Enter Status, Function, or Cage: XXXX
-----------------------------------------------------------------------------
Gold N - Erase Data, Restart Screen;
PF2 - Help; Gold T - Phen. Table; Enter - Cont. sequence;
Cntl W - Sequential Wean; Cntl L - Littered Cages; Cntl A - All Cages
=============================================================================
```

Now another animal may be assigned or 'Enter' may be pressed to end the use of this function on this cage. Then the prompt 'Enter Function or Cage: XXXX' appears and a new function may be selected to be performed on the same cage, a new cage may be selected, or 'Enter' to continue the cage sequence if a special processing aid has been selected. If a new cage is selected, the prompt 'Are all the data on this screen correct?' will appear. If the answer is 'y', normal processing will follow. If not, the animal technician will be able to edit any fields in the center section of the screen, using the tab key to move from field to field. When the cursor is positioned on the bottom line again and a 'y' is entered next to the prompt (i.e., all data are correct), all previously described data checking will be performed again, and the animal technician will be prompted to correct any errors or inconsistencies. When all data are correct and verified, normal processing will continue.

3.3. HELP MESSAGES AND SCREENS

A help message will appear for any data entry field when the cursor is positioned on that field and the PF2 key is pressed. This message may be up to 80 characters long and will always appear on the bottom line of the screen. If PF2 is pressed a second time, a full screen help message for that entire screen will be displayed. For example, Fig. A.2 is the help screen for the New Animal Entry screen (Fig. A.10). The help messages for the individual fields are listed below the screen. Pressing Enter' will return the operator to the data entry screen. It will also be possible to access the allowed value tables previously defined using TMS by pressing 'Gold-T' when prompted for a data item for which there is a table assigned. Those fields with allowed values will have allowed values information displayed.

3.4. NEW SCREEN FUNCTIONS

3.4.1. Allocation Data Input Screen

There is one data entry screen for setting up allocation. All other allocation data will be entered either through the INLIFE Standard Operating Procedures (SOPs) in place (i.e. by the liaison personnel) or through the new Study Definition system (being developed). The allocation screen, shown in Fig. A.3, allows input of allocation data that are currently not entered through the INLIFE SOPs. If the "start date" (the date on which the animal starts on the experiment) is defined as the animal birth date or the date the animal is allocated, the "start date" will be assigned from existing animal birth date or with the allocation date, as appropriate. If the start date is neither of these, it will be entered using the current INLIFE SOPs. Random allocation order and litter mate configuration requirements are entered. Note that the randomization algorithm will be finalized during the internal design phase. The Clip Sequence field allows any clip sequence to be entered as the default for all cages. This may be, for example, 'NLRB' or 'NRLB', where "N"=none, "R"=right, "L"=left, or "B"=both ear(s) clipped. If numeric animal IDs are to be used rather than characters for ear clips, 'none' will be entered in the clip sequence field. The Litter Mate field allows more responses than simply 'Y' or 'N'.

3.4.2. Enter/Display Animal Orders

The animal order data entry screen will allow entry of animal orders as they are received (Fig. A.5). Animal orders can be tracked and marked as filled as appropriate using this screen. Each experiment may require several strains and sexes; therefore several lines will be needed to account for the strains and sexes. The orders pending may be displayed in any animal room. Only orders that can be filled from strains present in that room will appear. The 'Date Filled' will be entered automatically when the number delivered equals the number required. The 'Date Filled' and 'Number Delivered' may also be entered by hand. The order will automatically disappear from the display on the Friday of the week following the week in which the order was filled.

3.4.3. Harem Mating

Mating of up to three females against one male will be allowed in the new system. This requires a few additional data items on the breeder cage screens and modifies the cage actions dealing with those cages. For each harem mating, the number of cages assigned will be equal to the number of females involved. The females all will be physically in one cage with the male until one is noted to be pregnant. Then she will be put in a separate cage. (The last female to become pregnant will remain with the male.) The male's location will be noted by a 'P' (present) or 'A' (absent) next to his UIN. The field next to the female's UIN will contain the earclips of the animals present in that cage and '-' for those in other cages. For example for three harem mated females 'NLR' signifies that three females are in that cage; '-L-' signifies that only one of three harem mated females, the one with a left earclip, is in that cage. Cage numbers for harem mating will be in sequence. UIN's will be assigned in sequence for clips N, L, and R. The female UIN and Established Date displayed on a screen will be the lowest numerically for that cage for that harem mating.

3.4. PAPER REPORTS INITIATED BY DATA ENTRY

Two paper reports will be generated automatically by data entry. The first is the new cage cards which will be printed when a new breeder pair is set up or when a cage is moved. Second, a copy of the room log file will be printed whenever the session in that room is terminated normally.

3.5. BREEDING TERMINAL DISPLAYS

The screen formats for the BREEDING portion of BMSS are shown in Figs. A.1 through A.20. The data element definitions, size, and edit/display requirements are shown in the data dictionary in Appendix D. The purpose of each screen and some notes about its use are listed at the bottom of the figure showing that screen. The sort order of each screen is listed in Table 3.3. The calculations required for each screen are shown in Table 3.4. The estimated frequency of use of each screen is shown in Table 3.5.

All data entry screen types are retained from the old BIS except for 'Observations'. Note that observations will be available in the MULTIGENERATION system through the INLIFE observation function, with a table of observations that is appropriate for MULTIGENERATION studies. The format of the BMSS data entry screens is similar to the format of the old BIS screens. Three new terminal functions have been added for the animal rooms. These are 'Display Animal Orders', 'Change Cage Status', and 'Move Cage'. The data display screens have been extensively modified to better meet the current needs of the animal husbandry staff. Several new data display screens (Figs. A.6 - A.9) have been designed as requested.

Included in the screen display are two new interactive data entry functions that are separate from the animal room functions. These functions provide for entry of those allocation data, which are not entered elsewhere in NARSS, and entry of animal order data. The requested screens for correction of errors in the BREEDING data base are not included here, because they require that the data base records be designed before the screens can be designed. The error correction screens will be modeled after the INLIFE data base correction screens as much as possible. The requested 'System has been down' message is not illustrated. It would be displayed on the bottom of the first BREEDING screen to appear on each terminal after the computer system becomes available after a CPU failure.

Table 3.3. Sort order for each screen

Screen	Sort Order
Login/ID	None
Balance Calibration	None
Allocation Data Input	None
Display Cage	None
Retirement Candidates	Cage number
Unproductive Breeders	Cage number
Feeders by Minimum Age	Strain code, cage number
Room Work Summary	Strain code
Display Animal Orders	Experiment number, investigators
Enter Animal Orders	Experiment number, investigators
Allocation	Rack, side, cage number
New Animal Entry	None
Assignment	New cage number (breeder asgn.)
Removal	None
Retire Individual Cages	None
Retire a Sequence of Cages	None
Pregnant or Plugged	None
Littered	None
Issue	None
Change Cage Status	None
Move Cage	None

Table 3.4. Calculations required for each screen.

Screen	Calculations
Login/ID	None.
Balance Calibration	Difference between actual and measured weight(s)
Allocation Data Input	None.
Display Cage	When a litter is present, the block count is decremented by number of litter animals previously removed, issued, etc. prior to display of this screen.
Retirement Candidates	Number of days established
Unproductive Breeders	Number of days established, number of days since last litter.
Feeders by Minimum Age	Age.
Room Work Summary	Counts by strain and totals over all strains are computed for the items displayed in Fig. 9.
Display Animal Orders	The 'Date Filled' is filled in when the number required equals the number delivered. The order is removed from the display Friday of the week after the order is filled.
Enter Animal Orders	None.
Allocation	Counts of males, females, and block animals are decremented as they are allocated.
New Animal Entry	None.
Assignment	Counts of males, females, and block animals are decremented as they are assigned.
Removal	Counts of males, females, and block animals are decremented as they are removed.
Retire Individual Cages	Counts of males and females are decremented as they are retired.
Retire a Sequence of Cages	None.
Pregnant or Plugged	None.
Littered	None.
Issue	Counts of males, females, and block animals are decremented as they are issued.
Change Cage Status	None.
Move Cage	None.

Note that 'number of days' is defined as zero on the first day.

Table 3.5. Frequency of use of each BREEDING screen.

Screen	many times per day	daily	weekly	monthly	less frequently
Login/ID	X				
Balance Calibration	X				
Allocation Data Input		X			
Display Cage	X				
Retirement Candidates	X				
Unproductive Breeders	X				
Feeders by Minimum Age	X				
Room Work Summary	X				
Display Animal Orders	X				
Enter Animal Orders	X				
Allocation	X				
New Animal Entry			X		
Assignment	X				
Removal	X				
Retire Individual	X				
Retire a Sequence of Cages		X			
Pregnant or Plugged		X			
Littered	X				
Issue	X				
Change Cage Status	X				
Move Cage	X				

3.6. INLIFE TERMINAL DISPLAYS

The following screens have been defined for INLIFE. The screens are referenced by their location in the Inlife Functional Design Specifications. These screens will not be modified for the BMSS but will be copied into the BMSS System where needed. The description for each of these screens can be found in the INLIFE documentation.

SCREEN	LOCATION IN INLIFE USER'S GUIDE
INLIFE Data Collection System Main Menu	page 3.2
Procedure Definition	opposite pg. 4.5
Schedule Definition	opposite pg. 4.7
Balance Calibration	opposite pg. 4.9
Identification Correction	opposite pg. 4.10
Cage Menu Screen	opposite pg. 4.11,13,15
Weigh Old Feeder	opposite pg. 4.18,20
Weigh New Feeder	opposite pg. 4.18,20
Weigh Old Bottle	opposite pg. 4.18,20
Weigh New Bottle	opposite pg. 4.18,20
Cage Observations	opposite pg. 4.22
Select Animal	opposite pg. 4.25,30
Select Unscheduled Animal Actions	opposite pg. 4.25,30
Select Unscheduled Cage Actions	opposite pg. 4.25,30
Re-Identify Animals in Cage	opposite pg. 4.35,36
Animal Weight	opposite pg. 4.37,40,41
Clinical Observations	opposite pg. 4.44
Observation Summary	opposite pg. 4.56
Feed Check	opposite pg. 4.57
Death Check	opposite pg. 4.58
Cage Relocation	opposite pg. 4.59
Remove Animal	opposite pg. 4.61
Dosing	

3.7. MULTIGENERATION TERMINAL DISPLAYS

The MULTIGENERATION terminal displays will include all the screens listed in Table 3.6. The MULTIGENERATION functions which must be added to the NARSS main menu are listed in Table 3.1. Two functions are duplicated for the BREEDING portion of BMSS and for INLIFE. They are the removal and cage relocation functions. Either BREEDING or INLIFE formats must be chosen for MULTI-GENERATION. The BREEDING (and allocation) functions will be accessed from the INLIFE schedule

definition screen by adding the BREEDING actions to the allowed action table. The appearance of the screens for the BREEDING portion of BMSS and the INLIFE portion of BMSS versus MULTIGENERATION screens is the same; however, the allowable input and allowable sequences of actions may be very different. For example, within the old BIS it is only possible to allocate animals from an issue cage to an experiment cage, while in MULTIGENERATION it will be possible to allocate from an experiment cage to an experiment cage. The sort order and calculation tables (Tables 3.3. and 3.4.) apply to the MULTIGENERATION screens as well as the BREEDING screens. The frequency of screen use is listed in Table 3.6. for the MULTIGENERATION screens. Details of the MULTIGENERATION internal requirements will be included in the internal design document.

Table 3.6. Frequency of use of each MULTIGENERATION screen.

Screen	many times per day	daily	weekly	monthly	less frequently
Login/ID		X			
Balance Calibration		X			
Allocation Data Input			X		
Display Cage	X				
Retirement Candidates		X			
Unproductive Breeders		X			
Feeders by Minimum Age		X			
Room Work Summary	X				
Allocation		X			
Assignment	X				
Removal	X				
Retire Individual Cages		X			
Retire a Sequence of Cages			X		
Pregnant or Plugged		X			
Littered		X			
Sex Pups		X			
Weigh Pups		X			
Issue	X				
Change Cage Status		X			
Move Cage		X			
Procedure Definition		X			
Schedule Definition		X			
Identification Correction			X		
Cage Menu Screen		X			
Weigh Old Feeder		X			
Weigh New Feeder		X			
Weigh Old Bottle		X			
Weigh New Bottle		X			
Cage Observations		X			
Select Animal		X			
Select Unscheduled Animal Actions			X		
Select Unscheduled Cage Actions			X		
Re-Identify Animals in Cage			X		
Animal Weight		X			
Clinical Observations		X			
Observation Summary		X			
Feed Check		X			
Death Check		X			
Cage Relocation		X			
Remove Animal		X			
Dosing		X			

4. REPORT LAYOUTS

4.1. BREEDING INFORMATION SYSTEM REPORTS

Reports will be generated by the VAX computer and transmitted to a laser printer. Printed reports or copies thereof will be printed on 8 1/2 x 11 inch paper for distribution to NCTR users who are the breeding colony managers and the experimental breeding staff for monitoring and analysis. It is recommended that this design incorporate the use of printers (e.g., laser printers) that can generate high quality reports using compressed print instead of using reduced computer copies. Printing of copies would need to be handled automatically to accommodate the requirements for different numbers of copies of different reports. A table driven function with the proper queues built in to specify report numbers and the print size would be used.

A recap report will be prepared daily to report all assignment, observation, and removal transactions for the day. Weekly reports provide a synopsis of the more detailed information from these daily transactions, including summaries of the week's activity. Certain reports have been designated as "ad hoc", meaning that they fulfill a specific purpose and are generally issued upon request rather than on a specific date. These reports include modifications of the current system reports as well as new reports. The reports were developed through a series of interviews, current system demonstrations, and analyses of current and potential future needs of the end-users.

An example of a report is shown in Section 4.1.1 and each report is described separately in Appendix B. Report descriptions, physical layouts, and data element summaries are in Parts B.1, B.2, and B.3, respectively, of Appendix B. The report description in the example that follows gives the purpose, data source, data element definitions (also in Appendix D), sort sequence, destination, and frequency. The report "test pattern" shows the presentation format (header, body, summary, and footer information), size and type of each data element, and the proposed physical arrangement on the page.

4.1.1. Sample Report

1. Daily Recap Report - Assignments (BS-001)

This report provides a list of all animal assignments and issues made during the day. A distinction is made between assignments and issues. If an animal's status is changed but it remains in the same room, it is considered an "assignment." This would include animals assigned as breeders or feeders. On the other hand, if an animal is assigned a standby status inside or outside of the room, it is considered an "issue." This would include animals issued to experiment or as feeders.

This report is issued daily. A section is prepared for each animal strain. Section detail is in sequence by source cage number. A summary is prepared as the last page of each section. Report detail is described below and a sample report follows this description.

Sort Sequence: Source Cage Number
Frequency: Daily
Destination or Printer No.:

a. Building room and NCTR strain code are identified on the title lines of each page. This issue is identified by the Gregorian date displayed below the report title.

b. A detail line is prepared for each assignment as follows:

(1) OPER: Number identifying the animal technician who performed this action.

(2) PREV. STATUS: Former status of the animal.

(3) UIN/COUNT: Strain code and unique identification number of the animal that were assigned or issued. "COUNT", if more than one, indicates either a pair of breeders or the number of animals treated as a block. For a block assignment this UIN is the first in a sequential series of UINs. For a breeder pair this UIN is for the female.

(4) SEX: Sex of the animal indicated as:

F = Female, M = Male, or U = Unsexed

(5) ANIMAL ID: Code that indicates the earclip or other code given to an animal when it is allocated to an experiment.

(6) GENR - Generation: The generation number of this animal, breeder pair, or block of animals.

(7) PREV. CAGE: The number identifying the previous cage that this animal was assigned.

(8) DEST - Cage Destination: Number identifying the cage to which this animal will be moved.

(9) CURRENT STATUS: Current status of the animal including final action (e.g., breeder, feeder, issue experiment, issue feeder, issue other, cull, dead, etc).

(10) CAN NO - Common Account Number: NCTR division account number assigned to animals that are issued to an experiment.

(11) EXP - Experiment: Number identifying the experiment for animals that are issued to an experiment.

(12) MATE UIN: Unique identification number for the male animal assigned to this female breeder.

c. A summary page is prepared for each strain after the last detail page for that strain. Totals are displayed for the total number of male and female breeders, total number of male, female and unsexed feeders, and the total number of male, female and unsexed animals for all issues.

4.1.2 Report Descriptions

Detailed descriptions of the breeding reports are in Appendix B. The report titles and sources are as follows:

1. Daily Recap Report - Assignments (BS001)
2. Daily Recap Report - Observations (BS002)
3. Daily Recap Report - Removals (BS003)
4. Female and Male Breeder Cards (BS004)
5. Animal Birth Report (BS005)
6. Weaned Animal Report (BS006)
7. Breeder Assignment Report (BS007)
8. Active Breeder Report (BS008)
9. Average Litter Size (BS009)
10. Unproductive Breeder Report (BS010)
11. Retirement Candidates (BS011)
12. Daily Allocations (BS012)
13. Female Breeder Status (BS013)
14. Productivity Index Report (BS014)
15. Feeder Status Report (BS015)
16. Transfer/Issue Cage Report (BS016)
17. Animal Orders (BS017)
18. Target Trace (BS018)

4.2. INLIFE REPORTS

ORNL will not make any changes to the following INLIFE reports and tables. Most of these tables and reports will be incorporated as part of BMSS. There will be some modification required to reflect the requirement of BMSS to deal with multiple generations of animals because INLIFE only deals with one generation.

A detailed description of the reports will not be included here because the information is readily available in existing NCTR documentation. The report titles and sources are as follows:

1. Individual Daily Consumption Table (contained in document #4114-INL/REP-1.0)
2. List of Rejected Food Consumption Values (contained in document #4114- INL/REP-1.0)
3. Feeding Schedule Report (contained in document #4114-INL/REP-1.0)
4. Animals Removed from Experiment Report (contained in document #4114-INL/REP-1.1)
5. Selective Observations Report (contained in document #4114-INL/REP-1.1)
6. Animal/Cage History Report (contained in document #4114-INL/REP-1.1)
7. INRP004A, Rack Configuration by Cage (contained in document #4114-INL/REP-1.1)
8. INRP005, PCR Report (contained in document #4114-INL/REP-1.1)
9. INRP006, INLIFE Animal Summary (contained in document #4114-INL/REP-1.1)
10. INRP007, Individual Body Weight Table (contained in document #4114-INL/REP-1.1)
11. INRP008A, Individual Daily Food Consumption Table (contained in document #4114-INL/REP-1.1)
12. INRP008B, Individual Daily Water Consumption Table (contained in document #4114-INL/REP-1.1)
13. INRP009A, Rejected Food Consumption Values (contained in document #4114-INL/REP-1.1)
14. INRP009B, Rejected Water Consumption Values (contained in document #4114 INL/REP-1.1)

4.3. MULTIGENERATION STUDIES REPORTS

The third functional area of EB or MULTIGENERATION studies is being established to test and evaluate animals where multiple generations of animals are required. Hence, EB must have capabilities of breeding and INLIFE, along with new capabilities, such as treating pups in a litter as individuals. The MULTIGENERATION studies reports follow the same format as the breeding reports and examples given in Section 4.1. Presently, three reports and a summary report have been defined for EB. They are listed below and located in Appendix B following the breeding reports. Report descriptions for EB are in Appendix B, Part B.1, physical layouts in B.2, and data element summaries in B.3.

1. Pup Weights at Weaning and Disposition (EBS001)
2. Pup Weights (EBS002)
3. Fertility (EBS003) and Summary Report (EBS003S)

5. FORMS/LOGS LAYOUT

5.1. BREEDING LOGS

The development and maintenance of activity logs is a very important function within the present BIS system. This is presently a manual procedure that is used for recording new litters. The procedure consists of two log sheets that are filled in according to well-defined standard operating procedures (SOP). Log sheet 1 is used for recording the new litter (e.g., to list assigned UIN's, etc.). Log sheet 2 is a carbon copy of 1 (i.e., duplicate information on a copy) and is used at the time the litters are weaned to record sex, animals weaned or dead, the disposition, and other information. The SOP for each log sheet and an example of each sheet and the layout is shown in Part B.4 of Appendix B. A requirement of the new system will be the capability to enter, store, retrieve, and print these data as a daily recap report.

5.2. BREEDING FORMS

Forms for BREEDING that exist in the present BIS system are the Male Breeder card and the Female Breeder card. These are preprinted cards that are prepared for each breeder pair listed on the Breeder Assignment Report at the time the pair is established as breeders. Each set of cards is attached to a breeder cage and is used to log the birth and weaning of litters produced by that breeder pair and serves as a quick visual check for that cage. New litters and their subsequent weaning are recorded on these preprinted cards and the data terminal. These cards are described in detail along with their layouts and data elements in Appendix B (Parts B.1., B.2., B.3., respectively)

6. TABLES

The screens and reports defined during the external design have not produced any new tables to be added to the present Table Maintenance System. If during the Internal Design or later stages of the life cycle a new table is required, it will be added to the present TMS system. The tables required for describing report frequencies and sort orders for reporting purposes have been included in Section 4.0, Report Layouts and Descriptions.

7. DATA RELATIONSHIPS AND VOLUMES

7.1. DATA RELATIONSHIPS AND VOLUMES

The dictionary shown in Appendix D contains the above mentioned attributes. The NARSS Data Dictionary was used to obtain some information about ADABAS data elements to populate the data dictionary. The NARSS Data Dictionary will continue to be cross-referenced during the life cycle process to obtain information on the data elements and their relationships to other data elements. The NARSS Data Dictionary will also be used to obtain information on the logical and physical design of the data structure. The volumetrics of the current system fall into two categories: 1) BIS--MODCOMP/IBM (approximately 250 megabytes), and 2) INLIFE. The file sizes and transaction volumes will be dealt with during the internal design.

At the present time not all attribute information can be completed. The data elements that are listed were derived from the reports. Screen entry information has not been included. Those data elements identified as "Calculated" are assumed to be calculated only at this time. When the internal design is completed, data elements and their attributes will be updated.

Appendix C contains a cross-reference of the reports identified for use in BMSS to the data elements defined in the data dictionary. The proposed Breeding or EB report identifier is given in the heading. In the first listing in Appendix C, the heading that lists the report is blank. The data elements listed on that page do not appear on any report; however, they are used to calculate other data elements that are on the reports.

The first column of the information in Appendix C identifies the name used in the report and the second column gives the data element name as it appears in the data element dictionary. From this information the user can identify the specific data element used in the reports.

7.1.1. Data Element Name

The data element name is the name used to describe the data element. Names are limited to 50 characters. The data element name defined here is the name by which the data element is commonly referred to rather than the name found in the program code. The word "by" in the name indicates that the

data are summarized or totaled for the data element that follows the word "by". For example, "by Treatment" would mean that the data are summed for each treatment.

7.1.2. Short Data Element Name

The short data element name is either a shortened description of the normally used data element name or is a commonly used alias. This shortened name is not used in program code.

7.1.3. RMS Data Element Name

This is the data element name as used in DEC's RMS code. It follows RMS naming conventions.

7.1.4. RMS File Format

This is the data element format used in DEC's RMS. It follows RMS format conventions.

7.1.5. ADABAS Data Element Name

This is the data element name as used in ADABAS code. It follows ADABAS naming conventions.

7.1.6. ADABAS File Format

This is the data element format used in ADABAS. It follows ADABAS format conventions.

7.1.7. Format Description

The format description is a representation of the format of the data element. It is used to show how the data would be displayed. An "A" indicates a character; no distinction is given between alphanumeric

and alpha. One "A" indicates a single character, two "A"s indicate two characters, etc. An "N" indicates a numeric value. Decimals are explicitly shown; e.g., "NN.N" indicates a numeric data element that takes four spaces with one decimal place. Without a decimal point shown the data are considered integer. The RMS or ADABAS file format descriptions of the data element may have implicit decimals.

7.1.8. Data Entry Screens

If the data are entered through data entry screens, the screen, or screens, on which the data element appears is listed. Following the screen name is a "-" followed by the name used on the screen to prompt the entry.

7.1.9. Report(s)

The attribute shows the report, or reports, on which the data element appears. First is the report heading followed by a "-" and then the name used in the report heading. The report heading could be different than the data element name.

If the report heading is followed by the phrase "(Conditional)", then the data element may or may not be used depending on other data factors. For example, in some cases, when an animal is known, the animal's UIN is listed in a specific column; otherwise the litter UIN is listed with a count of the number of animals. In report BS-003, "Removals," the heading UIN/COUNT could indicate a single animal or several animals that are to be removed from the breeding colony. If COUNT is greater than one, then the UIN is the litter's UIN. This would indicate that the value assigned to COUNT is the number of animals that are to be removed from the litter. This situation could occur if the animals in the litter have not been assigned UINs at the time of removal. If COUNT is not given, then the UIN is for a specific animal.

7.1.10. Initiating Source

The initiating source defines the source of the data element. If the field starts with:

- "Screen:" the data are entered through screen entry. Following this is a brief description of the person, persons, or organization that is allowed to enter data for the data element.

- "Calculated:" the data element is derived from one or more other data elements. The data element could be transferred from another data element on a conditional basis. The data element "Female UIN" is an example of a conditional data element. A check is made to identify a female, by searching the data element "Sex"; if it is female; then the animal's UIN is transferred from "UIN" to "Female UIN". A calculated data element could also be one that is derived from some statistical process, such as summation or averaging.

- "Other:" the source of the data element is from outside the system or from a look-up table. The data could be brought in by data exchange from outside the data base, e.g., through the process of Study Definition at the start of an experiment. When the Initiating Source is listed as "Other:" the specific data source is listed, followed by the person, persons, or organization allowed to alter or modify the data.

7.1.11. Allowed Values

The allowed values for the data element are listed in this attribute. Included in allowed values are the actual values permitted, the character notation, or ranges of values.

7.1.12. Defaults

The defaults are the values used when no data are given for a field. Blanks are an allowed value; when they are the data element attribute, "Default" in the data element dictionary is left blank. If a zero (0) is a default, then it should be spelled out as "zero" to avoid confusion.

7.1.13. Data Assessments

This attribute is a short description of the "rules" that can be used to assess the data. For example, in date sequencing, the assessment rule could be that one date be greater (or less than) another. The allowed values attribute also can be used for entry level data assessments of the data element and should not be repeated under this attribute. Some information is assumed in the data assessments; e.g., if the data element is numeric, it is assumed that no alpha characters are allowed.

7.1.14. Entity

The entity to which the data element belongs is given in this attribute. If the data element is used as a key or relation data element the word "Key" is written on the first line of this heading. Other lines identify the entities where they are found. Entities are shown in Figure 2.3.

7.1.15. Text Description

The "Text Description" is a free format field that allows for a definition of the data element. The definition should be short, but fully describe the data element and its role in the system.

7.2. USAGE OF THE DATA ELEMENT DICTIONARY

The dictionary will be a valuable tool during the life cycle process and will contain all data elements used in the system. This includes data elements that are stored in ADABAS or RMS. Data elements used for calculations, transfer, and internal storage during other manipulations also will be included. Those that are stored permanently in the data base will be identified in the attribute "ADABAS Data Element Name" with an (S) following the data element name.

8. PRELIMINARY TESTING AND CONVERSION PLANS

ORNL has prepared a BMSS testing plan draft outline according to NCTR's SOP for System Development. This outline will be expanded as file structures and layouts are further defined in internal design. The activities will include testing of procedures for using BMSS as well as testing of internal capacities and resource requirements. Backup, Recovery, and Maintenance procedures will also be tested. Testing will be performed by a team specified by the project manager and reporting to the project manager on the success or failure of the test programs. The criteria for testing will be developed by the team in concert with NCTR. The actual data for the testing plan will be derived from BIS Census data and historical data in conjunction with the appropriate data from INLIFE. The files for this process will be specified during the internal design phase. In addition, the file format and layout will be determined in the internal design and passed on to the NCTR team performing the conversion of the existing BIS data bases to BMSS structures and files.

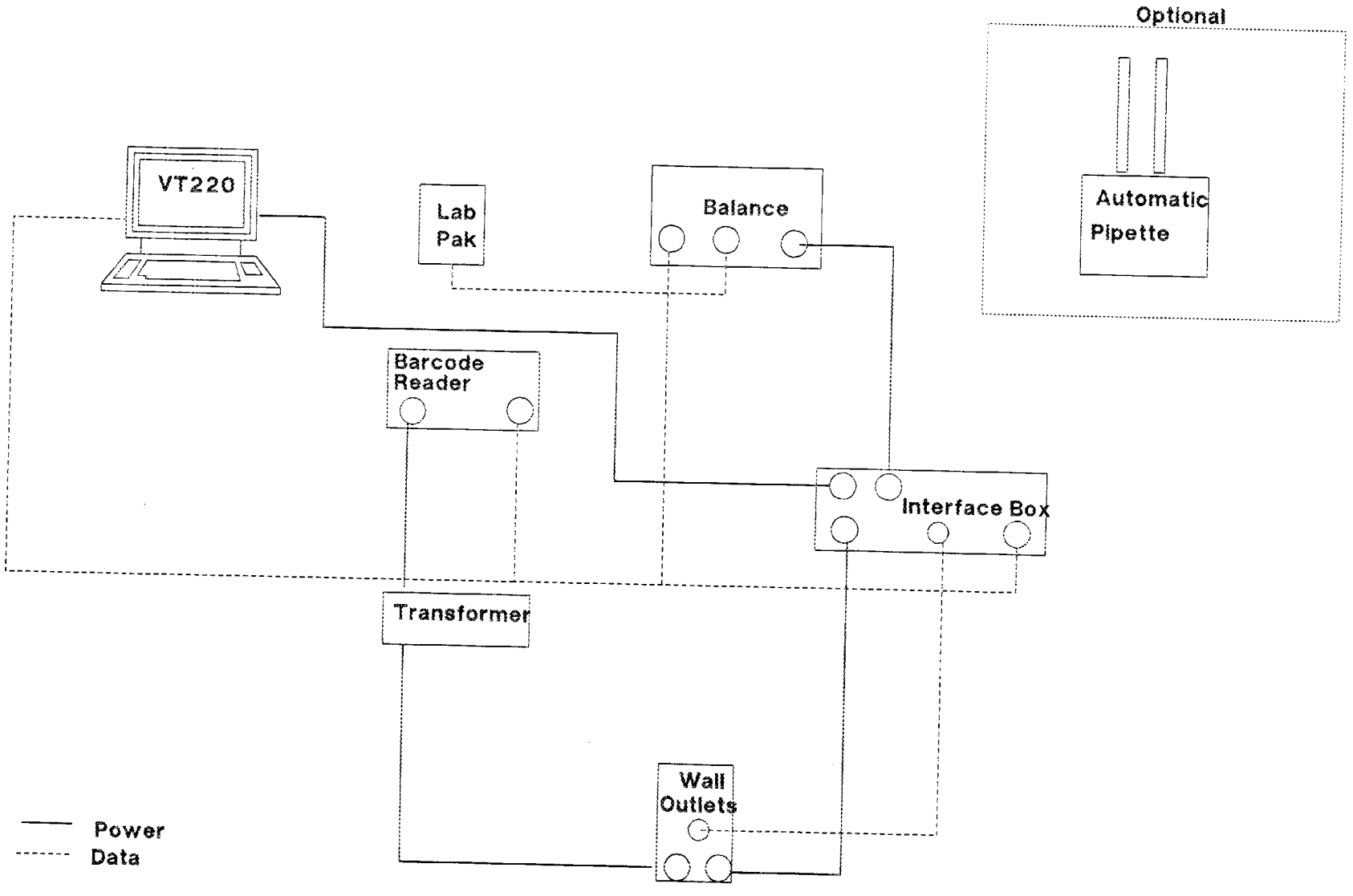
9. HARDWARE AND SOFTWARE REQUIREMENTS

BMSS will run on the production VAX 11/785 data entry CPU and production VAX 8650 data base CPU both operated by the NCTR Division of Resource Information Management Systems (DRIMS). The hardware for data entry and terminal displays will be DEC VT 220s or equivalents hardwired to the development and test VAX 785 with each terminal having a keyboard template or custom-marked key caps (Figure 9.1). Prototype engineering of the system will be performed on the development VAX 750 CPU with migration to the test VAX 780 CPU for final evaluation. Data entry will be performed with bar code readers, key entry, and signals received directly from the balance device. No dial-up access is anticipated. The VT 220 keyboard layout will mirror the current BIS keyboard layout as much as is reasonably possible. Bar code readers will be used instead of the current punch card readers. Data will be input by animal technicians in animal rooms or from other locations.

Output will be directed to printers and to the VT 220 screens. Screen copies or logs of daily activities will be required. Individual reports may be available on both devices or only on one, depending on the user's needs.

The procurement of VT 220 terminals, hardwired lines, bar code readers, balances and interface boxes will be required for the BMSS. Output for certain reports will be standardized to HP Laser II printers or equivalents.

Figure 9.1. BMSS Terminal and Data Entry Configuration



10. ANTICIPATED CONFIGURATION

10.1. SOFTWARE

The target software will include:

ADABAS version 1.4
Natural version 1.3
COBOL version 3.2
TDMS version 1.7
VMS version 4.6
DEC's RMS (Records Management System)

The applications software used to engineer BMSS will consist of TDMS, ADABAS, and COBOL. Other applications software available on NCTR computers that may be considered for the application are ADABAS/NATURAL report generation language, the Statistical Analysis System (SAS), and the interface between SAS and ADABAS (presently not on NCTR computers). The operating system software will be VMS/DCL. The conversion of the existing BIS on-line census and archival data bases on the IBM 4341 from IBM to DEC must be completed (by NCTR personnel or their contractors) before the new BMSS will be functional.

10.2. HARDWARE

Hardware requirements include a large portion of the production VAX 11/785 (data entry) and VAX 8650 (data base) CPUs. It is anticipated that during the internal design specific justification for speed, access and disk space will be defined. This will assist in the evaluation of the hardware resource needs for the final BMSS. In addition to the VAX CPUs, there will be a parallel activity involving the IBM and MODCOMP CPUs where another team will be preparing the software for the conversion of the existing data bases to the VAX CPUs. The estimated file and record format for the conversion will be set during the internal design.

Additional hardware requirements include VT 220 or compatible terminals, hardwired lines, port selectors, and appropriate balances and weighing devices to support the BREEDING area. Devices connected to the terminals in EXPERIMENTAL BREEDING have yet to be defined. Additional requirements for the number of laser printers in the breeding area will be determined by resource availability and costs. This will be addressed in the internal design.

11. ALGORITHMS

Requirements for calculations and algorithms have been summarized for each data element in Appendix D. Other algorithms required for logical file structures and physical file structures will be defined during the internal design phase.

12. SYSTEM OVERVIEW

NCTR Automated Research Support System (NARSS) encompasses all of the subsystems required to automate those functions which are necessary in order to manage experimental information from origination to completion of that experiment (Figure 12.1) (Reference 31). The concepts applied to all of the NARSS subsystems are:

A. The system must be a totally integrated system in which information is entered once within the subsystem that collects the data but then is made available to any other subsystem that requires the information.

B. The system must have the ability to trace and associate experiment information from inception to completion of the experiment.

C. Retrieval of data on the data base must be easy and readily accessible.

D. All data are edited to the extent that any data that reside on the VAX data bases can be considered accurate and complete.

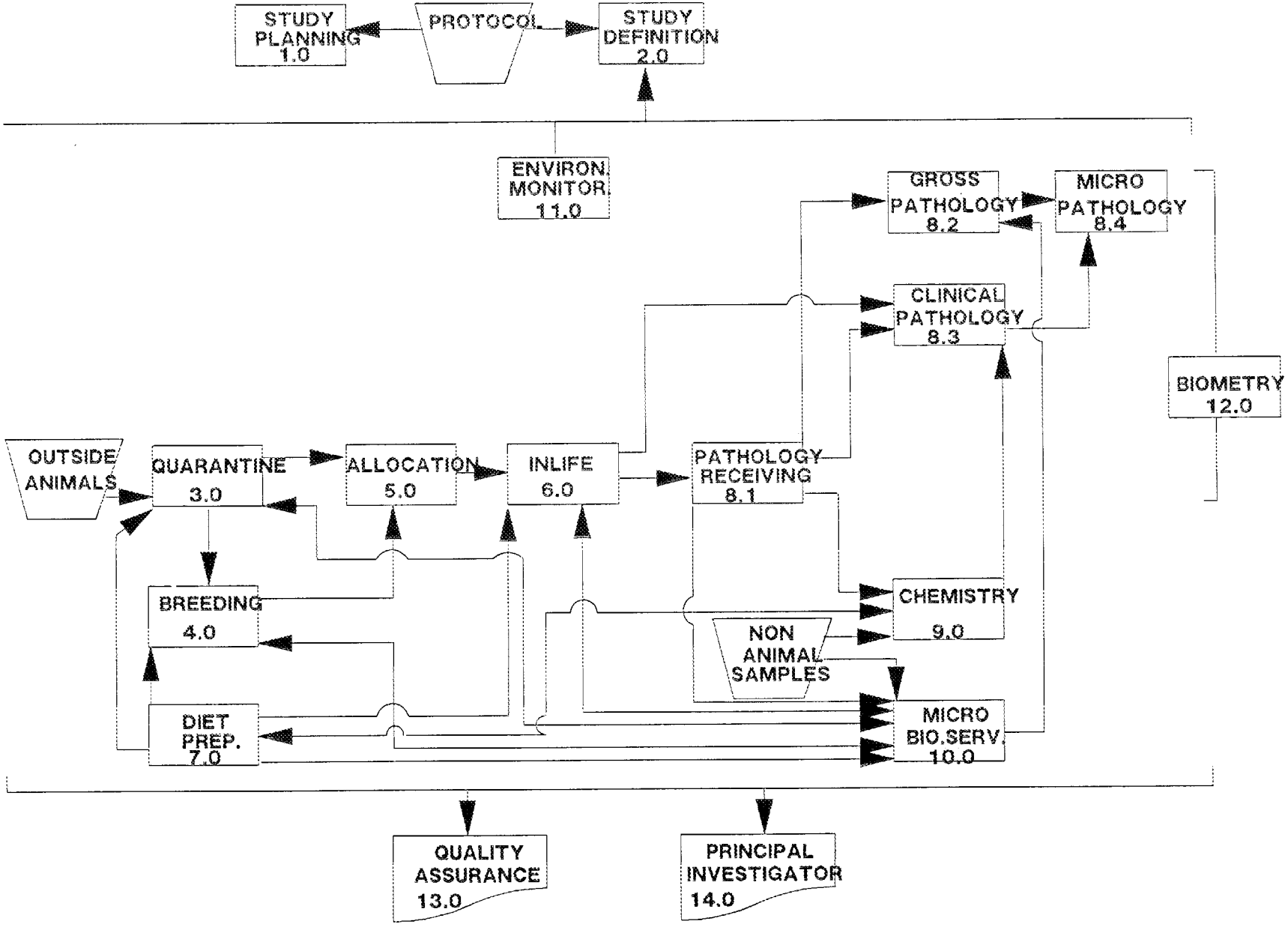
E. Audit capabilities will exist to ensure a history of all adds, changes and deletes to the data base.

F. Ensure that real time input (i.e., animal weights, feeder weights) are adequately provided for such that they are correct and valid at the time they are entered.

G. Online update, inquire, and batch report processing capabilities must be engineered for the VAX computer.

Each of the subsystems shown in Figure 12.1 is described in the June 1984 Requirements definition report. No update to these subsystem descriptions has been prepared to date.

Figure 12.1. NARSS Subsystem Linkages and Flows



13. OPERATIONS AND MAINTENANCE

The BMSS will be designed, prototyped, and engineered by ORNL personnel and their subcontractors under the direction of NCTR. The system will be maintained and operated by DRIMS personnel and their contractors.

14. ERROR CORRECTION PROCESSING

14.1. ERROR TYPES

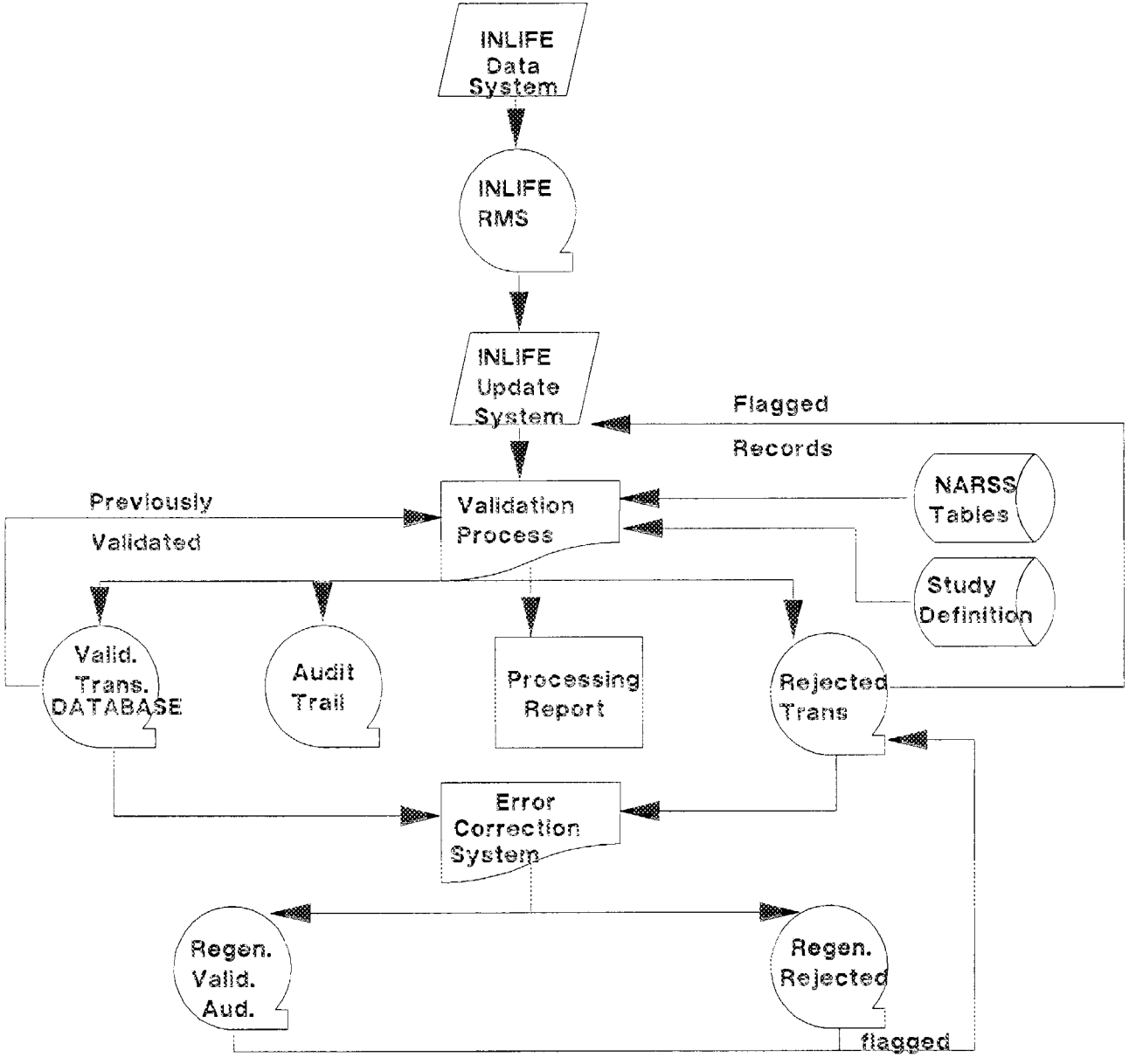
Error detection, reconciliation, correction, and record keeping are a standard part of the current BIS, INLIFE System, and other systems at NCTR. The types of errors that can be corrected in the present systems are 1) screen type where the error is corrected immediately by backspace keys or clear screen keys, i.e., general data entry errors; 2) errors occurring in the census file or other online information that is about the current transaction for a particular animal; no record of correction is required for these types of corrections; 3) errors in the data base due to logic errors or program code errors; these types of errors require quality assurance as well as the principal investigator's approval prior to change; 4) modifications caused by an animal death during a cage assignment or transfer as it is initially assigned; and 5) apparent errors caused by lagging of error corrections with previously generated reports. Errors due to system failures from power outages or equipment failures are also possible. The latter type of error will be minimized by dating all reports and standardizing procedures for report generation following file correction.

When errors of any type occur in the present BIS, an operator must apply an appropriate correction, following supervisory approvals, through means of direct file access and either rebuild a transaction or update the data base. When errors occur in the INLIFE data, the INLIFE Error Correction System is used (Figure 14.1). As documented in the INLIFE Error Correction Terminal Operator Guide, set procedures are followed for all correction processes. During any error correction process, no new records are added to the transaction file; only existing records are modified. Records may only be added through the data collection system or the Manual Forms Entry System. Following modification, a log is initialed and dated as to what correction was made and why. This is a standard practice for all data collection systems at INLIFE.

14.2. CORRECTION PROCEDURE

There presently is no menu-driven Error Correction System for the BREEDING System. Very strict procedures are followed for corrections to data entered into the BIS system as defined by Standard

Figure 14.1. INLIFE Error Correction System Flow



Operating Procedures and Good Laboratory Practices. The present set of procedures requires a number of manual steps to occur to identify the correct file containing the record(s) to be corrected, fixing the transaction, and depending upon the timing of the correction, updating the data base. The capability to correct data with a menu-driven system will be developed as part of the screen data entry process, transaction update processes, and data base maintenance procedures in the BMSS. The procedures developed will follow closely those developed for INLIFE as described below.

Figure 14.1 is taken from the INLIFE Error Correction System Terminal Operator Guide. This figure represents the process of error correction from a data flow/system perspective. The process of update takes place on the RMS files or on intermediate ADABAS working files (if determined appropriate by internal design task). Each type of transaction to the RMS files must pass validation prior to the transaction being approved for further processing. The Error Correction System can use input from both the transaction file, the validated ABABAS file, and the rejected transaction file to generate a revised transaction record. Once a record has been modified by the Error Correction System, it once again undergoes validation prior to it being approved for further processing to the data base. This process requires a substantial amount of file/record keeping and corresponding disk space on the computer. However, it is vital for quality control and assurance of the collected data. The regenerated and validated data file also contains audit trail information for accounting for the change in the data value.

14.3. APPROVAL PROCEDURE

Procedures as used by NCTR are those stated in CFR PART 160-Good Laboratory Practice Standards, Section 160.185. Briefly, these procedures require an audit trail of any change that has been made to a raw data value. Thus, if a computer system is used to modify a data value in a file, a file must be generated which tracks the change, the person, and date. This requires the recording of old value as well as new value in addition to the descriptive information as to why the changes were made.

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APPENDIX A

BMSS SCREENS

Figure A.1. Login / Identification

```
==================================================================================
Identification                                                    DD MMM YY HH:MM
Operator 99999

----------------------------------------------------------------------------------

 Building and Room number: XXX-XXXX

              Terminal ID: 999999

               Barcode ID: 999999

              Keyboard ID: 999999


Enter Function or Cage: XXXX
----------------------------------------------------------------------------------
Gold N - Erase Data, Restart Screen; PF2 - Help;
Cntl W - Sequential Wean; Cntl L - Littered Cages; Cntl A - All Cages
==================================================================================
```

Purpose:
To identify the equipment to be used in this session.

The new BMSS will be entered through the NARSS main menu. The operator id is retrieved from the Operator Identification Table during the VAX logon. Four items are entered on the BMSS identification screen.

1. Building and room - any room may be accessed from any terminal
   prompt: Enter Building and Room: XXX-XXX
   response: building and room numbers
   possible error message: Invalid Building and Room - Reenter
   response: reenter building and room

2. Terminal ID
   prompt: Enter Terminal ID: 999999
   response: bar code or key in the terminal identification number
   possible error message: Invalid Terminal ID - Reenter
   response: reenter terminal id

3. Barcode ID
   prompt: Enter Barcode ID: 999999
   response: bar code or key in the barcode identification number
   possible error message: Invalid Barcode ID - Reenter
   response: reenter barcode id

4. Keyboard ID
   prompt: Enter Keyboard ID: 999999
   response: bar code or key in the keyboard identification number
   possible error message: Invalid Keyboard ID - Reenter
   response: reenter keyboard id

After all data are correctly entered:
   prompt: Enter Function or Cage: XXXX
   response: bar code or key a cage number or press a function key
   If a function key is pressed the prompt 'Enter cage: 9999' will appear and the cage number must be entered before the screen clears.
   possible error message: Invalid cage for this room - Reenter
   response: reenter cage number
   possible error message: Invalid function - Reenter
   response: reenter function

At this point all Breeding functions are available. Note that if a cage number is entered here, the Display Cage screen (Fig. A.13) for that cage will appear next.

Figure A.2. Sample Help Screen - New Animal Entry

==========

New Animal Entry

This screen allows you to introduce new (purchased) animals into the breeding colony. All animals that are introduced into one cage can be entered on one screen. To enter animals to another cage, enter that cage number below the line.

Enter to return to data entry screen

==========

Field help messages:

Date of Birth:
Enter the date that the animal was born as (day month year).

Phenotype:
For strains 29, 37, or 46: black, yellow, or agouti; 84: haired or nude.

Number:
Enter the number of animals in this category.

Generation:
This number is provided by the vendor.

No data are entered on this screen. The only accepted response is pressing the enter key, which returns the animal technician to the data entry screen.

Figure A.3. Allocation Data Entry

```
==================================================================================
Allocation Data Input System - General Data                      DD MMM YY HH:MM

Operator 99999
----------------------------------------------------------------------------------

                          Experiment: 9999-99

Is the animal start date:
          the birth date? X
     the allocation date? X


            Random Requirement: X

      No Litter Mates in Cage: X
   No Litter Mates in Column: X
      No Litter Mates in Row: X

            Clip Sequence: XXXX

----------------------------------------------------------------------------------
Gold N - Erase Data, Restart Screen; PF2 - Help;
==================================================================================
```

Purpose:
To enter data to set up allocation for an experiment. The actual allocation is entered on the screen in Fig. A.4. All other data required to set up allocation are entered through current INLIFE SOP's. If the data entered on this screen will be entered in the new Study Definition system, this screen will be removed from BIS.

No prompts appear on this screen. Five data items are entered in the fields shown.

1. Enter the experiment and test for which these data will apply.

2 and 3. If the date the animal starts on the experiment is defined as the animal birth date or the allocation date, a 'y' is entered in the appropriate one of these two fields.
possible error message: Can't both be yes.
response: Change one or both of the responses to 'n'.
possible error message: Must be 'y' or 'n'.
response: Change data to 'y' or 'n', as appropriate.

4. Enter 'y' or 'n' if there is or is not a requirement that the animals be placed in cages in a random order during allocation.
possible error message: Must be 'y' or 'n'.
response: Change data to 'y' or 'n', as appropriate.

5, 6, and 7. Three possible types of 'litter mates per cage' requirements have been suggested. A 'y' or 'n' will be entered for each of these.
possible error message: Must be 'y' or 'n'.
response: Change data to 'y' or 'n', as appropriate.

8. The clip sequence may be any unique combination of the letters 'n', 'l', 'r', and 'b'. The characters 'id ' override the ear clip sequence and imply that some method other than earclip will be used to identify the animals.
possible error message: Must be N L R B or Animal ID.
response: Change data to appropriate characters.

After all data are entered, the following prompt appears:

Are all the data on this screen correct? X

If the response is 'n', data editing begins.

If the response is 'y', the a blank allocation data entry screen is displayed and data entry for another experiment may begin. If no more experiments are to be entered, an experiment number of -1 will terminate the function.

Figure A.4. Animal Allocation

```
==================================================================================
Alloc    Oper 99999 99999 99999 99999   Issue Cage 9999   DD MMM YY HH:MM
     Males              Females              Block        Original Block
  XX-9999999         XX-9999999           XX-9999999        XX-9999999
Count=99 Gen=9999 Count=99 Gen=9999  Count=99 Gen=9999 Count=99 DD MMM YY
----------------------------------------------------------------------------
Exp 9999-99  Room XXX-XXXX  Rack 99  Side X   Sex X  Strain XX   #/Cage 9
9999 XXXXX  9999 XXXXX  9999 XXXXX  9999 XXXXX  9999 XXXXX  9999 XXXXX
XXXXX       XXXXX       XXXXX       XXXXX       XXXXX       XXXXX
9999 XXXXX  9999 XXXXX  9999 XXXXX  9999 XXXXX  9999 XXXXX  9999 XXXXX
XXXXX       XXXXX       XXXXX       XXXXX       XXXXX       XXXXX
9999 XXXXX  9999 XXXXX  9999 XXXXX  9999 XXXXX  9999 XXXXX  9999 XXXXX
XXXXX       XXXXX       XXXXX       XXXXX       XXXXX       XXXXX
9999 XXXXX  9999 XXXXX  9999 XXXXX  9999 XXXXX  9999 XXXXX  9999 XXXXX
XXXXX       XXXXX       XXXXX       XXXXX       XXXXX       XXXXX
9999 XXXXX  9999 XXXXX  9999 XXXXX  9999 XXXXX  9999 XXXXX  9999 XXXXX
XXXXX       XXXXX       XXXXX       XXXXX       XXXXX       XXXXX
9999 XXXXX  9999 XXXXX  9999 XXXXX  9999 XXXXX  9999 XXXXX  9999 XXXXX
XXXXX       XXXXX       XXXXX       XXXXX       XXXXX       XXXXX
9999 XXXXX  9999 XXXXX  9999 XXXXX  9999 XXXXX  9999 XXXXX  9999 XXXXX
XXXXX       XXXXX       XXXXX       XXXXX       XXXXX       XXXXX
XX-9999999 X/X 9999.9 grams - Allocated to cage 9999
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
----------------------------------------------------------------------------
PF2 - Help;
==================================================================================
```

Purpose:
To track animals as they are allocated to experiment cages.

Notes:
Include check for phenotype in message to check for mark.

Allow going back and re-allocating animals after the clip or rack is finished, in case an animal is missing. Allow random allocation among several racks, i.e., be able to jump from one rack to another during allocation. A 10x10 rack will be displayed as four 5x5 racks.

'XXXXX' next to cage may be 'NONE', 'LEFT', etc. or a 5-digit animal id number.

The five 'X' fields below the cage number will be filled with 'N', 'L', etc. if a clip is used as a mark or with '1' if a 5-digit ID is used.

We need a better description of 'manual allocation'.

Note: When Allocation is invoked, balance will be calibrated via the INLIFE Balance Calibration Screen, if not already done in this session.

1. Multiple animal technicians
prompt: How many animal technicians on this allocation: 9
response: may be from 1 to 4
possible error message: May not be more that 4
response: reenter number
if more than one
prompt: Enter operator id: 99999
response: VAX operator identifiers for each technician
The prompt will appear for 1, 2, or 3 id's, as is appropriate.
possible error message: invalid operator id
response: reenter id

2. Experiment - Test
prompt: ENTER EXPERIMENT NUMBER: XXXX-XX
response: the experiment and test number for this allocation
possible error message: experiment not in the directory
response: reenter experiment number

The sex, strain, and number of animals per cage are filled in.
If the experiment allocation data are on file, the room, rack, starting cage, and ending cage, will be filled in automatically and data entry continues at step 8; otherwise continue at step 3.

3. Experiment building and room
prompt: ENTER ROOM NUMBER: XXX-XXXX
response: building and room number housing the experiment rack.
possible error message: invalid room number
response: reenter room number

4. Rack number
prompt: ENTER RACK NUMBER: 99
response: number of rack to which allocation is being made
possible error message: invalid rack number
response: reenter rack number

5. Rack side
prompt: ENTER RACK SIDE: X
response: A or B
possible error message: invalid rack side
response: reenter rack side

6. Starting cage - the starting and ending cages may be used to select a subset of the cages on this rack.
prompt: ENTER STARTING CAGE, ROW, OR COLUMN: XXXX
response: bar code or key in the number of the first cage for this allocation or press R or C
possible error message: invalid cage number
response: reenter cage number
7a. If a cage number was entered in 6.

Ending cage
prompt: ENTER ENDING CAGE: 9999
response: bar code or key in the number of the last cage for this allocation
possible error message: invalid cage number
response: reenter cage number

7b. If R (for rows) or C (for columns) was entered in 6.
Row or Column Numbers
prompt: ENTER ROW NUMBERS: 9 9 9 9 9 9 9 9 9 99
- or -
prompt: ENTER COLUMN NUMBERS: 9 9 9 9 9 9 9 9 9 99
response:
possible error message: invalid number -Reenter
response: reenter cage number
possible error message: That row/column does not exist on this rack
response: reenter number

--- Preliminary data entry finished ---
--- Begin processing issue cages ---

A configuration of the specified rack side is displayed in the middle of the screen. If beginning and ending cage numbers were specified, only those cage numbers in that range are displayed, otherwise, all 42 cage numbers for the rack side are displayed. If any animals have previously been allocated to this rack side, their individual earclip codes are displayed below the cages to which they have been allocated.

8. First cage this side of rack
prompt: ENTER FIRST CAGE THIS SIDE: 9999
response: bar code or key in the number of the first cage to be allocated to.
possible error message: invalid cage number
response: reenter cage number

9. Issue cage
prompt: ENTER ISSUE CAGE: 9999
response: bar code or key in the issue cage number
possible error message: invalid cage number
response: reenter cage number
possible error message: There are no animals in that cage
response: reenter cage number
possible error message: Wrong strain/sex
response: reenter cage number

No issue cage is required, if an animal is to be weighed and sent to Teratology only.

When an appropriate cage number is entered the issue cage number and its cage census is displayed.

10. Issue cage weight

prompt: WEIGH THE FULL ISSUE CAGE: 9999.9
response: place issue cage on balance and weigh; if weight is not automatically transferred to the screen, it may be keyed in.
possible error message: invalid weight
response: reenter weight
possible error message: That seems unreasonable
response: Press Enter to accept value or reenter weight

May be keyed in or entered by placing the issue cage on the electronic balance and pressing the "WEIGH" key.

11. Experiment cage number - manual allocation only
prompt: ENTER EXPERIMENT CAGE NUMBER: 9999
response: bar code or key in the number of the experiment cage to which the animal will be allocated
possible error message: invalid cage number
response: reenter cage number

12. Animal weight with options
prompt: WEIGH <SEX>, ENTER, END, REMOVAL, OR ISSUE CAGE: XXXXXX
response: W (weigh animal), 'Enter' key, E (end), R (removal), or I (issue cage)
responses are processed as follows:

12.a WEIGH - Remove the animal from the issue cage and press the "WEIGH" key. If the weight is accepted, the allocation of that animal is recorded as indicated on the screen by an earclip description (None, Left, Right, or Both) or by an id number next to the cage number. The following message is displayed:

prompt: CLIP, MOVE ANIMAL AND VERIFY: x

Response: Verify the animal's earclip and press the appropriate earclip identification key or the digit 1, as appropriate. If ear clip is used the initial letter of that earclip appears below the cage number. If an id number is used, the digit 1 appears below the cage number.

12.b ENTER - Press the "Enter" key if the animal being allocated is not to be weighed. The allocation of that animal is recorded exactly as described for "WEIGH" except no weight is recorded.

12.c END - Signals a normal ending of the allocation process.

12.d REMOVAL - If an animal in the issue cage is going to be removed ratherthan allocated, the removal screen will appear. Follow the procedure for removal. Upon completion, the allocation function is resumed as normal.

12.e ISSUE CAGE - If animals from a different issue cage are to be processed, go to Step 9.

As each allocation is performed, the allocation transaction is displayed on the transaction line. If the animal was weighed, a weight transaction is also displayed. The animal technician must place the animal in the cage indicated on the transaction line (also indicated on the rack display by the animal id description next to the cage number).

If the experiment protocol does not allow certain littermate configurations, a warning message is displayed when littermates are about to be allocated to an inappropriate rack position: LITMATE ERROR
prompt: ENTER CAGE OR ENTER

Response: (1) Special Operator ID's allow the animal technician to override the warning by pressing the 'Enter' key and continuing with the allocation, i.e., allocating littermates to the same column.

(2) An animal technician that does not have the permission just described, must enter a new issue cage as described for Step 9.

When a rack side is finished or the animal technician signals that the allocation is ending (normally) the following prompt will appear:

Are any allocated animals missing? X

If the response is 'n', allocation is ended.

If the response is 'y', animals may be re-allocated and all allocation data on the original animal is removed. The original animal is given the final disposition 'Dead' rather than 'Allocated'. The sequence begins:

prompt: Enter cage number of missing animal: 9999
response: bar code or key in the number of the experiment cage which has an animal missing
prompt: Enter clip or animal ID: XXXXX
response: go to Step 8 to re-allocate animal

When this animal is allocated the prompt:

Enter cage number of missing animal: 9999

appears again and the process may be repeated. If no cage number is entered (i.e., 'Enter' is pressed), the process is assumed to be completed and allocation terminates normally.

Figure A.5. Enter/Fill/Display Animal Orders

```
==================================================================================
Animal Orders                                                      DD MMM YY HH:MM
Operator 99999
            Date                    Strain  #   #                            Date
 Exp #  Required  P.I./Contact  Sex Req Del Special Requirements  Filled
9999-99 MM/DD/YY XXXXXXXXXXXXX XX X 999 999 XXXXXXXXXXXXXXXXXXXXX MM/DD/YY
Room XXX-XXXX    XXXXXXXXXXXXX XX X 999 999 XXXXXXXXXXXXXXXXXXXXX
                               XX X 999 999 XXXXXXXXXXXXXXXXXXXXX
9999-99 MM/DD/YY XXXXXXXXXXXXX XX X 999 999 XXXXXXXXXXXXXXXXXXXXX MM/DD/YY
Room XXX-XXXX    XXXXXXXXXXXXX XX X 999 999 XXXXXXXXXXXXXXXXXXXXX
                               XX X 999 999 XXXXXXXXXXXXXXXXXXXXX
                               XX X 999 999 XXXXXXXXXXXXXXXXXXXXX
9999-99 MM/DD/YY XXXXXXXXXXXXX XX X 999 999 XXXXXXXXXXXXXXXXXXXXX MM/DD/YY
Room XXX-XXXX    XXXXXXXXXXXXX XX X 999 999 XXXXXXXXXXXXXXXXXXXXX
                               XX X 999 999 XXXXXXXXXXXXXXXXXXXXX


Enter Function or Cage: XXXX
----------------------------------------------------------------------------------

Arrow keys - scroll text; Gold N - Erase Data, Restart Screen;
PF2 - Help; Enter - Cont. sequence;
Cntl W - Sequential Wean; Cntl L - Littered Cages; Cntl A - All Cages
==================================================================================
```

Purpose:
To track animal orders so that appropriate breeding levels can be maintained, and to ensure that orders are filled in a timely manner.

Notes:
All fields except 'Date Filled' will be entered by a person designated to perform this task. These data may be entered in any order and will be sorted for display by experiment number. After the order has been filled, the 'Date Filled' field will be entered and that order will be displayed only through Friday of the following week. This date will be filled automatically if the Issue process indicates that an order has been filled.

If an old experiment number is entered on a new line, the data previously entered for that experiment will be filled in as defaults for the new entry.

If the 'Exp #' is set to '0000-00', the order will be deleted from the system.

This screen will display either those orders that can be filled by the strains present in that room or all orders pending.

FUNCTION: Enter Animal Orders:

No prompts will appear for these data. They will be filled in from right to left and top to bottom as needed. As the screen is filled with orders, the data will scroll off the top of the screen.

1. Experiment and test - The experiment the animals are ordered for.
possible error message: Invalid experiment - Reenter
response: Reenter experiment and test

2. Date Required - The date the animals are needed for the experiment.
possible error message: Invalid date - Reenter
response: Reenter date
possible error message: That seems unreasonable
response: Press Enter to accept value or reenter date

3. Building and Room - The building and room to which the animals will be delivered.
possible error message: Invalid room - Reenter
response: Reenter building and room

4. P.I./Contact - The principal investigator(s) for the experiment; the person(s) who placed the order.

5. Strain - The strain required for this order.
possible error message: Invalid strain - Reenter
response: Reenter strain

6. Sex - The sex required for this order.
possible error message: Invalid sex - Reenter
response: Reenter sex

7. Number Required - The number required of this strain and sex, for the special requirements to follow.
possible error message: Invalid number - Reenter
response: Reenter number
possible error message: That seems unreasonable
response: Press Enter to accept value or reenter number

8. Special Requirements - Any other requirements on the order (such as age, phenotype, etc.) No error checking is done on text string.

FUNCTION: Fill Animal Orders:

1. Experiment Number
prompt: Enter Experiment and Test: 9999-99
response: enter the experiment and test number for which an order is to be marked as filled. Enter zero to terminate filling of orders
possible error message: Invalid experiment-test - Reenter
response: Reenter number
possible error message: No orders for that experiment-test - Reenter
response: Reenter number
2. Date Required - only if there is more than one date for this experiment

and test
prompt: Enter Date Requested: MM/DD/YY
response: enter the date requested for which an order is to be marked as filled.
possible error message: Invalid date - Reenter
response: Reenter number
possible error message: No orders for that date- Reenter
response: Reenter number

3. Number delivered (NOTE: not all animal handlers will be allowed to enter data on this screen.)
prompt: Enter the Number Delivered: 999
response: enter the number of animals actually delivered (which may not be the same as the number requested)
possible error message: Invalid number - Reenter
response: Reenter number
possible error message: That seems unreasonable
response: Press Enter to accept value or reenter number

4. Date filled (NOTE: not all animal handlers will be allowed to enter data on this screen.)
prompt: Enter Date Filled: MM/DD/YY
response: enter the date on which an order is to be marked as filled.
possible error message: Invalid date - Reenter
response: Reenter date
possible error message: That seems unreasonable
response: Press Enter to accept value or reenter date

After all data are correctly entered:
prompt: Enter Function or Cage: XXXX
response: bar code or key in the cage number or press a function key
possible error message: Invalid cage for this room - Reenter
response: reenter cage number
: There are no animals in that cage
response: reenter cage number
possible error message: Invalid function - Reenter
response: reenter function
If a valid cage number is entered or if Enter is pressed and a special processing aid has been selected, the following prompt appears:
Are all the data on this screen correct?
If the response is 'n', data editing begins.
If the response is 'y', the new cage is displayed for the current function.

FUNCTION: Display Animal Orders:

To end the display:

```
    prompt: Enter Function or Cage: XXXX
    response: bar code or key in the cage number or press a function key
    possible error message: Invalid cage for this room - Reenter
                  response: reenter cage number
                          : There are no animals in that cage
                  response: reenter cage number
    possible error message: Invalid function - Reenter
                  response: reenter function
```

If a valid cage number is entered or if Enter is pressed and a special processing aid has been selected, the following prompt appears:

    Are all the data on this screen correct?

If the response is 'n', data editing begins.
If the response is 'y', the new cage is displayed for the current function.

Figure A.6. Display Retirement Candidates

```
==================================================================================
Retirement Candidates                                              DD MMM YY  HH:MM
                                                   Female
Operator 99999                        Days         Age                 Room XXX-XXXX
  Cage   Female        Male     Established (Days)
  9999 XX-9999999 XX-9999999      999        999
  9999 XX-9999999 XX-9999999      999        999
  9999 XX-9999999 XX-9999999      999        999
  9999 XX-9999999 XX-9999999      999        999
  9999 XX-9999999 XX-9999999      999        999
  9999 XX-9999999 XX-9999999      999        999
  9999 XX-9999999 XX-9999999      999        999
  9999 XX-9999999 XX-9999999      999        999
  9999 XX-9999999 XX-9999999      999        999
  9999 XX-9999999 XX-9999999      999        999
  9999 XX-9999999 XX-9999999      999        999
  9999 XX-9999999 XX-9999999      999        999
  9999 XX-9999999 XX-9999999      999        999
  9999 XX-9999999 XX-9999999      999        999
  9999 XX-9999999 XX-9999999      999        999
Enter Function or Cage: XXXX
----------------------------------------------------------------------------------

Arrow keys - scroll text; PF2 - Help; Enter - Cont. sequence;
Cntl W - Sequential Wean; Cntl L - Littered Cages; Cntl A - All Cages
==================================================================================
```

Purpose:
To display those breeders that have reached retirement age.

Notes:
Breeder animals in this room will appear on this screen if they are at or past the retirement age set for their strain in the strain table.

If no breeder cages are present in this room, the message
'No breeders in this room' will appear.
If no breeders are retirement candidates in this room, the message
'No retirement candidates in this room' will appear.

1. End display;
   prompt: Enter Function or Cage: XXXX
   response: bar code or key in the cage number or press a function key
   possible error message: Invalid cage for this room - Reenter
   response: reenter cage number
   possible error message: Invalid function - Reenter
   response: reenter function

Figure A.7. Display Unproductive Breeders

```
==========================================================================
Unproductive Breeders                                        DD MMM YY HH:MM
Operator 9999                    Days      Last Litter         Room XXX-XXXX
  Cage   Female      Male   Established  (Days)  No.
  9999 XX-9999999 XX-9999999    999        999    99
  9999 XX-9999999 XX-9999999    999        999    99
  9999 XX-9999999 XX-9999999    999        999    99
  9999 XX-9999999 XX-9999999    999        999    99
  9999 XX-9999999 XX-9999999    999        999    99
  9999 XX-9999999 XX-9999999    999        999    99
  9999 XX-9999999 XX-9999999    999        999    99
  9999 XX-9999999 XX-9999999    999        999    99
  9999 XX-9999999 XX-9999999    999        999    99
  9999 XX-9999999 XX-9999999    999        999    99
  9999 XX-9999999 XX-9999999    999        999    99
  9999 XX-9999999 XX-9999999    999        999    99
  9999 XX-9999999 XX-9999999    999        999    99
  9999 XX-9999999 XX-9999999    999        999    99
  9999 XX-9999999 XX-9999999    999        999    99
  9999 XX-9999999 XX-9999999    999        999    99
Enter Function or Cage: XXXX
--------------------------------------------------------------------------

Arrow keys - scroll text; PF2 - Help; Enter - Cont. sequence;
Cntl W - Sequential Wean; Cntl L - Littered Cages; Cntl A - All Cages
==========================================================================
```

Purpose:
To display those breeders that have not produced a litter within a set number of days.

Notes:
Breeder animals in this room will appear on this screen if they have not produced a litter for a length of time set for their strain in the strain table.

If no breeder cages are present in this room, the message
'No breeders in this room' will appear.
If no breeders are retirement candidates in this room, the message
'No unproductive breeders in this room' will appear.

1. End display;
   prompt: Enter Function or Cage: XXXX
   response: bar code or key in the cage number or press a function key
   possible error message: Invalid cage for this room - Reenter
   response: reenter cage number
   possible error message: Invalid function - Reenter
   response: reenter function

Figure A.8. Display Feeders by Age Range and Maximum Age

```
==================================================================================
Feeders by Age Range                                    DD MMM YY HH:MM
Operator 99999            Feeder Age: 999 to 999                Room XXX-XXXX
 Cage      UIN      SEX     Age
 9999  XX-9999999   X      999
 9999  XX-9999999   X      999
 9999  XX-9999999   X      999
 9999  XX-9999999   X      999
 9999  XX-9999999   X      999
 9999  XX-9999999   X      999
 9999  XX-9999999   X      999
 9999  XX-9999999   X      999
 9999  XX-9999999   X      999
 9999  XX-9999999   X      999
 9999  XX-9999999   X      999
 9999  XX-9999999   X      999
 9999  XX-9999999   X      999
 9999  XX-9999999   X      999
 9999  XX-9999999   X      999
 9999  XX-9999999   X      999
Enter Function or Cage: XXXX
----------------------------------------------------------------------------------

Arrow keys - scroll text; PF2 - Help; Enter - Cont. sequence;
Alt W - Sequential Wean; Alt L - Littered Cages; Alt A - All Cages
==================================================================================
```

Purpose:
To display those feeders that ar between certain ages.

Notes:
Feeder animals in this room will appear on this screen if they have are at or past an age entered by the terminal operator.

Default Min Age=0, Max Age=999

If no feeder cages are present in this room, the message
'No feeders in this room' will appear.

1. Age for display;
   prompt: Enter age (days): 999
   response: enter minimum age in days of feeders to be displayed
   possible error message: Invalid age - Reenter
   response: reenter age

If no feeders in this room are at or past the entered age, the message
'No feeders at or past this age in this room' will appear.

2. End display;
   prompt: Enter Function or Cage: XXXX
   response: bar code or key in the cage number or press a function key
   possible error message: Invalid cage for this room - Reenter
   response: reenter cage number
   possible error message: Invalid function - Reenter
   response: reenter function

Figure A.9. Display Room Work Summary

```
==================================================================================
Room Work Summary        Room XXX-XXXX                              DD MMM YY HH:MM
Operator 99999           Issued this Room     Issued on System
   Strain Phen    Exp. #   M   F   U Total   M   F   U Total
     XX   XXXX   9999-99 999 999 999 999   999 999 999 999
     XX   XXXX   Feeder  999 999 999 999   999 999 999 999
     XX   XXXX O/9999-99 999 999 999 999   999 999 999 999

                         Terminal Totals
     Breeders Retired    Pairs   New   Num. of  Feeders Set Up
Strain  Phen  M    F     Set Up  Born  Litters  M   F   U  Tot
  XX    XXXX 999  999     999    999    999    999 999 999 999
  XX    XXXX 999  999     999    999    999    999 999 999 999
  XX    XXXX 999  999     999    999    999    999 999 999 999
Total        999  999     999    999    999    999 999 999 999

Removals:   Dead              Culled            Surplus           Survey
 Strain M   F   U  Tot   M   F   U  Tot   M   F   U  Tot   M   F   U  Tot

  XX  999 999 999 999  999 999 999 999  999 999 999 999  999 999 999 999
  XX  999 999 999 999  999 999 999 999  999 999 999 999  999 999 999 999

  XX  999 999 999 999  999 999 999 999  999 999 999 999  999 999 999 999

Total 999 999 999 999  999 999 999 999  999 999 999 999  999 999 999 999

Enter Function or Cage: XXXX
----------------------------------------------------------------------------
Arrow keys - scroll text; Gold N - Erase Data, Restart Screen;
PF2- Help; Enter - Cont. sequence;
Cntl W - Sequential Wean; Cntl L - Littered Cages; Cntl A - All Cages
==================================================================================
```

Purpose:
To display a summary of all work performed in a room on that day, or to display all work done in the colony on that day.
Also, to be able to determine the number of issues still to be performed in this room by comparing the total number of issues on the system with the total number required.

Notes:
Only display issue lines with non-zero system totals.
Display all lines only for strains that are present in that room.

1. End display;
   prompt: Enter Function or Cage: XXXX
   response: bar code or key in the cage number or press a function key
   possible error message: Invalid cage for this room - Reenter
   response: reenter cage number
   possible error message: Invalid function - Reenter
   response: reenter function

Figure A.10. New Animal Entry

```
==========================================================================
New Animal Entry        XXXXXXX Cage Number 9999          DD MMM YY HH:MM
Operator 99999                     Room XXX-XXXX           ** MODE **
    Males XXXX        Females XXXX
     DD MMM YY          DD MMM YY           Block        Original Block
   XX-9999999  X     XX-9999999 XXX     XX-9999999        XX-9999999
Count=99 Gen=9999 Count=99 Gen=9999  Count=99 Gen=9999 Count=99 DD MMM YY
--------------------------------------------------------------------------
Adult Males     Adult Females     Litter Animals
  DD MMM YY        DD MMM YY         DD MMM YY      Date of Birth
       9999             9999              9999      Generation
         99               99                99      Strain
     XXXXXX           XXXXXX                        Phenotype
    XXXXXXX          XXXXXXX                        Status
         99               99                99      Count

Notes: XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX



Enter Function or Cage: XXXX
--------------------------------------------------------------------------
Gold N - Erase Data, Restart Screen;
PF2 - Help; Gold T - Phen. Table; Enter - Cont. sequence;
Cntl W - Sequential Wean; Cntl L - Littered Cages; Cntl A - All Cages
==========================================================================
```

Purpose:
To enter new (purchased) animals into the colony.

Notes:
The Notes field applies only to the UIN's assigned on this screen and is displayed in target trace report.

Note: A cage is required for this function. It must be entered first if it is to be used.

1. Enter sex or litter
   prompt: Enter sex or litter: X
   response: M F L U or blank (when finished entering new animals to this cage)
   possible error message: Must be M or F or U or L
   response: reenter sex or litter

2. Date of birth
   prompt: Enter date of birth: DD MMM YY
   response: date of birth of this animal or litter
   possible error message: Invalid date - Reenter
   response: reenter date
   possible error message: That seems unreasonable
   response: Press Enter to accept value or reenter date

3. Generation
   prompt: Enter generation: 9999
   response: generation of this animal or litter
   possible error message: Invalid generation - Reenter
   response: reenter generation

4. Strain
   prompt: Enter strain: XX
   response: strain of this animal or litter
   possible error message: Invalid strain - Reenter
   response: reenter strain

5. Phenotype - only appears when required by strain code
   prompt: Enter phenotype: XXXXXX
   response: H (haired) or N (nude) for strain 84
   B (black) Y (yellow) or A (agouti) for strains 29 37 or 46
   possible error message: Invalid phenotype - Reenter
   response: reenter phenotype

6. Status - for sexed animals only
   prompt: Enter status: XXXXXXX
   response: B (breeder) or F (feeder)
   possible error message: Invalid status - Reenter
   response: reenter status

7. Count
   prompt: Enter count: 99
   response: number of animals of this type
   possible error message: Invalid count - Reenter
   response: reenter count
   possible error message: That seems unreasonable
   response: Press Enter to accept value or reenter count

--- return to Step 1 ---

If a valid cage number is entered or if Enter is pressed and a special processing aid has been selected, the following prompt appears:

Are all the data on this screen correct?

If the response is 'n', data editing begins.
If the response is 'y', the new cage is displayed for the current function.

After all data are correctly entered:

```
prompt: Enter Function or Cage: XXX
response: bar code or key in the cage number or press a function key
possible error message: Invalid cage for this room - Reenter
               response: reenter cage number
                       : There are no animals in that cage
               response: reenter cage number
possible error message: Invalid function - Reenter
               response: reenter function
```

Figure A.11. Change Cage Status

```
==================================================================================
Change Cage Status      XXXXXXX Cage Number 9999          DD MMM YY HH:MM
Operator 99999                     Room XXX-XXXX           ** MODE **
    Males XXXX       Females XXXX
     DD MMM YY         DD MMM YY          Block        Original Block
   XX-9999999  X     XX-9999999 XXX     XX-9999999        XX-9999999
Count=99 Gen=9999 Count=99 Gen=9999  Count=99 Gen=9999 Count=99 DD MMM YY
----------------------------------------------------------------------------

 New Cage Status? XXXXXXX


Enter Function or Cage: XXXX
----------------------------------------------------------------------------

Gold N - Erase Data, Restart Screen; PF2 - Help; Enter - Cont. sequence;
Cntl W - Sequential Wean; Cntl L - Littered Cages; Cntl A - All Cages
==================================================================================
```

Purpose:
To change the status of all animals in a cage without moving the cage.

Notes:
May be breeder to feeder or feeder to breeder. The new status default will be selected based on the current cage status.

1. New status
   prompt: Enter new status: XXXXXX
   response: B (breeder) or F (feeder)
   possible error message: Invalid status - Reenter
                response: reenter status

After all data are correctly entered:
   prompt: Enter Function or Cage: XXXX
   response: bar code or key in the cage number or press a function key
   possible error message: Invalid cage for this room - Reenter
                response: reenter cage number
                        : There are no animals in that cage
                response: reenter cage number
   possible error message: Invalid function - Reenter
                response: reenter data

If a valid cage number is entered or if Enter is pressed and a special processing aid has been selected, the following prompt appears:
   Are all the data on this screen correct?
If the response is 'n', data editing begins.
If the response is 'y', the new cage is displayed for the current function.

Figure A.12. Move Cage

```
==================================================================================
Move Cage                XXXXXXX Cage Number 9999          DD MMM YY HH:MM
Operator 99999                      Room XXX-XXXX          ** MODE **
    Males XXXX        Females XXXX
     DD MMM YY          DD MMM YY          Block        Original Block
   XX-9999999  X     XX-9999999 XXX     XX-9999999        XX-9999999
Count=99 Gen=9999 Count=99 Gen=9999  Count=99 Gen=9999 Count=99 DD MMM YY
----------------------------------------------------------------------------------
New Cage 9999     Switch cages? X


Enter Function or Cage: XXXX
----------------------------------------------------------------------------------
Gold N - Erase Data, Restart Screen; PF2 - Help; Enter - Cont. sequence;
Cntl W - Sequential Wean; Cntl L - Littered Cages; Cntl A - All Cages
==================================================================================
```

Purpose:
To move a cage to another rack position in that room. This allows moving an entire breeding unit (male, female, litter) to a new location in the room.

Notes:
This must print a new cage card with all the old cage information (except cage number) as it was.

1. New cage position
   prompt: Enter new cage number: 9999
   response: bar code or key in the cage number position
   possible error message: Invalid cage - Reenter
   response: reenter cage position

2. Switch cages
   prompt: Switch these two cages? X
   response: Y or N
   possible error message: Must be 'y' or 'n'
   response: reenter response

After all data are correctly entered:
   prompt: Enter Function or Cage: XXXX
   response: bar code or key in the cage number or press a function key
   possible error message: Invalid cage for this room - Reenter
   response: reenter cage number
   : There are no animals in that cage
   response: reenter cage number
   possible error message: Invalid function - Reenter
   response: reenter function

If a valid cage number is entered or if Enter is pressed and a special processing aid has been selected, the following prompt appears:
   Are all the data on this screen correct?
If the response is 'n', data editing begins.
If the response is 'y', the new cage is displayed for the current function.

Figure A.13. Display Cage

```
==========================================================================
Display Cage            XXXXXXX Cage Number 9999          DD MMM YY HH:MM
Operator 99999                     Room XXX-XXXX          ** MODE **
    Males XXXX       Females XXXX
     DD MMM YY         DD MMM YY          Block        Original Block
   XX-9999999  X     XX-9999999 XXX     XX-9999999        XX-9999999
Count=99 Gen=9999 Count=99 Gen=9999  Count=99 Gen=9999 Count=99 DD MMM YY
--------------------------------------------------------------------------

Enter Function or Cage: XXXX
--------------------------------------------------------------------------
Gold N - Erase Data, Restart Screen; PF2 - Help; Enter - Cont. sequence;
Cntl W - Sequential Wean; Cntl L - Littered Cages; Cntl A - All Cages
==========================================================================
```

Purpose:
To display the number and status of the animals in a cage.

Notes:
To allow harem mating, two fields have been added on the top of the screen. The field next to male UIN is P (present in cage) or A (absent from cage). The three fields next to female UIN are the ear clips of the females present in the cage. These values appear only if harem mating is occurring.

Three other fields are new. The date under 'Males' and 'Females' is the date that individual was established as a breeder. The fields next to Males and Females are phenotype and will only appear for strains with more that one phenotype. The 'MODE' field on the right will display 'Seq Wean', 'Littered', or 'All' if one of the special processing aids has been selected.

'Block' is displayed when litter animals are present in the cage. 'Original Block' is displayed when a litter is born, and remains on that breeder cage until a new litter is born. If litter animals are placed in an issue cage, the corresponding 'Original Block' is displayed on that cage display.

1. End display;
   prompt: Enter Function or Cage: XXXX
   response: bar code or key in the cage number or press a function key
   possible error message: Invalid cage for this room - Reenter
   response: reenter cage number
   possible error message: Invalid function - Reenter
   response: reenter function

Figure A.14. Animal Assignment

```
==================================================================================
Assignment                XXXXXXX Cage Number 9999          DD MMM YY HH:MM
Operator 99999                        Room XXX-XXXX          ** MODE **
    Males XXXX        Females XXXX
     DD MMM YY          DD MMM YY            Block        Original Block
   XX-9999999  X     XX-9999999 XXX     XX-9999999         XX-9999999
Count=99 Gen=9999 Count=99 Gen=9999  Count=99 Gen=9999 Count=99 DD MMM YY
----------------------------------------------------------------------------------
Current   Phen/     ---  New ---                      CAN or CID
Status Sex Obs  #  Status  Cage  Reason Disposition  or EXP  UIN Assigned
XXXXXXX X XXXX 99  XXXXXXX 9999                                XX-9999999
XXXXXXX X XXXX 99  XXXXXXX 9999                                XX-9999999
XXXXXXX X XXXX 99  XXXXXXX 9999                                XX-9999999
XXXXXXX X XXXX 99  XXXXXXX 9999                                XX-9999999
XXXXXXX X XXXX 99  XXXXXXX 9999                                XX-9999999



Enter Function or Cage: XXXX
----------------------------------------------------------------------------------

Gold N - Erase Data, Restart Screen;
PF2 - Help; Gold T - Phen. Table; Enter - Cont. sequence;
Cntl W - Sequential Wean; Cntl L - Littered Cages; Cntl A - All Cages
==================================================================================
```

Purpose:
To assign an animal a new status.

Notes:
Breeder assignments must be sorted by new cage or screen, if doing more than one assignment. UIN's assigned appear automatically. UIN's are assigned to breeder pairs taking the numbers for the males from the low end of the block and for the females from the high end of the block.

1. Current Status
   prompt: Enter Status: XXXX
   response: B (breeder) F (feeder) or L (litter) or,
   when done, press the 'Enter' key
   possible error message: Invalid status - Reenter
   response: reenter status

2. Sex
   prompt: Enter Sex: X
   response: M F B (both) or U (unsexed; not valid for breeders).
   possible error message: Invalid sex - Reenter
   response: reenter sex

3. Phenotype - only appears when required by strain code
   prompt: Enter Phenotype: XXXX
   response: H (haired) or N (nude) for strain 84
   B (black) Y (yellow) or A (agouti) for strains 29 37 and 46
   possible error message: Invalid phenotype - Reenter
   response: reenter phenotype

4. Count - only appears when allowed by sex and cage census
   prompt: Enter Count: 99
   response: number of animals or breeder pairs to be assigned
   possible error message: Not that many of that sex
   response: reenter count
   possible error message: That seems unreasonable
   response: Press Enter to accept value or reenter count

5. New Status
   prompt: Enter New Status: XXXXXX
   response: B (breeder) or F (feeder)
   possible error message: Not a valid status
   response: reenter status

6. New Cage
   prompt: Enter New Cage: 9999
   response: bar code or key in the new cage number
   If no cage is entered and the cage census allows, the status of the current cage is changed.
   If the new status is breeder and count is greater than one, then this is the first of 'Count' sequences cages to which breeder assignments will be made.
   possible error message: Invalid cage for this room - reenter
   response: reenter cage
   possible error message: Destination incompatible with status - reenter
   response: reenter cage

--- Go back to Step 1 ---

After all data are correctly entered:
    prompt: Enter Function or Cage: XXXX
    response: bar code or key in the cage number or press a function key
    possible error message: Invalid cage for this room - Reenter
                          : There are no animals in that cage
                  response: reenter cage number
    possible error message: Invalid function - Reenter
                  response: reenter function

If a valid cage number is entered or if Enter is pressed and a special processing aid has been selected, the following prompt appears:
    Are all the data on this screen correct?
If the response is 'n', data editing begins.
If the response is 'y', the new cage is displayed for the current function.

If a valid function is entered, that function is begun for this cage.

If Enter is pressed and no special processing aid has been selected, the message 'No special cage sequencing selected' appears and the data must be re-entered.

Figure A.15. Animal Removal

```
==================================================================================
Removal                    XXXXXXX Cage Number 9999          DD MMM YY HH:MM
Operator 99999                        Room XXX-XXXX           ** MODE **
    Males XXXX        Females XXXX
     DD MMM YY          DD MMM YY            Block        Original Block
   XX-9999999  X     XX-9999999 XXX     XX-9999999         XX-9999999
Count=99 Gen=9999 Count=99 Gen=9999  Count=99 Gen=9999 Count=99 DD MMM YY
----------------------------------------------------------------------------
Current   Phen/     ---  New ---                      CAN or CID
Status Sex Obs  #  Status  Cage  Reason Disposition  or EXP  UIN Assigned
XXXXXXX X      99                XXXXXXXX XXXXXXXX 99999999999 XX-9999999
XXXXXXX X      99                XXXXXXXX XXXXXXXX 99999999999 XX-9999999
XXXXXXX X      99                XXXXXXXX XXXXXXXX 99999999999 XX-9999999
XXXXXXX X      99                XXXXXXXX XXXXXXXX 99999999999 XX-9999999
XXXXXXX X      99                XXXXXXXX XXXXXXXX 99999999999 XX-9999999



Enter Function or Cage: XXXX
----------------------------------------------------------------------------

Gold N - Erase Data, Restart Screen; PF2 - Help; Enter - Cont. sequence;
 Cntl W - Sequential Wean; Cntl L - Littered Cages; Cntl A - All Cages
==================================================================================
```

Purpose:
To cull or surplus an animal, to send it to be surveyed, or note its death.

1. Current Status
   prompt: Enter status: XXXXXX
   response: B (breeder) F (feeder) or L (litter) or press 'Enter' to end the function
   possible error message: Invalid status - Reenter
                response: reenter status

2. Sex - only appears when more than one sex is present
   prompt: Enter sex: X
   response: M F or U (unsexed)
   possible error message: Invalid sex - Reenter
                response: reenter sex

3. Phenotype - only appears when allowed by strain code
   prompt: Enter phenotype
   response: H (haired) or N (nude) for strain 84
             B (black) Y (yellow) or A (agouti) for strains 29 37 or 46
   possible error message: Invalid phenotype - Reenter
                response: reenter phenotype

4. Count - only appears when required by sex and census
   prompt: Enter count: 99
   response: number of animals for this removal
   possible error message: Not that many of that sex
                response: reenter data

5. Reason - not required if disposition is not blank
   prompt: Enter reason: XXXXXXXX
   response: D (dead) S (surplus) or C (culled)
   possible error message: Invalid reason - Reenter
                response: reenter data

6. Disposition - only required if reason is 'dead'
   prompt: Enter disposition: XXXXXXXX
   response: P (pathology) C (chemistry) or M (microbiology)
   possible error message: Invalid disposition - Reenter
                response: reenter data
   if both Reason and Disposition are blank the message
                Must enter reason and/or disposition
   will appear and processing will return to step 5.

7. CID - only required if reason is 'dead'
   prompt: Enter CID: 99999999
   response: bar code or key in the carcass identification number
   possible error message: Invalid CID - Reenter
                response: reenter CID
   possible error message: CID already used - Reenter
                response: enter a different CID

After all data are correctly entered:

```
    prompt: Enter Function or Cage: XXXX
    response: bar code or key in the cage number or press a function key
    possible error message: Invalid cage for this room - Reenter
                  response: reenter cage number
                          : There are no animals in that cage
                  response: reenter cage number
    possible error message: Invalid function - Reenter
                  response: reenter function
```

If a valid cage number is entered or if Enter is pressed and a special processing aid has been selected, the following prompt appears:

Are all the data on this screen correct?

If the response is 'n', data editing begins.

If the response is 'y', the new cage is displayed for the current function.

Figure A.16. Animal Retirement

```
==================================================================================
Retire                    Breeder Cage Number 9999          DD MMM YY HH:MM
Operator 99999                     Room XXX-XXXX             ** MODE **
    Males XXXX        Females XXXX
     DD MMM YY          DD MMM YY           Block        Original Block
   XX-9999999  X     XX-9999999 XXX     XX-9999999        XX-9999999
Count=99 Gen=9999 Count=99 Gen=9999  Count=99 Gen=9999 Count=99 DD MMM YY
----------------------------------------------------------------------------------
Current   Phen/     ---  New ---                      CAN or CID
Status Sex Obs  #  Status  Cage  Reason Disposition  or EXP  UIN Assigned
        X                         Retired  XXXXXXXX 99999999999 XX-9999999


 Enter Function or Cage: XXXX
----------------------------------------------------------------------------------

Gold N - Erase Data, Restart Screen; PF2 - Help; Enter - Cont. sequence;
Cntl W - Sequential Wean; Cntl L - Littered Cages; Cntl A - All Cages
==================================================================================
```

Purpose:
To retire one or both breeders in a cage or a sequence of cages.

Notes:
Sex may be M, F, or B (both).

1. Retire Individual or Sequential Cages
   prompt: Sequential or Individual: X
   response: I (individual) or S (sequential)
   possible error message: Invalid response - Reenter
                response: reenter choice

If Sequential (all cages retired will appear as line entries on the same screen):

2a. Starting cage number
   prompt: Enter first cage to retire: 9999
   response: bar code or key in the first cage number to retire or press 'Enter' to end the function
   possible error message: Invalid cage number
                response: reenter cage number

   Ending cage number
   prompt: Enter last cage to retire: 9999
   response: bar code or key in the last cage number to retire
   possible error message: Invalid cage number
                response: reenter cage number

If Individual:

2b. Cage number
   prompt: Enter cage to retire: 9999
   response: bar code or key in the cage number to retire or press 'Enter' to end the function
   possible error message: Invalid cage number
                response: reenter cage number
   possible error message: Not a breeder cage
                response: enter a new cage number

3. Sex
   prompt: Enter sex
   response: M or F
   possible error message: Invalid sex - Reenter
                response: reenter sex

4. Count - only appears for females and harem matings
   prompt: Enter count
   response: 1, 2, or 3
   possible error message: Invalid count - Reenter
                response: reenter count

5. Disposition - may be blank
   prompt: Enter disposition
   response: P (pathology) C (chemistry) or M (microbiology)
   possible error message: Invalid disposition - Reenter
                response: reenter disposition

6. CID - may be blank
   will be repeated for each animal and cage

```
    prompt: Enter CID
    response: bar code or key in the carcass identification number
    possible error message: Invalid CID - Reenter
                  response: reenter CID
    possible error message: CID already used - Reenter
                  response: enter a different CID

--- go to 2a or 2b, as appropriate

After all data are correctly entered:
    prompt: Enter Function or Cage: XXXX
    response: bar code or key in the cage number or press a function key
    possible error message: Invalid cage for this room - Reenter
                  response: reenter cage number
                          : There are no animals in that cage
                  response: reenter cage number
    possible error message: Invalid function - Reenter
                  response: reenter function

If a valid cage number is entered or if Enter is pressed and a special
processing aid has been selected, the following prompt appears:
    Are all the data on this screen correct?
If the response is 'n', data editing begins.
If the response is 'y', the new cage is displayed for the current function.
```

Figure A.17. Note Pregnant or Plugged

```
==================================================================================
Pregnant                XXXXXXX Cage Number 9999          DD MMM YY HH:MM
Operator 99999                     Room XXX-XXXX           ** MODE **
    Males XXXX       Females XXXX
     DD MMM YY         DD MMM YY          Block        Original Block
   XX-9999999  X     XX-9999999 XXX     XX-9999999       XX-9999999
Count=99 Gen=9999 Count=99 Gen=9999  Count=99 Gen=9999 Count=99 DD MMM YY
----------------------------------------------------------------------------
Current   Phen/     ---  New ---                      CAN or CID
Status Sex Obs  #  Status  Cage  Reason Disposition  or EXP  UIN Assigned
           PR                                                  XX-9999999


Enter Function or Cage: XXXX
----------------------------------------------------------------------------
Gold N - Erase Data, Restart Screen; PF2 - Help; Enter - Cont. sequence;
 Cntl W - Sequential Wean; Cntl L - Littered Cages; Cntl A - All Cages
==================================================================================
```

Purpose:
To note that a female is pregnant or that a plug has been observed.

Notes:
The code entered is 'PR' for pregnant or 'PL' for plugged.
For experimental breeding, it is possible that some action should be taken if no litter is recorded within 21 days of recording a pregnancy.

possible error message: No breeder female in cage
response: select a new cage or new function

prompt: Enter Function or Cage: XXXX
response: bar code or key in the cage number or press a function key
possible error message: Invalid cage for this room - Reenter
response: reenter cage number
: There are no animals in that cage
response: reenter cage number
possible error message: Invalid function - Reenter
response: reenter function

If a valid cage number is entered or if Enter is pressed and a special processing aid has been selected, the following prompt appears:
Are all the data on this screen correct?
If the response is 'n', data editing begins.
If the response is 'y', the new cage is displayed for the current function.

Figure A.18. Note Litter

```
==================================================================================
Littered                XXXXXXX Cage Number 9999          DD MMM YY HH:MM
Operator 99999                     Room XXX-XXXX           ** MODE **
    Males XXXX       Females XXXX
     DD MMM YY         DD MMM YY          Block        Original Block
   XX-9999999  X     XX-9999999 XXX     XX-9999999        XX-9999999
Count=99 Gen=9999 Count=99 Gen=9999  Count=99 Gen=9999 Count=99 DD MMM YY
----------------------------------------------------------------------------------
Current   Phen/     ---  New ---                      CAN or CID
Status Sex Obs  #  Status  Cage  Reason Disposition  or EXP  UIN Assigned
          L    99                                                XX-9999999


Is the number correct? X  Enter Function or Cage: XXXX
----------------------------------------------------------------------------------

Gold N - Erase Data, Restart Screen; PF2 - Help; Enter - Cont. sequence;
Cntl W - Sequential Wean; Cntl L - Littered Cages; Cntl A - All Cages
==================================================================================
```

Purpose:
To note that a female has littered and to note the number of litter animals.

Notes:
Original litter block remains on the screen until a new litter is born, and
it is replaced by a new litter block, or the female is retired, and it is cleared.

Litter generation is the female generation plus 1, except for crossbreeding.
In that case the generation is 1. The strain for a crossbred litter is read from a table.

possible error message: No breeder female in cage
response: select a new cage or new function
possible error message: Litter already in cage, wean litter first
response: Assign or remove previous litter animals

1. Count
   prompt: Enter number of pups
   response: number of pups observed
   possible error message: Invalid count - Reenter
   response: reenter count
   possible error message: That seems unreasonable
   response: Press Enter to accept value or reenter count

After data are correctly entered:
   prompt: Enter Function or Cage: XXXX
   response: bar code or key in the cage number or press a function key
   possible error message: Invalid cage for this room - Reenter
   response: reenter cage number
   : There are no animals in that cage
   response: reenter cage number
   possible error message: Invalid function - Reenter
   response: reenter function

If a valid cage number is entered or if Enter is pressed and a special processing aid has been selected, the following prompt appears:
   Are all the data on this screen correct?
If the response is 'n', data editing begins.
If the response is 'y', the new cage is displayed for the current function.

Figure A.19. Issue Animal

```
==========================================================================
Issue                    XXXXXXX Cage Number 9999          DD MMM YY HH:MM
Operator 99999                      Room XXX-XXXX           ** MODE **
    Males XXXX        Females XXXX
     DD MMM YY          DD MMM YY           Block        Original Block
   XX-9999999  X     XX-9999999 XXX     XX-9999999        XX-9999999
Count=99 Gen=9999 Count=99 Gen=9999  Count=99 Gen=9999 Count=99 DD MMM YY
--------------------------------------------------------------------------
Current   Phen/    ---  New ---                      CAN or CID
Status Sex Obs  #  Status  Cage  Reason Disposition  or EXP  UIN Assigned
XXXXXXX X XXXX 99  Issue   9999  XXXXXXXX           9999-99     XX-9999999
                                                    99999999


Enter Function or Cage: XXXX
--------------------------------------------------------------------------
Gold N - Erase Data, Restart Screen;
PF2 - Help; Gold T - Phen. Table; Enter - Cont. sequence;
Cntl W - Sequential Wean; Cntl L - Littered Cages; Cntl A - All Cages
==========================================================================
```

Purpose:
To issue animals to experiments, as feeders, or for other reasons.

Notes:
An issue may have and experiment number and a CAN, but CAN is not currently used.

Once an experiment/CAN is entered, it becomes the default value for the following issue screens.

'Issue other' is a final action. No cage is required.
If 'Issue Experiment', males and females are assigned one at a time to cages.

1. Current Status
   prompt: Enter status: XXXXXX
   response: B (breeder) F (feeder) L (litter) or press 'Enter' to end the function
   possible error message: Invalid status - Reenter
   response: reenter status

2. Sex - only appears when more than one sex in cage
   prompt: Enter sex: X
   response: M F or U (unsexed)
   possible error message: Invalid sex - Reenter
   response: reenter sex

3. Phenotype - only appears when allowed by strain code
   prompt: Enter phenotype: XXXX
   response: H (haired) or N (nude) for strain 84
   B (black) Y (yellow) or A (agouti) for strains 29 37 or 46
   possible error message: Invalid phenotype - Reenter
   response: reenter phenotype

4. Count - only appears when required by sex and cage census
   prompt: Enter count: 99
   response: number of animals for this issue
   possible error message: Not that many of that sex
   response: reenter count

5. Reason
   prompt: Enter reason for issue: XXXXXXXX
   response: E (experiment) F (feeder) or O (other)
   possible error message: Invalid reason - Reenter
   response: reenter reason

5. New cage - not required if reason is 'other'
   prompt: Enter new cage number: 9999
   response: bar code or key in the issue cage number
   possible error message: Not an issue cage
   response: reenter cage number

7. Experiment-test or CAN - may be blank
   prompt: Enter Experiment number or CAN: 99999999
   response: experiment and test number for reason = E
   experiment and test number and/or CAN number for reason = other
   possible error message: Invalid experiment or CAN - Reenter
   response: reenter experiment or CAN

After all data are correctly entered:

```
    prompt: Enter Function or Cage: XXXX
    response: bar code or key in the cage number or press a function key
    possible error message: Invalid cage for this room - Reenter
                  response: reenter cage number
                          : There are no animals in that cage
                  response: reenter cage number
    possible error message: Invalid function - Reenter
                  response: reenter function
```

If a valid cage number is entered or if Enter is pressed and a special processing aid has been selected, the following prompt appears:

    Are all the data on this screen correct?

If the response is 'n', data editing begins.
If the response is 'y', the new cage is displayed for the current function.

Figure A.20. Summary of Various Actions

```
==================================================================================
Retire                    Breeder Cage Number 9999          DD MMM YY HH:MM
Operator 99999                     Room XXX-XXXX             ** MODE **
    Males XXXX        Females XXXX
     DD MMM YY          DD MMM YY           Block        Original Block
   XX-9999999  X     XX-9999999 XXX     XX-9999999        XX-9999999
Count=99 Gen=9999 Count=99 Gen=9999  Count=99 Gen=9999 Count=99 DD MMM YY
----------------------------------------------------------------------------
Current   Phen/     ---  New ---                      CAN or CID
Status Sex Obs  #  Status  Cage  Reason Disposition  or EXP  UIN Assigned
XXXXXXX X      99  XXXXXXX 9999                                XX-9999999
XXXXXXX X      99  XXXXXXX 9999                                XX-9999999
XXXXXXX X      99                XXXXXXXX XXXXXXXX 99999999999 XX-9999999
XXXXXXX X      99                XXXXXXXX XXXXXXXX 99999999999 XX-9999999
XXXXXXX X      99  Issue   9999  XXXXXXXX          9999-99     XX-9999999
                                                   999999999
XXXXXXX X      99  Issue   9999  XXXXXXXX          9999-99     XX-9999999
XXXXXXX X       9                Retired  XXXXXXXX 99999999999 XX-9999999
XXXXXXX X       9                Retired  XXXXXXXX 99999999999 XX-9999999

Enter Function or Cage: XXXX
----------------------------------------------------------------------------
Gold N - Erase Data, Restart Screen;
PF2 - Help; Gold T - Phen. Table; Enter - Cont. sequence;
Cntl W - Sequential Wean; Cntl L - Littered Cages; Cntl A - All Cages
==================================================================================
```

Notes:
This is the general appearance of the screen after two assignment, two removals (dead, etc.), two issues, and two retires.

Other actions, such as recording a litter, would appear on this screen as well.

After all data are correctly entered:

```
    prompt: Enter Function or Cage: XXXX
    response: bar code or key in the cage number or press a function key
    possible error message: Invalid cage for this room - Reenter
                  response: reenter cage number
                          : There are no animals in that cage
                  response: reenter cage number
    possible error message: Invalid function - Reenter
                  response: reenter function
```

If a valid cage number is entered or if Enter is pressed and a special processing aid has been selected, the following prompt appears:

```
    Are all the data on this screen correct? X
```

If the response is 'n', data editing begins.
If the response is 'y', the new cage is displayed for the current function.

APPENDIX B

REPORTS

PART B.1. Description of the Reports
PART B.2. Proposed Report Physical Layouts
PART B.3. Data Element Summaries by Report
PART B.4. Log Sheets 1 and 2 and Standard Operating Procedures

PART B.1. Description of the Reports

B.1. DESCRIPTION OF BMSS REPORTS

Currently, output reports are generated by the VAX computer and transmitted to a high speed line printer. Reports or copies of printed reports are then reduced onto standard 8 1/2 x 11 inch paper and distributed to NCTR breeding colony managers and the experimental breeding staff. It is suggested (Section 4.1, Page 39 of this document) that reports be transmitted to distributed laser printers and compressed print be used as necessary to improve report quality.

A recap is prepared daily to report all assignment, observation and removal transactions for the day. Weekly reports provide a synopsis of the more detailed information from these daily transactions, including summaries of the week's activity. Certain reports have been designated as "ad hoc" meaning that they fulfill a specific purpose and are generally issued upon request rather than on a specific date. Each report is described separately in this section. Sample physical layouts of each report are found in Section B.2.

1. Daily Recap Report - Assignments (BS001)

This report provides a list of all animal assignments and issues made during the day. A distinction is made between assignments and issues. If an animal's status is changed such that it remains in the same room, it is considered an "assignment." This would include animals assigned as breeders or feeders. On the other hand, if an animal is assigned a standby status inside or outside of the room, it is considered an "issue." This would include animals issued to experiment or as feeders.

This report is issued daily. A section is prepared for each animal strain. Section detail is in sequence by source cage number. A summary is prepared as the last page of each section. Report detail is described below and a sample report is found in Section B.2.

Sort Sequence: Current Cage Number

Frequency: Daily

Destination or Printer No.:

a. Building room and NCTR strain code are identified on the title lines of each page. This issue is identified by the Gregorian date displayed below the report title.

b. A detail line is prepared for each assignment as follows:

(1) OPER: Number identifying the animal technician who performed this action.

(2) PREV. STATUS: Former status of the animal.

(3) UIN/COUNT: Strain code and unique identification number of the animal that was assigned or issued. "COUNT", if more than one, indicates either a pair of breeders or the number of animals treated as a block. For a block assignment this UIN is the first in a sequential series of UIN's. For a breeder pair this UIN is for the female.

(4) SEX: Sex of the animal indicated as:

F = Female, M = Male, or U = Unsexed

(5) BREEDING ANIMAL ID: Code that indicates the earclip or an optional code to distinguish females in harem mating. An earclip different from "N" could only apply to a single animal assignment.

(6) GENR - Generation: The generation number of this animal, breeder pair, or block of animals.

(7) PREV. CAGE: The number identifying the previous cage that this animal was assigned.

(8) CURRENT CAGE: Number identifying the cage to which this animal will be moved.

(9) CURRENT STATUS: Current status of the animal including final action (e.g., breeder, feeder, issue experiment, issue feeder, issue other, cull, dead, etc).

(10) CAN NO - Common Account Number: NCTR division account number assigned to animals that are issued to an experiment.

(11) EXP - Experiment: The experiment number and test the animal is issued to.

(12) MATE UIN: Unique identification number for the male animal assigned to this female breeder.

c. A summary page is prepared for each strain after the last detail page for that strain. Totals are displayed for the total number of male and female breeders, total number of male, female and unsexed feeders, and the total number of male, female and unsexed animals for all issues.

2. Daily Recap Report - Observations (BS002)

This report provides a list of all animal observations recorded during the day. These observations include normal conditions such as pregnant and littered, yellow, black, haired and nude.

This report is issued daily. A section is prepared for each animal strain. Section detail is in sequence by building-room, strain code, source cage, and unique identification number. A summary is prepared as the last page of each section. Report detail is described below and a sample report is in Section B.2.

Sort Sequence: Building-Room, Strain Code, Cage, and Unique Identification Number

Frequency: Daily

Destination and Printer No:

a. Building Room and NCTR strain code are identified on the title lines of each page. This report is identified by the Gregorian date displayed below the report title.

b. a detail line is prepared for each observation as follows:

(1) OPER: Number identifying the animal technician who performed this action.

(2) STATUS: The type of role currently assigned to this animal(s) such as breeder, feeder, or block animal.

(3) UIN/COUNT: Strain code and unique identification number of the animal or block to which this observation applies. If this is a "littered" observation the number of animals in the litter is indicated by "COUNT" which indicates the number of animals from the same cage that were observed.

(4) SEX: Sex of the animal indicated as:

F = Female, M = Male, or U = Unsexed

(5) BREEDING ANIMAL ID: Code that indicates the earclip or an optional - code to distinguish females in harem mating. An earclip different from "N" could only apply to a single animal assignment.

(6) PHENOTYPE: Visible properties of an animal produced by the interaction of the genotype and the environment.

(7) CAGE: Number identifying the cage for which this observation was made.

(8) OBSERVATIONS: A descriptive phrase for the condition observed.

(9) LITTER UIN: Strain code and unique identification number assigned to the new litter by the system. Only present for littered observations.

(10) LITTER-GEN: The placement of this litter within the succession of generations of this strain as developed at the NCTR breeder colony.

c. A summary page is prepared for each strain after the last detail page for that strain. Totals are displayed for the following observations:

Littered
Pregnant
Plugged
New Born Animals
Males Yellow
Females Yellow
Males Black
Females Black
Males Agouti
Females Agouti
Males Hair
Females Hair
Males Nude
Females Nude

3. <u>Daily Recap Report - Removals (BS003)</u>

This report provides a list of all animals removed from the breeding colony during the day. Removals may be for any of the following reasons: dead, culled, surplused, retired, or for analysis by Micro, Chemistry or Pathology. A removal applies to one or more animals from the same cage, homogeneously identified, and removed for the same reason.

This report is issued daily. A section is prepared for each animal strain. Section detail is in sequence by building-room, strain code, source cage, and unique identification number. A summary is prepared as the last page of each section. Report detail is described below, and a sample report is in Section B.2.

Sort Sequence: Building-Room, Strain Code, Cage, and Unique Identification Number

Frequency: Daily

Destination or Printer No.:

a. Building Room and NCTR strain code are identified on the title lines of each page. This issue is identified by the gregorian date displayed below the report title.

b. A detail line is prepared for each removal as follows:

(1) OPER: Number identifying the animal technician who made this removal.

(2) CURRENT STATUS: The assignment this animal was dedicated to prior to removal. See BS-001 for full definition.

(3) UIN/COUNT: Strain code and unique identification number of the animal that was removed. If more than one animal was removed, as indicated by "COUNT", this UIN is the first in a sequential series for the block of animals that were removed.

(4) SEX: Sex of the animal indicated as:

F = Female, M = Male, or U = Unsexed

(5) BREEDING ANIMAL ID: Code that indicates the earclip or an optional code to distinguish females in harem mating. An earclip different from "N" could only apply to a single animal assignment.

(6) CAGE: The number identifying the cage from which this animal was removed.

(7) REMOVAL REASON: The reason for the removal. Can also be "issue other" in which case the animal goes to an experiment for no further accountability by the Breeding System.

(8) REMOVAL DISPOSITION: The disposition of the animal only if sent to micro, chemistry, or pathology.

(9) EXPERIMENT: The experiment number and the test an animal is allocated to.

(10) CARCASS-ID: Carcass Identification (CID) number assigned to an animal that was sent to Micro, Chemistry or Pathology.

c. A summary page is prepared for each strain after the last detail page for that strain. Totals are displayed for the following categories:

Total number of each, male, female and unsexed animals culled.

Total number of each male, female and unsexed surplus animals.

Total number of each male, female animals retired.

Total number of each male, female and unsexed animals that were dead.

Total number of each male, female and unsexed animals that were sent to Pathology, Micro and Chemistry.

Total number of each male, female and unsexed animals that were removed as issue other.

4. Female Breeder Card and Male Breeder Card (BS004)

Two cards are prepared for each breeder pair listed on the Breeder Assignment Report at the time established as breeders. Each set of cards is attached to a breeder cage and is used to log the birth and weaning of litters produced by that breeder pair and serves as a quick visual check for that cage. This information is also recorded on the data terminal.

Cards are prepared in cage number sequence. The information contained on each card is described below and a sample pair of cards is shown in Section b.2.

Sort Sequence: Source Cage Number

Frequency: Variable - At Time of Breeder Assignment

Destination or Printer No.:

a. The top half of each card contains the same type of information as follows:

(1) UIN: Unique identification number for this breeder.

(2) MATED: Gregorian date that this breeder was assigned to its mate.

(3) STRAIN: Strain code for this breeder.

(4) GENERATION: The placement of this breeder within the succession of generations of this strain.

(5) SOURCE CAGE NO.: Number identifying the cage from which this breeder animal was taken.

(6) DOB FOR UIN: Birthdate of this breeder.

(7) BUILDING-ROOM NO.: Number identifying the breeder building and room in which this animal is located.

(8) The space in the center of the card contains the cage number for the cage assigned to this breeder pair.

b. The lower half of each card provides space for the animal technician to log in the birth of litters. This portion on the Male Breeder Card is not currently used. Information is logged on the Male and Female Breeder Card as follows:

(1) DATE FOUND PREG.: Date the female was found to be pregnant. Normally not used.

(2) DATE LITTER BORN: Gregorian date that the new litter will be recorded on the terminal. This may not be the actual date of birth due to weekend births or work schedules.

(3) NUMBER OF LITTER: Total number of animals born.

(4) NUMBER WEANED: Total number of surviving litter pups that were weaned.

(5) REMARKS: Normally used to record the number of males, females and dead animals, in that order.

(6) RETURN DATE: Date the animal is returned to the cage.

5. <u>Animal Birth Report (BS005)</u>

This report provides a complete list of litters born in the breeding colony which may include more than one breeding room during a specified time period. Each litter is identified by its strain, unique identification number, litter size and litter number (rank), and generation number. Identity of the parents and cage location is also included. Totals are provided for all animals born of a specific strain and date and a total for that date. A summary is prepared as the final report page.

This report is issued weekly but can be requested for a longer period. It is prepared in sequence by birth date, room number, litter strain, and cage number. Report detail is described below and a sample report follows the description. This issue includes all animals born during the period specified by the dates displayed on the report title line.

Sort Sequence: Birth Date, Cage No., Building-Room, Litter Strain, and Cage Number

Frequency: Weekly, Ad hoc

Destination or Printer No.:

a. A group of detail lines is prepared for all litters born of a specific strain, in a specific room and on a specific date. A line is prepared for each litter, however, birth date and wean date appear only on the first line of a group.

(1) BIRTH DATE: Gregorian date that the litters in this group were born.

(2) WEAN DATE: Gregorian date that the litters in this group are to be separated from their mothers which is determined by the species and strain and taken from the species and strain table.

(3) DATE ESTABLISHED: Gregorian date that a breeding relationship was established for the parents of this litter.

(4) CURRENT BUILDING-ROOM-CAGE: Current location of the cage containing the new litter.

(5) SIRE STRAIN-UIN: Strain code and unique identification number assigned to the father at birth.

(6) DAM STRAIN-UIN: Strain code and unique identification number assigned to the mother at her birth.

(7) LITTER STRAIN-UIN: Strain code and unique identification number assigned to the litter. This is the first number in a series (block) of numbers reserved for this litter. As each animal is weaned, or otherwise removed, it is assigned a number from this block.

(8) LITTER NUMBER: A chronological placement of this litter among other litters born to the same breeder pair.

(9) LITTER GENERATION: The placement of this litter within the succession of generations of this strain as developed at the NCTR breeder colony.

(10) LITTER SIZE: Total number of animals born in this litter.

b. A group total line is prepared after the last detail line for each group. The total number of animals born to this group is displayed, as indicated by strain number and room number.

c. A total line is prepared following the last group total line for the same birth date. It is identified by the phrase "TOTAL BORN THIS DATE" followed by the total number of animals.

d. RECAP OF BIRTHS: This is a report summary prepared at the end of the report. A summary line is prepared for each strain as follows:

(1) NCTR STRAIN CODE: Two character code identifying the strain.

(2) TOTAL LITTER: Total number of litters born of this strain during this period.

(3) TOTAL BORN: Total number of animals born of this strain during this period.

(4) AVERAGE LITTER SIZE: Average number of animals per litter for this strain during the time period.

(5) PROJECTED NO. TO BE WEANED: Two totals are displayed for the projected number of animals to be weaned - 90% and 95% of the total number of animals born of this strain.

6. **Weaned Animal Report (BS006)**

This report provides a complete list of litters weaned during a specified time period. Each litter weaned is accounted for by its strain, unique identification number, litter size, and the disposition of its members. Identity of the parents and the cage location is also included. The total number of litters weaned is provided for each strain weaned on a specified date and for all litters weaned on that date. A summary is prepared as the final report page.

This report is issued weekly and is prepared in sequence by wean date, room number, litter strain and cage number. Report detail is described below and a sample report is in Section B.2.

Sort Sequence: Wean Date, Room Number, Litter Strain, and Cage Number

Frequency: Weekly

Destination or Printer No.:

This report includes all litters that were weaned during the period specified by the dates on the second line of each page.

a. A group of detail lines is prepared for all litters weaned on the same date and of the same strain and room location. The wean date and birth date appear only on the first detail line of a group and also on the first detail line of a new page when the group is continued. Detail is as follows:

(1) WEAN DATE: Gregorian date that the litters in this group were weaned.

(2) BIRTH DATE: Gregorian date that the litters in this group were born.

(3) CURRENT BUILDING-ROOM-CAGE: Room location of the cage that this litter was born in, and the cage number.

(4) SIRE UIN: Strain code and unique identification number assigned to the father at his birth.

(5) DAM UIN: Strain code and unique identification number assigned to the number at her birth.

(6) LITTER UIN: Strain code and unique identification number assigned to the litter at its birth.

(7) LITTER SIZE: Total number of animals in this litter.

(8) DEAD: Number of animals in this litter that were found dean.

(9) CULLED: Number of animals in this litter that were destroyed because of injury or deformity.

(10) SURPLUS: Number of animals in this litter that, although healthy, were removed because of no demand for them.

(11) SURVEY: Number of animals in this litter that were requested for a Micro, Chemistry, or Pathology examination.

(12) ISSUE: Number of animals in this litter that were issued to an experiment, feeder, or other.

(13) ASSIGN BREEDER: Number of animals that were established as breeders

(14) ASSIGN FEEDER: Number of animals established as feeders.

(15) GENERATION: The placement of this litter within the succession of generations of this strain raised at the NCTR breeding colony.

(16) ISSUE: Number of animals on "standby" for future assignment.

b. A group total line is prepared after the last detail line for the group. The total number of litters weaned is displayed for that strain number and room number.

c. A total line for all litters weaned on the same date is prepared following the last group total line for that date. The total number of animals for each detail column is displayed.

d. A summary is prepared on the final report page, identified by the heading "RECAP OF WEANED ANIMALS." A line is prepared for each strain as follows:

(1) NCTR STRAIN CODE: Strain code to which summary detail applies.

(2) TOTAL LITTERS: Total number of litters weaned of this strain.

(3) TOTAL BORN: Total number of animals weaned of this strain.

(4) AVG. NUMBER PER LITTER: Average number of animals per litter for this strain.

(5) DEAD: Total number of animals of this strain found dead and the percent.

(6) CULLED: Total number of animals culled of this strain and the percent.

(7) SURPLUS: Total number of surplus animals of this strain and the percent

(8) SURVEY: Total number of animals of this strain issued to Micro, Chemistry, or Pathology and the percent.

(9) ASSIGN BREEDER: Total number of animals of this strain assigned as breeders and the percent.

(10) ASSIGN FEEDER: Total number of animals of this strain assigned as feeders and the percent.

(11) ISSUE: Total number of animals of this strain issued to experiment, feeder, or other and the percent.

7. Breeder Assignment Report (BS007)

This report provides a list of breeders that were established during a specified time period. The source of each individual breeder and the location of established pairs are provided. The total number of breeders is displayed for each strain and room, and for each established date. A summary recap displays the total number of assignments for each strain.

This report is issued weekly. It is prepared in sequence by established date, room number, strain and current cage number. Report detail is described below and a sample report is in Section B.2.

Sort Sequence: Established Date, Room Number, Strain, and Current Cage Number.

Frequency: Weekly, Ad hoc

Destination or Printer No.:

This report includes all animals assigned as breeders during the period specified by the dates displayed on the report title line.

a. A group of detail lines is prepared for all breeders established on a specific date and room. A line is prepared for each established pair, however, the established date appears only on the first line of a group.

(1) ESTABLISH DATE: Gregorian date that the breeders in this group were established as pairs.

(2) CURRENT CAGE: Identification number for the cage occupied by this breeder pair.

(3) CURRENT BUILDING ROOM: Number identifying the room in which this breeder pair is located.

(4) FEMALE: Individual information provided for the female member of the pair is as follows:

(a) BIRTH DATE: Gregorian date on which this animal was born.

(b) UIN: Strain code and unique identification number assigned to this animal at birth.

(c) PREV. CAGE: Identification number of the cage that contained this animal prior to this assignment.

(d) FROM BUILDING-ROOM: Number identifying the building and room this animal was in prior to this assignment.

(5) MALE: Individual information provided for the male member of the pair is as follows:

(a) BIRTH DATE: Gregorian date on which this animal was born.

(b) UIN: Strain code and unique identification number assigned to this animal at birth.

(c) PREV. CAGE: Identification number of the cage that contained this animal prior to this assignment.

(d) FROM BUILDING-ROOM: Number identifying the room this animal was in prior to this assignment.

b. A room total line is prepared after the last detail line for that room. The total number of animals assigned as breeders in this room, on this established date, is displayed.

c. A total line is prepared following the last room total line for the same established date. It is identified by the phrase "TOTAL THIS DATE", followed by the total number of animals assigned as breeders on this date.

d. BREEDER ASSIGNMENT RECAP: A separate page is prepared for the total number of animals, by strain, assigned as breeders.

(1) A total line is prepared for each strain as follows:

(a) STRAIN: The strain code to which this total applies.

(b) TOTAL: Total number of animals of this strain assigned as breeders during this period.

(2) A grand total line displays the total number of animals assigned as breeders during this period and is identified by the phrase "TOTAL THIS PERIOD."

8. Active Breeder Report (BS008)

This report provides a complete list of active breeder pairs in the colony. It is used for taking inventory and also as a reference to obtain a pedigree trace on the female UIN.

This report is issued monthly and is in sequence by room number and cage number. This detail is described below and a sample report is in Section B.2.

Sort Sequence: Room Number, Cage Number

Frequency: Monthly

Destination or Printer No.:

a. A detail line is prepared for each breeder pair as follows:

(1) CAGE: Number identifying the cage occupied by this breeder pair.

(2) BUILDING-ROOM: The number identifying the room where this cage is located. A group of detail lines is prepared for all cages in the same room. Therefore, the room number appears only on the first detail line.

(3) UIN: Strain code and unique identification number assigned to the animal at birth.

(4) SEX: Sex of the animal.

(5) GENERATION: The placement of this animal within the succession of generations of this strain raised at the NCTR breeding colony.

(6) DATE ESTABLISHED: Gregorian date on which this pair was established as breeders.

b. A building room total line is prepared following the last detail line for that room. The total number of breeder pairs in the room is displayed, followed by the phrase "TOTAL ACTIVE BREEDER PAIRS BUILDING ROOM", and the building room number.

9. <u>Average Litter Size (BS009)</u>

This report provides a litter size analysis of all new litters, summarizing litters by animal strain and litter number. All litters reported on the Animal Birth Report are included on this report.

This report is issued weekly or as needed and features a separate page for each strain. Report detail is in sequence by strain and litter number. This detail is described below and a sample report is in Section B.2.

Sort Sequence: Strain Code and Litter Number

Frequency: Weekly, Ad hoc

Destination or Printer No.:

This report includes all litters born during the period specified by the dates displayed on the report title line.

A summary line is prepared for each strain and litter number having births during this period.

a. NCTR STRAIN CODE: Strain code that applies to the litter numbers summarized on this page. This code is displayed only on the first summary line of a page.

b. LITTER NUMBER: The plurality of all litters, that, if taken individually, would be of the same ranking or chronological position within its family of litters.

c. NUMBER BORN: The total number of animals born of this litter number.

d. NUMBER LITTERS: The total number of litters born of this litter number.

e. AVERAGE NO. PER LITTER: The average number of animals per litter for this litter number.

10. Unproductive Breeder Report (BS010)

This report provides a list of all breeder pairs the have been determined to be unproductive, as a result of not having a litter within the past 75 days or longer. Animals from this list may be disposed of at the discretion of management. The unproductive status of each pair listed is justified with dates. Pairs are listed by strain and room. Totals are displayed for the number of pairs in a room and the number of pairs by strain in a room. A summary prepared on the last report page displays the total number of unproductive pairs for each strain and a grand total.

This report is issued weekly and is in sequence by room number, female strain and cage number. Report detail is described below and a sample report is in Section B.2.

Sort Sequence: Building-Room, Female Strain, and Cage Number

Frequency: Weekly

Destination or Printer No.:

a. A group of detail lines is prepared for the unproductive pairs of the same female strain and room number as follows:

(1) BLDG-ROOM: Number identifying the building and room in which the breeder pair is located. The room number appears only on the first line of a group.

(2) CAGE: Number identifying the cage in which this breeder pair is kept.

(3) FEMALE UIN: Strain code and the unique identification number assigned to this female at birth.

(4) MALE UIN: Strain code and the unique identification number assigned to this male at birth.

(5) ESTABLISH

(a) DATE: Gregorian date that this breeder pair was established as mates.

(b) DAYS: Number of days that have elapsed since this breeder pair was established.

(6) LAST LITTER

(a) DATE: Gregorian date that the last litter was born to this breeder pair. Zeroes indicate total unproductivity.

(b) DAYS: Elapsed time in days since the last litter was born to this breeder pair. Zeroes indicate totally unproductive.

(c) LITTER NO.: The number of litters this breeder pair has produces.

(7) NEXT TO LAST DATE GAVE BIRTH: Gregorian date that the next to last litter was born to this breeder pair.

b. A strain total line is prepared after the last detail line for a group. It is identified by the phrase "TOTAL PAIRS FEMALE STRAIN" and followed by the strain number and total number of unproductive pairs of this strain.

c. A room total line is prepared after the last strain total line for the same room. It is identified by the phrase TOTAL PAIRS ROOM" and followed by the room number and total number of unproductive pairs in this room.

d. A separate page is prepared as a summary. It is identified by the heading "RECAP OF UNPRODUCTIVE BREEDER PAIRS". Totals are prepared as follows:

(1) STRAIN: The female strain code to which this total applies.

(2) PAIRS: Total number of unproductive breeder pairs for this strain.

(3) A grand total of all unproductive breeder pairs is displayed after the last strain total.

11. Retirement Candidates (BS011)

This report lists all breeders that are eligible for retirement. Eligibility is established once a breeder has been on breeder status for a period of time predetermined for that species and strain. Once a breeder becomes a candidate, it will appear on subsequent issues of this report until it is actually retired.

This report is issued weekly and is in sequence by room number, strain code and cage number. Report detail is described below and a sample report is in Section B.2.

Sort Sequence: Building-Room Number, Strain Code, and Cage Number

Frequency: Weekly

Destination or Printer No.:

a. A group of detail lines is prepared for candidates of the strain and from the same room as follows:

(1) BLDG-ROOM: Number identifying the room in which this group of candidates is located. Room number appears only on the first detail line of a group.

(2) CAGE: Number identifying the cage in which this candidate is located.

(3) FEMALE UIN: Strain code and the unique identification number assigned to this female at birth.

(4) MALE UIN: Strain code and the unique identification number assigned to this male at birth.

(5) ESTABLISH:

(a) DATE: Gregorian date that this animal was established as a breeder.

(b) DAYS: Total number of elapsed days that this animal has been a breeder.

(6) FEMALE DATE OF BIRTH:

(a) DATE: Gregorian date that this animal was born.

(b) DAYS: Age of this animal in days.

12. **Daily Allocations (BS012)**

This report lists all animals that were allocated to experiments during the day. It is prepared in sequence by experiment, room, rack, rack side and cage number. A new page is started for each rack side. Report detail is described below and a sample report is in Section B.2.

Sort Sequence: Experiment, Room, Rack, Rack Side, and Cage Number

Frequency: Daily

Destination or Printer No.:

This report includes all animals allocated on the date displayed beneath the report title. The experiment, room, rack and rack side are identified in the heading of the report.

a. Detail information is prepared for each cage, with three cages to a line. Cage number sequence is from left to right. Information for each cage is as follows:

(1) OPER: Number identifying the animal technician who performed this action.

(2) EXPERIMENT: The experiment number and the test an animal is allocated to.

(3) BLDG-ROOM: Number identifying the building and room where the allocated animals will reside.

(4) RACK: The rack the animal cage resides on.

(5) SIDE: The side of the rack (A or B) the animal cage is on.

(6) CAGE: Number identifying the cage in the experiment animal room to which these animals were allocated. Cage number is shown only on the first line of detail pertaining to that cage.

(7) TREATMENT: Treatment number uniquely identifying the treatment within tests.

(8) ANIMAL START DATE: The date the animal was assigned to the treatment.

(9) BREEDING ANIMAL ID: Code that indicates the earclip or an optional code to distinguish females in harem mating. An earclip different from "N" could only apply to a single animal assignment.

(10) SEX: Sex code indicating the sex of this animal as:

F = Female, M = Male, or U = Unsexed

(11) UIN: Strain code and the unique identification number identifying the animal allocated.

(12) ALLOCATION DATE: The date an animal is allocated to an experiment (part of the header information).

(13) ALLOCATION WEIGHT: The weight of the animal at the time of allocation.

(14) UNITS: In grams or kilograms.

(15) ISSUE CAGE: Cage where "issue" animal (animal on standby) resides.

(16) REPLACEMENT ANIMAL: Strain code and the unique identification number identifying the animal used to replace an allocated animal that is missing or dead.

(17) CARCASS-ID: Carcass Identification (CID) number assigned to an animal that was sent to Micro, Chemistry or Pathology.

b. A summary page is prepared as the last report page for each experiment. The experiment number is identified in the heading. The following totals are displayed:

(1) MALE ALLOCATIONS: Total number of male animals allocated to this experiment on the date of allocation.

(2) FEMALE ALLOCATIONS: Total number of female animals allocated to this experiment on the date of allocation.

(3) UNSEXED ALLOCATIONS: Total number of unsexed animals allocated to this experiment on the date of allocation.

(4) TOTAL ALLOCATIONS: Total number of animals allocated to this experiment on the date of allocation.

13. <u>Female Breeder Status (BS013)</u>

This report provides the history of female breeders. First, each female breeder is described by its strain, unique identification number, date of birth, current building-room, the male paired with, status, generation, and number of litters. This is the initial header on the first page of the report and items are described below.

This report is issued weekly and is in sequence by female UIN, litter animal, birth date, and litter animal. Report detail is described below and a sample report is in Section B.2.

Sort Sequence: Female UIN, Litter Animal, Birth Date, and Litter Animal

Frequency: Weekly

Destination or Printer No.:

a) The following information occurs at the top of each page:

(1) FEMALE UIN: Strain code and unique identification number assigned to the number at her birth.

(2) DATE OF BIRTH: Gregorian date when the female breeder was born.

(3) CURRENT BLDG-ROOM/CAGE: Room location of the cage that this litter was born in, and the cage number.

(4) MALE UIN: Strain code and unique identification number assigned to the father at his birth.

(5) CURRENT STATUS: The destination of this animal as one of the following: breeder, feeder, issue experiment, issue feeder, or issue other.

(6) GENERATION: The placement of this litter within the succession of generations of this strain raised at the NCTR breeding colony.

(7) NUMBER OF LITTERS: The number of litters this female breeder has produced.

Next, the report provides a breakdown of each litter by litter size, and characterizes the disposition of the offspring within each litter by sex.

This report is issued weekly and is prepared in sequence by litter strain-uin, birth date, litter size, and litter number. The litter animal uin and the sex of each litter animal is given followed by its disposition. Report detail is described below and a sample report follows this description.

This report includes all female breeders specified by a certain strain.

b. A group of detail lines is prepared for all litter animals of a certain disposition. The litter strain-uin, birth date, litter size, and litter number appear only on the first detail line of a group and also on the first detail line of a new page when the group is continued. Detail is as follows:

(1) LITTER UIN: Strain code and unique identification number assigned to the litter at its birth.

(2) BIRTH DATE: Gregorian date that the litters in this group were born.

(3) LITTER SIZE: Total number of animals in this litter.

(4) LITTER NUMBER: A chronological placement of this litter among other litters born to the same breeder pair.

(5) LITTER ANIMAL: The unique identification number and strain for each animal in a litter.

(6) SEX: Sex code indicating the sex of this animal as:

F = Female or M = Male

(7) DISPOSITION DATE: Date the animal was given a certain disposition (e.g., culled, surplused, dead, etc.)

(8) CULLED: Number of animals in this litter that were destroyed because of injury or deformity.

(9) SURPLUSED: Number of animals in this litter that, although healthy, were removed because of no demand for them.

(10) DEAD: Number of animals in this litter that were found dean.

(11) BREEDER: Number of animals that were established as breeders

(12) FEEDER: Number of animals established as feeders.

(13) ISSUE: Number of animals in this litter that were issued to an experiment, feeder or other.

(14) SURVEY: Number of animals in this litter that were requested for a Micro, Chemistry, or Pathology examination.

c. A group total line is prepared after the last detail line for the group. The total number of animals of each disposition column is displayed for that litter number.

d. A total line for each sex (male, female, and unsexed) for the same litter number is then displayed following the totals for disposition.

14. Productivity Index Report (BS014)

This report provides an index of productivity (i.e., average number weaned weekly) for each strain within a specified range of dates. The report is produced as needed. Report detail is provided below and a sample report is in Section B.2.

Sort Sequence: Strain

Frequency: Ad hoc

Destination or Printer No.:

a) The report is prepared for the range of dates occurring at the top of the page with the following information in the body of the report:

(1) NCTR STRAIN CODE: Strain code that applies to the breeders summarized on this page.

(2) PRODUCTIVITY INDEX: The productivity index is the average number of animals weaned weekly by a certain strain. It is calculated by dividing the total weaned by the total breeders of a particular strain.

(3) TOTAL BREEDERS: Total number of breeder animals by strain.

(4) TOTAL WEANED: Total number of animals weaned by strain.

15. Feeder Status Report (BS015)

This report provides the projected mating date by sex and strain for feeders in a certain building-room. The total of animals of each sex and strain is then provided for each building-room.

This report is issued weekly and is in sequence by room number, strain code, and cage number. Report detail is described below and a sample report is in Section B.2.

Sort Sequence: Room Number, Strain Code, Cage Number

Frequency: Weekly

Destination or Printer No.:

a. A group of detail lines is prepared for candidates of the strain and from the same room as follows:

(1) BLDG-ROOM: Number identifying the room in which this group of candidates is located. Room number appears only on the first detail line of a group.

(2) CAGE: Number identifying the cage in which this candidate is located.

(3) MALE UIN/COUNT: Strain code and the unique identification number of this male or block to which this observation applies. If more than one male, as indicated by "COUNT", this UIN is the first in a sequential series for the block of animals that are in feeder status.

(4) FEMALE UIN/COUNT: Strain code and the unique identification of this female or block to which this observation applies. If more than one female, as indicated by "COUNT", this UIN is the first in a sequential series for the block of animals that are in feeder status.

(5) UNSEXED UIN/COUNT: Strain code and the unique identification of this unsexed animal or block to which this observation applies. "COUNT" is the total number of males, females, and unsexed in the litter.

(6) DATE OF BIRTH: Gregorian date on which this animal was born.

(7) PROJECTED MATING DATE: The date the strain is expected to mate. This date is derived by adding a certain number of days to the date of birth (e.g., 21 days for some strains of mice).

b. A total line showing the number of males, females, and unsexed by strain for the same building-room is then displayed.

16. <u>Issue Cage Census Report (BS016)</u>

This report provides the number of animals by strain of each sex that were transferred or designated as issue animals.

This report is issued on request and is in sequence by strain, cage, and sex. Report detail is described below and a sample report is in Section B.2.

Sort Sequence: Strain, Cage, Sex

Frequency: Ad hoc

Destination or Printer No.:

(1) STRAIN: The strain code to which this animal or animals belongs.

(2) CAGE: Number identifying the cage where this animal or animals resided at the time of transfer or being designated as issue.

(3) UIN/COUNT: Strain code and unique identification number of the animal or block to which this action applies. If this is a "litter" action the number of animals in the litter as indicated by "COUNT" is the number of animals from the same cage that were transferred or issued.

(4) SEX: Sex code indicating the sex of this animal as:

F = Female, M = Male, or U = Unsexed

17. Animal Orders (BS017)

This report provides a list of the animals ordered for experiments. Each order is identified by operator, experiment, principal investigator, and the dates the orders were requested and filled. Information required for the animals includes the number ordered by strain and sex as well as their age and phenotype.

This report is issued weekly, monthly, monthly or as requested for certain date ranges for experiments requiring continuing delivery of animals. The sequence is by experiment number and principal investigator. Report detail is described below and a sample report is in Section B.2.

Sort Sequence: Experiment Number, Principal Investigator

Frequency: Weekly, Monthly, Ad hoc with date range

Destination or Printer No.:

a. The operator and the Gregorian date the order was placed are identified in the title lines of each page.

b. A detail line is prepared for each experiment number as follows:

(1) OPER: Number identifying the animal technician who placed this order.

(2) EXPERIMENT: The experiment number and the test an animal is allocated to.

(3) BUILDING-ROOM: Number identifying the building and room where the pups resided at the time of weighing and assignment.

(4) PI/CONTACT: The principal investigator (PI) or person responsible for the experiment and order.

(5) DATE REQUIRED: Date the animals are required to begin the experiment.

(6) STRAIN: The strain code to which this animal or animals belongs.

(7) SEX: Sex code indicating the sex of this animal as:

F = Female, M = Male, or U = Unsexed

(8) NUMBER REQUESTED: Number of animals of each strain requested for a specific experiment and principal investigator.

(9) NUMBER DELIVERED: Number of animals of each strain delivered for a specific experiment and principal investigator.

(10) DATE FILLED: Date the animals were received for the experiment.

(11) SPECIAL REQUIREMENTS: Special requirements for the order, if needed, are listed in this area.

c. A summary page is prepared monthly for each experiment number. Totals are displayed for the number requested and the number delivered by sex and strain for each experiment.

18. Target Trace (BS018)

This report provides a printed diagram that traces the genealogical history of a root or designated animal. Print options for the report include an option of reporting all the predecessors for a current UIN of interest or reporting the successors for an historical UIN. No cage number is provided, if animal is not active in colony.

The report is printed on request and the sort sequence is by strain, generation, and room number. Report detail is described below and a sample report is in Section B.2.

Sort Sequence: strain, generation, and room number

Frequency: Ad hoc

Destination or Printer No.:

a) A report is prepared with the following information:

(1) UIN: Strain code and unique identification number assigned at birth.

(2) GENERATION: The placement of this animal within the succession of generations of this strain as developed at the NCTR breeder colony.

(3) BUILDING-ROOM: Number identifying the current building and room where the litters reside.

(4) CAGE: Number identifying the cage where this animal or animals reside.

(5) NOTES: Notes recorded on the New Animal Entry Screen (A.10) are printed in this report.

19. **Pup Weights at Weaning and Disposition (EBS001)**

This report provides the weight and disposition (surplus, allocation, breeder, etc.) at the time of weaning of pups born to parents who have undergone a specific experimental treatment. The report tracks the parents and specific litter information (UIN, generation, number) as well as the weight and disposition of the pup at the time of weaning.

This report is issued on request and is in sequence by experiment number, female treatment, litter UIN, litter generation, and litter number. Report detail is described below and a sample report is in Section B.2.

Sort Sequence: experiment number, female treatment, litter UIN, litter generation, and litter number

Frequency: Ad hoc

Destination or Printer No.:

(1) EXPERIMENT NO.: The experiment number and the test an animal is allocated to.

(2) OPER: Number identifying the animal technician who performed this action.

(3) FEMALE TMT: Treatment number for the initial chemical treatment administered to this female. The chemical, its concentration and dose are identified by this number.

(4) FEMALE GENERATION: The placement of this female within the succession of generations of this strain raised at the NCTR breeding colony.

(5) MALE UIN: Strain code and unique identification number assigned at birth to the sire.

(6) FEMALE UIN: Strain code and unique identification number assigned to her at birth to the dam.

(7) LITTER BIRTH DATE: Gregorian date that this litter was born.

(8) LITTER UIN: Strain code and unique identification number assighed to the litter at its birth.

(9) LITTER GENERATION: The placement of this litter within the succession of generations of this strain raised at the NCTR breeding colony.

(10) LITTER NUMBER: A chronological placement of this litter among other litters born to the same breeder pair.

(11) LITTER WEIGHT: The combined weight of all the pups in the litter at weaning.

(12) UNITS: In grams or kilograms.

(13) SURPLUS: Number of animals in this litter that, although healthy, were removed because of no demand for them.

(14) ALLOCATION: The number of pups chosen to be used in an experiment.

(15) BREEDER: Number of pups that were established as breeders

(16) SURVEY: Number of animals in this litter that were requested for a Micro, Chemistry, or Pathology examination.

(17) ISSUE: Number of pups on standby for future assignment.

(18) DEAD: Number of pups in this litter that were dead or missing.

(19) CULLED: Number of animals in this litter that were destroyed because of injury or deformity.

(20) BUILDING-ROOM: Number identifying the building and room where the pups resided at the time of weighing and assignment.

20. **Pup Weights. (EBS002)**

This report provides detailed weight information on the pups born to parents who have undergone a specific experimental treatment. The report the parents and specific litter information (UIN, generation, number) as well as the weight and age of the pup on a certain date.

This report is issued upon request and sequenced by room number, experiment number, litter UIN, and litter generation. Report detail is described below and a sample of the report is in B.2.

Sort Sequence: room number, experiment number, litter UIN, and litter generation

Frequency: Ad hoc

Destination or Printer No.:

(1) EXPERIMENT NO.: The experiment number and the test an animal is allocated to.

(2) OPER: Number identifying the animal technician who made this assignment.

(3) BUILDING-ROOM: Number identifying the building and room where the pups resided at the time of weighing and assignment.

(4) FEMALE GENERATION: The placement of this animal within the succession of generations of this strain raised at the NCTR breeding colony.

(5) MALE UIN: Strain code and unique identification number assigned at birth.

(6) FEMALE UIN: Strain code and unique identification number assigned to her at birth.

(7) LITTER BIRTH DATE: Gregorian date that this litter was born.

(8) LITTER ANIMAL: Strain code and unique identification number assigned to each animal in the litter at its birth.

(9) LITTER GENERATION: The placement of this litter within the succession of generations of this strain raised at the NCTR breeding colony.

(10) LITTER NUMBER: A chronological placement of this litter among other litters born to the same breeder pair.

(11) WEIGHT: The weight of the pup.

(12) UNIT: The unit of weight in grams or kilograms.

(13) NUMBER WEIGHED: Number of litter animals weighed.

(14) DATE WEIGHED: The Gregorian date the pup was weighed.

(15) AGE DAYS: The age in days of the pup at the time weighed. Calculated by subtracting the litter birth date from the date weighed.

21. **Fertility (EBS003)**

The purpose of this report is to provide information of the fertility of males and females undergoing experimental treatments. The report tracks the males and females by building-room, experiment, treatment, the generations and litters produced, and the disposition of the offspring for each generation and litter.

This report is issued on request for a selected range of dates and is in sequence by experiment number, female treatment, litter UIN, and litter number. Report detail is described below and a sample report is in Section B.2.

Sort Sequence: experiment number, female treatment, litter UIN, and litter number

Frequency: Ad hoc

Destination or Printer No.:

a. A detail page for each experiment number is prepared as follows:

(1) EXPERIMENT: The experiment number and test to which an animal is allocated.

(2) BUILDING-ROOM: Number identifying the building and room where the pups resided at the time of weighing and assignment.

(3) MALE GENR: The placement of this male within the succession of generations of this strain as developed at the NCTR breeder colony.

(4) MALE TMT: Treatment number indicating the initial chemical treatment administered to this male. The chemical, chemical concentration and the duration of the chemical dose is administered is identified by this number.

(5) MALE UIN: Strain code and unique identification number assigned at birth.

(6) FEMALE GENR: The placement of this female within the succession of generations of this strain as developed at the NCTR breeder colony.

(7) FEMALE TMT: Treatment number indicating the initial chemical treatment administered to this female. The chemical, chemical concentration and the duration of the chemical dose is administered is identified by this number.

(8) FEMALE UIN: Strain code and unique identification number assigned to her at birth.

(9) DATE EST: Gregorian date that a breeding relationship was established for the parents of this litter.

(10) PLUG DATE: Gregorian date that the female was observed plugged.

(11) OBSERVED PREGNANT: Gregorian date that the female was observed pregnant.

(12) LITTER BIRTH DATE: Gregorian date that the litters in this group were born.

(13) LITTER UIN: Strain code and unique identification number assigned to the litter at its birth.

(14) GENR: The placement of this litter within the succession of generations of this strain raised at the NCTR breeding colony.

(15) LITTER NUMBER: A chronological placement of this litter among other litters born to the same breeder pair.

(16) LITTER SIZE: Total number of animals born in this litter.

(17) OBSERVE DATE: The date the litter was observed or inspected.

(18) NO. M/F DAY: The ratio of males to females born to the observed litter that date.

(19) NO. L/D (LIVE/DEAD): Ratio of animals that were born alive to those born dead. Dead refers to those animals that were "stillborn".

(20) NO. MALES WEAN: Total number of males that were weaned on this date.

(21) NO. FEM WEAN: Total number of females that were weaned on this date.

(22) NO. DEAD WEAN: Total number of animals that died by the time they were to be weaned.

(23) WEAN DATE: Gregorian date that the litters in this group were separated from their mothers.

b. A summary page is prepared as the last report page for each experiment. The experiment number is identified in the heading. Totals are displayed for the following categories for each treatment:

Number of female breeders established.
Number of male breeders established.
Number of plugs observed.
Number of females observed pregnant.
Number of litters.
Average litter size.
Totals are presented for born, males, females, born live, born dead, males weaned, females weaned, and weaned.
Average number of litters per female.
Average duration between litters.
Duration in days from start to last litter.
Number of unproductive females.

PART B.2. Proposed Report Physical Layouts

REPORT NO. BS001 NATIONAL CENTER FOR TOXICOLOGICAL RESEARCH DD-MMM-YY TIME = HH:MM

BLDG-ROOM XXX-XXXX BREEDING MULTIGENERATION SUPPORT SYSTEM PAGE ##

NCTR STRAIN CODE XX DAILY RECAP REPORT -- ASSIGNMENTS

DATE ASSIGNED MM-DD-YY

OPER	PREV. STATUS	UIN/COUNT	SEX	BREEDING ANIMAL ID	GENR	PREV CAGE	CURRENT CAGE	CURRENT STATUS	CAN NO.	EXP	MATE/UIN
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	9999	9999	9999	XXXXXXXXXXXX	99999999	9999-99	XX-9999999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	9999	9999	9999	XXXXXXXXXXXX	99999999	9999-99	XX-9999999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	9999	9999	9999	XXXXXXXXXXXX	99999999	9999-99	XX-9999999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	9999	9999	9999	XXXXXXXXXXXX	99999999	9999-99	XX-9999999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	9999	9999	9999	XXXXXXXXXXXX	99999999	9999-99	XX-9999999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	9999	9999	9999	XXXXXXXXXXXX	99999999	9999-99	XX-9999999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	9999	9999	9999	XXXXXXXXXXXX	99999999	9999-99	XX-9999999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	9999	9999	9999	XXXXXXXXXXXX	99999999	9999-99	XX-9999999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	9999	9999	9999	XXXXXXXXXXXX	99999999	9999-99	XX-9999999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	9999	9999	9999	XXXXXXXXXXXX	99999999	9999-99	XX-9999999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	9999	9999	9999	XXXXXXXXXXXX	99999999	9999-99	XX-9999999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	9999	9999	9999	XXXXXXXXXXXX	99999999	9999-99	XX-9999999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	9999	9999	9999	XXXXXXXXXXXX	99999999	9999-99	XX-9999999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	9999	9999	9999	XXXXXXXXXXXX	99999999	9999-99	XX-9999999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	9999	9999	9999	XXXXXXXXXXXX	99999999	9999-99	XX-9999999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	9999	9999	9999	XXXXXXXXXXXX	99999999	9999-99	XX-9999999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	9999	9999	9999	XXXXXXXXXXXX	99999999	9999-99	XX-9999999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	9999	9999	9999	XXXXXXXXXXXX	99999999	9999-99	XX-9999999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	9999	9999	9999	XXXXXXXXXXXX	99999999	9999-99	XX-9999999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	9999	9999	9999	XXXXXXXXXXXX	99999999	9999-99	XX-9999999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	9999	9999	9999	XXXXXXXXXXXX	99999999	9999-99	XX-9999999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	9999	9999	9999	XXXXXXXXXXXX	99999999	9999-99	XX-9999999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	9999	9999	9999	XXXXXXXXXXXX	99999999	9999-99	XX-9999999

NOTE: MARK IS NOW ANIMAL ID AND IS CHARACTER=XXXXX. VALUE IS LEFT JUSTIFIED.

REPORT NO. BS001S NATIONAL CENTER FOR TOXICOLOGICAL RESEARCH DD-MMM-YY TIME = HH:MM

BLDG-ROOM XXX-XXXX BREEDING MULTIGENERATION SUPPORT SYSTEM PAGE ##

MCTR STRAIN CODE XX DAILY RECAP REPORT SUMMARY -- ASSIGNMENTS

MM-DD-YY

ASSIGNMENT TOTALS:

TOTAL MALE BREEDERS SET UP..... 9999

TOTAL FEMALE BREEDERS SET UP..... 9999

TOTAL MALE FEEDERS SET UP..... 9999

TOTAL FEMALE FEEDERS SET UP..... 9999

TOTAL UNSEXED FEEDERS SET UP..... 9999

TOTAL MALES ISSUED..... 9999

TOTAL FEMALES ISSUED..... 9999

TOTAL UNSEXED ISSUED..... 9999

(*) INDICATES TRANSACTION DELETED

NOTE: SCREEN OUTPUT (WITH OPTION TO PRINT SCREEN) AS WELL AS HARDCOPY REPORT.

REPORT NO. BS002 NATIONAL CENTER FOR TOXICOLOGICAL RESEARCH DD-MMM-YY TIME = HH:MM

BLDG-ROOM XXX-XXXX BREEDING MULTIGENERATION SUPPORT SYSTEM PAGE ##

NCTR STRAIN CODE XX DAILY RECAP REPORT -- OBSERVATIONS

DATE OBSERVED MM-DD-YY

OPER	STATUS	UIN/COUNT	SEX	ANIMAL ID	PHENO-TYPE	CAGE	OBSERVATIONS	LITTER-UIN	LITTER-GEN
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	XX	9999	XXXXXXXXXXXXX	XX-9999999	9999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	XX	9999	XXXXXXXXXXXXX	XX-9999999	9999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	XX	9999	XXXXXXXXXXXXX	XX-9999999	9999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	XX	9999	XXXXXXXXXXXXX	XX-9999999	9999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	XX	9999	XXXXXXXXXXXXX	XX-9999999	9999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	XX	9999	XXXXXXXXXXXXX	XX-9999999	9999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	XX	9999	XXXXXXXXXXXXX	XX-9999999	9999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	XX	9999	XXXXXXXXXXXXX	XX-9999999	9999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	XX	9999	XXXXXXXXXXXXX	XX-9999999	9999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	XX	9999	XXXXXXXXXXXXX	XX-9999999	9999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	XX	9999	XXXXXXXXXXXXX	XX-9999999	9999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	XX	9999	XXXXXXXXXXXXX	XX-9999999	9999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	XX	9999	XXXXXXXXXXXXX	XX-9999999	9999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	XX	9999	XXXXXXXXXXXXX	XX-9999999	9999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	XX	9999	XXXXXXXXXXXXX	XX-9999999	9999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	XX	9999	XXXXXXXXXXXXX	XX-9999999	9999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	XX	9999	XXXXXXXXXXXXX	XX-9999999	9999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	XX	9999	XXXXXXXXXXXXX	XX-9999999	9999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	XX	9999	XXXXXXXXXXXXX	XX-9999999	9999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	XX	9999	XXXXXXXXXXXXX	XX-9999999	9999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	XX	9999	XXXXXXXXXXXXX	XX-9999999	9999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	XX	9999	XXXXXXXXXXXXX	XX-9999999	9999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	XX	9999	XXXXXXXXXXXXX	XX-9999999	9999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	XX	9999	XXXXXXXXXXXXX	XX-9999999	9999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	XX	9999	XXXXXXXXXXXXX	XX-9999999	9999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	XX	9999	XXXXXXXXXXXXX	XX-9999999	9999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	XX	9999	XXXXXXXXXXXXX	XX-9999999	9999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	XX	9999	XXXXXXXXXXXXX	XX-9999999	9999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	XX	9999	XXXXXXXXXXXXX	XX-9999999	9999

REPORT NO. BS002S NATIONAL CENTER FOR TOXICOLOGICAL RESEARCH DD-MMM-YY TIME = HH:MM

BLDG-ROOM XXX-XXXX BREEDING INFORMATION SYSTEM PAGE ##

NCTR STRAIN.CODE XX DAILY RECAP REPORT SUMMARY -- OBSERVATIONS/PHENOTYPES

MM-DD-YY

OBSERVATION TOTALS:

TOTAL LITTERED..... 9999

TOTAL PLUGGED..... 9999

TOTAL PREGNANT..... 9999

TOTAL NEW BORN..... 9999

TOTAL MALES YELLOW..... 9999

TOTAL FEMALES YELLOW..... 9999

TOTAL MALES BLACK..... 9999

TOTAL FEMALES BLACK..... 9999

TOTAL MALES AGOUTI..... 9999

TOTAL FEMALES AGOUTI..... 9999

TOTAL MALES HAIR..... 9999

TOTAL FEMALES HAIR..... 9999

TOTAL MALES NUDE..... 9999

TOTAL FEMALES NUDE..... 9999

(*) INDICATES TRANSACTION DELETED

NOTE: SCREEN OUTPUT (WITH OPTION TO PRINT SCREEN) AS WELL AS HARDCOPY REPORT.

REPORT NO. BS003 NATIONAL CENTER FOR TOXICOLOGICAL RESEARCH DD-MMM-YY TIME = HH:MM

BLDG-ROOM XXX-XXXX BREEDING MULTIGENERATION SUPPORT SYSTEM PAGE ##

NCTR STRAIN CODE XX DAILY RECAP REPORT -- REMOVALS

REMOVAL DATE MM-DD-YY

OPER	CURRENT STATUS	UIN/COUNT	SEX	BREEDING ANIMAL ID	CAGE	|----------REMOVAL--------| REASON	DISPOSITION	EXP. NO.	CARCASS-ID
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	9999	XXXXXXXXXXXX	XXXXXXXXXXXX	9999-99	99999999999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	9999	XXXXXXXXXXXX	XXXXXXXXXXXX	9999-99	99999999999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	9999	XXXXXXXXXXXX	XXXXXXXXXXXX	9999-99	99999999999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	9999	XXXXXXXXXXXX	XXXXXXXXXXXX	9999-99	99999999999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	9999	XXXXXXXXXXXX	XXXXXXXXXXXX	9999-99	99999999999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	9999	XXXXXXXXXXXX	XXXXXXXXXXXX	9999-99	99999999999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	9999	XXXXXXXXXXXX	XXXXXXXXXXXX	9999-99	99999999999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	9999	XXXXXXXXXXXX	XXXXXXXXXXXX	9999-99	99999999999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	9999	XXXXXXXXXXXX	XXXXXXXXXXXX	9999-99	99999999999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	9999	XXXXXXXXXXXX	XXXXXXXXXXXX	9999-99	99999999999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	9999	XXXXXXXXXXXX	XXXXXXXXXXXX	9999-99	99999999999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	9999	XXXXXXXXXXXX	XXXXXXXXXXXX	9999-99	99999999999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	9999	XXXXXXXXXXXX	XXXXXXXXXXXX	9999-99	99999999999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	9999	XXXXXXXXXXXX	XXXXXXXXXXXX	9999-99	99999999999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	9999	XXXXXXXXXXXX	XXXXXXXXXXXX	9999-99	99999999999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	9999	XXXXXXXXXXXX	XXXXXXXXXXXX	9999-99	99999999999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	9999	XXXXXXXXXXXX	XXXXXXXXXXXX	9999-99	99999999999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	9999	XXXXXXXXXXXX	XXXXXXXXXXXX	9999-99	99999999999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	9999	XXXXXXXXXXXX	XXXXXXXXXXXX	9999-99	99999999999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	9999	XXXXXXXXXXXX	XXXXXXXXXXXX	9999-99	99999999999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	9999	XXXXXXXXXXXX	XXXXXXXXXXXX	9999-99	99999999999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	9999	XXXXXXXXXXXX	XXXXXXXXXXXX	9999-99	99999999999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	9999	XXXXXXXXXXXX	XXXXXXXXXXXX	9999-99	99999999999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	9999	XXXXXXXXXXXX	XXXXXXXXXXXX	9999-99	99999999999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	9999	XXXXXXXXXXXX	XXXXXXXXXXXX	9999-99	99999999999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	9999	XXXXXXXXXXXX	XXXXXXXXXXXX	9999-99	99999999999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	9999	XXXXXXXXXXXX	XXXXXXXXXXXX	9999-99	99999999999
99999	XXXXXXXXXXXX	XX-9999999/99	X	XXXXX	9999	XXXXXXXXXXXX	XXXXXXXXXXXX	9999-99	99999999999

NOTE: TYPE-REMOVAL REFERS TO THE REASON FOR REMOVAL (WHY? AND WHERE SENT).

REPORT NO. BS003S NATIONAL CENTER FOR TOXICOLOGICAL RESEARCH DD-MMM-YY TIME = HH:MM

BLDG-ROOM XXX-XXXX BREEDING INFORMATION SYSTEM PAGE ##

NCTR STRAIN CODE XX DAILY RECAP REPORT SUMMARY -- REMOVALS

MM-DD-YY

REMOVAL TOTALS:

TOTAL MALES CULL..... 9999

TOTAL FEMALES CULL..... 9999

TOTAL UNSEXED CULL..... 9999

TOTAL MALES SURPLUS..... 9999

TOTAL FEMALES SURPLUS..... 9999

TOTAL UNSEXED SURPLUS..... 9999

TOTAL MALES RETIRED..... 9999

TOTAL FEMALES RETIRED..... 9999

TOTAL MALES DEAD..... 9999

TOTAL FEMALES DEAD..... 9999

TOTAL UNSEXED DEAD..... 9999

TOTAL MALES TO PATHOLOGY..... 9999

TOTAL FEMALES TO PATHOLOGY..... 9999

TOTAL UNSEXED TO PATHOLOGY..... 9999

TOTAL MALES TO MICRO..... 9999

TOTAL FEMALES TO MICRO..... 9999

TOTAL UNSEXED TO MICRO..... 9999

TOTAL MALES TO CHEMISTRY..... 9999

TOTAL FEMALES TO CHEMISTRY..... 9999

TOTAL UNSEXED TO CHEMISTRY..... 9999

TOTAL MALES TO ISSUE OTHER..... 9999

TOTAL FEMALES TO ISSUE OTHER..... 9999

TOTAL UNSEXED TO ISSUE OTHER..... 9999

(*) INDICATES TRANSACTION DELETED

MALE BREEDER CARD

UIN XX-9999999

MATED mm/dd/yy STRAIN (text field)

GENERATION 9999 SOURCE CAGE 9999

DOB FOR UIN mm/dd/yy BLDG-ROOM XXX-XXXX

CAGE NO 9999

MOTHER'S NUMBER	DATE FOUND PREG'N	REMOVED TO CAGE	DATE RET'D TO MALE	REMARKS

FEMALE BREEDER CARD

UIN XX-9999999

MATED mm/dd/yy STRAIN (text field)

GENERATION 9999 SOURCE CAGE 9999

DOB FOR UIN mm/dd/yy BLDG-ROOM XXX-XXXX

CAGE NO 9999

DATE FOUND PREGN	DATE LITTER BORN	NUMBER OF LITTER	NUMBER WEANED	REMARKS

REPORT NO. BS005 NATIONAL CENTER FOR TOXICOLOGICAL RESEARCH DD-MMM-YY PAGE ##

ANIMAL BIRTH REPORT FROM DATE MM/DD/YY TO MM/DD/YY HH:MM:SS

BIRTH DATE	WEAN DATE	ESTABLISH DATE	CURR CAGE	SIRE UIN	DAM UIN	LITTER UIN	LITTER NUMBER	LITTER GENERATION	LITTER SIZE
mm/dd/yy	mm/dd/yy	mm/dd/yy	9999	XX-9999999	XX-9999999	XX-9999999	99	9999	99
		mm/dd/yy	9999	XX-9999999	XX-9999999	XX-9999999	99	9999	99
		mm/dd/yy	9999	XX-9999999	XX-9999999	XX-9999999	99	9999	99
		mm/dd/yy	9999	XX-9999999	XX-9999999	XX-9999999	99	9999	99
		mm/dd/yy	9999	XX-9999999	XX-9999999	XX-9999999	99	9999	99
		mm/dd/yy	9999	XX-9999999	XX-9999999	XX-9999999	99	9999	99
		mm/dd/yy	9999	XX-9999999	XX-9999999	XX-9999999	99	9999	99
		mm/dd/yy	9999	XX-9999999	XX-9999999	XX-9999999	99	9999	99

						TOTAL STRAIN XX	BLDG-ROOM XXX-XXXX		9999
mm/dd/yy	mm/dd/yy	mm/dd/yy	9999	XX-9999999	XX-9999999	XX-9999999	99	9999	99
		mm/dd/yy	9999	XX-9999999	XX-9999999	XX-9999999	99	9999	99
		mm/dd/yy	9999	XX-9999999	XX-9999999	XX-9999999	99	9999	99
		mm/dd/yy	9999	XX-9999999	XX-9999999	XX-9999999	99	9999	99
		mm/dd/yy	9999	XX-9999999	XX-9999999	XX-9999999	99	9999	99

						TOTAL STRAIN XX	BLDG-ROOM XXX-XXXX		9999
mm/dd/yy	mm/dd/yy	mm/dd/yy	9999	XX-9999999	XX-9999999	XX-9999999	99	9999	99

						TOTAL STRAIN XX	BLDG-ROOM XXX-XXXX		9999
mm/dd/yy	mm/dd/yy	mm/dd/yy	9999	XX-9999999	XX-9999999	XX-9999999	99	9999	99
		mm/dd/yy	9999	XX-9999999	XX-9999999	XX-9999999	99	9999	99
		mm/dd/yy	9999	XX-9999999	XX-9999999	XX-9999999	99	9999	99
		mm/dd/yy	9999	XX-9999999	XX-9999999	XX-9999999	99	9999	99
		mm/dd/yy	9999	XX-9999999	XX-9999999	XX-9999999	99	9999	99
		mm/dd/yy	9999	XX-9999999	XX-9999999	XX-9999999	99	9999	99
		mm/dd/yy	9999	XX-9999999	XX-9999999	XX-9999999	99	9999	99
		mm/dd/yy	9999	XX-9999999	XX-9999999	XX-9999999	99	9999	99
		mm/dd/yy	9999	XX-9999999	XX-9999999	XX-9999999	99	9999	99
		mm/dd/yy	9999	XX-9999999	XX-9999999	XX-9999999	99	9999	99
		mm/dd/yy	9999	XX-9999999	XX-9999999	XX-9999999	99	9999	99
						TOTAL STRAIN XX	BLDG-ROOM XXX-XXXX		9999

TOTAL BORN THIS DATE. 9999

NOTE: THIS REPORT REQUIRES A QUERY CAPABILITY WHERE USER SUPPLIES START DATE AND END DATE FOR REPORT.

REPORT NO. BSC05S

NATIONAL CENTER FOR TOXICOLOGICAL RESEARCH

DD-MMM-YY PAGE ##

RECAP OF BIRTHS FROM MM/DD/YY TO MM/DD/YY

HH:MM:SS

NCTR STRAIN CODE	TOTAL LITTERS	TOTAL BORN	AVERAGE LITTER SIZE	PROJECTED NO. TO BE WEANED 90%	95%
XX	9999	9999	99.99	999	999
XX	9999	9999	99.99	999	999
XX	9999	9999	99.99	999	999
XX	9999	9999	99.99	999	999
XX	9999	9999	99.99	999	999
XX	9999	9999	99.99	999	999
XX	9999	9999	99.99	999	999
XX	9999	9999	99.99	999	999
XX	9999	9999	99.99	999	999
XX	9999	9999	99.99	999	999
XX	9999	9999	99.99	999	999
XX	9999	9999	99.99	999	999
XX	9999	9999	99.99	999	999
XX	9999	9999	99.99	999	999
XX	9999	9999	99.99	999	999
XX	9999	9999	99.99	999	999
XX	9999	9999	99.99	999	999
XX	9999	9999	99.99	999	999
XX	9999	9999	99.99	999	999
XX	9999	9999	99.99	999	999
XX	9999	9999	99.99	999	999
XX	9999	9999	99.99	999	999
XX	9999	9999	99.99	999	999
XX	9999	9999	99.99	999	999
XX	9999	9999	99.99	999	999
XX	9999	9999	99.99	999	999
XX	9999	9999	99.99	999	999
XX	9999	9999	99.99	999	999
XX	9999	9999	99.99	999	999
XX	9999	9999	99.99	999	999
XX	9999	9999	99.99	999	999

NOTE: HARDCOPY ONLY

REPORT NO. BS006

NATIONAL CENTER FOR TOXICOLOGICAL RESEARCH

DD-MMM-YY PAGE ##

ANIMALS WEANED FROM DATE MM/DD/YY TO MM/DD/YY

HH:MM:SS

WEAN DATE mm/dd/yy	BIRTH DATE mm/dd/yy	CURR CAGE	SIRE UIN	DAM UIN	LITTER UIN	LITTER SIZE	DEAD	CULLED	SURPLUS	SURVEY	ASSIGN BREEDER	ASSIGN FEEDER	ISSUE
		9999	XX-9999999	XX-9999999	XX-9999999	99	99	99	99	99	99	99	99
		9999	XX-9999999	XX-9999999	XX-9999999	99	99	99	99	99	99	99	99
		9999	XX-9999999	XX-9999999	XX-9999999	99	99	99	99	99	99	99	99
		9999	XX-9999999	XX-9999999	XX-9999999	99	99	99	99	99	99	99	99
		9999	XX-9999999	XX-9999999	XX-9999999	99	99	99	99	99	99	99	99
		9999	XX-9999999	XX-9999999	XX-9999999	99	99	99	99	99	99	99	99
TOTAL PAIRS STRAIN XX BLDG-ROOM XXX-XXXX 9999 = SUM NO. CAGES													
mm/dd/yy	mm/dd/yy	9999	XX-9999999	XX-9999999	XX-9999999	99	99	99	99	99	99	99	99
		9999	XX-9999999	XX-9999999	XX-9999999	99	99	99	99	99	99	99	99
		9999	XX-9999999	XX-9999999	XX-9999999	99	99	99	99	99	99	99	99
TOTAL PAIRS STRAIN XX BLDG-ROOM XXX-XXXX 9999 = SUM NO. CAGES													
mm/dd/yy	mm/dd/yy	9999	XX-9999999	XX-9999999	XX-9999999	99	99	99	99	99	99	99	99
		9999	XX-9999999	XX-9999999	XX-9999999	99	99	99	99	99	99	99	99
		9999	XX-9999999	XX-9999999	XX-9999999	99	99	99	99	99	99	99	99
		9999	XX-9999999	XX-9999999	XX-9999999	99	99	99	99	99	99	99	99
		9999	XX-9999999	XX-9999999	XX-9999999	99	99	99	99	99	99	99	99
TOTAL PAIRS STRAIN XX BLDG-ROOM XXX-XXXX 9999 = SUM NO. CAGES													
TOTAL FOR THIS DATE.						999	999	999	999	999	999	999	999
mm/dd/yy	mm/dd/yy	9999	XX-9999999	XX-9999999	XX-9999999	99	99	99	99	99	99	99	99
		9999	XX-9999999	XX-9999999	XX-9999999	99	99	99	99	99	99	99	99
		9999	XX-9999999	XX-9999999	XX-9999999	99	99	99	99	99	99	99	99
		9999	XX-9999999	XX-9999999	XX-9999999	99	99	99	99	99	99	99	99
		9999	XX-9999999	XX-9999999	XX-9999999	99	99	99	99	99	99	99	99
		9999	XX-9999999	XX-9999999	XX-9999999	99	99	99	99	99	99	99	99
		9999	XX-9999999	XX-9999999	XX-9999999	99	99	99	99	99	99	99	99
		9999	XX-9999999	XX-9999999	XX-9999999	99	99	99	99	99	99	99	99
TOTAL PAIRS STRAIN XX BLDG-ROOM XXX-XXXX 9999 = SUM NO. CAGES													

NOTE: FOR PRINTING PURPOSES, SELECTION IS DONE BY STRAIN BY WEAN OR BIRTHDATE WITH DATE BEING A RANGE OF LOW DATE TO HIGH DATE.

RECAP OF ANIMALS WEANED FROM MM/DD/YY TO MM/DD/YY HH:MM:SS

NCTR STRAIN CODE	TOTAL LITTERS	TOTAL BORN	AVG. NO. PER LITTER	DEAD		CULLED		SURPLUS		SURVEY		ASSIGN BREEDER		ASSIGN FEEDER		ISSUE	
XX	9999	9999	99.99	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	99	999.9
XX	9999	9999	99.99	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	99	999.9
XX	9999	9999	99.99	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	99	999.9
XX	9999	9999	99.99	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	99	999.9
XX	9999	9999	99.99	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	99	999.9
XX	9999	9999	99.99	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	99	999.9
XX	9999	9999	99.99	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	99	999.9
XX	9999	9999	99.99	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	99	999.9
XX	9999	9999	99.99	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	99	999.9
XX	9999	9999	99.99	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	99	999.9
XX	9999	9999	99.99	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	99	999.9
XX	9999	9999	99.99	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	99	999.9
XX	9999	9999	99.99	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	99	999.9
XX	9999	9999	99.99	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	99	999.9
XX	9999	9999	99.99	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	99	999.9
XX	9999	9999	99.99	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	99	999.9
XX	9999	9999	99.99	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	99	999.9
XX	9999	9999	99.99	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	99	999.9
XX	9999	9999	99.99	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	99	999.9
XX	9999	9999	99.99	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	99	999.9
XX	9999	9999	99.99	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	99	999.9
XX	9999	9999	99.99	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	99	999.9
XX	9999	9999	99.99	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	99	999.9
XX	9999	9999	99.99	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	99	999.9
XX	9999	9999	99.99	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	99	999.9
XX	9999	9999	99.99	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	99	999.9
XX	9999	9999	99.99	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	99	999.9
XX	9999	9999	99.99	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	99	999.9
XX	9999	9999	99.99	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	99	999.9
XX	9999	9999	99.99	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	99	999.9
XX	9999	9999	99.99	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	9999	999.9%	99	999.9

REPORT NO. BS007 NATIONAL CENTER FOR TOXICOLOGICAL RESEARCH DD-MMM-YY PAGE ##

BREEDER ASSIGNMENT REPORT FROM DATE MM/DD/YY TO MM/DD/YY HH:MM:SS

		FEMALE				MALE			
ESTABLISH DATE	CURRENT CAGE	BIRTH DATE	UIN	PREV CAGE	FROM BLDG-ROOM	BIRTH DATE	UIN	PREV CAGE	FROM BLDG-ROOM
mm/dd/yy	9999	mm/dd/yy	XX-9999999	9999	XXX-XXXX	mm/dd/yy	XX-9999999	9999	XXX-XXXX
	9999	mm/dd/yy	XX-9999999	9999	XXX-XXXX	mm/dd/yy	XX-9999999	9999	XXX-XXXX
	9999	mm/dd/yy	XX-9999999	9999	XXX-XXXX	mm/dd/yy	XX-9999999	9999	XXX-XXXX
	9999	mm/dd/yy	XX-9999999	9999	XXX-XXXX	mm/dd/yy	XX-9999999	9999	XXX-XXXX
	9999	mm/dd/yy	XX-9999999	9999	XXX-XXXX	mm/dd/yy	XX-9999999	9999	XXX-XXXX
	9999	mm/dd/yy	XX-9999999	9999	XXX-XXXX	mm/dd/yy	XX-9999999	9999	XXX-XXXX
	9999	mm/dd/yy	XX-9999999	9999	XXX-XXXX	mm/dd/yy	XX-9999999	9999	XXX-XXXX
	9999	mm/dd/yy	XX-9999999	9999	XXX-XXXX	mm/dd/yy	XX-9999999	9999	XXX-XXXX
	9999	mm/dd/yy	XX-9999999	9999	XXX-XXXX	mm/dd/yy	XX-9999999	9999	XXX-XXXX

TOTAL STRAIN XX BLDG-ROOM XXX-XXXX.....9999 = SUM OF PAIRS/CAGE

TOTAL STRAIN XX BLDG-ROOM XXX-XXXX.....9999 = SUM OF PAIRS/CAGE

9999	mm/dd/yy	XX-9999999	9999	XXX-XXXX	mm/dd/yy	XX-9999999	9999	XXX-XXXX
9999	mm/dd/yy	XX-9999999	9999	XXX-XXXX	mm/dd/yy	XX-9999999	9999	XXX-XXXX
9999	mm/dd/yy	XX-9999999	9999	XXX-XXXX	mm/dd/yy	XX-9999999	9999	XXX-XXXX
9999	mm/dd/yy	XX-9999999	9999	XXX-XXXX	mm/dd/yy	XX-9999999	9999	XXX-XXXX
9999	mm/dd/yy	XX-9999999	9999	XXX-XXXX	mm/dd/yy	XX-9999999	9999	XXX-XXXX

TOTAL STRAIN XX BLDG-ROOM XXX-XXXX.....9999 = SUM OF PAIRS/CAGE

TOTAL STRAIN XX BLDG-ROOM XXX-XXXX.....9999 = SUM OF PAIRS/CAGE

9999	mm/dd/yy	XX-9999999	9999	XXX-XXXX	mm/dd/yy	XX-9999999	9999	XXX-XXXX

TOTAL THIS DATE.....9999

mm/dd/yy	9999	mm/dd/yy	XX-9999999	9999	XXX-XXXX	mm/dd/yy	XX-9999999	9999	XXX-XXXX
	9999	mm/dd/yy	XX-9999999	9999	XXX-XXXX	mm/dd/yy	XX-9999999	9999	XXX-XXXX
	9999	mm/dd/yy	XX-9999999	9999	XXX-XXXX	mm/dd/yy	XX-9999999	9999	XXX-XXXX
	9999	mm/dd/yy	XX-9999999	9999	XXX-XXXX	mm/dd/yy	XX-9999999	9999	XXX-XXXX
	9999	mm/dd/yy	XX-9999999	9999	XXX-XXXX	mm/dd/yy	XX-9999999	9999	XXX-XXXX
	9999	mm/dd/yy	XX-9999999	9999	XXX-XXXX	mm/dd/yy	XX-9999999	9999	XXX-XXXX
	9999	mm/dd/yy	XX-9999999	9999	XXX-XXXX	mm/dd/yy	XX-9999999	9999	XXX-XXXX
	9999	mm/dd/yy	XX-9999999	9999	XXX-XXXX	mm/dd/yy	XX-9999999	9999	XXX-XXXX

REPORT NO. BS007S

NATIONAL CENTER FOR TOXICOLOGICAL RESEARCH

DD-MMM-YY PAGE ##

BREEDER ASSIGNMENT RECAP FROM MM/DD/YY TO MM/DD/YY

HH:MM:SS

NCTR STRAIN CODE	TOTAL
XX	9999
XX	9999
XX	9999
XX	9999
XX	9999
XX	9999
XX	9999

TOTAL THIS PERIOD	99999

BS008

NATIONAL CENTER FOR TOXICOLOGICAL RESEARCH

DD-MMM-YY PAGE ##

ACTIVE BREEDER REPORT

HH:MM:SS

BLDG-ROOM XXX-XXXX

CAGE	UIN	SEX	GENERATION	DATE ESTABLISHED
9999	XX-9999999	X	9999	mm/dd/yy
9999	XX-9999999	X	9999	mm/dd/yy
9999	XX-9999999	X	9999	mm/dd/yy
	XX-9999999	X	9999	mm/dd/yy
9999	XX-9999999	X	9999	mm/dd/yy
	XX-9999999	X	9999	mm/dd/yy
9999	XX-9999999	X	9999	mm/dd/yy
	XX-9999999	X	9999	mm/dd/yy
9999	XX-9999999	X	9999	mm/dd/yy
	XX-9999999	X		mm/dd/yy
9999	XX-9999999	X	9999	mm/dd/yy
9999	XX-9999999	X	9999	mm/dd/yy
	XX-9999999	X		mm/dd/yy
9999	XX-9999999	X	9999	mm/dd/yy
	XX-9999999	X	9999	mm/dd/yy
9999	XX-9999999	X	9999	mm/dd/yy
	XX-9999999	X	9999	mm/dd/yy
9999	XX-9999999	X	9999	mm/dd/yy
	XX-9999999	X	9999	mm/dd/yy
9999	XX-9999999	X	9999	mm/dd/yy
	XX-9999999	X	9999	mm/dd/yy

AVERAGE NUMBER PER LITTER REPORT FROM MM/DD/YY TO MM/DD/YY HH:MM:SS

NCTR STRAIN CODE	LITTER NUMBER	NUMBER BORN	NUMBER LITTERS	AVERAGE NO. LITTER
XX	99	9999	9999	999.9
	99	9999	9999	999.9
	99	9999	9999	999.9
	99	9999	9999	999.9
	99	9999	9999	999.9
XX	99	9999	9999	999.9
	99	9999	9999	999.9
	99	9999	9999	999.9
	99	9999	9999	999.9
	99	9999	9999	999.9
XX	99	9999	9999	999.9
	99	9999	9999	999.9
	99	9999	9999	999.9
	99	9999	9999	999.9
	99	9999	9999	999.9
XX	99	9999	9999	999.9
	99	9999	9999	999.9
	99	9999	9999	999.9
	99	9999	9999	999.9
	99	9999	9999	999.9
XX	99	9999	9999	999.9
	99	9999	9999	999.9
	99	9999	9999	999.9
	99	9999	9999	999.9
	99	9999	9999	999.9
XX	99	9999	9999	999.9
	99	9999	9999	999.9
	99	9999	9999	999.9
	99	9999	9999	999.9
	99	9999	9999	999.9

BS010 NATIONAL CENTER FOR TOXICOLOGICAL RESEARCH DD-MMM-YY PAGE ##

UNPRODUCTIVE BREEDER PAIRS HH:MM:SS

BLDG-ROOM	CAGE	FEMALE UIN	MALE UIN	ESTABLISH DATE	ESTABLISH DAYS	LAST LITTER DATE	LAST LITTER DAYS	LAST LITTER LITT.NO.	NEXT TO LAST DATE GAVE BIRTH
XXX-XXXX	9999	XX-9999999	XX-9999999	mm/dd/yy	999	mm/dd/yy	999	99	mm/dd/yy
	9999	XX-9999999	XX-9999999	mm/dd/yy	999	mm/dd/yy	999	99	mm/dd/yy
	9999	XX-9999999	XX-9999999	mm/dd/yy	999	mm/dd/yy	999	99	mm/dd/yy
	9999	XX-9999999	XX-9999999	mm/dd/yy	999	mm/dd/yy	999	99	mm/dd/yy
	9999	XX-9999999	XX-9999999	mm/dd/yy	999	mm/dd/yy	999	99	mm/dd/yy
	9999	XX-9999999	XX-9999999	mm/dd/yy	999	mm/dd/yy	999	99	mm/dd/yy
	9999	XX-9999999	XX-9999999	mm/dd/yy	999	mm/dd/yy	999	99	mm/dd/yy
	9999	XX-9999999	XX-9999999	mm/dd/yy	999	mm/dd/yy	999	99	mm/dd/yy
	9999	XX-9999999	XX-9999999	mm/dd/yy	999	mm/dd/yy	999	99	mm/dd/yy
	9999	XX-9999999	XX-9999999	mm/dd/yy	999	mm/dd/yy	999	99	mm/dd/yy
	9999	XX-9999999	XX-9999999	mm/dd/yy	999	mm/dd/yy	999	99	mm/dd/yy
	9999	XX-9999999	XX-9999999	mm/dd/yy	999	mm/dd/yy	999	99	mm/dd/yy

TOTAL UNPRODUCTIVE BREEDER PAIRS STRAIN XX.....9999

TOTAL PAIRS BLDG-ROOM XXX-XXXX.....9999

XXX-XXXX	9999	XX-9999999	XX-9999999	mm/dd/yy	999	mm/dd/yy	999	99	mm/dd/yy
	9999	XX-9999999	XX-9999999	mm/dd/yy	999	mm/dd/yy	999	99	mm/dd/yy
	9999	XX-9999999	XX-9999999	mm/dd/yy	999	mm/dd/yy	999	99	mm/dd/yy
	9999	XX-9999999	XX-9999999	mm/dd/yy	999	mm/dd/yy	999	99	mm/dd/yy
	9999	XX-9999999	XX-9999999	mm/dd/yy	999	mm/dd/yy	999	99	mm/dd/yy
	9999	XX-9999999	XX-9999999	mm/dd/yy	999	mm/dd/yy	999	99	mm/dd/yy
	9999	XX-9999999	XX-9999999	mm/dd/yy	999	mm/dd/yy	999	99	mm/dd/yy
	9999	XX-9999999	XX-9999999	mm/dd/yy	999	mm/dd/yy	999	99	mm/dd/yy
	9999	XX-9999999	XX-9999999	mm/dd/yy	999	mm/dd/yy	999	99	mm/dd/yy
	9999	XX-9999999	XX-9999999	mm/dd/yy	999	mm/dd/yy	999	99	mm/dd/yy
	9999	XX-9999999	XX-9999999	mm/dd/yy	999	mm/dd/yy	999	99	mm/dd/yy
	9999	XX-9999999	XX-9999999	mm/dd/yy	999	mm/dd/yy	999	99	mm/dd/yy

TOTAL UNPRODUCTIVE BREEDER PAIRS STRAIN XX.....9999

TOTAL PAIRS BLDG-ROOM XXX-XXXX.....9999

REPORT NO. BS010S

NATIONAL CENTER FOR TOXICOLOGICAL RESEARCH

DD-MMM-YY PAGE ##

HH:MM:SS

RECAP OF UNPRODUCTIVE BREEDER PAIRS

NCTR STRAIN CODE	PAIRS
XX	9999
XX	9999
XX	9999
XX	9999
XX	9999
XX	9999
XX	9999

TOTAL THIS PERIOD	99999

RETIREMENT CANDIDATES HH:MM:SS

BLDG-ROOM	CAGE	FEMALE UIN	MALE UIN	ESTABLISH DATE	ESTABLISH DAYS	FEMALE DATE OF BIRTH DATE	FEMALE DATE OF BIRTH DAYS
XXX-XXXX	9999	XX-9999999	XX-9999999	mm/dd/yy	999	mm/dd/yy	999
	9999	XX-9999999	XX-9999999	mm/dd/yy	999	mm/dd/yy	999
	9999	XX-9999999	XX-9999999	mm/dd/yy	999	mm/dd/yy	999
	9999	XX-9999999	XX-9999999	mm/dd/yy	999	mm/dd/yy	999
	9999	XX-9999999	XX-9999999	mm/dd/yy	999	mm/dd/yy	999
	9999	XX-9999999	XX-9999999	mm/dd/yy	999	mm/dd/yy	999
	9999	XX-9999999	XX-9999999	mm/dd/yy	999	mm/dd/yy	999

TOTAL RETIREMENT CANDIDATES STRAIN XX.....9999

TOTAL PAIRS BLDG-ROOM XXX-XXXX.....9999

XXX-XXXX	9999	XX-9999999	XX-9999999	mm/dd/yy	999	mm/dd/yy	999
	9999	XX-9999999	XX-9999999	mm/dd/yy	999	mm/dd/yy	999
	9999	XX-9999999	XX-9999999	mm/dd/yy	999	mm/dd/yy	999
	9999	XX-9999999	XX-9999999	mm/dd/yy	999	mm/dd/yy	999
	9999	XX-9999999	XX-9999999	mm/dd/yy	999	mm/dd/yy	999
	9999	XX-9999999	XX-9999999	mm/dd/yy	999	mm/dd/yy	999
	9999	XX-9999999	XX-9999999	mm/dd/yy	999	mm/dd/yy	999

TOTAL RETIREMENT CANDIDATES STRAIN XX.....9999

TOTAL PAIRS BLDG-ROOM XXX-XXXX.....9999

XXX-XXXX	9999	XX-9999999	XX-9999999	mm/dd/yy	999	mm/dd/yy	999
	9999	XX-9999999	XX-9999999	mm/dd/yy	999	mm/dd/yy	999
	9999	XX-9999999	XX-9999999	mm/dd/yy	999	mm/dd/yy	999
	9999	XX-9999999	XX-9999999	mm/dd/yy	999	mm/dd/yy	999
	9999	XX-9999999	XX-9999999	mm/dd/yy	999	mm/dd/yy	999
	9999	XX-9999999	XX-9999999	mm/dd/yy	999	mm/dd/yy	999
	9999	XX-9999999	XX-9999999	mm/dd/yy	999	mm/dd/yy	999

TOTAL RETIREMENT CANDIDATES STRAIN XX.....9999

TOTAL PAIRS BLDG-ROOM XXX-XXXX.....9999

RECAP OF RETIREMENT CANDIDATE PAIRS HH:MM:SS

NCTR STRAIN CODE	PAIRS
XX	9999
XX	9999
XX	9999
XX	9999
XX	9999
XX	9999
XX	9999
TOTAL THIS PERIOD	99999

REPORT NO. BS012 NATIONAL CENTER FOR TOXICOLOGICAL RESEARCH DD-MMM-YY PAGE ##

EXPERIMENT NO. 9999-99 BREEDING INFORMATION SYSTEM HH:MM:SS

BLDG-ROOM XXX-XXXX ALLOCATION mm/dd/yy

RACK 99 SIDE X

OPER	CAGE	TMT	ANIMAL START DATE	BREEDING ANIMAL ID	SEX	UIN	ALLOC WEIGHT	UNITS	ISSUE CAGE	REPLACEMENT ANIMAL	CARCASS-ID
XXXXX	9999	999	mm/dd/yy	XXXXX	X	XX-9999999	999.9	XXX	9999	XX-9999999	99999999999
XXXXX	9999	999	mm/dd/yy	XXXXX	X	XX-9999999	999.9	XXX	9999	XX-9999999	99999999999
XXXXX	9999	999	mm/dd/yy	XXXXX	X	XX-9999999	999.9	XXX	9999	XX-9999999	99999999999
XXXXX	9999	999	mm/dd/yy	XXXXX	X	XX-9999999	999.9	XXX	9999	XX-9999999	99999999999
XXXXX	9999	999	mm/dd/yy	XXXXX	X	XX-9999999	999.9	XXX	9999	XX-9999999	99999999999
XXXXX	9999	999	mm/dd/yy	XXXXX	X	XX-9999999	999.9	XXX	9999	XX-9999999	99999999999
XXXXX	9999	999	mm/dd/yy	XXXXX	X	XX-9999999	999.9	XXX	9999	XX-9999999	99999999999
XXXXX	9999	999	mm/dd/yy	XXXXX	X	XX-9999999	999.9	XXX	9999	XX-9999999	99999999999
XXXXX	9999	999	mm/dd/yy	XXXXX	X	XX-9999999	999.9	XXX	9999	XX-9999999	99999999999
XXXXX	9999	999	mm/dd/yy	XXXXX	X	XX-9999999	999.9	XXX	9999	XX-9999999	99999999999
XXXXX	9999	999	mm/dd/yy	XXXXX	X	XX-9999999	999.9	XXX	9999	XX-9999999	99999999999
XXXXX	9999	999	mm/dd/yy	XXXXX	X	XX-9999999	999.9	XXX	9999	XX-9999999	99999999999
XXXXX	9999	999	mm/dd/yy	XXXXX	X	XX-9999999	999.9	XXX	9999	XX-9999999	99999999999
XXXXX	9999	999	mm/dd/yy	XXXXX	X	XX-9999999	999.9	XXX	9999	XX-9999999	99999999999
XXXXX	9999	999	mm/dd/yy	XXXXX	X	XX-9999999	999.9	XXX	9999	XX-9999999	99999999999
XXXXX	9999	999	mm/dd/yy	XXXXX	X	XX-9999999	999.9	XXX	9999	XX-9999999	99999999999
XXXXX	9999	999	mm/dd/yy	XXXXX	X	XX-9999999	999.9	XXX	9999	XX-9999999	99999999999
XXXXX	9999	999	mm/dd/yy	XXXXX	X	XX-9999999	999.9	XXX	9999	XX-9999999	99999999999
XXXXX	9999	999	mm/dd/yy	XXXXX	X	XX-9999999	999.9	XXX	9999	XX-9999999	99999999999
XXXXX	9999	999	mm/dd/yy	XXXXX	X	XX-9999999	999.9	XXX	9999	XX-9999999	99999999999
XXXXX	9999	999	mm/dd/yy	XXXXX	X	XX-9999999	999.9	XXX	9999	XX-9999999	99999999999
XXXXX	9999	999	mm/dd/yy	XXXXX	X	XX-9999999	999.9	XXX	9999	XX-9999999	99999999999
XXXXX	9999	999	mm/dd/yy	XXXXX	X	XX-9999999	999.9	XXX	9999	XX-9999999	99999999999
XXXXX	9999	999	mm/dd/yy	XXXXX	X	XX-9999999	999.9	XXX	9999	XX-9999999	99999999999

REPORT NO. SS012S

EXP NO. 9999-99

NATIONAL CENTER FOR TOXICOLOGICAL RESEARCH

BREEDING INFORMATION SYSTEM

ALLOCATION REPORT RECAP

DD-MMM-YY PAGE ##

HH:MM:SS

MALE ALLOCATIONS..... 999

FEMALE ALLOCATIONS..... 999

UNSEXED ALLOCATIONS..... 999

TOTAL ALLOCATIONS..... 999

REPORT NO. BS-013

NATIONAL CENTER FOR TOXICOLOGICAL RESEARCH

DD-MMM-YY PAGE ##

BREEDING INFORMATION SYSTEM

HH:MM:SS

FEMALE BREEDER HISTORY

FEMALE UIN XX-9999999
DATE OF BIRTH. . . . . .mm/dd/yy
CURRENT BLDG-ROOM/CAGE .XXX-XXXX / 9999
MALE UIN XX-9999999
CURRENT STATUS XXXXXXXXXXXX
GENERATION 9999
NUMBER OF LITTERS. . . .9999

LITTER UIN	BIRTH DATE	LITTER SIZE	LITTER NUMBER	LITTER ANIMAL	SEX	DISPOSITION DATE	CULLED	SURPLUSED	DEAD	BREEDER	FEEDER	ISSUE	SURVEY
XX-9999999	mm/dd/yy	99	99	XX-9999999	X	mm/dd/yy	X	X	X	X	X	X	X
				XX-9999999	X	mm/dd/yy	X	X	X	X	X	X	X
				XX-9999999	X	mm/dd/yy	X	X	X	X	X	X	X
				XX-9999999	X	mm/dd/yy	X	X	X	X	X	X	X
				XX-9999999	X	mm/dd/yy	X	X	X	X	X	X	X
				XX-9999999	X	mm/dd/yy	X	X	X	X	X	X	X
				XX-9999999	X	mm/dd/yy	X	X	X	X	X	X	X
				XX-9999999	X	mm/dd/yy	X	X	X	X	X	X	X
				XX-9999999	X	mm/dd/yy	X	X	X	X	X	X	X
						TOTALS	99	99	99	99	99	99	99
						TOTAL	MALE=9999	FEMALE=9999		UNSEX=9999			
XX-9999999	mm/dd/yy	99	99	XX-9999999	X	mm/dd/yy	X	X	X	X	X	X	X
				XX-9999999	X	mm/dd/yy	X	X	X	X	X	X	X
				XX-9999999	X	mm/dd/yy	X	X	X	X	X	X	X
				XX-9999999	X	mm/dd/yy	X	X	X	X	X	X	X
				XX-9999999	X	mm/dd/yy	X	X	X	X	X	X	X
				XX-9999999	X	mm/dd/yy	X	X	X	X	X	X	X
				XX-9999999	X	mm/dd/yy	X	X	X	X	X	X	X
				XX-9999999	X	mm/dd/yy	X	X	X	X	X	X	X
				XX-9999999	X	mm/dd/yy	X	X	X	X	X	X	X
						TOTALS	99	99	99	99	99	99	99
						TOTAL	MALE=9999	FEMALE=9999		UNSEX=9999			

NOTE: FOR REPORT GENERATION, ONLY ONE X PER LINE (LITTER ANIMAL) IS POSSIBLE. SEX IS NOTED BY M(MALE), F(FEMALE), OR U(UNSEXED).

BREEDING INFORMATION SYSTEM MM:HH:SS

PRODUCTIVITY INDEX REPORT

FOR PERIOD MM/DD/YY TO MM/DD/YY

NCTR STRAIN CODE	PRODUCTIVITY INDEX	TOTAL BREEDERS	TOTAL WEANED
XX	99.99	9999	9999
XX	99.99	9999	9999
XX	99.99	9999	9999
XX	99.99	9999	9999
XX	99.99	9999	9999
XX	99.99	9999	9999
XX	99.99	9999	9999
XX	99.99	9999	9999
XX	99.99	9999	9999
XX	99.99	9999	9999
XX	99.99	9999	9999
XX	99.99	9999	9999
XX	99.99	9999	9999
XX	99.99	9999	9999
XX	99.99	9999	9999
XX	99.99	9999	9999
XX	99.99	9999	9999
XX	99.99	9999	9999
XX	99.99	9999	9999
XX	99.99	9999	9999
XX	99.99	9999	9999
XX	99.99	9999	9999
XX	99.99	9999	9999
XX	99.99	9999	9999
XX	99.99	9999	9999
XX	99.99	9999	9999
XX	99.99	9999	9999
XX	99.99	9999	9999
XX	99.99	9999	9999
XX	99.99	9999	9999
XX	99.99	9999	9999

BS015 NATIONAL CENTER FOR TOXICOLOGICAL RESEARCH DD-MMM-YY TIME = HH:MM

BREEDING MULTIGENERATION SUPPORT SYSTEM PAGE ##

FEEDER STATUS

BLDG-ROOM	CAGE	MALE UIN/COUNT	FEMALE UIN/COUNT	UNSEXED UIN/COUNT	DATE OF BIRTH	PROJECTED MATING DATE
XXX-XXXX	9999	XX-9999999/99	XX-9999999/99	XX-9999999/99	mm/dd/yy	mm/dd/yy
	9999	XX-9999999/99	XX-9999999/99	XX-9999999/99	mm/dd/yy	mm/dd/yy
	9999	XX-9999999/99	XX-9999999/99	XX-9999999/99	mm/dd/yy	mm/dd/yy
	9999	XX-9999999/99	XX-9999999/99	XX-9999999/99	mm/dd/yy	mm/dd/yy
	9999	XX-9999999/99	XX-9999999/99	XX-9999999/99	mm/dd/yy	mm/dd/yy
	9999	XX-9999999/99	XX-9999999/99	XX-9999999/99	mm/dd/yy	mm/dd/yy
	9999	XX-9999999/99	XX-9999999/99	XX-9999999/99	mm/dd/yy	mm/dd/yy

TOTAL MALES BLDG-ROOM XXX-XXXX STRAIN XX.....9999

TOTAL FEMALES BLDG-ROOM XXX-XXXX STRAIN XX.....9999

TOTAL UNSEXED BLDG-ROOM XXX-XXXX STRAIN XX.....9999

XXX-XXXX	9999	XX-9999999/99	XX-9999999/99	XX-9999999/99	mm/dd/yy	mm/dd/yy
	9999	XX-9999999/99	XX-9999999/99	XX-9999999/99	mm/dd/yy	mm/dd/yy
	9999	XX-9999999/99	XX-9999999/99	XX-9999999/99	mm/dd/yy	mm/dd/yy
	9999	XX-9999999/99	XX-9999999/99	XX-9999999/99	mm/dd/yy	mm/dd/yy
	9999	XX-9999999/99	XX-9999999/99	XX-9999999/99	mm/dd/yy	mm/dd/yy
	9999	XX-9999999/99	XX-9999999/99	XX-9999999/99	mm/dd/yy	mm/dd/yy
	9999	XX-9999999/99	XX-9999999/99	XX-9999999/99	mm/dd/yy	mm/dd/yy

TOTAL MALES BLDG-ROOM XXX-XXXX STRAIN XX.....9999

TOTAL FEMALES BLDG-ROOM XXX-XXXX STRAIN XX.....9999

TOTAL UNSEXED BLDG-ROOM XXX-XXXX STRAIN XX.....9999

REPORT NO. BS016 NATIONAL CENTER FOR TOXICOLOGICAL RESEARCH MM/DD/YY PAGE ##

ISSUE CAGE CENSUS REPORT HH:MM:SS

STRAIN	CAGE	UIN/COUNT	SEX
XX	9999	9999999/99	X
	9999	9999999/99	X
	9999	9999999/99	X
	9999	9999999/99	X
	9999	9999999/99	X
	9999	9999999/99	X
	9999	9999999/99	X
	9999	9999999/99	X
	9999	9999999/99	X

TOTAL MALES.....9999 TOTAL FEMALES.....9999 TOTAL UNSEXED.....9999

XX	9999	9999999/99	X
	9999	9999999/99	X
	9999	9999999/99	X
	9999	9999999/99	X
	9999	9999999/99	X
	9999	9999999/99	X
	9999	9999999/99	X
	9999	9999999/99	X
	9999	9999999/99	X

TOTAL MALES.....9999 TOTAL FEMALES.....9999 TOTAL UNSEXED.....9999

XX	9999	9999999/99	X
	9999	9999999/99	X
	9999	9999999/99	X
	9999	9999999/99	X
	9999	9999999/99	X
	9999	9999999/99	X
	9999	9999999/99	X
	9999	9999999/99	X
	9999	9999999/99	X

TOTAL MALES.....9999 TOTAL FEMALES.....9999 TOTAL UNSEXED.....9999

REPORT NO. BS017 NATIONAL CENTER FOR TOXICOLOGICAL RESEARCH DD-MMM-YY TIME = HH:MM

OPER 99999 BREEDING MULTIGENERATION SUPPORT SYSTEM PAGE ##

RECAP REPORT -- ANIMAL ORDERS

MM-DD-YY

EXP. NO.	BLDG-ROOM	P.I./CONTACT	DATE REQUIRED	STRAIN	SEX	NUMBER REQUESTED	NUMBER DELIVERED	DATE FILLED	SPECIAL REQUIREMENTS
9999-99	XXX-XXXX	XXXXXXXXXX	mm/dd/yy	XX	X	999	999	mm/dd/yy	XXXXXXXXXXXXXXXXXXXXXXXXX
				XX	X	999	999	mm/dd/yy	XXXXXXXXXXXXXXXXXXXXXXXXX
	XXX-XXXX	XXXXXXXXXX	mm/dd/yy	XX	X	999	999	mm/dd/yy	XXXXXXXXXXXXXXXXXXXXXXXXX
				XX	X	999	999	mm/dd/yy	XXXXXXXXXXXXXXXXXXXXXXXXX
				XX	X	999	999	mm/dd/yy	XXXXXXXXXXXXXXXXXXXXXXXXX
	XXX-XXXX	XXXXXXXXXX	mm/dd/yy	XX	X	999	999	mm/dd/yy	XXXXXXXXXXXXXXXXXXXXXXXXX
				XX	X	999	999	mm/dd/yy	XXXXXXXXXXXXXXXXXXXXXXXXX
				XX	X	999	999	mm/dd/yy	XXXXXXXXXXXXXXXXXXXXXXXXX
				XX	X	999	999	mm/dd/yy	XXXXXXXXXXXXXXXXXXXXXXXXX
9999-99	XXX-XXXX	XXXXXXXXXX	mm/dd/yy	XX	X	999	999	mm/dd/yy	XXXXXXXXXXXXXXXXXXXXXXXXX
				XX	X	999	999	mm/dd/yy	XXXXXXXXXXXXXXXXXXXXXXXXX
	XXX-XXXX	XXXXXXXXXX	mm/dd/yy	XX	X	999	999	mm/dd/yy	XXXXXXXXXXXXXXXXXXXXXXXXX
				XX	X	999	999	mm/dd/yy	XXXXXXXXXXXXXXXXXXXXXXXXX
				XX	X	999	999	mm/dd/yy	XXXXXXXXXXXXXXXXXXXXXXXXX
	XXX-XXXX	XXXXXXXXXX	mm/dd/yy	XX	X	999	999	mm/dd/yy	XXXXXXXXXXXXXXXXXXXXXXXXX
				XX	X	999	999	mm/dd/yy	XXXXXXXXXXXXXXXXXXXXXXXXX
				XX	X	999	999	mm/dd/yy	XXXXXXXXXXXXXXXXXXXXXXXXX
				XX	X	999	999	mm/dd/yy	XXXXXXXXXXXXXXXXXXXXXXXXX
9999-99	XXX-XXXX	XXXXXXXXXX	mm/dd/yy	XX	X	999	999	mm/dd/yy	XXXXXXXXXXXXXXXXXXXXXXXXX
				XX	X	999	999	mm/dd/yy	XXXXXXXXXXXXXXXXXXXXXXXXX
	XXX-XXXX	XXXXXXXXXX	mm/dd/yy	XX	X	999	999	mm/dd/yy	XXXXXXXXXXXXXXXXXXXXXXXXX
				XX	X	999	999	mm/dd/yy	XXXXXXXXXXXXXXXXXXXXXXXXX
				XX	X	999	999	mm/dd/yy	XXXXXXXXXXXXXXXXXXXXXXXXX
	XXX-XXXX	XXXXXXXXXX	mm/dd/yy	XX	X	999	999	mm/dd/yy	XXXXXXXXXXXXXXXXXXXXXXXXX
				XX	X	999	999	mm/dd/yy	XXXXXXXXXXXXXXXXXXXXXXXXX
				XX	X	999	999	mm/dd/yy	XXXXXXXXXXXXXXXXXXXXXXXXX
				XX	X	999	999	mm/dd/yy	XXXXXXXXXXXXXXXXXXXXXXXXX

REPORT NO. 8S017S

NATIONAL CENTER FOR TOXICOLOGICAL RESEARCH

DD-MMM-YY TIME = HH:MM

BREEDING MULTIGENERATION SUPPORT SYSTEM

PAGE ##

MONTHLY SUMMARY REPORT -- ANIMAL ORDERS

EXP. NO.	STRAIN	SEX	NUMBER REQUESTED	NUMBER DELIVERED
9999-99	XX	X	999	999
	XX	X	999	999
	XX	X	999	999
9999-99	XX	X	999	999
	XX	X	999	999
9999-99	XX	X	999	999
	XX	X	999	999
	XX	X	999	999
	XX	X	999	999
9999-99	XX	X	999	999
	XX	X	999	999
	XX	X	999	999
9999-99	XX	X	999	999
	XX	X	999	999
9999-99	XX	X	999	999
	XX	X	999	999
	XX	X	999	999
	XX	X	999	999

REPORT BS018

TARGET TRACE ROOT ANIMAL XX-9999999

VENDOR INFORMATION: (REQUEST FOR A 300-350 CHARACTER FIELD TO DESCRIBE THE VENDOR, DATE RECEIVED, ANY ANOMALIES OR DESCREPANCIES,ETC.)

NOTE: PRINT OPTIONS FOR THE REPORT
1. CURRENT UIN, ALL PREDECESSORS
2. PAST UIN, ALL SUCCESSORS
3. XX = NCTR STRAIN CODE
4. 9999999 = UIN
5. 9999 = GENERATION (adjacent to or above UIN's)
6. XXX-XXXX = ROOM NO. (BLDG-ROOM)

```
                                                    XX-9999999-9999
                                                    XX-9999999-9999
                                                    XX-9999999-9999
                                                    XX-9999999-9999
                                                    XX-9999999-9999
                                                    XX-9999999-9999
                                                    XX-9999999-9999
                                                    XX-9999999-9999
                                                    XX-9999999-9999
* * * * * * * * * * * * * * * * * * * * * * * * * *XX-9999999-9999
*                                                                                                                    Current
*                                                                                                                    Room/Cage No.
9999         9999         9999         9999         9999         9999         9999         9999         9999
XX-9999999   XX-9999999   XX-9999999   XX-9999999   XX-9999999   XX-9999999   XX-9999999                             XXX-XXXX/9999
*                         *            *            *                         *
*                         *            *            *                         *****        XX-9999999                XXX-XXXX/9999
*                         *            *            *                         *            *
*                         *            *            *                         *            *****        XX-9999999   XXX-XXXX/9999
*                         *            *            *                         *            *
*                         *            *            *                         *            *****        XX-9999999   XXX-XXXX/9999
*                         *            *            *                         *
*                         *            *            *                         *****        XX-9999999                XXX-XXXX/9999
*                         *            *            *
*                         *            *            *****        XX-9999999   XX-9999999                             XXX-XXXX/9999
*                         *            *                                      *
*                         *            *                                      *****        XX-9999999                XXX-XXXX/9999
*                         *            *                                      *
*                         *            *                                      *****        XX-9999999                XXX-XXXX/9999
*                         *            *                                      *
*                         *            *                                      *****        XX-9999999                XXX-XXXX/9999
*                         *            *
*                         *            *****        XX-9999999   XX-9999999                                          XXX-XXXX/9999
*                         *                         *
*                         *                         *****        XX-9999999                                          XXX-XXXX/9999
*                         *
*                         *****        XX-9999999   XX-9999999   XX-9999999                                          XXX-XXXX/9999
*                         *
*                         *****        XX-9999999   XX-9999999   XX-9999999                                          XXX-XXXX/9999
*                         *
*                         *****        XX-9999999   XX-9999999   XX-9999999                                          XXX-XXXX/9999
*                         *
*                         *****        XX-9999999   XX-9999999   XX-9999999                                          XXX-XXXX/9999
*                                                   *            *
*                                                   *            *****        XX-9999999                             XXX-XXXX/9999
*                                                   *            *
*                                                   *            *****        XX-9999999                             XXX-XXXX/9999
*                                                   *
*                                                   *****        XX-9999999   XX-9999999                             XXX-XXXX/9999
*                                                   *
*                                                   *****        XX-9999999                                          XXX-XXXX/9999
*
*****        XX-9999999   XX-9999999   XX-9999999   XX-9999999   XX-9999999   XX-9999999                             XXX-XXXX/9999
                                                                 *            *
                                                                 *            *****        XX-9999999                XXX-XXXX/9999
                                                                 *            *
                                                                 *            *****        XX-9999999                XXX-XXXX/9999
                                                                 *
                                                                 *****        XX-9999999   XX-9999999                XXX-XXXX/9999
```

* * * * * 23 ANIMALS THIS GROUP * * * * *

NOTE: NO CAGE NUMBER WILL BE LISTED IF THE ANIMAL IS NOT ACTIVE

EXPERIMENT NO. 9999-99 EXPERIMENTAL BREEDING SYSTEM HH:MM:SS

PUP WEIGHTS AT WEANING AND DISPOSITION

OPER	FEM TMT	FEM GENR	MALE UIN	FEMALE UIN	LITTER BIRTHDATE	LITTER UIN	LITT GENR	LITT NO.	LITT WEIGHT	UNITS	DISPOSITION SURP	ALLOC	BREED	SURVEY	ISSUE	DEAD	CULL	BLDG-ROOM
XXXXX	999	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	99	99	99	99	99	99	XXX-XXXX
XXXXX	999	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	99	99	99	99	99	99	XXX-XXXX
XXXXX	999	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	99	99	99	99	99	99	XXX-XXXX
XXXXX	999	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	99	99	99	99	99	99	XXX-XXXX
XXXXX	999	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	99	99	99	99	99	99	XXX-XXXX
XXXXX	999	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	99	99	99	99	99	99	XXX-XXXX
XXXXX	999	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	99	99	99	99	99	99	XXX-XXXX
XXXXX	999	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	99	99	99	99	99	99	XXX-XXXX
XXXXX	999	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	99	99	99	99	99	99	XXX-XXXX
XXXXX	999	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	99	99	99	99	99	99	XXX-XXXX
XXXXX	999	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	99	99	99	99	99	99	XXX-XXXX
XXXXX	999	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	99	99	99	99	99	99	XXX-XXXX
XXXXX	999	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	99	99	99	99	99	99	XXX-XXXX
XXXXX	999	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	99	99	99	99	99	99	XXX-XXXX
XXXXX	999	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	99	99	99	99	99	99	XXX-XXXX
XXXXX	999	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	99	99	99	99	99	99	XXX-XXXX
XXXXX	999	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	99	99	99	99	99	99	XXX-XXXX
XXXXX	999	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	99	99	99	99	99	99	XXX-XXXX
XXXXX	999	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	99	99	99	99	99	99	XXX-XXXX
XXXXX	999	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	99	99	99	99	99	99	XXX-XXXX
XXXXX	999	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	99	99	99	99	99	99	XXX-XXXX
XXXXX	999	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	99	99	99	99	99	99	XXX-XXXX
XXXXX	999	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	99	99	99	99	99	99	XXX-XXXX
XXXXX	999	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	99	99	99	99	99	99	XXX-XXXX
XXXXX	999	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	99	99	99	99	99	99	XXX-XXXX
XXXXX	999	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	99	99	99	99	99	99	XXX-XXXX
XXXXX	999	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	99	99	99	99	99	99	XXX-XXXX
XXXXX	999	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	99	99	99	99	99	99	XXX-XXXX
XXXXX	999	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	99	99	99	99	99	99	XXX-XXXX

EXPERIMENT NO. 9999-99 EXPERIMENTAL BREEDING SYSTEM HH:MM:SS

PUP WEIGHTS

OPER	BLDG-ROOM	FEMALE GENR	MALE UIN	FEMALE UIN	LITTER BIRTHDATE	LITTER ANIMAL	LITT GENR	LITT NO.	WEIGHT	UNIT	NUMBER WEIGHED	DATE WEIGHED	AGE DAYS
XXXXX	XXX-XXXX	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	mm/dd/yy	99
XXXXX	XXX-XXXX	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	mm/dd/yy	99
XXXXX	XXX-XXXX	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	mm/dd/yy	99
XXXXX	XXX-XXXX	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	mm/dd/yy	99
XXXXX	XXX-XXXX	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	mm/dd/yy	99
XXXXX	XXX-XXXX	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	mm/dd/yy	99
XXXXX	XXX-XXXX	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	mm/dd/yy	99
XXXXX	XXX-XXXX	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	mm/dd/yy	99
XXXXX	XXX-XXXX	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	mm/dd/yy	99
XXXXX	XXX-XXXX	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	mm/dd/yy	99
XXXXX	XXX-XXXX	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	mm/dd/yy	99
XXXXX	XXX-XXXX	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	mm/dd/yy	99
XXXXX	XXX-XXXX	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	mm/dd/yy	99
XXXXX	XXX-XXXX	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	mm/dd/yy	99
XXXXX	XXX-XXXX	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	mm/dd/yy	99
XXXXX	XXX-XXXX	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	mm/dd/yy	99
XXXXX	XXX-XXXX	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	mm/dd/yy	99
XXXXX	XXX-XXXX	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	mm/dd/yy	99
XXXXX	XXX-XXXX	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	mm/dd/yy	99
XXXXX	XXX-XXXX	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	mm/dd/yy	99
XXXXX	XXX-XXXX	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	mm/dd/yy	99
XXXXX	XXX-XXXX	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	mm/dd/yy	99
XXXXX	XXX-XXXX	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	mm/dd/yy	99
XXXXX	XXX-XXXX	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	mm/dd/yy	99
XXXXX	XXX-XXXX	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	mm/dd/yy	99
XXXXX	XXX-XXXX	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	mm/dd/yy	99
XXXXX	XXX-XXXX	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	mm/dd/yy	99
XXXXX	XXX-XXXX	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	mm/dd/yy	99
XXXXX	XXX-XXXX	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	mm/dd/yy	99
XXXXX	XXX-XXXX	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	mm/dd/yy	99
XXXXX	XXX-XXXX	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	mm/dd/yy	99
XXXXX	XXX-XXXX	9999	XX-9999999	XX-9999999	mm/dd/yy	XX-9999999	9999	99	99999.9	XXX	99	mm/dd/yy	99

EXPERIMENTAL BREEDING SYSTEM HH:MM:SS

EXPERIMENT NO. 9999-99 FERTILITY REPORT FROM DATE MM/DD/YY TO MM/DD/YY

BLDG-ROOM	MALE GENR	MALE TMT	MALE UIN	FEM GENR	FEM TMT	FEMALE UIN	DATE EST	PLUG DATE	OBSERVED PREGNANT	LITTER BIRTH DATE	LITTER UIN	GENR	LITT. NO.	LITT. SIZE	OBSERVE DATE	NO. M/F DAY	NO. L/D	NO. MALES WEAN	NO. FEM WEAN	NO. DEAD WEAN	WEAN DATE
XXX-XXXX	9999	999	XX-9999999	9999	999	XX-9999999	mm/dd/yy	mm/dd/yy	mm/dd/yy	mm/dd/yy	XX-9999999	9999	99	99	mm/dd/yy	99/99	99/99	99	99	99	mm/dd/yy
XXX-XXXX	9999	999	XX-9999999	9999	999	XX-9999999	mm/dd/yy	mm/dd/yy	mm/dd/yy	mm/dd/yy	XX-9999999	9999	99	99	mm/dd/yy	99/99	99/99	99	99	99	mm/dd/yy
XXX-XXXX	9999	999	XX-9999999	9999	999	XX-9999999	mm/dd/yy	mm/dd/yy	mm/dd/yy	mm/dd/yy	XX-9999999	9999	99	99	mm/dd/yy	99/99	99/99	99	99	99	mm/dd/yy
XXX-XXXX	9999	999	XX-9999999	9999	999	XX-9999999	mm/dd/yy	mm/dd/yy	mm/dd/yy	mm/dd/yy	XX-9999999	9999	99	99	mm/dd/yy	99/99	99/99	99	99	99	mm/dd/yy
XXX-XXXX	9999	999	XX-9999999	9999	999	XX-9999999	mm/dd/yy	mm/dd/yy	mm/dd/yy	mm/dd/yy	XX-9999999	9999	99	99	mm/dd/yy	99/99	99/99	99	99	99	mm/dd/yy
XXX-XXXX	9999	999	XX-9999999	9999	999	XX-9999999	mm/dd/yy	mm/dd/yy	mm/dd/yy	mm/dd/yy	XX-9999999	9999	99	99	mm/dd/yy	99/99	99/99	99	99	99	mm/dd/yy
XXX-XXXX	9999	999	XX-9999999	9999	999	XX-9999999	mm/dd/yy	mm/dd/yy	mm/dd/yy	mm/dd/yy	XX-9999999	9999	99	99	mm/dd/yy	99/99	99/99	99	99	99	mm/dd/yy
XXX-XXXX	9999	999	XX-9999999	9999	999	XX-9999999	mm/dd/yy	mm/dd/yy	mm/dd/yy	mm/dd/yy	XX-9999999	9999	99	99	mm/dd/yy	99/99	99/99	99	99	99	mm/dd/yy
XXX-XXXX	9999	999	XX-9999999	9999	999	XX-9999999	mm/dd/yy	mm/dd/yy	mm/dd/yy	mm/dd/yy	XX-9999999	9999	99	99	mm/dd/yy	99/99	99/99	99	99	99	mm/dd/yy
XXX-XXXX	9999	999	XX-9999999	9999	999	XX-9999999	mm/dd/yy	mm/dd/yy	mm/dd/yy	mm/dd/yy	XX-9999999	9999	99	99	mm/dd/yy	99/99	99/99	99	99	99	mm/dd/yy
XXX-XXXX		999	XX-9999999	9999	999	XX-9999999	mm/dd/yy	mm/dd/yy	mm/dd/yy	mm/dd/yy	XX-9999999	9999	99	99	mm/dd/yy	99/99	99/99	99	99	99	mm/dd/yy
XXX-XXXX		999	XX-9999999	9999	999	XX-9999999	mm/dd/yy	mm/dd/yy	mm/dd/yy	mm/dd/yy	XX-9999999	9999	99	99	mm/dd/yy	99/99	99/99	99	99	99	mm/dd/yy
XXX-XXXX		999	XX-9999999	9999	999	XX-9999999	mm/dd/yy	mm/dd/yy	mm/dd/yy	mm/dd/yy	XX-9999999	9999	99	99	mm/dd/yy	99/99	99/99	99	99	99	mm/dd/yy
XXX-XXXX		999	XX-9999999	9999	999	XX-9999999	mm/dd/yy	mm/dd/yy	mm/dd/yy	mm/dd/yy	XX-9999999	9999	99	99	mm/dd/yy	99/99	99/99	99	99	99	mm/dd/yy
XXX-XXXX	9999	999	XX-9999999	9999	999	XX-9999999	mm/dd/yy	mm/dd/yy	mm/dd/yy	mm/dd/yy	XX-9999999	9999	99	99	mm/dd/yy	99/99	99/99	99	99	99	mm/dd/yy
XXX-XXXX	9999	999	XX-9999999	9999	999	XX-9999999	mm/dd/yy	mm/dd/yy	mm/dd/yy	mm/dd/yy	XX-9999999	9999	99	99	mm/dd/yy	99/99	99/99	99	99	99	mm/dd/yy
XXX-XXXX	9999	999	XX-9999999	9999	999	XX-9999999	mm/dd/yy	mm/dd/yy	mm/dd/yy	mm/dd/yy	XX-9999999	9999	99	99	mm/dd/yy	99/99	99/99	99	99	99	mm/dd/yy
XXX-XXXX	9999	999	XX-9999999	9999	999	XX-9999999	mm/dd/yy	mm/dd/yy	mm/dd/yy	mm/dd/yy	XX-9999999	9999	99	99	mm/dd/yy	99/99	99/99	99	99	99	mm/dd/yy
XXX-XXXX	9999	999	XX-9999999	9999	999	XX-9999999	mm/dd/yy	mm/dd/yy	mm/dd/yy	mm/dd/yy	XX-9999999	9999	99	99	mm/dd/yy	99/99	99/99	99	99	99	mm/dd/yy
XXX-XXXX	9999	999	XX-9999999	9999	999	XX-9999999	mm/dd/yy	mm/dd/yy	mm/dd/yy	mm/dd/yy	XX-9999999	9999	99	99	mm/dd/yy	99/99	99/99	99	99	99	mm/dd/yy
XXX-XXXX	9999	999	XX-9999999	9999	999	XX-9999999	mm/dd/yy	mm/dd/yy	mm/dd/yy	mm/dd/yy	XX-9999999	9999	99	99	mm/dd/yy	99/99	99/99	99	99	99	mm/dd/yy
XXX-XXXX	9999	999	XX-9999999	9999	999	XX-9999999	mm/dd/yy	mm/dd/yy	mm/dd/yy	mm/dd/yy	XX-9999999	9999	99	99	mm/dd/yy	99/99	99/99	99	99	99	mm/dd/yy
XXX-XXXX	9999	999	XX-9999999	9999	999	XX-9999999	mm/dd/yy	mm/dd/yy	mm/dd/yy	mm/dd/yy	XX-9999999	9999	99	99	mm/dd/yy	99/99	99/99	99	99	99	mm/dd/yy
XXX-XXXX	9999	999	XX-9999999	9999	999	XX-9999999	mm/dd/yy	mm/dd/yy	mm/dd/yy	mm/dd/yy	XX-9999999	9999	99	99	mm/dd/yy	99/99	99/99	99	99	99	mm/dd/yy
XXX-XXXX	9999	999	XX-9999999	9999	999	XX-9999999	mm/dd/yy	mm/dd/yy	mm/dd/yy	mm/dd/yy	XX-9999999	9999	99	99	mm/dd/yy	99/99	99/99	99	99	99	mm/dd/yy
XXX-XXXX	9999	999	XX-9999999	9999	999	XX-9999999	mm/dd/yy	mm/dd/yy	mm/dd/yy	mm/dd/yy	XX-9999999	9999	99	99	mm/dd/yy	99/99	99/99	99	99	99	mm/dd/yy
XXX-XXXX	9999	999	XX-9999999	9999	999	XX-9999999	mm/dd/yy	mm/dd/yy	mm/dd/yy	mm/dd/yy	XX-9999999	9999	99	99	mm/dd/yy	99/99	99/99	99	99	99	mm/dd/yy
XXX-XXXX	9999	999	XX-9999999	9999	999	XX-9999999	mm/dd/yy	mm/dd/yy	mm/dd/yy	mm/dd/yy	XX-9999999	9999	99	99	mm/dd/yy	99/99	99/99	99	99	99	mm/dd/yy
XXX-XXXX	9999	999	XX-9999999	9999	999	XX-9999999	mm/dd/yy	mm/dd/yy	mm/dd/yy	mm/dd/yy	XX-9999999	9999	99	99	mm/dd/yy	99/99	99/99	99	99	99	mm/dd/yy
XXX-XXXX	9999	999	XX-9999999	9999	999	XX-9999999	mm/dd/yy	mm/dd/yy	mm/dd/yy	mm/dd/yy	XX-9999999	9999	99	99	mm/dd/yy	99/99	99/99	99	99	99	mm/dd/yy

REPORT NO. EBS3S NATIONAL CENTER FOR TOXICOLOGICAL RESEARCH DD-MMM-YY PAGE ##

BLDG-ROOM XXX-XXXX EXPERIMENTAL BREEDING SYSTEM HH:MM:SS

EXPERIMENT NO. 9999-99 DAILY RECAP REPORT SUMMARY FERTILITY

FOR PERIOD MM/DD/YY TO MM/DD/YY

TREATMENT	001	002	003	004	ETC.....
NUMBER FEMALE BREEDER EST.	999	999	999	999	...
NUMBER MALE BREEDER EST.	999	999	999	999	...
NUMBER PLUG OBSERVED	999	999	999	999	...
NUMBER FEMALES OBSERVED PREGNANT	999	999	999	999	...
NUMBER LITTERED	999	999	999	999	
AVERAGE LITTER SIZE	999	999	999	999	
TOTAL BORN	999	999	999	999	
TOTAL MALES	999	999	999	999	
TOTAL FEMALES	999	999	999	999	
TOTAL BORN LIVE	999	999	999	999	
TOTAL BORN DEAD	999	999	999	999	
TOTAL MALES WEANED	999	999	999	999	
TOTAL FEMALES WEANED	999	999	999	999	
TOTAL WEANED	999	999	999	999	
AVERAGE NUMBER LITTERS/FEMALE	999	999	999	999	
AVERAGE DURATION BETWEEN LITTERS	999	999	999	999	
DURATION(DAYS) FROM START TO LAST LITTER	999	999	999	999	
NUMBER OF UNPRODUCTIVE FEMALES	999	999	999	999	

PART B.3. Data Element Summaries by Report

DATA ELEMENT SUMMARY FOR BMSS REPORTS

B.3.1. BREEDING SYSTEM REPORTS

Report Number: BS001
Report Name: ASSIGNMENTS (1.2.5, 1.2.7)
Report Frequency: Daily

Data Items	Header	Summary
operator	bldg-room	total male breeders set up
previous status	strain	total female breeders set up
UIN/count	date	total male feeders setup
sex	time	total female feeders set up
animal i.d.	page no.	total unsexed feeders set up
generation.		total males issued
previous cage		total females issued
current cage		total unsexed issued
current status		
CAN		
experiment number		
mate UIN		

Report Number: BS002
Report Name: OBSERVATIONS (1.2.4)
Report Frequency: Daily

Data Items	Header	Summary
operator	bldg-room	total littered
status	NCTR strain	total pregnant
UIN/count	date	total new born
sex	time	total males yellow
animal i.d.	page no.	total females yellow
cage		total males black
observation		total females black
litter-UIN		total males agouti
litter-generation		total female agouti
		total males hair
		total females hair
		total males nude
		total females nude

Report Number: BS003

Report Name: REMOVALS (1.2.5.1)

Report Frequency: Daily

Data Items	Header	Summary
operator	bldg-room	total males cull
current status	NCTR strain code	total females cull
UIN/count	date	total unsexed cull
sex	time	total males surplus
animal i.d.	page no.	total females surplus
cage		total unsexed surplus
removal reason		total males retired
removal destination		total females retired
experiment number		total males dead
carcass i.d.		total females dead
		total unsexed dead
		total males to pathology
		total females to pathology
		total unsexed to pathology
		total males to micro
		total females to micro
		total unsexed to micro
		total males to chemistry
		total females to chemistry
		total unsexed to chemistry

Report Number: BS004

Report Name: FEMALE AND MALE BREEDER CARDS (1.2.2)

Report Frequency: As Needed

Data Items-Female	Data Items-Male
UIN	UIN
mated date	mated date
strain	strain
generation	generation
source cage	source cage
DOB for UIN	DOB for UIN
bldg-room	bldg-room
cage number,check digit	cage number
date found pregnant	mother's number
date litter born	date found pregnant
number in litter	date removed to cage
number weaned	date returned to male
remarks;m/f/dead	remarks

Report Number: BS005

Report Name: ANIMAL BIRTH FROM DATE MM/DD/YY to MM/DD/YY (1.2.2.4)

Report Frequency: Weekly, as needed

Data Items	Header	Summary
birth date	date	total born; strain/bldg-room
wean date	time	total born this date
establish date	period covered	
bldg-room	page no.	
current cage		
sire UIN		
dam UIN		
litter UIN		
litter number		
generation		
litter size		

Report Number: BS005S

Report Name: ANIMAL BIRTH RECAP (1.2.2.4)

Report Frequency: Weekly, as needed

Data Items	Header	Summary
NCTR strain code	date	
total litters	time	
total born	period covered	
average litter size	page no.	
projected weaned 90%		
projected weaned 95%		

Report Number: BS006

Report Name: ANIMALS WEANED FROM MM/DD/YY TO MM/DD/YY (1.2.2.5)

Report Frequency: Weekly, as needed

Data Items	Header	Summary
wean date	date	total pairs; strain/bldg-room
birth date	time	total litters
bldg-room	period of	total born
current cage	report	average number per litter
sire UIN	page no.	total dead
dam UIN		total culled
litter UIN		total surplus
litter size		total survey
dead		total assign breeder
cull		total assign feeder
surplus		total issue
survey		
assign breeder		
assign feeder		
issue		

Report Number: BS007

Report Name: BREEDER ASSIGNMENTS FROM MM/DD/YY TO MM/DD/YY (1.2.2)

Report Frequency: Weekly, as needed

Data Items	Header	Summary
establish date	date	total breeders/bldg-room
bldg-room	time	total assigned this date
current cage	reporting	total assigned this period
female birth date	period	total assigned this period
female UIN	page no.	by strain
female from cage		
female from bldg-room		
male birth date		
male UIN		
male from cage		
male from bldg-room		

NCTR-requested Modification or Addition: hybrid cages reported by hybrid strain code, not female code

Report Number: BS008

Report Name: ACTIVE BREEDER (1.2.2)

Report Frequency: Monthly

Data Items	Header	Summary
cage	time	total active pairs in room
male UIN	date	
female UIN	bldg-room	
generation	page no.	
date established		

Report Number: BS009

Report Name: AVERAGE LITTER SIZE FROM MM/DD/YY to MM/DD/YY (1.2.2.4)

Report Frequency: Weekly, as needed

Data Items	Header	Summary
NCTR strain code	time	
litter number	date	
number born	period covered	
average no. in litter		
number litters		

Report Number: BS010

Report Name: UNPRODUCTIVE BREEDER PAIRS (1.2.2)

Report Frequency: Weekly

Data Items	Header	Summary
bldg-room	date	total pairs/strain
cage	time	total pairs/bldg-room
female UIN	page no.	total pairs/strain
male UIN		total pairs this period
establish date		
establish days		
last litter date		
last litter days		
last litter number		
next to last date gave birth		

Report Number: BS011

Report Name: RETIREMENT CANDIDATES (1.2.2)

Report Frequency: Weekly

Data Items	Header	Summary
bldg-room	date	total/strain
cage	time	total
female UIN	page #	total/strain
male UIN		total this date
sex		
date established		
days as breeder		
female date of birth		
days since birth (age)		

Report Number: BS012

Report Name: DAILY ALLOCATION (1.2.7.6)

Report Frequency: Daily

Data Items	Header	Summary
operator	exp. no.	male allocations
cage	bldg-room	female allocations
treatment	rack	unsexed allocations
experiment	side	total allocations
start date	date	
experiment animal	time	
i.d.	alloc. date	
sex page		
UIN		
alloc. weight		
units		
issue cage		

Report Number: BS013
Report Name: FEMALE BREEDER HISTORY
Report Frequency: Weekly

Data Items	Header	Summary
litter UIN	time	totals by sex
birth date	date	totals by disposition
litter size	page	
litter number	UIN	
litter animal	date of birth	
sex	current bldg-room/cage	
disposition date	male UIN	
culled	current status	
surplused	generation	
dead	number of litters	
breeder		
feeder		
issue		
survey		

Report Number: BS014
Report Name: PRODUCTIVITY INDEX (1.2.2)
Report Frequency: As needed

Data Items	Header	Summary
NCTR strain code	time	
productivity index	date	
total breeders	page no.	
total weaned	period covered	

Report Number: BS015
Report Name: FEEDER STATUS REPORT
Report Frequency: Weekly

Data Items	Header	Summary
bldg-room	date	total males bldg-room by strain
cage	time	total females bldg-room by strain
male UIN/count	page no.	total unsexed bldg-room by strain
female UIN/count		
unsexed UIN/count		
date of birth		
projected mating date		

Report Number: BS016

Report Name: ISSUE CAGE CENSUS REPORT

Report Frequency: Ad Hoc

Data Items	Header	Summary
NCTR strain code	date	total males/strain
cage	time	total females/strain
UIN/count	page no.	total unsexed/strain
sex		

Report Number: BS017

Report Name: ANIMAL ORDERS

Report Frequency: WEEKLY, MONTHLY, AD HOC with date range

Data Items	Header	Summary
experiment no.	operator	number requested and delivered by strain and sex for each experiment
bldg-room	date	
principal investigator	time	
date required	page no.	
strain		
sex		
number requested		
number delivered		
phenotype		
date filled		
special requirements		

Report Number: BS018

Report Name: TARGET TRACE BY ROOT ANIMAL

Report Frequency: AS NEEDED

Data Items	Header	Summary
NCTR strain code	strain code	total animals this group
UIN	UIN	
generation	generation	
bldg-room		
cage number		

Report Number: BS019
Report Name: SYSTEM EDIT SUMMARY
Report Frequency: AS NEEDED

Data Items	Header	Summary
assignments	time	transactions processed with
observations	date	errors
removals		request deleted
allocations		passing edit
deletions		errors encountered
		internal transactions to data base

Report Number: BS020
Report Name: SYSTEM DATA BASE UPDATE SUMMARY
Report Frequency: AS NEEDED

Report Number: BS021
Report Name: SYSTEM DRIVER SUMMARY
Report Frequency: AS NEEDED

Report Number: BS022
Report Name: ACTIVE FEMALE BREEDER DESCENDANT REPORT
Report Frequency:

Report Number: BS023
Report Name: BREEDER ALLOCATION WEIGHTS
Report Frequency:

Report Number: BS024
Report Name: Not Available
Report Frequency:

Report Number: BS025
Report Name: CAGE CHECK REPORT
Report Frequency:

Report Number: BS026
Report Name: ISSUE PUNCH CARD REPORT
Report Frequency:

Report Number: BS027
Report Name: ROOM CARD PUNCH FORMAT REPORT
Report Frequency:

B.3.2. EXPERIMENTAL BREEDING REPORTS

Report Number: EBS001
Report Name: PUP WEIGHTS AT WEANING AND DISPOSITION
Report Frequency: AS NEEDED

Data Items	Header	Summary
operator	experiment no.	
female treatment	date	
female generation	time	
male UIN	page no.	
female UIN		
litter birth date		
litter UIN		
litter generation		
litter no.		
litter weight		
units		
disposition surplus		
disposition allocation		
disposition breeder		
disposition survey		
disposition issue		
disposition dead		
disposition cull		
bldg-room		

Report Number: EBS002
Report Name: PUP WEIGHTS
Report Frequency: AS NEEDED

Data Items	Header	Summary
operator	experiment no.	
female treatment	date	
female generation	time	
male UIN	page no.	
female UIN		
litter birth date		
litter animal		
litter generation		
litter no.		
litter weight		
units		
number weighed		
date weighed		
age days		

Report Number: EBS003
Report Name: FERTILITY
Report Frequency: AS NEEDED

Data Items	Header	Summary
bldg-room	operator	number female breeder est.
male generation	experiment no.	number male feeder est.
male treatment	date	number plug observed
male UIN	time	number females obs. preg.
female treatment	page no.	number littered
female UIN		average litter size
date established		total born
plug date		total males
observed pregnant		total females
litter birth date		total born live
litter UIN		total born dead
generation		total males weaned
litter no.		total females weaned
litter size		total weaned
observe date		average no. litters/female
no. m/f day		average duration between litters
no. l/d		duration (days) from start to last litter
no. males weaned		number of unproductive females
no. females weaned		
no. dead weaned		
wean date		

PART B.4. Log Sheets 1 and 2 and Standard Operating Procedure

*"A" Barrier - 39

*Also used in Bldgs. 6 and 14

STANDARD OPERATING PROCEDURES

Log Sheet #1

This is the original log sheet for recording new litters not previously recorded. A new log sheet must be used for each recording date.

1. Each new log sheet must have in the top left corner - Room #, Operator ID#, and Strain Code.

2. Date (column 1) - the 1st date entered must be complete (month, day, year). A line may be drawn from this date to the bottom of the log sheet.

3. Pedigree (column 2) - UIN of each breeder. 1st, male UIN; 2nd, female UIN below the male UIN.

4. Gen. (column 3) - record the generation of the breeder pair.

5. DOB (column 4) - date of birth of new litters recorded must be complete (month, day, year) on the first litter recorded on the new log sheet. All other litters recorded on this date may have only the month and day.

6. Assigned UIN (column 5) - the 1st litter block UIN must be complete. All other numbers of the litter may have 2 digits, unless that number changes into the next hundred, then a 3 digit number must be used. The circled number indicates the number found in that litter when recorded.

7. From Cage (column 6) - this indicates the cage number of the breeder pair and/or litter. The single digit found above and to the right of the cage number is the check digit, if on BIS.

8. Gen. (column 7) - record the generation of the new litter.

9. Disposition (column 8) - indicates the disposition of the litter, breeders, or cage at the time of recording.

10. Remove log sheets 1 (originals) from log book and file in office; make necessary entries in office log books.

NOTE:

The last UIN recorded on the last log sheet for that recording date must be a complete UIN and is compared with 1st UIN of the next recording date - if this UIN is not a higher UIN - STOP recording and report this to your suprvisor.

SUBMITTED: Marion L. Albright 11/21/83
Marion L. Albright

DATE	② ♂ PEDIGREE ♀	③ GEN	④ DOB	⑤ ASSIGNED UIN	⑤ FROM CAGE	⑦ GEN	⑥ DISPOSITION
	12345	120	2-10-78	04-1012485	20-6	121	
	12347			86			
				87			
				(6) 88			
				89			
				90			
	12350	120	2-10	1012491	26-7	121	Dead
	12354			92			
				(4) 93			
				94			
	12359	120	2-10	1012495	29-0	121	
	12362			96			
				97			
				98			
				(9) 99			
				500			
				01			
				02			
				03			
	12366	120	2-10	1012504	41-1	121	
	12369			05			
				06			
				(8) 07			
				08			
				09			
				10			
				1012511			

"A" Barrier - 40

*Also used in Bldgs. 6 and 14

STANDARD OPERATING PROCEDURES

Log Sheet #2

This log sheet is a carbon copy of log sheet #1 and is used at the time litters are weaned.

1. Column 5 - a sex symbol must be placed beside each UIN; male from top down, female from the bottom up. Missing or dead animals will have no sex symbol.

2. Column 6 - this number (3/2/1) indicates that 3 males, 2 females were weaned; the last digit indicates that 1 animal is missing or dead.

3. Column 8 - disposition of each animal in litter.

   - A-(I-3500-125) indicates that this animal or animals were issued - to cage #3500 - to Experiment #125.

   - B-(B-70-1) indicates that these animals were established as breeders in cage #70 with check digit.

   - C-(Dia) indicates litter # were sent to Diagnostics; if breeders are sent to Diagnostics, place dia beside breeder UIN, column 2.

   Acceptable abbreviations:

B - breeder	dia - diagnostic	P - pathology
C - culled	E - experiment	R - retired
D - dead	F - feeder	S - surplus
		T - tumor

4. Number the bottom of the last log sheet for that date and place the following information:

   a. Total males weaned.
   b. Total females weaned.
   c. Total dead or missing.
   d. Total males and/or females issued.
   e. Complete date (month, day, year).

NOTE:

Make and enter all observations on breeders-litters on log sheet and terminal.

SUBMITTED: Marion L. Albright 11/21/83
Marion L. Albright

[illegible] 11-21-83

DATE	② ♂ PEDIGREE ♀	③ GEN	④ DOB	⑤ ASSIGNED UIN	⑥ FROM CAGE	⑦ GEN	⑧ DISPOSITION
	12345	120	2-10-78	04-1012485 ♂	20-6	121	B-70-1
	12347			86 ♂			B-71-2
				87 ♂			B-72-3
				(6) 88 ♀	3/3		B72
				89 ♀			B-71
				90 ♀			B-70
	12350	120	2-10	1012491	26-7	121	Dead
	12354			92	0/0/4		
				(4) 93			
				94			
	12359	120	2-10	1012495 ♂	29-0	121	Dia.
	12362			96 ♂			Dia.
				97 ♂	4/5		Sur
				98 ♂			Sur.
				(9) 99 ♀			I/3500/125
				500 ♀			
				01 ♀			
				02 ♀			
				03 ♀			
	12366	120	2-10	1012504 ♂	41-1	121	Sur
	12369			05 ♂			"
				06	2/3/3		Dead
				(8) 07			
				08			
				09 ♀			I/3501/125
				10 ♀			
				1012511 ♀			
				1. Total males weaned			
				2. Total females weaned			
				3. Total dead or missing			
				4. Total males and/or females issued.			
				5. Complete date (mo., da., yr.)			

Bldg. 6 - 27*

*This SOP will also be used in all animal rooms in Bldgs. 14, 52, 53 & "A" Barrier

STANDARD OPERATING PROCEDURES

Log Sheet #2 (Special Breeding)

STRAIN _____

This log sheet is a carbon copy of log sheet #1 and is used at the time litters are weaned.

1. Column 5 - a sex symbol and color abbreviation must be placed beside each UIN; males from the top down, females from the bottom up. Dead or missing animals will have no sex symbol or color abbreviation.

2. Column 6 - this number (3/2/1) indicates that 3 males, 2 females were weaned; the last digit indicates that 1 animal is missing or dead.

3. Column 8 - disposition of each animal in litter.

   - A-(I-3500-125) indicates that this animal or animals were Issued - to Cage #3500 - to Experiment #125.

   - B-(B-70-1) indicates that these animals were established as Breeders in Cage #70 with check digit.

   - C-(Dia) indicates Litter # were sent to diagnostics; if Breeders are sent to Diagnostics, place Dia beside Breeder UIN, column 2.

Acceptable disposition abbreviations:

B - breeder	E - experiment	R - retired
C - culled	F - feeder	S - surplus
D - dead	I - issued	T - tissue mass
Dia - diagnostic	P - pathology	

Acceptable color abbreviations:

A - agouti	H - HAIRED ~~W - white~~
~~B - brown~~ N - Nude	Y - yellow
Bl - black	

6/23/85

4. At the bottom of the last log sheet for that date, place the following information:

   a. Operator I.D.
   b. Total males weaned.
   c. Total females weaned.
   d. Total dead or missing.
   e. Total males and/or females issued.
   f. Complete date (month, day, year).

♂ PEDIGREE ♀	GEN	DOB	ASSIGNED UIN	FROM CAGE	GEN	DISPOSITION
78 12345	120	2-10-78	04-1012485 ♂ BL	20^{-6}	121	$B-70^{-1}$
12347			86 ♂ A			$B-71^{-2}$
			87 ♂ BL			$B-72^{-3}$
			(6) 88 ♀ A	$3/_3$		B72
			89 ♀ BL			B-71
			90 ♀ Y			B-70
12350	120	2-10	1012491	26^{-7}	121	Dead
12354			92	$0/_0$		
			(4) 93	$/_4$		
			94			
12359	120	2-10	1012495 ♂ BL	29^{-0}	121	Dia.
12362			96 ♂ BL			Dia.
			97 ♂ BL	$4/_5$		Sur
			98 ♂ A			Sur
			(9) 99 ♀ BL			I/3500/125
			500 ♀ BL			
			01 ♀ BL			
			02 ♀ Y			
			03 ♀ A			
12366	120	2-10	1012504 ♂ BL	41^{-1}	121	Sur
12369			05 ♂ A			Sur
			06	$2/_3$		Dead
			(8) 07	$/_3$		
			08			
			09 ♀ BL			I/3501/125
			10 ♀ BL			
			1012511 ♀ BL			
			1. Oper. ID			
			2. Total males weaned			
			3. Total females weaned			
			4. Total dead or missing			
			5. Total males and/or females issued			
			6. Complete date (mo., day, yr.)			

NOTE:

- Make and enter all observations on breeders-litters on log sheet, room log book and terminal.

- Follow mating scheme closely.

MATING COLOR SCHEME

Strain _____

Sex → ♂ / Color → ♀ ↓	A	Bl	Y
A	No	Yes	No
BL	Yes	No	Yes
Y	No	Yes	No

NOTE:

- Agouti or Yellow males may be mated only with Black females of the same litter.

- Black males may be mated only with Agouti or Yellow females of the same litter.

SUBMITTED: Marion L. Albright 11/21/83
Marion L. Albright

Harvey Kalbach 11-21-83
HARVEY KALBACH, Director, Division of Animal Husbandry

NOTE: NEW LOG SHEET LAYOUT

The following is the proposed physical layout for the log sheet report which will be part of the new Breeding System. Note that the data element "SEX" has been added between the "ASSIGNED UIN" and "FROM CAGE" data elements. This provides the capability to enter the "SEX" code for the computer rather than using a graphic symbol.

LOG BOOK -- ANIMAL HUSBANDRY DIVISION

DATE	PEDIGREE	GEN	DOB	ASSIGNED UIN	SEX	FROM CAGE	GEN	DISPOSITION
mm/dd/yy	999999	9999	mm/dd/yy	XX-9999999	X	9999	9999	XXXXXXXXXXXX
mm/dd/yy	999999	9999	mm/dd/yy	XX-9999999	X	9999	9999	XXXXXXXXXXXX
mm/dd/yy	999999	9999	mm/dd/yy	XX-9999999	X	9999	9999	XXXXXXXXXXXX
mm/dd/yy	999999	9999	mm/dd/yy	XX-9999999	X	9999	9999	XXXXXXXXXXXX
mm/dd/yy	999999	9999	mm/dd/yy	XX-9999999	X	9999	9999	XXXXXXXXXXXX
mm/dd/yy	999999	9999	mm/dd/yy	XX-9999999	X	9999	9999	XXXXXXXXXXXX
mm/dd/yy	999999	9999	mm/dd/yy	XX-9999999	X	9999	9999	XXXXXXXXXXXX
mm/dd/yy	999999	9999	mm/dd/yy	XX-9999999	X	9999	9999	XXXXXXXXXXXX
mm/dd/yy	999999	9999	mm/dd/yy	XX-9999999	X	9999	9999	XXXXXXXXXXXX
mm/dd/yy	999999	9999	mm/dd/yy	XX-9999999	X	9999	9999	XXXXXXXXXXXX
mm/dd/yy	999999	9999	mm/dd/yy	XX-9999999	X	9999	9999	XXXXXXXXXXXX
mm/dd/yy	999999	9999	mm/dd/yy	XX-9999999	X	9999	9999	XXXXXXXXXXXX
mm/dd/yy	999999	9999	mm/dd/yy	XX-9999999	X	9999	9999	XXXXXXXXXXXX
mm/dd/yy	999999	9999	mm/dd/yy	XX-9999999	X	9999	9999	XXXXXXXXXXXX
mm/dd/yy	999999	9999	mm/dd/yy	XX-9999999	X	9999	9999	XXXXXXXXXXXX
mm/dd/yy	999999	9999	mm/dd/yy	XX-9999999	X	9999	9999	XXXXXXXXXXXX
mm/dd/yy	999999	9999	mm/dd/yy	XX-9999999	X	9999	9999	XXXXXXXXXXXX
mm/dd/yy	999999	9999	mm/dd/yy	XX-9999999	X	9999	9999	XXXXXXXXXXXX
mm/dd/yy	999999	9999	mm/dd/yy	XX-9999999	X	9999	9999	XXXXXXXXXXXX
mm/dd/yy	999999	9999	mm/dd/yy	XX-9999999	X	9999	9999	XXXXXXXXXXXX
mm/dd/yy	999999	9999	mm/dd/yy	XX-9999999	X	9999	9999	XXXXXXXXXXXX
mm/dd/yy	999999	9999	mm/dd/yy	XX-9999999	X	9999	9999	XXXXXXXXXXXX
mm/dd/yy	999999	9999	mm/dd/yy	XX-9999999	X	9999	9999	XXXXXXXXXXXX
mm/dd/yy	999999	9999	mm/dd/yy	XX-9999999	X	9999	9999	XXXXXXXXXXXX
mm/dd/yy	999999	9999	mm/dd/yy	XX-9999999	X	9999	9999	XXXXXXXXXXXX

APPENDIX C

REPORTS AND DATA DICTIONARY CROSS REFERENCE

REPORT =

Report Heading	Dictionary Name
Born Dead	Born Dead
Building-Room	Building-Room
Cage	Cage
Disposition	Disposition

REPORT = BS001

Report Heading	Dictionary Name
Bldg-Room	Current Building-Room
Breeding Animal ID	Breeding Animal ID
CAN No.	CAN
Count	Count-Assignment
Current Cage	Current Cage
Current Status	Current Status
Date Assigned	Date Assigned
EXP	Experiment Number
Genr	Generation
Mate UIN (Conditional)	Sire UIN
NCTR Strain Code	NCTR Strain Code
Oper	Operator
Prev Cage	Previous Cage
Prev. Status	Previous Status
Sex	Sex
UIN (Conditional)	UIN
UIN (Conditional)	Litter UIN

REPORT = BS001s

Report Heading	Dictionary Name
(None)	Date Assigned
Bldg-Room	Current Building-Room
NCTR Strain Code	NCTR Strain Code
Total Female Breeders Set Up	Total Female Breeders By Room & Strain
Total Female Feeders Set Up	Total Female Feeders By Room & Strain
Total Female Issued	Total Female Issued By Room & Strain
Total Male Breeders Set Up	Total Male Breeders By Room & Strain
Total Male Feeders Set Up	Total Male Feeders By Room & Strain
Total Males Issued	Total Males Issued By Room & Strain
Total Unsexed Feeders Set Up	Total Unsexed Feeders By Room & Strain
Total Unsexed Issued	Total Unsexed Issued By Room & Strain

REPORT = BS002

Report Heading	Dictionary Name
Animal ID	Breeding Animal ID
Bldg-Room	Current Building-Room
Cage	Current Cage
Count	Count-Observation
Date Observed	Date Observed
Litter-Gen	Generation
Litter-UIN	Litter UIN
NCTR Strain Code	NCTR Strain Code
Observations	Observations
Oper	Operator
Phenotype	Phenotype
Sex	Sex
Status	Current Status
UIN (Conditional)	UIN
UIN (Conditional)	Litter UIN

REPORT = BS002s

Report Heading	Dictionary Name
(None)	Date Observed
Bldg-Room	Current Building-Room
NCTR Strain Code	NCTR Strain Code
Total Females Agouti	Total Females Agouti By Room & Strain
Total Females Black	Total Females Black By Room & Strain
Total Females Hair	Total Females Hair By Room & Strain
Total Females Nude	Total Females Nude By Room & Strain
Total Females Yellow	Total Females Yellow By Room & Strain
Total Littered	Total Littered By Room & Strain
Total Males Agouti	Total Males Agouti By Room & Strain
Total Males Black	Total Males Black By Room & Strain
Total Males Hair	Total Males Hair By Room & Strain
Total Males Nude	Total Males Nude By Room & Strain
Total Males Yellow	Total Males Yellow By Room & Strain
Total New Borm	Total New Born By Room & Strain
Total Plugged	Total Plugged By Room & Strain
Total Pregnant	Total Pregnant By Room & Strain

REPORT = BS003

Report Heading	Dictionary Name
Bldg-Room	Current Building-Room
Breeding Animal ID	Breeding Animal ID
Cage	Current Cage
Carcass-ID	Carcass-ID
Count	Count-Removal
Current Status	Current Status
EXP. NO.	Experiment Number
NCTR Strain Code	NCTR Strain Code
Oper	Operator
Removal Date	Removal Date
Removal Disposition	Removal Disposition
Removal Reason	Removal Reason
Sex	Sex
UIN (Conditional)	UIN
UIN (Conditional)	Litter UIN

REPORT = BS003s

Report Heading	Dictionary Name
(None)	Removal Date
Bldg-Room	Current Building-Room
NCTR Strain Code	NCTR Strain Code
Total Females Cull	Total Females Culled By Room & Strain
Total Females Dead	Total Females Dead By Room & Strain
Total Females Retired	Total Females Retired By Room & Strain
Total Females Surplus	Total Females Surplused By Room & Strain
Total Females To Issue Other	Total Females To Issue Other By Room & Strain
Total Females to Chemistry	Total Females To Chemistry By Room & Strain
Total Females to Micro	Total Females To Micro By Room & Strain
Total Females to Pathology	Total Females To Pathology By Room & Strain
Total Males Cull	Total Males Culled By Room & Strain
Total Males Dead	Total Males Dead By Room & Strain
Total Males Retired	Total Males Retired By Room & Strain
Total Males Surplus	Total Males Surplused By Room & Strain
Total Males To Issue Other	Total Males To Issue Other By Room & Strain
Total Males to Chemistry	Total Males To Chemistry By Room & Strain
Total Males to Micro	Total Males To Micro By Room & Strain
Total Males to Pathology	Total Males To Pathology By Room & Strain
Total Unsexed Cull	Total Unsexed Culled By Room & Strain
Total Unsexed Dead	Total Unsexed Dead By Room & Strain
Total Unsexed Surplus	Total Unsexed Surplused By Room & Strain
Total Unsexed To Issue Other	Total Unsexed To Issue Other By Room & Strain
Total Unsexed to Chemistry	Total Unsexed To Chemistry By Room & Strain
Total Unsexed to Micro	Total Unsexed To Micro By Room & Strain
Total Unsexed to Pathology	Total Unsexed To Pathology By Room & Strain

REPORT = BS004f

Report Heading	Dictionary Name
Bldg-Room	Current Building-Room
Cage No.	Current Cage
Check Digit	Check Digit
DOB for UIN	Female Birth Date
Date Found Pregnant	Date Found Pregnant
Date Litter Born	Birth Date
Generation	Generation
Mated	Date Established
Number Weaned	Number Weaned By Litter
Number of Litter	Number In Litter
Remarks	Remarks
Source Cage	Female Source Cage
Strain	Strain
UIN	Female UIN

REPORT = BS004m

Report Heading	Dictionary Name
Bldg-Room	Current Building-Room
Cage No.	Current Cage
Check Digit	Check Digit
DOB for UIN	Male Birth Date
Date Found Pregnant	Date Found Pregnant
Date Ret'd to Male	Return Date
Generation	Generation
Mated	Date Established
Mother's Number	Dam UIN
Remarks	Remarks
Removed to Cage	Destination Cage
Source Cage	Male Source Cage
Strain	Strain
UIN	Male UIN

REPORT = BS005

Report Heading	Dictionary Name
(Nothing)	Total Litter Size By Room & Strain
Birth Date	Birth Date
Bldg-Room	Current Building-Room
Curr Cage	Current Cage
Dam UIN	Dam UIN
Establish Date	Date Established
From Date	From Date
Litter Generation	Generation
Litter Number	Litter Number
Litter Size	Number In Litter
Litter UIN	Litter UIN
Sire UIN	Sire UIN
To Date	To Date
Total Born This Date	Total Born By Strain
Total Strain	NCTR Strain Code
Wean Date	Wean Date - Projected

REPORT = BS005s

Report Heading	Dictionary Name
Average Litter Size	Average Litter Size
From Date	From Date
NCTR Strain Code	NCTR Strain Code
Proj No. To Be Weaned - 90%	Proj No. To Be Weaned - 90%
Proj No. To Be Weaned - 95%	Proj No. To Be Weaned - 95%
To Date	To Date
Total Born	Total Born By Strain
Total Litters	Total Number Of Litters By Strain

REPORT = BS006

Report Heading	Dictionary Name
Assign Breeder	Number Assigned As Breeders Per Litter
Assign Feeder	Number Assigned as Feeders Per Litter
Birth Date	Birth Date
Bldg-Room	Current Building-Room
Culled	Number Culled Per Litter
Curr Cage	Current Cage
Dam UIN	Dam UIN
Dead	Number Dead Per Litter
From Date	From Date
Issue	Number Issued Per Litter
Litter Size	Number In Litter
Litter UIN	Litter UIN
Sire UIN	Sire UIN
Sum No. Cages	Total Number Of Cages By Strain
Surplus	Number Surplused Per Litter
Survey	Number Surveyed Per Litter
To Date	To Date
Total For This Date - Assign Breeder	Total Assign Breeder For Date
Total For This Date - Assign Feeder	Total Assign Feeder For Date
Total For This Date - Culled	Total Culled For Date
Total For This Date - Dead	Total Dead For Date
Total For This Date - Issue	Total Issue For Date
Total For This Date - Litter Size	Total Litter Size For Date
Total For This Date - Surplus	Total Surplus For Date
Total For This Date - Survey	Total Survey For Date
Total Pairs Strain	NCTR Strain Code
Wean Date	Wean Date

REPORT = BS006s

Report Heading	Dictionary Name
Assign Breeder	Percentage Assign Breeder by Strain
Assign Breeders	Total Assigned Breeders By Strain
Assign Feeder	Percentage Assign Feeder By Strain
Assign Feeder	Total Assigned Feeder By Strain
Avg. No. Per Litters	Average Litter Size
Culled	Total Culled By Strain
Culled	Percentage Culled By Strain
Dead	Percentage Dead By Strain
Dead	Total Dead By Strain
From Date	From Date
Issue	Percentage Issue By Strain
Issue	Total Issued By Strain
NCTR Strain Code	NCTR Strain Code
Surplus	Percentage Surplus By Strain
Surplus	Total Surplused By Strain
Survey	Total Surveyed By Strain
Survey	Percentage Survey By Strain
To Date	To Date
Total Born	Total Born By Strain
Total Litters	Total Number Of Litters By Strain

REPORT = BS007

Report Heading	Dictionary Name
Bldg-Room	Current Building-Room
Current Cage	Current Cage
Establish Date	Date Established
Female Birth Date	Female Birth Date
Female From Bldg-Room	Female From Bldg-Room
Female Prev Cage	Female Source Cage
Female UIN	Dam UIN
From Date	From Date
Male Birth Date	Male Birth Date
Male From Bldg-Room	Male From Bldg-Room
Male Prev Cage	Male Source Cage
Male UIN	Sire UIN
Sum of Pairs/Cage	Total Pairs Per Cage By Strain
To Date	To Date
Total Strain	NCTR Strain Code
Total This Date	Total Number Of Pairs

REPORT = BS007s

Report Heading	Dictionary Name
From Date	From Date
NCTR Strain Code	NCTR Strain Code
To Date	To Date
Total	Total Assigned Breeders By Strain
Total This Period	Total Assign Breeders

REPORT = BS008

Report Heading	Dictionary Name
Bldg-Room	Current Building-Room
Cage	Current Cage
Date Established	Date Established
Generation	Generation
Sex	Sex
UIN	UIN

REPORT = BS009

Report Heading	Dictionary Name
Avgerage No. Litter	Average Litter Size
From Date	From Date
Litter Number	Litter Number
NCTR Strain Code	NCTR Strain Code
Number Born	Number In Litter
Number Litters	Total Number Of Litters By Strain
To Date	To Date

REPORT = BS010

Report Heading	Dictionary Name
Bldg-Room	Current Building-Room
Cage	Current Cage
Establish Date	Date Established
Establish Days	Days Established
Female UIN	Dam UIN
Last Litter Date	Last Litter Date
Last Litter Days	Last Litter Days
Last Litter Litt. No.	Litter Number
Male UIN	Sire UIN
Next to Last Date Gave Birth	Next To Last Date
Strain	NCTR Strain Code
Total Pairs Bldg-Room	Total Pairs By Room & Strain
Total Unproductive Breeder Pairs	Total Unproductive Breeder Pairs By Room

REPORT = BS010s

Report Heading	Dictionary Name
NCTR Strain Code	NCTR Strain Code
Pairs	Total Unproductive Breeder Pairs By Strain
Total This Period	Total Unproductive Breeder Pairs

REPORT = BS011

Report Heading	Dictionary Name
Bldg-Room	Current Building-Room
Cage	Current Cage
Establish Date	Date Established
Establish Days	Days Established
Female Date of Birth Date	Female Birth Date
Female Date of Birth Days	Female Birth Days
Female UIN	Dam UIN
Male UIN	Sire UIN
Strain	NCTR Strain Code
Total Retirement Candidates	Total Retirement Candidates By Strain
Total This Period	Total Retirement Candidates

REPORT = BS011s

Report Heading	Dictionary Name
NCTR Strain Code	NCTR Strain Code
Pairs	Total Retirement Candidates By Strain
Total This Period	Total Retirement Candidates By Time Period

REPORT = BS012

Report Heading	Dictionary Name
Alloc Weight	Allocation Weights
Allocation	Allocation Date
Animal Start Date	Start Date
Bldg-Room	Allocation Building & Room
Breeding Animal ID	Breeding Animal ID
Cage	Allocation Cage
Experiment No.	Experiment Number
Issue Cage	Current Cage
Oper	Operator
Rack	Rack
Sex	Sex
Side	Rack Side
TMT	Treatment
UIN	UIN
Units	Allocation Weights Units

REPORT = BS012s

Report Heading	Dictionary Name
EXP NO.	Experiment Number
Female Allocations	Total Females Allocated to Experiment
Male Allocations	Total Males Allocated By Experiment
Total Allocations	Total Allocated By Experiment
Unsexed Allocations	Total Unsexed Allocations By Experiment

REPORT = BS013

Report Heading	Dictionary Name
Birth Date	Birth Date
Breeder	Animal Breeder
Culled	Animal Culled
Current Bldg-Room	Current Building-Room
Current Cage	Current Cage
Current Status	Current Status
Date of Birth	Female Birth Date
Dead	Animal Dead
Disposition Date	Disposition Date
Feeder	Animal Feeder
Female UIN	Dam UIN
Generation	Generation
Issue	Animal Issue
Litter Animal	UIN
Litter Number	Litter Number
Litter Size	Number In Litter
Litter UIN	Litter UIN
Male UIN	Sire UIN
Number of Litters	Number Of Litters Per Pair
Sex	Sex
Surplused	Animal Surplused
Survey	Animal Survey
Total Female	Total Females Per Litter
Total Male	Total Males By Litter
Total Unsex	Total Unsexed Per Litter
Totals Breeder	Total Breeders Per Litter
Totals Culled	Total Culled Per Litter
Totals Dead	Total Dead Per Litter
Totals Feeder	Total Feeders Per Litter
Totals Issue	Total Issued Per Litter
Totals Surplused	Total Surplused Per Litter
Totals Survey	Total Surveyed Per Litter

REPORT - BS014

Report Heading	Dictionary Name
From Date	From Date
NCTR Strain Code	NCTR Strain Code
Productivity Index	Productivity Index
To Date	To Date
Total Breeders	Total Breeders By Strain
Total Weaned	Total Weaned By Strain

REPORT = BS015

Report Heading	Dictionary Name
Bldg-Room	Current Building-Room
Cage	Current Cage
Count	Count-Feeder Male
Count	Count-Feeder Unsexed
Count	Count-Feeder Female
Date of Birth	Birth Date
Female UIN	Female UIN
Male UIN	Male UIN
Projected Mating Date	Projected Mating Date
Strain	NCTR Strain Code
Total Females	Total Female Feeders By Room & Strain
Total Males	Total Males Feeder By Room & Strain
Total Unsexed	Total Unsexed Feeders By Room & Strain
Unsexed UIN	Unsexed UIN

REPORT - BS016

Report Heading	Dictionary Name
Cage	Current Cage
Count	Count-Transfer/Issue
Sex	Sex
Strain	NCTR Strain Code
Total Females	Total Females By Strain
Total Male Strain	Total Males By Strain
Total Unsexed	Total Unsexed By Strain
UIN (Conditional)	Litter UIN
UIN (Conditional)	UIN

REPORT = BS017

Report Heading	Dictionary Name
(None)	Date Animal Order
Bldg-Room	Current Building-Room
Date Filled	Date Filled
Date Required	Start Date
EXP. NO.	Experiment Number
Number Delivered	Number Delivered
Number Requested	Number Requested
Oper	Operator
Phenotype	Phenotype
Principal Investigator	Principal Investigator
Sex	Sex
Special Requirements	Special Requirements
Strain	NCTR Strain Code

REPORT - BS017s

Report Heading	Dictionary Name
EXP. NO.	Experiment Number
Number Delivered	Total Number Delivered by Month
Number Requested	Total Number Requested by Month
Sex	Sex
Strain	NCTR Strain Code

REPORT = BS018

Report Heading	Dictionary Name
Current Cage No.	Current Cage
Current Room	Current Building-Room
Generation	Generation
NCTR Strain Code	NCTR Strain Code
UIN	UIN

REPORT - EBS001

Report Heading	Dictionary Name
Bldg-Room	Current Building-Room
Disposition Alloc	Number Pups Used In Experiment
Disposition Breeder	Number Assigned As Breeders Per Litter
Disposition Cull	Number Culled Per Litter
Disposition Dead	Number Dead Per Litter
Disposition Issue	Number Issued Per Litter
Disposition Surp	Number Surplused Per Litter
Disposition Survey	Number to Survey by Litter
Experiment No.	Experiment Number
Fem Genr	Female Generation
Fem TMT	Female Treatment
Female UIN	Dam UIN
Litt Genr	Generation
Litt No.	Litter Number
Litt Weight	Wean Weight
Litter Birthdate	Birth Date
Litter UIN	Litter UIN
Male UIN	Sire UIN
Oper	Operator
Units	Wean Weight Units

REPORT - EBS002

Report Heading	Dictionary Name
Age Days	Days
Bldg-Room	Current Building-Room
Date Weighed	Date Weighed
Experiment No.	Experiment Number
Female Genr	Female Generation
Female UIN	Dam UIN
Litt Genr	Generation
Litt No.	Litter Number
Litter Animal	UIN
Litter Birthdate	Birth Date
Male UIN	Sire UIN
Number Weighed	Number Weighed
Oper	Operator
Unit	Wean Weight Units
Weight	Pup Weight

REPORT - EBS003

Report Heading	Dictionary Name
(None)	Summary Fertility Date
Bldg-Room	Current Building-Room
Date Est	Date Established
Experiment No.	Experiment Number
Fem Gener	Female Generation
Fem TMT	Female Treatment
Female UIN	Dam UIN
From Date	From Date
Genr	Generation
Litt. No.	Litter Number
Litt. Size	Number In Litter
Litter Birthdate	Birth Date
Litter UIN	Litter UIN
Male Genr	Male Generation
Male TMT	Male Treatment
Male UIN	Sire UIN
No. Dead Wean	Number Dead At Weaning Per Litter
No. Fem Wean	Number Females Weaned Per Litter
No. L/D	Number Live to Dead
No. M/F Day	Male To Female Ratio
No. Males Wean	Number Males Weaned Per Litter
Observe Date	Observe Date
Observed Pregnant	Date Found Pregnant
Oper	Operator
Plug Date	Plug Date
To Date	To Date
Wean Date	Wean Date

REPORT = EBS003s

Report Heading	Dictionary Name
Average Duration Between Litters	Average Duration Between Litters
Average Litter Size	Average Litter Size By Treatment
Average Number Litters/Female	Average Number Litters/Female
Bldg-Room	Current Building-Room
Duration(Days) From Start to Last Litter	Duration From Start To Last Litter
Experiment No.	Experiment Number
Number Female Breeders Est.	Number Female Breeder By Treatment
Number Females Observed Pregnant	Number Females Observed Pregnant By Treatment
Number Littered	Number Littered By Treatment
Number Male Breeders Est.	Number Male Breeder By Treatment
Number Of Unproductive Females	Number Of Unproductive Females By Treatment
Number Plug Observed	Number Plug Observed
Total Born	Total Born By Treatment
Total Born Dead	Total Born Dead By Treatment
Total Born Live	Total Born Live By Treatment
Total Females	Total Females Born By Treatment
Total Females Weaned	Total Females Weaned By Treatment
Total Males	Total Males Born By Treatment
Total Males Weaned	Total Males Weaned By Treatment
Total Weaned	Total Weaned By Treatment

APPENDIX D

DATA ELEMENT DICTIONARY

Data Element Name:	Allocation Building & Room
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	AAA-AAAA
Data Entry Screen(s):	
Report(s):	BS012 - Bldg-Room
Initiating Source:	
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	Allocation
Text Description:	Number identifying the building and room where the allocated animal will reside.

Data Element Name:	Allocation Cage
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	Cage-Num (4N)
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS012 - Cage
Initiating Source:	Other: The allocation cage could be derived from Study Definition.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	Allocation
Text Description:	Number identifying the cage in the experiment to which the animals were allocated.

Data Element Name:	Allocation Date
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	Allocation Date (6N)
ADABAS File Format:	
Format Description:	MM/DD/YY
Data Entry Screen(s):	
Report(s):	BS012 - Allocation
Initiating Source:	
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	Allocation
Text Description:	The date the animal was allocated to the experiment.

Data Element Name:	Allocation Weights
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	Allocation- Wgt (5N.N)
ADABAS File Format:	
Format Description:	NNNN.N
Data Entry Screen(s):	
Report(s):	BS012 - Alloc Weight
Initiating Source:	
Allowed Values:	
Defaults:	
Data Assessments:	Weight range should be validated against the range set up in Study Definition.
Entity:	Allocation
Text Description:	Weight of the animal at the time of allocation.

Data Element Name:	Allocation Weights Units
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	AAAAA
Data Entry Screen(s):	
Report(s):	BS012 - Units
Initiating Source:	Other: The units for the allocation weights should have been set in Study Definition.
Allowed Values:	
Defaults:	
Data Assessments:	Check against table set up by Study Definition.
Entity:	Allocation
Text Description:	Unit of measurement of weight of the animal at the time of allocation.

Data Element Name:	Animal Breeder
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	A
Data Entry Screen(s):	
Report(s):	BS013 - Breeder
Initiating Source:	Calculated: If "Current Status" equal "Breeder" then this data element equals "X"
Allowed Values:	X - if breeder, Blank otherwise
Defaults:	Blank
Data Assessments:	
Entity:	
Text Description:	An indicator as to whether the animal was assigned as a breeder.

Data Element Name:	Animal Culled
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	A
Data Entry Screen(s):	
Report(s):	BS013 - Culled
Initiating Source:	Calculated: If "Current Status" equal "Culled" then this data element equals "X"
Allowed Values:	X - if culled, Blank otherwise
Defaults:	Blank
Data Assessments:	
Entity:	
Text Description:	An indicator as to whether the animal was culled.

Data Element Name:	Animal Dead
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	A
Data Entry Screen(s):	
Report(s):	BS013 - Dead
Initiating Source:	Calculated: If "Current Status" equal "Dead" then this data element equals "X"
Allowed Values:	X - if dead, Blank otherwise
Defaults:	Blank
Data Assessments:	
Entity:	
Text Description:	An indicator as to whether the animal was dead at time of birth.

Data Element Name:	Animal Feeder
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	A
Data Entry Screen(s):	
Report(s):	BS013 - Feeder
Initiating Source:	Calculated: If "Current Status" equal "Feeder" then this data element equals "X"
Allowed Values:	X - if feeder, Blank otherwise
Defaults:	Blank
Data Assessments:	
Entity:	
Text Description:	An indicator as to whether the animal was assigned as a feeder.

Data Element Name:	Animal Issue
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	A
Data Entry Screen(s):	
Report(s):	BS013 - Issue
Initiating Source:	Calculated: If "Current Status" equal "Issue" then this data element equals "X"
Allowed Values:	X - if culled, Blank otherwise
Defaults:	Blank
Data Assessments:	
Entity:	
Text Description:	An indicator as to whether the animal was assigned as issued.

Data Element Name:	Animal Surplused
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	A
Data Entry Screen(s):	
Report(s):	BS013 - Surplused
Initiating Source:	Calculated: If "Current Status" equal "Surplus" then this data element equals "X"
Allowed Values:	X - if surplused, Blank otherwise
Defaults:	Blank
Data Assessments:	
Entity:	
Text Description:	An indicator as to whether the animal was surplused.

Data Element Name:	Animal Survey
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	A
Data Entry Screen(s):	
Report(s):	BS013 - Survey
Initiating Source:	Calculated: If "Current Status" equal "Pathology" or "Micro" or "Chemistry" then this data element equals "X"
Allowed Values:	X - if survey, Blank otherwise
Defaults:	Blank
Data Assessments:	
Entity:	
Text Description:	An indicator as to whether the animal was surveyed.

Data Element Name:	Average Duration Between Litters
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNN
Data Entry Screen(s):	
Report(s):	EBS003s
Initiating Source:	Calculated: The mean number of days between litters by treatment.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Mean of the number of days between litters in each treatment.

Data Element Name:	Average Litter Size
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNN.NN
Data Entry Screen(s):	
Report(s):	BS005s BS006s - Avg. No. Per Litters BS009 - Average No. Litter
Initiating Source:	Calculated: The mean of the number of animals per litter.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Mean number of animals per litter for this strain during the time period.

Data Element Name:	Average Litter Size By Treatment
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNN
Data Entry Screen(s):	
Report(s):	EBS003s - Average Litter Size
Initiating Source:	Calculated: The mean of the litter size by treatment.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Total mean of litter size by treatment.

Data Element Name:	Average Number Litters/Female
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNN
Data Entry Screen(s):	
Report(s):	EBS003s
Initiating Source:	Calculated: The mean number of litters the females have had by treatment.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	The mean number of litters the females in a particular treatment have had.

Data Element Name:	Birth Date
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	Anim-Birth-Date
ADABAS File Format:	
Format Description:	MM/DD/YY
Data Entry Screen(s):	
Report(s):	BS004s - Date Litter Born BS005 BS006 BS013 BS015 - Date of Birth EBS001 - Litter Birthdate EBS002 - Litter Birthdate EBS003 - Litter Birthdate
Initiating Source:	Calculated: This is the date from 'Observe Date' when the corresponding 'Observation' is equal to 'Littered.'
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Gregorian date that the new litter entered into the computer. The date is for the litter and applies to all animals in the litter. This may not be the actual date of birth due to weekend births or work schedules.

Data Element Name:	Born Dead
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NN
Data Entry Screen(s):	
Report(s):	
Initiating Source:	
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	Litter
Text Description:	The number of animals in a litter that were born dead.

Data Element Name:	Breeding Animal ID
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	AAAAA
Data Entry Screen(s):	
Report(s):	BS001 BS002 - Animal ID BS003 BS012
Initiating Source:	
Allowed Values:	
Defaults:	"?"
Data Assessments:	
Entity:	Animal
Text Description:	Code that indicates the earclip or an optional code to distinguish female animals in harem mating. An earclip different from "N" could only apply to a single animal assignment.

Data Element Name:	Building-Room
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	Current-Building-ID (A3) "Plus" Current-Room-ID (A4)
ADABAS File Format:	7 Characters
Format Description:	AAA-AAAA
Data Entry Screen(s):	
Report(s):	
Initiating Source:	
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	Disposition
Text Description:	Identification number for the building and room occupied by this animal at the time of the 'Disposition Date.' Three-character building number plus four-character room number.

Data Element Name:	CAN
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNNNNNN
Data Entry Screen(s):	
Report(s):	BS001 - CAN No.
Initiating Source:	
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	Animal
Text Description:	Common Account Number: NCTR division account number assigned to animals that are issued to an experiment.

Data Element Name:	Cage
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	
Initiating Source:	
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	Disposition
Text Description:	Identification number for the cage occupied by this at the time of the 'Disposition Date.'

Data Element Name:	Carcass-ID
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	Anim-Carcass-ID (11N)
ADABAS File Format:	
Format Description:	NNNNNNNNNNN
Data Entry Screen(s):	
Report(s):	BS003
Initiating Source:	
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	Animal
Text Description:	Carcass Identification (CID) number assigned to an animal that was sent to Microbiological Services, Chemistry or Pathology. This number is composed of a 4-digit experiment number, a 2-digit test number, and a 5-digit sequence number. CIDs are assigned by Pathology.

Data Element Name:	Check Digit
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	N
Data Entry Screen(s):	
Report(s):	BS004f BS004m
Initiating Source:	
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	Animal
Text Description:	A single digit that is found on the cage cards.

Data Element Name:	Count-Assignment
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NN
Data Entry Screen(s):	
Report(s):	BS001 - Count
Initiating Source:	Calculated: If this is an individual animal, count equals one; otherwise, it indicates either a pair of breeders or the number of animals treated as a block.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	If this is an individual animal, count equals one; otherwise, this data element indicates either a pair of breeders or the number of animals treated as a block.

Data Element Name:	Count-Feeder Female
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NN
Data Entry Screen(s):	
Report(s):	BS015 - Count
Initiating Source:	Calculated: If this is an individual female animal, count equals one; otherwise, count equals the number of females in the litter that are feeders.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	If this is an individual female animal, equals one; otherwise, count equals the number of females in the litter that are feeders.

Data Element Name:	Count-Feeder Male
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NN
Data Entry Screen(s):	
Report(s):	BS015 - Count
Initiating Source:	Calculated: If this is an individual male animal, count equals one; otherwise, count equals the number of males in the litter that are feeders.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	If this is an individual male animal, equals one; otherwise, count equals the number of males in the litter that are feeders.

Data Element Name:	Count-Feeder Unsexed
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NN
Data Entry Screen(s):	
Report(s):	BS015 - Count
Initiating Source:	Calculated: If this is an individual unsexed animal, count equals one; otherwise, count equals the number of unsexed in the litter that are feeders.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	If this is an individual unsexed animal, equals one; otherwise, count equals the number of unsexed in the litter that are feeders.

Data Element Name:	Count-Observation
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NN
Data Entry Screen(s):	
Report(s):	BS002 - Count
Initiating Source:	Calculated: If this is a littered observation this data element equals the number of animals in the same cage that were observed.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	If this is a littered observation this data element equals the number of animals in the same cage that were observed.

Data Element Name:	Count-Removal
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NN
Data Entry Screen(s):	
Report(s):	BS003 - Count
Initiating Source:	Calculated: If this is an individual animal, count equals one; otherwise, it indicates the number of animals in this block that were removed.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	If this observation is an individual animal, count equals one; otherwise, it indicates the number of animals in this block that were removed.

Data Element Name:	Count-Transfer/Issue
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NN
Data Entry Screen(s):	
Report(s):	BS016 - Count
Initiating Source:	Calculated: If this is a littered observation count equals the number of animals from the same cage that were transferred or issued.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	If this is a littered observation count equals the number of animals from the same cage that were transferred or issued.

Data Element Name:	Current Building-Room
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	Current-Building-ID (A3) "Plus" Current-Room-ID (A4)
ADABAS File Format:	7 Characters
Format Description:	AAA-AAAA
Data Entry Screen(s):	Room Number
Report(s):	BS001 - Bldg-Room, BS001s - Bldg-Room BS002 - Bldg-Room, BS002s - Bldg-Room BS003 - Bldg-Room, BS003s - Bldg-Room BS004f - Bldg-Room, BS004m - Bldg-Room BS005 - Bldg-Room, BS006 - Bldg-Room BS007 - Bldg-Room, BS008 - Bldg-Room BS010 - Bldg-Room, BS011 - Bldg-Room BS013 - Current Bldg-Room BS015 - Bldg-Room, BS017 - Bldg-Room BS018 - Current Room EBS001 - Bldg-Room, EBS002 - Bldg-Room EBS003 - Bldg-Room, EBS003s - Bldg-Room
Initiating Source:	Calculated: This is the building and room from 'Building-Room' for the most recent disposition of the animal. The most recent disposition is derived from the most recent dat in 'Disposition Date.'
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Three-character building number plus four-character room number.

Data Element Name:	Current Cage
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	Current-Cage-Num (4N)
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS001 BS002 - Cage BS003 - Cage BS004f - Cage No. BS004m - Cage No. BS005 - Curr Cage BS006 - Curr Cage BS007 BS008 - Cage BS010 - Cage BS011 - Cage BS012 - Issue Cage BS013 BS015 - Cage BS016 - Cage BS018 - Current Cage No.
Initiating Source:	Calculated: This is the cage from 'Cage' for the most recent disposition of the animal. The most recent disposition is derived from the most recent date in 'Disposition Date.'
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Identification number for the cage occupied by this animal or animals.

Data Element Name:	Current Status
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	AAAAAAAAAAAA
Data Entry Screen:	
Report(s):	BS001 BS002 - Status BS003 BS013
Initiating Source:	Calculated: This is the status from the field 'Disposition' for the most recent disposition o the animal. The most recent disposition is derived from the most recent date in 'Disposition Date.'
Allowed Values:	Dead Culled Issue-Feeder Issue-Exper Issue-Other Breeder Surplus Litter New Animal Retired Survey-Path Survey-Micro Survey-Chem
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Current status of the animal, including final action. On report BS001 only status that can be assigned is used.

Data Element Name:	Dam UIN
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	AA-NNNNNNN
Data Entry Screen(s):	
Report(s):	BS004m - Mother's Number BS005 - Dam UIN BS006 - Dam UIN BS007 - Female UIN BS010 - Female UIN BS011 - Female UIN BS013 - Female UIN EBS001 - Female UIN EBS002 - Female UIN EBS003 - Female UIN
Initiating Source:	
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	Key Pairs Animal
Text Description:	Strain code and unique identification number assigned to the female animal of the breeding pair.

Data Element Name:	Date Animal Order
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	MM/DD/YY
Data Entry Screen(s):	
Report(s):	BS017 - (None)
Initiating Source:	
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	Order
Text Description:	Gregorian date for which animal order report is written.

Data Element Name:	Date Assigned
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	MM/DD/YY
Data Entry Screen(s):	
Report(s):	BS001 BS001s - (None)
Initiating Source:	Calculated: This is the date from the field 'Disposition Date' select for a specific date.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Gregorian date that the assignment was made.

Data Element Name:	Date Established
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	MM/DD/YY
Data Entry Screen(s):	
Report(s):	BS004f - Mated BS004m - Mated BS005 - Establish Date BS007 - Establish Date BS008 BS010 - Establish Date BS011 - Establish Date EBS003 - Date Est
Initiating Source:	
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	Pairs
Text Description:	Gregorian date that the breeding relationship was established.

Data Element Name:	Date Filled
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	MM/DD/YY
Data Entry Screen(s):	
Report(s):	BS017
Initiating Source:	
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	Order
Text Description:	Date the animals were received for the experiment.

Data Element Name:	Date Found Pregnant
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	MM/DD/YY
Data Entry Screen(s):	
Report(s):	BS004f BS004m EBS003 - Observed Pregnant
Initiating Source:	Calculated: This is the date from the field 'Observe Date' for the most recent observation of a pregnant animal ('Observation' is equal to Pregnant).
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	The date the animal was found to be pregnant.

Data Element Name:	Date Observed
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	MM/DD/YY
Data Entry Screen(s):	
Report(s):	BS002 BS002s - (None)
Initiating Source:	Calculated: This is the date from the field 'Observe Date' a specific date.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Gregorian date that the observation was made.

Data Element Name:	Date Weighed
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	MM-DD-YY
Data Entry Screen(s):	
Report(s):	EBS002
Initiating Source:	
Allowed Values:	00 to 99
Defaults:	
Data Assessments:	
Entity:	Pup Weighing
Text Description:	Date the animal was weighed.

Data Element Name:	Days
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NN
Data Entry Screen(s):	
Report(s):	EBS002 - Age Days
Initiating Source:	Calculated: The number of days between the Birth Date and Current Date
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	The age of the animal in number of days.

Data Element Name:	Days Established
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNN
Data Entry Screen(s):	
Report(s):	BS010 - Establish Days BS011 - Establish Days
Initiating Source:	Calculated: The number of days between the Established Date and the Current Date.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Number of days that this breeder has been assigned as a breeder. Found on the top half of each breeder assignment card.

Data Element Name:	Destination Cage
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	Cage-Num (4N)
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS004m - Removed to Cage
Initiating Source:	
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	Removal
Text Description:	Number identifying the cage to which the animal will be moved.

Data Element Name:	Disposition
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	
Data Entry Screen(s):	
Report(s):	
Initiating Source:	
Allowed Values:	Dead Culled Issue-Feeder Issue-Exper Issue-Other Breeder Surplus Litter New Animal Retired Survey-Path Survey-Micro Survey-Chem
Defaults:	
Data Assessments:	
Entity:	Disposition
Text Description:	The disposition of the animal at the time of the corresponding 'Disposition Date.'

Data Element Name:	Disposition Date
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	MM/DD/YY
Data Entry Screen(s):	
Report(s):	BS013
Initiating Source:	
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	Disposition
Text Description:	Date the animal was given a certain disposition.

Data Element Name:	Duration From Start To Last Litter
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNN
Data Entry Screen(s):	
Report(s):	EBS003s - Duration(Days) From Start to Last Lit
Initiating Source:	Calculated: This is the difference between the start date and the last litter by treatment.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	This is the difference between the start date and the last litter by treatment.

Data Element Name:	Experiment Number
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	Test-Num (6N)
ADABAS File Format:	
Format Description:	NNNN-NN
Data Entry Screen(s):	Experiment Number
Report(s):	BS001 - EXP BS003 - EXP. NO. BS012 - Experiment No. BS012s - EXP NO. BS017 - EXP. NO. BS017s - EXP. NO. EBS001 - Experiment No. EBS002 - Experiment No. EBS003 - Experiment No. EBS003s - Experiment No.
Initiating Source:	
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	Key Allocation Principal Investigator Order
Text Description:	Number identifying the experiment and test the animal is allocated to. Four-digit experiment number and two-digit test number which is unique within the experiment, making a six-digit unique test identifier.

Data Element Name:	Female Birth Date
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	Birth-Date
ADABAS File Format:	
Format Description:	MM/DD/YY
Data Entry Screen(s):	
Report(s):	BS004f - DOB for UIN BS007 - Female Birth Date BS011 - Female Date of Birth Date BS013 - Date of Birth
Initiating Source:	Calculated: If the animal is female, then this data element is equal to the birth date from the data element "Birth Date".
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Birth date of the female animal.

Data Element Name:	Female Birth Days
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS011 - Female Date of Birth Days
Initiating Source:	Calculated: The current date minus the birth date ("Birth Date").
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Age of the female animal. Number of days since the birth of the female animal. (Current date minus the birth date).

Data Element Name:	Female From Bldg-Room
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	AAAAAAA
Data Entry Screen(s):	
Report(s):	BS007
Initiating Source:	Calculated: If the animal is a female, then this data element is transferred from another data element.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Number identifying the room this female animal was in prior to this assignment. This number is composed of a 4-character building and 3-character room identifier.

Data Element Name:	Female Generation
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	EBS001 - Female Genr EBS002 - Female Genr EBS003 - Female Genr
Initiating Source:	Calculated: If the animal is female then this data element equals "Generation."
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	The generation number of this female animal.

Data Element Name:	Female Source Cage
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS004f - Source Cage BS007 - Female Prev Cage
Initiating Source:	Calculated: If the animal is female, then the information is transferred from "Source Cage."
Allowed Values:	1 to 9999
Defaults:	
Data Assessments:	
Entity:	
Text Description:	The number identifying the previous cage that this female animal was in.

Data Element Name:	Female Treatment
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNN
Data Entry Screen(s):	
Report(s):	EBS001 - Fem TMT EBS003 - Fem TMT
Initiating Source:	Calculated: If the animal is female then this data element is transferred from "Treatment."
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Treatment number for the female indicating the initial chemical treatment to be administered to this animal. The chemical, concentration, and the duration that this chemical dose is to be administered is identified by this number.

Data Element Name:	Female UIN
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	BIS - UIN
ADABAS File Format:	
Format Description:	AA-NNNNNNN
Data Entry Screen(s):	
Report(s):	BS004f - UIN BS015
Initiating Source:	Calculated: If the animal is female, then the information is transferred from "UIN."
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	This is a code that identifies a female animal. The unique identification number (UIN) consists of a two-digit strain code and a seven-digit sequential number.

Data Element Name:	From Date
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	MM/DD/YY
Data Entry Screen(s):	
Report(s):	BS005 BS005s BS006 BS006s BS007 BS007s BS009 BS014 EBS003
Initiating Source:	
Allowed Values:	
Defaults:	
Data Assessments:	Must be less than or equal to the 'From Date.'
Entity:	Report Period
Text Description:	From date specified in report for the period of time covered by the report. Usually the reports are run on Monday for the previous week.

Data Element Name:	Generation
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS001 - Genr BS002 - Litter-Gen BS004f BS004m BS005 - Litter Generation BS008 BS013 BS018 EBS001 - Litter Genr EBS002 - Litter Genr EBS003 - Genr
Initiating Source:	
Allowed Values:	
Defaults:	0
Data Assessments:	
Entity:	Litter
Text Description:	The generation number of this animal, breeder pair, or block of animals. The placement of this animal with the succession of generations of this strain.

Data Element Name:	Last Litter Date
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	MMDDYY
Data Entry Screen(s):	
Report(s):	BS010
Initiating Source:	Calculated: The last litter date is the latest "Litter Birth Date" for this breeder pair.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Gregorian date that the last litter was born to this breeder pair. Zeros indicate total unproductivity.

Data Element Name:	Last Litter Days
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s)	
Report(s):	BS010
Initiating Source:	Calculated: The difference between the "Last Litter Date" and the current date.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Elapsed time in days since the last litter was born to this breeder pair. Zeroes indicate totally unproductive.

Data Element Name:	Litter Number
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NN
Data Entry Screen(s):	
Report(s):	BS005 BS009 BS010 - Last Litter Litt. No. BS013 EBS001 - Litt No. EBS002 - Litt No. EBS003 - Litt. No.
Initiating Source:	Calculated: This data element value is derived from counting the value 'Littered' in the field 'Observation' for the pair from oldest observation to the most current.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A chronological placement of this litter among other litters born to the same breeder pair.

Data Element Name:	Litter UIN
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	AA-NNNNNNN
Data Entry Screen(s):	
Report(s):	BS001 - UIN (Conditional) BS002 - UIN (Conditional) BS002 - Litter-UIN BS003 - UIN (Conditional) BS005 - Litter UIN BS006 - Litter UIN BS013, BS016 - UIN (Conditional) EBS001, EBS003
Initiating Source:	
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	Key Litter Pup Weighing Wean Disposition Animal Pairs
Text Description:	For a "littered" observation a litter UIN is a digit unique identification number assigned to litter by the system. In reports only the last seven digits are used. The block of UIN for a litter are recognized by the beginning three numbers being "100". Starting with the seven digit number, a series of numbers is reserved f individual assignment of one UIN per animal. The number of UINs set aside is equal to the number in the litter (also called litter count)

Data Element Name:	Male Birth Date
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	Birth-Date
ADABAS File Format:	
Format Description:	MM/DD/YY
Data Entry Screen(s):	
Report(s):	BS004m - DOB for UIN BS007 - Male Birth Date
Initiating Source:	Calculated: If the animal is male, then the birth date is transferred from the data element "Birth Date."
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Birth date of the male animal.

Data Element Name:	Male From Bldg-Room
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	AAAAAAA
Data Entry Screen(s):	
Report(s):	BS007
Initiating Source:	Calculated: If the animal is a male, then this data element is transferred from another data element.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Number identifying the room this male animal was in prior to this assignment. This number is composed of a 4-character building and 3-character room identifier.

Data Element Name:	Male Generation
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	EBS003 - Male Genr
Initiating Source:	Calculated: If the animal is a male, then this data element is transferred from "Generation."
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	The male generation number.

Data Element Name:	Male Source Cage
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS004m - Source Cage BS007 - Male Prev Cage
Initiating Source:	Calculated: If the animal is male, then the information is transferred from "Source Cage."
Allowed Values:	1 to 9999
Defaults:	
Data Assessments:	
Entity:	
Text Description:	The number identifying the previous cage that this male animal was in.

Data Element Name:	Male To Female Ratio
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NN/NN
Data Entry Screen(s):	
Report(s):	EBS003 - No. M/F Day
Initiating Source:	Calculated: A data element that has the ratio of the number of males to the number of females born to the observed litter.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	The ratio of males to females born to the observed litter that date.

Data Element Name:	Male Treatment
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNN
Data Entry Screen(s):	
Report(s):	EBS003 - Male TMT
Initiating Source:	Calculated: If the animal is male then this data element is transferred from "Treatment."
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Treatment number for the male indicating the initial chemical treatment to be administered to this animal. The chemical, concentration, and the duration that this chemical dose is to be administered is identified by this number.

Data Element Name:	Male UIN
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	BIS - UIN
ADABAS File Format:	
Format Description:	AA-NNNNNNN
Data Entry Screen(s):	Subject UIN
Report(s):	BS004m - UIN BS015
Initiating Source:	Calculated: If the animal is male, then the information is transferred from "UIN."
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	This is a code that identifies a male animal. The unique identification number (UIN) consists of a two-digit strain code and a seven-digit sequential number.

Data Element Name:	NCTR Strain Code
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	Strain-Code (5N)
ADABAS File Format:	
Format Description:	AA
Data Entry Screen(s):	Subject Strain
Report(s):	BS001, BS001s, BS002, BS002s, BS003, BS003s, BS005-Total Strain, BS005s, BS006-Total Pairs Strain, BS006s, BS007-Total Strain, BS007s, BS009, BS010-Strain, BS010s, BS011-Strain, BS011s, BS014, BS015-Strain, BS016-Strain, BS017-Strain, BS017s-Strain, BS018
Initiating Source	
Allowed Values:	00-ZZ
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Two digit strain code. Although the old specification name system used an NN format, we note here that strain code is alphanumeric.

Data Element Name:	Next To Last Date
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	MMDDYY
Data Entry Screen(s):	
Report(s):	BS010 - Next to Last Date Gave Birth
Initiating Source:	Calculated: This is the second to last "Litter Birth Date" for this pair of breeders.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Gregorian date that the next to last litter was born to this breeder pair.

Data Element Name:	Number Assigned As Breeders Per Litter
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NN
Data Entry Screen(s):	
Report(s):	BS006 - Assign Breeder EBS001 - Disposition Breeder
Initiating Source:	Calculated: Sum of the number of animals assigned as breeders by litter.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Number of animals that were established as breeders.

Data Element Name:	Number Assigned as Feeders Per Litter
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NN
Data Entry Screen(s):	
Report(s):	BS006 - Assign Feeder
Initiating Source:	Calculated: Sum of the number of animals assigned as feeders by litter.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Number of animals that were established as feeders.

Data Element Name:	Number Culled Per Litter
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NN
Data Entry Screen(s):	
Report(s):	BS006 - Culled EBS001 - Disposition Cull
Initiating Source:	Calculated: The sum of the number of animals culled by litter.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Number of animals in this litter that were not used because of injury or deformity.

Data Element Name:	Number Dead At Weaning Per Litter
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NN
Data Entry Screen(s):	
Report(s):	EBS003 - No. Dead Wean
Initiating Source:	
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	Wean Disposition
Text Description:	Number of animals that died by the time they were to be weaned.

Data Element Name:	Number Dead Per Litter
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NN
Data Entry Screen(s):	
Report(s):	BS006 - Dead EBS001 - Disposition Dead
Initiating Source:	Calculated: The sum of the number of dead animals by litter.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Number of animals in this litter that were found dead.

Data Element Name:	Number Delivered
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNN
Data Entry Screen(s):	
Report(s):	BS017
Initiating Source:	
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	Order
Text Description:	Number of animals of each strain order delivered for a specific experiment and principal investigator.

Data Element Name:	Number Female Breeder By Treatment
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNN
Data Entry Screen(s):	
Report(s):	EBS003s - Number Female Breeders Est.
Initiating Source:	Calculated: The sum of the female breeders established by treatment.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Total number of female breeders established by treatment.

Data Element Name:	Number Females Observed Pregnant By Treatment
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNN
Data Entry Screen(s):	
Report(s):	EBS003s - Number Females Observed Pregnant
Initiating Source:	Calculated: The sum of females observed pregnant by treatment.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Total number of females observed pregnant by treatment.

Data Element Name:	Number Females Weaned Per Litter
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NN
Data Entry Screen(s):	
Report(s):	EBS003 - No. Fem Wean
Initiating Source:	Calculated: The sum of the number of animals weaned by sex (female) and by litter.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	The number of females weaned from the litter.

Data Element Name:	Number In Litter
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS004f - Number of Litter BS005 - Litter Size BS006 - Litter Size BS009 - Number Born BS013 - Litter Size EBS003 - Litt. Size
Initiating Source:	
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	Litter
Text Description:	Total number of animals born in a litter.

Data Element Name:	Number Issued Per Litter
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NN
Data Entry Screen(s):	
Report(s):	BS006 - Issue EBS001 - Disposition Issue
Initiating Source:	Calculated: The sum of the number of animals issued by litter.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Number of animals in this litter that were issued.

Data Element Name:	Number Littered By Treatment
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNN
Data Entry Screen(s):	
Report(s):	EBS003s - Number Littered
Initiating Source:	Calculated: The sum of number of pairs that have littered by treatment.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Total number of pairs that have littered by treatment.

Data Element Name:	Number Live to Dead
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NN/NN
Data Entry Screen(s):	
Report(s):	EBS003 - No. L/D
Initiating Source:	Calculated: The ratio of the number of live animals to dead animals by litter.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Ratio of animals that were born alive to those born dead. Dead refers to those animals that were "stillborn".

Data Element Name:	Number Male Breeder By Treatment
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNN
Data Entry Screen(s):	
Report(s):	EBS003s - Number Male Breeders Est.
Initiating Source:	Calculated: The sum of the male breeders established by treatment.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Total number of male breeders established by treatment.

Data Element Name:	Number Males Weaned Per Litter
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NN
Data Entry Screen(s):	
Report(s):	EBS003 - No. Males Wean
Initiating Source:	Calculated: Sum of the number of male animals weaned by litter.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	The number of males weaned from the litter.

Data Element Name:	Number Of Litters Per Pair
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS013 - Number of Litters
Initiating Source:	Calculated: Sum of the number of litters per pair.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Total number of litters born to this pair.

Data Element Name:	Number Of Unproductive Females By Treatment
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNN
Data Entry Screen(s):	
Report(s):	EBS003s - Number Of Unproductive Females
Initiating Source:	Calculated: Total number of unproductive females by treatment.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Total number of unproductive females by treatment.

Data Element Name:	Number Plug Observed
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNN
Data Entry Screen(s):	
Report(s):	EBS003s
Initiating Source:	Calculated: The sum of the plugs observed by treatment.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Total number of plugs observed by treatment.

Data Element Name:	Number Pups Used In Experiment
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NN
Data Entry Screen(s):	
Report(s):	EBS001 - Disposition Alloc
Initiating Source:	Calculated: Sum of the number of pups used in the experiment.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	The number of pups in the litter to be used in an experiment.

Data Element Name:	Number Requested
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNN
Data Entry Screen(s):	
Report(s):	BS017
Initiating Source:	
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	Order
Text Description:	Number of animals of each strain order requested for a specific experiment and principal investigator.

Data Element Name:	Number Surplused Per Litter
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NN
Data Entry Screen(s):	
Report(s):	BS006 - Surplus EBS001 - Disposition Surp
Initiating Source:	Calculated: Sum of the number of animals surplused by litter.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Number of animals in this litter that, although healthy, were removed because of no demand for them.

Data Element Name:	Number Surveyed Per Litter
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NN
Data Entry Screen(s):	
Report(s):	BS006 - Survey
Initiating Source:	Calculated: Sum of the number of animals surveyed by litter.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Number of animals in this litter that were requested for a diagnostic examination by micro, chemistry, or pathology.

Data Element Name:	Number Weaned By Litter
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNN
Data Entry Screen(s):	
Report(s):	BS004f - Number Weaned
Initiating Source:	Calculated: Sum of the number of animals weaned by litter.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Total number of surviving litter pups that were weaned.

Data Element Name:	Number Weighed
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NN
Data Entry Screen(s):	
Report(s):	EBS002
Initiating Source:	
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	Pup Weighing
Text Description:	Total number of pups that are weighed together.

Data Element Name:	Number to Survey by Litter
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	EBS001 - Disposition Survey
Initiating Source:	Calculated: The number of animals sent to pathology from the litter.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element indicating the number of pups that were sent to pathology from the litter.

Data Element Name:	Observations
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	AAAAAAAAAAAAA
Data Entry Screen(s):	
Report(s):	BS002
Initiating Source:	
Allowed Values:	Littered Pregnant Plugged
Defaults:	
Data Assessments:	
Entity:	Pairs
Text Description:	A descriptive phrase for the conditions observed.

Data Element Name:	Observe Date
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	MM/DD/YY
Data Entry Screen(s):	
Report(s):	EBS003
Initiating Source:	
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	Pairs
Text Description:	The date the litter was observed or inspected. Relates to the corresponding 'Observation.'

Data Element Name:	Operator
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	Data-Operator-Code (5N)
ADABAS File Format:	
Format Description:	NNNNN
Data Entry Screen(s):	
Report(s):	BS001 - Oper BS002 - Oper BS003 - Oper BS012 - Oper EBS001 - Oper EBS002 - Oper EBS003 - Oper BS017 - Oper
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Number identifying the animal technician who performed this action.

Data Element Name:	Percentage Assign Breeder by Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNN.N
Data Entry Screen(s):	
Report(s):	BS006s - Assign Breeder
Initiating Source:	Calculated: A percentage of animals assigned as breeders by strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element taking the per cent of animals assigned as breeders by strain during then time period.

Data Element Name:	Percentage Assign Feeder By Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNN.N
Data Entry Screen(s):	
Report(s):	BS006s - Assign Feeder
Initiating Source:	Calculated: A percentage animals assigned as feeders by strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element taking the per cent of animals assigned as feeders by strain during the time period.

Data Element Name:	Percentage Culled By Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNN.N
Data Entry Screen(s):	
Report(s):	BS006s - Culled
Initiating Source:	Calculated: A percentage of number culled animals by strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element taking the per cent of culled animals by strain during time period.

Data Element Name:	Percentage Dead By Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNN.N
Data Entry Screen(s):	
Report(s):	BS006s - Dead
Initiating Source:	Calculated: A percentage of number dead animals by strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element taking the per cent of dead animals by strain during time period.

Data Element Name:	Percentage Issue By Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNN.N
Data Entry Screen(s):	
Report(s):	BS006s - Issue
Initiating Source:	Calculated: A percentage of issue animals by strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element taking the per cent of issue animals by strain during the time period.

Data Element Name:	Percentage Surplus By Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNN.N
Data Entry Screen(s):	
Report(s):	BS006s - Surplus
Initiating Source:	Calculated: A percentage of number surplused animals by strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element taking the per cent of surplused animals by strain during time period.

Data Element Name:	Percentage Survey By Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNN.N
Data Entry Screen(s):	
Report(s):	BS006s - Survey
Initiating Source:	Calculated: A percentage of number survey animals by strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element taking the per cent of survey animals by strain during time period.

Data Element Name:	Phenotype
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	AA
Data Entry Screen(s):	
Report(s):	BS002 BS017
Initiating Source:	
Allowed Values:	Agouti Black Yellow Haired Nude
Defaults:	
Data Assessments:	Check against a look-up table that contains phenotypes allowed for the strain of the animal.
Entity:	Animal
Text Description:	Visible properties of an animal produced by the interaction of the genotype and the environment. Only applies to some species.

Data Element Name:	Plug Date
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	MM/DD/YY
Data Entry Screen(s):	
Report(s):	EBS003
Initiating Source:	Calculated: The date from 'Observe Date' when the corresponding 'Observation' is equal to 'Plugged.'
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	The date the female plug was observed.

Data Element Name:	Previous Cage
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS001 - Prev Cage
Initiating Source:	Calculated: When a new assignment is made or the animal is allocated this data element becomes the value used in "Current Cage."
Allowed Values:	1 to 9999
Defaults:	
Data Assessments:	
Entity:	
Text Description:	The number identifying the previous cage that this animal occupied.

Data Element Name:	Previous Status
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	AAAAAAAAAAAAA
Data Entry Screen(s):	
Report(s):	BS001 - Prev. Status
Initiating Source:	Calculated: This data element is the next to last status in the data element "Disposition."
Allowed Values:	Issue-Feeder Issue-Exper Issue-Other Breeder Litter New Animal Survey-Path Survey-Micro Survey-Chem
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Former status of the animal.

Data Element Name:	Principal Investigator/Contact
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	AAAAAAAAAA
Data Entry Screen(s):	
Report(s):	BS017
Initiating Source:	
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	Principal Investigator
Text Description:	Principal investigator/Contact for the experiment. Is the person that places the order for the animals.

Data Element Name:	Productivity Index
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NN.NN
Data Entry Screen(s):	
Report(s):	BS014
Initiating Source:	Calculated: The index is calculated by dividing the total weaned by the total breeders of a particular strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Mean number of animals weaned weekly or during this time period for this strain.

Data Element Name:	Proj No. To Be Weaned - 90%
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNN
Data Entry Screen(s):	
Report(s):	BS005s
Initiating Source:	Calculated: Multiply the "Total Born" by .9.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Estimated totals for the projected number of animals to be weaned - 90% of the total number of animals born of this strain during the time period.

Data Element Name:	Proj No. To Be Weaned - 95%
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNN
Data Entry Screen(s):	
Report(s):	BS005s
Initiating Source:	Calculated: Multiply the "Total Born by .95.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Estimated totals for the projected number of animals to be weaned - 95% of the total number of animals born of this strain during the time period.

Data Element Name:	Projected Mating Date
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	MM/DD/YY
Data Entry Screen(s):	
Report(s):	BS015
Initiating Source:	Calculated: The date is calculated by using a look-up table. The look-up table is species and strain dependent.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	The date the strain is expected to mate. This date is derived by adding a certain number of days to the date of birth. The number is species and strain dependent.

Data Element Name:	Pup Weight
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNNN.N
Data Entry Screen(s):	
Report(s):	EBS002 - Weight
Initiating Source:	
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	Pup Weighing
Text Description:	The weight of the pup at weaning.

Data Element Name:	Rack
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	Current-Rack-Num (2N)
ADABAS File Format:	
Format Description:	NN
Data Entry Screen(s):	
Report(s):	BS012
Initiating Source:	
Allowed Values:	
Defaults:	
Data Assessments:	The rack information should be validated against Study Def.
Entity:	Allocation
Text Description:	The rack the animal is allocated to.

Data Element Name:	Rack Side
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	Current-Rack-Side (2N)
ADABAS File Format:	
Format Description:	A
Data Entry Screen(s):	
Report(s):	BS012 - Side
Initiating Source:	
Allowed Values:	A B
Defaults:	
Data Assessments:	The rack side information should be validated against Study Def.
Entity:	Allocation
Text Description:	The side of the rack the animal is allocated to.

Data Element Name:	Remarks
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	(text field)
Data Entry Screen(s):	
Report(s):	BS004f BS004m
Initiating Source:	
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	Litter
Text Description:	Used to record the number of males, females, and dead animals in a litter.

Data Element Name:	Removal Date
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	MM/DD/YY
Data Entry Screen(s):	
Report(s):	BS003 BS003s - (None)
Initiating Source:	
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	Removal
Text Description:	Gregorian date that the removal was made.

Data Element Name:	Removal Disposition
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	AAAAAAAAAAAA
Data Entry Screen(s):	
Report(s):	BS003
Initiating Source:	
Allowed Values:	Micro Chemistry Pathology
Defaults:	
Data Assessments:	
Entity:	Removal
Text Description:	The destination of the animal if it was sent to micro, chemistry, or pathology.

Data Element Name:	Removal Reason
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	AAAAAAAAAAAA
Data Entry Screen(s):	
Report(s):	BS003
Initiating Source:	Calculated: Final action of the data element "Current Status."
Allowed Values:	Surplused Dead Retired Micro Chemistry Pathology
Defaults:	
Data Assessments:	
Entity:	
Text Description:	The reason for the removal of the animal. It is calculated from the data element "Current Status" for those animals with final actions taken.

Data Element Name:	Return Date
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	MM\DD\YY
Data Entry Screen(s):	
Report(s):	BS004m - Date Ret'd to Male
Initiating Source:	
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	Removal
Text Description:	Date animal is returned to the cage.

Data Element Name:	Sex
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	Anim-Sex (A)
ADABAS File Format:	
Format Description:	A
Data Entry Screen(s):	
Report(s):	BS001 BS002 BS003 BS008 BS012 BS013 BS016 BS017 BS017s
Initiating Source:	
Allowed Values:	M - male F - female U - unsexed
Defaults:	
Data Assessments:	
Entity:	Animal
Text Description:	Sex of the animal

Data Element Name:	Sire UIN
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	AA-NNNNNNN
Data Entry Screen(s):	
Report(s):	BS001 - Mate UIN (Conditional) BS005 - Sire UIN BS006 - Sire UIN BS007 - Male UIN BS010 - Male UIN BS011 - Male UIN BS013 - Male UIN EBS001 - Male UIN EBS002 - Male UIN EBS003 - Male UIN
Initiating Source:	
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	Key Pairs Animal
Text Description:	Strain code and unique identification number assigned to the male of the breeding pair. In BS001 the Sire UIN is listed only for females that were assigned as breeders.

Data Element Name:	Special Requirements
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	AAAAAAAAAAAAAAAAAAAAAAAA
Data Entry Screen(s):	
Report(s):	BS017
Initiating Source:	
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	Order
Text Description:	Special requirements for a specific experiment and principal investigator.

Data Element Name:	Start Date
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	Start-Date-On-Test (6N)
ADABAS File Format:	
Format Description:	MM/DD/YY
Data Entry Screen(s):	
Report(s):	BS012 - Animal Start Date BS017 - Date Required
Initiating Source:	
Allowed Values:	
Defaults:	
Data Assessments:	The start date must be greater than the 'Birth Date.'
Entity:	Principal Investigator
Text Description:	The date the animals are required to begin the experiment.

Data Element Name:	Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	(text field)
Data Entry Screen(s):	
Report(s):	BS004f BS004m
Initiating Source:	
Allowed Values:	
Defaults:	
Data Assessments:	Validated against general tables.
Entity:	Litter
Text Description:	A text code denoting the type of strain.

Data Element Name:	Summary Fertility Date
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	MM/DD/YY
Data Entry Screen(s):	
Report(s):	EBS003 - (None)
Initiating Source:	Calculated: This is the date for which the report is issued.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Gregorian date for which animal order report is written.

Data Element Name:	To Date
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	MM/DD/YY
Data Entry Screen(s):	
Report(s):	BS005 BS005s BS006 BS006s BS007 BS007s BS009 BS014 EBS003
Initiating Source:	
Allowed Values:	
Defaults:	
Data Assessments:	Date must be greater than or equal to the 'From Date.'
Entity:	
Text Description:	To date specified in report for the period of time covered by the report. Usually the reports are currently (as of 8/09/88) run on Friday night for that week.

Data Element Name:	Total Allocated By Experiment
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNN
Data Entry Screen(s):	
Report(s):	BS012s - Total Allocations
Initiating Source:	Calculated: Sum of total males allocated and total females allocated by experiment.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Total number of animals allocated to this experiment on the date of allocation.

Data Element Name:	Total Assign Breeder For Date
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNN
Data Entry Screen(s):	
Report(s):	BS006 - Total For This Date - Assign Breeder
Initiating Source:	Calculated: A sum of number of all assigned breeder animals for the date given in the report.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of all assign breeder animals for the date given in the report.

Data Element Name:	Total Assign Breeders
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS007s - Total This Period
Initiating Source:	Calculated: A sum of number of animals assigned as breeders.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of all animals assigned as breeders during the time period.

Data Element Name:	Total Assign Feeder For Date
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNN
Data Entry Screen(s):	
Report(s):	BS006 - Total For This Date - Assign Feeder
Initiating Source:	Calculated: A sum of number of all assigned feeder animals for the date given in the report.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of all assign feeder animals for the date given in the report.

Data Element Name:	Total Assigned Breeders By Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS006s - Assign Breeders BS007s - Total
Initiating Source:	Calculated: A sum of number of animals assigned as breeders by strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of all animals assigned as breeders by strain during the time period.

Data Element Name:	Total Assigned Feeder By Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS006s - Assign Feeder
Initiating Source:	Calculated: A sum of number animals assigned as feeders by strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of all animals assigned as feeders by strain during the time period

Data Element Name:	Total Born By Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS005 - Total Born This Date BS005s - Total Born BS006s - Total Born
Initiating Source:	Calculated: Sum of the total number of animals born by strain for the time period.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Total number of animals born of this strain during this period.

Data Element Name:	Total Born By Treatment
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNN
Data Entry Screen(s):	
Report(s):	EBS003s - Total Born
Initiating Source:	Calculated: The sum of number of pups born by treatment.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Total number of pups born by treatment.

Data Element Name:	Total Born Dead By Treatment
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNN
Data Entry Screen(s):	
Report(s):	EBS003s - Total Born Dead
Initiating Source:	Calculated: The sum of number of pups born dead by treatment.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Total number of pups born dead by treatment.

Data Element Name:	Total Born Live By Treatment
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNN
Data Entry Screen(s):	
Report(s):	EBS003s - Total Born Live
Initiating Source:	Calculated: The total number of animals that were born live by treatment.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	The total number of animals that were born live by treatment.

Data Element Name:	Total Breeders By Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS014 - Total Breeders
Initiating Source:	Calculated: Sum of the number of breeders by strain for the time period.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Total number of breeder animals by strain for the reporting period.

Data Element Name:	Total Breeders Per Litter
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NN
Data Entry Screen(s):	
Report(s):	BS013 - Totals Breeder
Initiating Source:	Calculated: A sum of number of breeders from a litter UIN.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of breeders animals from a litter UIN.

Data Element Name:	Total Culled By Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS006s - Culled
Initiating Source:	Calculated: A sum of number all culled animals by strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of all culled animals by strain during time period.

Data Element Name:	Total Culled For Date
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNN
Data Entry Screen(s):	
Report(s):	BS006 - Total For This Date - Culled
Initiating Source:	Calculated: A sum of number of all culled animals for the date given in the report.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of all culled animals for the date given in the report.

Data Element Name:	Total Culled Per Litter
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NN
Data Entry Screen(s):	
Report(s):	BS013 - Totals Culled
Initiating Source:	Calculated: A sum of the number culled from a litter UIN.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of culled animals from a litter UIN.

Data Element Name:	Total Dead By Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS006s - Dead
Initiating Source:	Calculated: A sum of the number of all dead animals by strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of all dead animals by strain during time period

Data Element Name:	Total Dead For Date
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNN
Data Entry Screen(s):	
Report(s):	BS006 - Total For This Date - Dead
Initiating Source:	Calculated: A sum of the number of all dead animals for the date given in the report.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of all dead animals for the date given in the report.

Data Element Name:	Total Dead Per Litter
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NN
Data Entry Screen(s):	
Report(s):	BS013 - Totals Dead
Initiating Source:	Calculated: A sum of the number of dead from a litter UIN.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of dead animals from a litter UIN.

Data Element Name:	Total Feeders Per Litter
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NN
Data Entry Screen(s):	
Report(s):	BS013 - Totals Feeder
Initiating Source:	Calculated: A sum of the number of feeders from a litter UIN.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of feeder animals from a litter UIN.

Data Element Name:	Total Female Breeders By Room & Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS001s - Total Female Breeders Set Up
Initiating Source:	Calculated: A sum of the number of female breeders by room and strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of female breeders animals set up (established) by room and strain.

Data Element Name:	Total Female Feeders By Room & Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS001s - Total Female Feeders Set Up BS015 - Total Females
Initiating Source:	Calculated: A sum of the number of female feeders by room and strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of female feeder animals set up (established) by room and strain.

Data Element Name:	Total Female Issued By Room & Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS001s - Total Female Issued
Initiating Source:	Calculated: A sum of the number of females issued by room and strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of female issued animals by room and strain.

Data Element Name:	Total Females Agouti By Room & Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS002s - Total Females Agouti
Initiating Source:	Calculated: A sum of number all female animals agouti by room and strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of all female animals agouti by room and strain.

Data Element Name:	Total Females Allocated to Experiment
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNN
Data Entry Screen(s):	
Report(s):	BS012s - Female Allocations
Initiating Source:	Calculated: Sum of the number of female animals allocated by experiment.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Total number of female animals allocated to this experiment on the date of allocation.

Data Element Name:	Total Females Black By Room & Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS002s - Total Females Black
Initiating Source:	Calculated: A sum of number all female animals black by room and strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of all female animals black by room and strain.

Data Element Name:	Total Females Born By Treatment
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNN
Data Entry Screen(s):	
Report(s):	EBS003s - Total Females
Initiating Source:	Calculated: The sum of number of females born by treatment.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Total number of females born by treatment.

Data Element Name:	Total Females By Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS016 - Total Females
Initiating Source:	Calculated: A sum of number of females by strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of females for a particular strain.

Data Element Name:	Total Females Culled By Room & Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS003s - Total Females Cull
Initiating Source:	Calculated: A sum of number all female animals culled by room and strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of all female animals culled by room and strain.

Data Element Name:	Total Females Dead By Room & Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS003s - Total Females Dead
Initiating Source:	Calculated: A sum of number all female animals dead by room and strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of all female animals dead by room and strain.

Data Element Name:	Total Females Hair By Room & Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS002s - Total Females Hair
Initiating Source:	Calculated: A sum of number all female animals with hair by room and strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of all female animals with hair by room and strain.

Data Element Name:	Total Females Nude By Room & Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS002s - Total Females Nude
Initiating Source:	Calculated: A sum of number all nude animals by room and strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of all nude female animals by room and strain.

Data Element Name:	Total Females Per Litter
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS013 - Total Female
Initiating Source:	Calculated: A sum of number of females by litter UIN.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of females for a particular litter UIN.

Data Element Name:	Total Females Retired By Room & Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS003s - Total Females Retired
Initiating Source:	Calculated: A sum of number all female animals retired by room and strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of all female animals retired by room and strain.

Data Element Name:	Total Females Surplused By Room & Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS003s - Total Females Surplus
Initiating Source:	Calculated: A sum of number all female animals surplused by room and strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of all female animals surplused by room and strain.

Data Element Name:	Total Females To Chemistry By Room & Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS003s - Total Females to Chemistry
Initiating Source:	Calculated: A sum of number all female animals sent to chemistry by room and strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of all female animals sent to chemistry by room and strain.

Data Element Name:	Total Females To Issue Other By Room & Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS003s - Total Females To Issue Other
Initiating Source:	Calculated: A sum of number all female animals to issue other by room and strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of all female animals to issue other by room and strain.

Data Element Name:	Total Females To Micro By Room & Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS003s - Total Females to Micro
Initiating Source:	Calculated: A sum of number all female animals sent to microbiology by room and strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of all female animals sent to microbiology by room and strain.

Data Element Name:	Total Females To Pathology By Room & Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS003s - Total Females to Pathology
Initiating Source:	Calculated: A sum of number all female animals sent to pathology by room and strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of all female animals sent to pathology by room and strain.

Data Element Name:	Total Females Weaned By Treatment
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNN
Data Entry Screen(s):	
Report(s):	EBS003s - Total Females Weaned
Initiating Source:	Calculated: The sum of number of females weaned by treatment.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Total number of females weaned by treatment.

Data Element Name:	Total Females Yellow By Room & Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS002s - Total Females Yellow
Initiating Source:	Calculated: A sum of number all female animals yellow by room and strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of all female animals yellow by room and strain.

Data Element Name:	Total Issue For Date
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNN
Data Entry Screen(s):	
Report(s):	BS006 - Total For This Date - Issue
Initiating Source:	Calculated: A sum of number all issue animals for the date given in the report.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of all issue animals for the date given in the report.

Data Element Name:	Total Issued By Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NN
Data Entry Screen(s):	
Report(s):	BS006s - Issue
Initiating Source:	Calculated: A sum of number of issue animals by strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of all issue animals by strain during the time period.

Data Element Name:	Total Issued Per Litter
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NN
Data Entry Screen(s):	
Report(s):	BS013 - Totals Issue
Initiating Source:	Calculated: A sum of number issued from a litter UIN.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of issue animals from a litter UIN.

Data Element Name:	Total Litter Size By Room & Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS005 - (Nothing)
Initiating Source:	Calculated: A sum of litter size by strain and room.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the litter size for a particular strain in a particular room.

Data Element Name:	Total Litter Size For Date
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNN
Data Entry Screen(s):	
Report(s):	BS006 - Total For This Date - Litter Size
Initiating Source:	Calculated: A sum of number of animals in litter for the date given in the report.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of all animals in litter for the date given in the report.

Data Element Name:	Total Littered By Room & Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS002s - Total Littered
Initiating Source:	Calculated: A sum of the number of all littered animals by room and strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of all littered animals by room and strain.

Data Element Name:	Total Male Breeders By Room & Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS001s - Total Male Breeders Set Up
Initiating Source:	Calculated: A sum of number of male breeders by room and strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of male breeders animals set up (established) by room and strain.

Data Element Name:	Total Male Feeders By Room & Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS001s - Total Male Feeders Set Up
Initiating Source:	Calculated: A sum of number of male feeders by room and strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of male feeders animals set up (established) by room and strain.

Data Element Name:	Total Males Agouti By Room & Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS002s - Total Males Agouti
Initiating Source:	Calculated: A sum of number all male animals agouti by room and strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of all male animals agouti by room and strain. Used in daily summary reports.

Data Element Name:	Total Males Allocated By Experiment
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNN
Data Entry Screen(s):	
Report(s):	BS012s - Male Allocations
Initiating Source:	Calculated: Sum of the number of male animals allocated by experiment.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Total number of male animals allocated to this experiment.

Data Element Name:	Total Males Black By Room & Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS002s - Total Males Black
Initiating Source:	Calculated: A sum of number all male animals black by room and strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of all male animals black by room and strain. Used in daily summary reports.

Data Element Name:	Total Males Born By Treatment
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNN
Data Entry Screen(s):	
Report(s):	EBS003s - Total Males
Initiating Source:	Calculated: The sum of number of males born by treatment.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Total number of males born by treatment.

Data Element Name:	Total Males By Litter
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS013 - Total Male
Initiating Source:	Calculated: A sum of number of males by litter UIN.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of males for a particular litter UIN.

Data Element Name:	Total Males By Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS016 - Total Male Strain
Initiating Source:	Calculated: A sum of number of males by strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of males for a particular strain.

Data Element Name:	Total Males Culled By Room & Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS003s - Total Males Cull
Initiating Source:	Calculated: A sum of number all male animals culled by room and strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of all male animals culled by room and strain. Used in daily summary reports.

Data Element Name:	Total Males Dead By Room & Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS003s - Total Males Dead
Initiating Source:	Calculated: A sum of number all male animals dead by room and strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of all male animals dead by room and strain.

Data Element Name:	Total Males Feeder By Room & Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS015 - Total Males
Initiating Source:	Calculated: A sum of number all male feeder animals by room and strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of all male feeder animals by room and strain.

Data Element Name:	Total Males Hair By Room & Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS002s - Total Males Hair
Initiating Source:	Calculated: A sum of number all male animals with hair by room and strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of all male animals with hair by room and strain.

Data Element Name:	Total Males Issued By Room & Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS001s - Total Males Issued
Initiating Source:	Calculated: A sum of number males issued by room and strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of male issued animals by room and strain.

Data Element Name:	Total Males Nude By Room & Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS002s - Total Males Nude
Initiating Source:	Calculated: A sum of number all nude male animals by room and strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of all nude male animals by room and strain.

Data Element Name:	Total Males Retired By Room & Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS003s - Total Males Retired
Initiating Source:	Calculated: A sum of number all male animals retired by room and strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of all male animals retired by room and strain.

Data Element Name:	Total Males Surplused By Room & Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS003s - Total Males Surplus
Initiating Source:	Calculated: A sum of number all male animals surplused by room and strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of all male animals surplused by room and strain.

Data Element Name:	Total Males To Chemistry By Room & Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS003s - Total Males to Chemistry
Initiating Source:	Calculated: A sum of number all male animals sent to chemistry by room and strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of all male animals sent to chemistry by room and strain.

Data Element Name:	Total Males To Issue Other By Room & Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS003s - Total Males To Issue Other
Initiating Source:	Calculated: A sum of number all male animals to issue other by room and strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of all male animals to issue other by room and strain.

Data Element Name:	Total Males To Micro By Room & Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS003s - Total Males to Micro
Initiating Source:	Calculated: A sum of number all male animals sent to microbiology by room and strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of all male animals sent to microbiology by room and strain.

Data Element Name:	Total Males To Pathology By Room & Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS003s - Total Males to Pathology
Initiating Source:	Calculated: A sum of number all male animals sent to pathology by room and strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of all male animals sent to pathology by room and strain.

Data Element Name:	Total Males Weaned By Treatment
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNN
Data Entry Screen(s):	
Report(s):	EBS003s - Total Males Weaned
Initiating Source:	Calculated: The sum of number of males weaned by treatment.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Total number of males weaned by treatment.

Data Element Name:	Total Males Yellow By Room & Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS002s - Total Males Yellow
Initiating Source:	Calculated: A sum of the number of all male animals yellow by room and strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of all male animals of a yellow color by room and strain.

Data Element Name:	Total New Born By Room & Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS002s - Total New Born
Initiating Source:	Calculated: A sum of the number of all new born animals by room and strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of all new born animals by room and strain.

Data Element Name:	Total Number Delivered by Month
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNN
Data Entry Screen(s):	
Report(s):	BS017s - Number Delivered
Initiating Source:	Calculated: This data element is the sum of the number of animals delivered by experiment number, strain, and sex for each month.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Number of animals of each strain order delivered by month.

Data Element Name:	Total Number Of Cages By Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS006 - Sum No. Cages
Initiating Source:	Calculated: A sum of cages by strain and room.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of cages for a particular strain in a particular room.

Data Element Name:	Total Number Of Litters By Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS005s - Total Litters BS006s - Total Litters BS009 - Number Litters
Initiating Source:	Calculated: Sum of the total number of litters by strain for the time period.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Total number of litters born of this strain during this period.

Data Element Name:	Total Number Of Pairs
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS007 - Total This Date
Initiating Source:	Calculated: A sum of the number of pairs.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of pairs.

Data Element Name:	Total Number Requested by Month
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNN
Data Entry Screen(s):	
Report(s):	BS017s - Number Requested
Initiating Source:	Calculated: This data element is the sum of the number of animals requested by experiment number, strain, and sex for each month.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Number of animals of each strain order requested by month.

Data Element Name:	Total Pairs By Room & Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS010 - Total Pairs Bldg-Room
Initiating Source:	Calculated: A sum of number of pairs by strain and room.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of pairs for a particular strain in a particular room.

Data Element Name:	Total Pairs Per Cage By Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS007 - Sum of Pairs/Cage
Initiating Source:	Calculated: A sum of the number of pairs by strain and room.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of pairs by strain and room.

Data Element Name:	Total Plugged By Room & Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS002s - Total Plugged
Initiating Source:	Calculated: A sum of the number of animals with plugs by room and strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of all animals with plugs by room and strain.

Data Element Name:	Total Pregnant By Room & Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS002s - Total Pregnant
Initiating Source:	Calculated: A sum of the number of pregnant animals by room and strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of all pregnant animals by room and strain.

Data Element Name:	Total Retirement Candidates
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS011 - Total This Period
Initiating Source:	Calculated: A sum of all pairs of animals that are possible retirement candidates for the time period.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of pairs of all possible retirement candidates for the time period.

Data Element Name:	Total Retirement Candidates By Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS011 - Total Retirement Candidates BS011s - Pairs
Initiating Source:	Calculated: A sum of the number of retirement candidates pairs by strain.
Defaults:	
Data Assessments:	
Entity:	
Allowed Values:	
Text Description:	A calculated data element summing the number of all possible retirement candidates by strain.

Data Element Name:	Total Retirement Candidates By Time Period
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS011s - Total This Period
Initiating Source:	Calculated: A sum of number of pairs of animals that are possible retirement candidates for the time period.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of pairs of all possible retirement candidates by time period.

Data Element Name:	Total Surplus For Date
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNN
Data Entry Screen(s):	
Report(s):	BS006 - Total For This Date - Surplus
Initiating Source:	Calculated: A sum of number all surplus animals for the date given in the report.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of all surplus animals for the date given in the report.

Data Element Name:	Total Surplused By Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS006s - Surplus
Initiating Source:	Calculated: A sum of number all surplused animals by strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of all surplused animals by strain during time period

Data Element Name:	Total Surplused Per Litter
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NN
Data Entry Screen(s):	
Report(s):	BS013 - Totals Surplused
Initiating Source:	Calculated: A sum of number surplused from a litter UIN.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of surplused animals from a litter UIN.

Data Element Name:	Total Survey For Date
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNN
Data Entry Screen(s):	
Report(s):	BS006 - Total For This Date - Survey
Initiating Source:	Calculated: A sum of the number of all survey animals for the date given in the report.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of all survey animals for the date given in the report.

Data Element Name:	Total Surveyed By Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS006s - Survey
Initiating Source:	Calculated: A sum of number all survey animals by strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of all survey animals by strain during time period

Data Element Name:	Total Surveyed Per Litter
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NN
Data Entry Screen(s):	
Report(s):	BS013 - Totals Survey
Initiating Source:	Calculated: A sum of number surveyed from a litter UIN.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of survey animals from a litter UIN.

Data Element Name:	Total Unproductive Breeder Pairs
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNNN
Data Entry Screen(s):	
Report(s):	BS010s - Total This Period
Initiating Source:	Calculated: Sum of the total number of unproductive breeder pairs.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Total number of unproductive breeder pairs.

Data Element Name:	Total Unproductive Breeder Pairs By Room
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS010 - Total Unproductive Breeder Pairs
Initiating Source:	Calculated: A sum of number of unproductive pairs by strain and room.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of unproductive pairs for a particular strain in a particular room.

Data Element Name:	Total Unproductive Breeder Pairs By Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNNN
Data Entry Screen(s):	
Report(s):	BS010s - Pairs
Initiating Source:	Calculated: Sum of the number of unproductive breeder pairs by strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Total number of unproductive breeder pairs by strain.

Data Element Name:	Total Unsexed Allocations By Experiment
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNN
Data Entry Screen(s):	
Report(s):	BS012s - Unsexed Allocations
Initiating Source:	Calculated: Sum of the number of unsexed animals allocated by experiment.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Total number of unsexed animals allocated to this experiment on the date of allocation.

Data Element Name:	Total Unsexed By Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS016 - Total Unsexed
Initiating Source:	Calculated: A sum of number of unsexed by litter UIN.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of unsexed for a particular litter UIN.

Data Element Name:	Total Unsexed Culled By Room & Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS003s - Total Unsexed Cull
Initiating Source:	Calculated: A sum of number all unsexed animals culled by room and strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of all unsexed animals culled by room and strain.

Data Element Name:	Total Unsexed Dead By Room & Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS003s - Total Unsexed Dead
Initiating Source:	Calculated: A sum of number all unsexed animals dead by room and strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of all unsexed animals dead by room and strain.

Data Element Name:	Total Unsexed Feeders By Room & Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS001s - Total Unsexed Feeders Set Up BS015 - Total Unsexed
Initiating Source:	Calculated: A sum of number of unsexed feeders by room and strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of unsexed feeder animals set up (established) by room and strain.

Data Element Name:	Total Unsexed Issued By Room & Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS001s - Total Unsexed Issued
Initiating Source:	Calculated: A sum of number unsexed issued by room and strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of unsexed issued animals by room and strain.

Data Element Name:	Total Unsexed Per Litter
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS013 - Total Unsex
Initiating Source:	Calculated: A sum of number of unsexed animals by litter UIN.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of unsexed animals for a particular litter UIN.

Data Element Name:	Total Unsexed Surplused By Room & Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS003s - Total Unsexed Surplus
Initiating Source:	Calculated: A sum of number all unsexed animals surplused by room and strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of all unsexed animals surplused by room and strain.

Data Element Name:	Total Unsexed To Chemistry By Room & Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS003s - Total Unsexed to Chemistry
Initiating Source:	Calculated: A sum of number all unsexed animals sent to chemistry by room and strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of all unsexed animals sent to chemistry by room and strain.

Data Element Name:	Total Unsexed To Issue Other By Room & Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS003s - Total Unsexed To Issue Other
Initiating Source:	Calculated: A sum of number all unsexed animals to issue other by room and strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of all unsexed animals to issue other by room and strain.

Data Element Name:	Total Unsexed To Micro By Room & Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS003s - Total Unsexed to Micro
Initiating Source:	Calculated: A sum of number all unsexed animals sent to microbiology by room and strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of all unsexed animals sent to microbiology by room and strain.

Data Element Name:	Total Unsexed To Pathology By Room & Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS003s - Total Unsexed to Pathology
Initiating Source:	Calculated: A sum of number all unsexed animals sent to pathology by room and strain.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	A calculated data element summing the number of all unsexed animals sent to pathology by room and strain.

Data Element Name:	Total Weaned By Strain
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNNN
Data Entry Screen(s):	
Report(s):	BS014 - Total Weaned
Initiating Source:	Calculated: Sum of the total number of animals weaned by strain for the time period.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Total number of animals weaned by strain for the reporting period.

Data Element Name:	Total Weaned By Treatment
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NNN
Data Entry Screen(s):	
Report(s):	EBS003s - Total Weaned
Initiating Source:	Calculated: The sum of number of pups weaned by treatment.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Total number of pups weaned by treatment.

Data Element Name:	Treatment
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	Treatment-Group-Num
ADABAS File Format:	
Format Description:	NNN
Data Entry Screen(s):	
Report(s):	BS012 - TMT
Initiating Source:	
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	Allocation
Text Description:	Treatment number indicating the initial chemical treatment to be administered to this animal. The chemical, concentration, and the duration that this chemical dose is to be administered is identified by this number.

Data Element Name:	UIN
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	Anim-BIS-UIN-Strain-Code (2A-7N)
ADABAS File Format:	
Format Description:	AA-NNNNNNN
Data Entry Screen(s):	
Report(s):	BS001 - UIN (Conditional) BS002 - UIN (Conditional) BS003 - UIN (Conditional) BS008 BS012 BS013 - Litter Animal BS016 - UIN (Conditional) BS018 EBS002 - Litter Animal
Initiating Source:	
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	Key Wean Weight Removal Animal Disposition Pairs Allocation
Text Description:	Strain code and unique identification number (UIN) of the animal that was assigned or issued.

Data Element Name:	Unsexed UIN
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	AA-NNNNNNN
Data Entry Screen(s):	
Report(s):	BS015
Initiating Source:	Calculated: If the animal is unsexed, then the UIN is transferred to this data element.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Strain code and unique identification number (UIN) of this unsexed animal or block to which this observation applies.

Data Element Name:	Wean Date
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	MM/DD/YY
Data Entry Screen(s):	
Report(s):	BS006 EBS003
Initiating Source:	
Allowed Values:	
Defaults:	
Data Assessments:	Date must be greater than the 'Birth Date.'
Entity:	Wean Weight
Text Description:	Gregorian date that the litters is this group were separated from its mother.

Data Element Name:	Wean Date - Projected
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	MM/DD/YY
Data Entry Screen(s):	
Report(s):	BS005 - Wean Date
Initiating Source:	Calculated: The projected wean date is derived from a look-up table. The projected wean date is species and strain specific.
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	
Text Description:	Gregorian date that the litter is to be separated from its mother. This value is derived from a species and strain specific look-up table.

Data Element Name:	Wean Weight
Short Data Element Name:	
RMS Data Element Name:	
RMS File Format:	
ADABAS Data Element Name:	
ADABAS File Format:	
Format Description:	NN.N
Data Entry Screen(s):	
Report(s):	EBS001 - Litt Weight
Initiating Source:	
Allowed Values:	
Defaults:	
Data Assessments:	
Entity:	Wean Weight
Text Description:	The weight of the littered pups at weaning.

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