



Duke Lemur Center

David Haring, Registrar
3705 Erwin Road
Durham, NC 27705-5000

Phone: (919) 489-3364 ext 228
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dharing@duke.edu

RECEIVED MAR 1 2019

February 20, 2019

Division of Management Authority
U.S. Fish and Wildlife Service
Branch of Permits, MS:1A
5275 Leesburg Pike
Falls Church, VA 22041-3803

Dear To Whom It May Concern:

I am submitting a completed application for re-issuance of the Duke Lemur Center's Endangered/Threatened Species Permit (MA48515B-1). I am enclosing a completed form 3-200-37. All supporting documentation for the application can be found in the enclosed flash drive.

Enclosed is a check for \$100.00 from Duke University for the application processing fee.

Please contact me if you have any questions about the application or need additional information.

Sincerely:



David Haring
Registrar
dharing@duke.edu
919-401-7228



DEPARTMENT OF THE INTERIOR
U.S. FISH AND WILDLIFE SERVICE
DIVISION OF MANAGEMENT AUTHORITY
BRANCH OF PERMITS, MS: 1A
5275 LEESBURG PIKE
FALLS CHURCH VA 22041-3803

FEDERAL FISH AND WILDLIFE PERMIT

1. PERMITTEE

DUKE LEMUR CENTER
DUKE UNIVERSITY
3705 ERWIN ROAD
DURHAM, NC 27705
U.S.A.

2. AUTHORITY-STATUTES
16 USC 1539(a)

REGULATIONS
50 CFR 17.22
50 CFR 17.32

3. NUMBER
MA48515B-1 AMENDMENT

4. RENEWABLE
☐ YES
☒ NO

5. MAY COPY
☒ YES
☐ NO

6. EFFECTIVE
03/23/2016

7. EXPIRES
03/22/2019

8. NAME AND TITLE OF PRINCIPAL OFFICER (If #1 is a business)
ANNE D. YODER
DIRECTOR

9. TYPE OF PERMIT
ENDANGERED/THREATENED SPECIES WILDLIFE

10. LOCATION WHERE AUTHORIZED ACTIVITY MAY BE CONDUCTED

11. CONDITIONS AND AUTHORIZATIONS:

A. GENERAL CONDITIONS SET OUT IN SUBPART D OF 50 CFR 13, AND SPECIFIC CONDITIONS CONTAINED IN FEDERAL REGULATIONS CITED IN BLOCK #2 ABOVE, ARE HEREBY MADE A PART OF THIS PERMIT. ALL ACTIVITIES AUTHORIZED HEREIN MUST BE CARRIED OUT IN ACCORD WITH AND FOR THE PURPOSES DESCRIBED IN THE APPLICATION SUBMITTED. CONTINUED VALIDITY, OR RENEWAL, OF THIS PERMIT IS SUBJECT TO COMPLETE AND TIMELY COMPLIANCE WITH ALL APPLICABLE CONDITIONS, INCLUDING THE FILING OF ALL REQUIRED INFORMATION AND REPORTS.

B. THE VALIDITY OF THIS PERMIT IS ALSO CONDITIONED UPON STRICT OBSERVANCE OF ALL APPLICABLE FOREIGN, STATE, LOCAL, TRIBAL, OR OTHER FEDERAL LAW.

C. VALID FOR USE BY PERMITTEE NAMED ABOVE.

D. ACCEPTANCE OF THIS PERMIT SERVES AS EVIDENCE THAT THE PERMITTEE UNDERSTANDS AND AGREES TO ABIDE BY THE 'GENERAL PERMIT CONDITIONS (COPY ATTACHED).

E. AUTHORIZED TO SELL IN INTERSTATE AND FOREIGN COMMERCE, EXPORT OR RE-EXPORT BLOOD, TISSUE, WHOLE CADAVERS, AND PARTS FROM SPECIES WITHIN THE FOLLOWING FAMILIES: LEMURIDAE, INDRIIDAE, CHEIROGALEIDAE, DAUBENTONIIDAE, TARSIIDAE, LORISIDAE AND HOMINIDAE FOR SCIENTIFIC RESEARCH PROVIDING NO ANIMALS WERE EUTHANIZED FOR THE SOLE PURPOSE OF PROVIDING SPECIMENS.

F. AUTHORIZED TO TAKE BLOOD AND TISSUE FROM LIVING SPECIMENS FOR PURPOSES OF SCIENTIFIC RESEARCH AND FOR ENHANCEMENT OF PROPAGATION OR SURVIVAL OF THE SPECIES.

G. SAMPLES UNDER THIS PERMIT MAY NOT BE USED FOR RESEARCH OR OTHER ACTIVITIES WHICH WILL RESULT IN PRODUCTION OF VIABLE OFFSPRING.

CONDITIONS CONTINUED...

☒ ADDITIONAL CONDITIONS AND AUTHORIZATIONS ALSO APPLY

12. REPORTING REQUIREMENTS

ANNUAL REPORT DUE: 03/31
EMAIL ANNUAL REPORTS TO: PERMITS@FWS.GOV

ISSUED BY:

TITLE

CHIEF, BRANCH OF PERMITS, DMA

DATE

03/23/2016



United States Department of the Interior

FISH AND WILDLIFE SERVICE

International Affairs
5275 Leesburg Pike, MS: IA
Falls Church, VA 22041-3803



Page 2 of 2

SPECIAL CONDITIONS CONTINUED PRT-48515B

- H. A copy of this permit must be maintained by each institution receiving authorized materials.
- I. Appropriate documentation as required by the Convention on International Trade in Endangered Species (CITES) must be obtained from the Division of Management Authority prior to the export or re-export of any cadavers, blood, or tissue samples.
- J. Annual reports should include the following:
 - 1) A current inventory of live and dead specimens,
 - 2) Reports of each sale,
 - 3) Causes of mortalities,
 - 4) Management changes intended to reduce mortality, and
 - 5) Summary of the effectiveness of management changes in reducing mortality.
 - 6) Publications, paper reports produced from specimens traded under this permit.



BRANCH OF PERMITS
U.S. MANAGEMENT AUTHORITY

03/23/2016
DATE



Department of Interior
U.S. Fish and Wildlife Service
Federal Fish and Wildlife Permit Application Form

Type of Activity

U.S. Fish and Wildlife Service
Division of Management Authority
Branch of Permits, MS: IA
5275 Leesburg Pike
Falls Church, VA 22041-3803
1-800-358-2104 or 703-358-2104

**EXPORT/RE-EXPORT/IMPORT/INTERSTATE AND FOREIGN
COMMERCE/TAKE OF ANIMALS (LIVE/ SAMPLES/PARTS/PRODUCTS)
under the Convention on International Trade in Endangered Species
(CITES) and/or the U.S. Endangered Species Act (ESA)**

Complete Sections A or B, and C, D, and E of this application. U.S. address may be required in Section C, see instructions for details. **Instructions on how to make your application complete and help avoid unnecessary delays are attached.**

Section A: Complete if applying as an individual

1.a. Last Name	1.b. First Name	1.c. Middle Name/Initial	1.d. Suffix
2. Date of Birth (mm/dd/yyyy)	3. Telephone Number	3.a. Alternate Telephone Number	4. E-mail address

Section B: Complete if applying on behalf of a business, corporation, public agency, Tribe, or institution

1.a. Name of business, agency, Tribe, or institution Duke University Lemur Center		1.b. Doing business as (DBA) Duke University	
2. Tax identification no. 560-532-129		3. Description of business, agency, Tribe, or institution Conservation institution specializing in prosimian research	
4.a. Principal officer Last name Dye	4.b. Principal officer First Name Greg	4.c. Principal officer Middle name/initial	4.d. Suffix Mr.
5. Principal officer title Interim Director/Director of Operations		6. Primary contact name David Haring (dharing@duke.edu)	
7.a. Business telephone number 919-401-7228	7.b. Alternate telephone number	7.c. Business fax number 919-490-5394	7.d. Business e-mail address dharing@duke.edu

Section C: All applicants complete address information

1.a. Physical address (Street address; Apartment #, Suite #, or Room #; no P.O. Boxes) 3705 Erwin Rd				
1.b. City Durham	1.c. State NC	1.d. Zip code/Postal code 27705	1.e. County/Province Durham	1.f. Country United States
2.a. Mailing address (include if different than physical address; include name of contact person if applicable)				
2.b. City	2.c. State	2.d. Zip code/Postal code	2.e. County/Province	2.f. Country

Section D: All applicants MUST complete

1. Attach the nonrefundable application processing fee in the form of a check or money order payable to the U.S. FISH AND WILDLIFE SERVICE in the amount of \$100 . Federal, Tribal, State, and local government agencies, and those acting on behalf of such agencies, are exempt from the processing fee – attach documentation of fee exempt status as outlined in instructions [50 CFR 13.11(d)].
2. Certification: I hereby certify that I have read and am familiar with the regulations contained in Title 50 Part 13 of the Code of Federal Regulations and the other applicable parts in subchapter B of Chapter I of Title 50 , and I certify that the information submitted in this application for a permit is complete and accurate to the best of my knowledge and belief. I understand that any false statement herein may subject me to the criminal penalties of 18 U.S.C. 1001.
Signature of applicant/Principal Officer for permit (No photocopied or stamped signatures) Date of signature (mm/dd/yyyy)  02/13/19
Please continue to next page

DUKE LEMUR CENTER APPLICATION
(Endangered/Threatened Species permit MA48515B-1)

1. Name and address where you wish the permit to be mailed, if different from page 1. If you wish the permit to be sent to you by means other than regular mail, provide an air bill, pre-paid envelope, or billing information:

Please mail to address on Page 1.

A pre-addressed Federal Express airway bill with billing reference is enclosed.

**2. Who should we contact if we have questions about the application?
(Include name, phone number, and email):**

Mr. David Haring, Registrar
Duke Lemur Center
3705 Erwin Road
Durham, North Carolina 27705
dharing@duke.edu
919-401-7228

3. Have you or any other of the owners of the business (if applying as a business, corporation, or institution), been assessed a civil penalty or convicted of any criminal provision of any statute or regulation relating to the activity for which the application is filed; been convicted, or entered a plea of guilty or nolo contendere, for a felony violation of the Lacey Act, the Migratory Bird Treaty Act, or the Bald and Golden Eagle Protection Act, forfeited collateral, or are currently under any charges for any violations of the laws mentioned above?

NO

4. What activity are you requesting authorization to carry out:

INTERSTATE COMMERCE: We are requesting authorization for interstate commerce of biological samples from CITES protected species (NOT for the sale of live animals).

We currently (and throughout the duration of our expiring permit) distribute biological samples from our captive prosimian primate colony in a variety of ways. We have a large and ongoing collection of biological samples collected and banked opportunistically; we consider this collection a reservoir from which all kinds of future research on these endangered species can be conducted without any additional interaction with the live animal. Typical examples of sample types in our banked collection are blood and blood products collected during routine physical examinations (RPEs), and cadavers, tissues and blood samples collected when an animal dies of natural causes or has to be euthanized due to acute injury or chronic illness. These sample types are variably stored frozen, in RNA-later, or in formalin so as to support as many types of downstream research as possible. If a researcher wants to obtain banked samples, he or she must submit a project proposal to the DLC Research Manager that includes a short project description, PI information including position, academic institution, and contact information, and signatures indicating that they will use the samples for the approved project and not distribute them to a third party without permission from the DLC. This banked collection is continually expanding as new samples, from old and new individuals, become available.

In some cases, researchers obtain samples as part of a live animal use project that has been approved by the DLC Research Committee and the Duke University Institutional Animal Care and Use Committee (IACUC). Examples of samples obtained via this route would be blood, hair, urine, feces, or gland secretions collected for researchers by the DLC veterinary and research staff. Finally, in other cases, samples are requested prior to and collected immediately upon the death of an individual (NOTE: this refers only to opportunistic collection of samples upon death; we will NEVER euthanize an animal for sample collection or other research purposes). In these cases, project proposals are submitted and approved so that samples that require immediate processing (e.g. for the assessment of gene expression or cultivation of cell culture lines) can be obtained when opportunistically available (sudden death of an animal; upon scheduled euthanasia of a chronically ill animal).

5. For EACH animal involved in the proposed activity provide:

We have a collection of biological specimens banked opportunistically from our captive animal colony over the past 52 years. New opportunistically collected specimens are added on a regular basis (daily to weekly, depending on activity). Typically banked specimens are tissues collected at necropsy of an animal which died of natural causes or had to be euthanized due to acute injury or chronic illness, or blood products or urine samples collected during routine physical exams (RPEs). Animal information regarding species represented in our current biological sample collection can be found in Table 1 (scientific name, common name, and taxonomic abbreviation used in other Tables) and Table 2 (individual animal information). Details of the samples themselves (type, date of collection, storage) are given along with the source animal species and ID number in Table 3. Please note that Table 3 is an excel workbook containing several tabs: the first is a summary table of biological samples by species and sample type, and the other tabs contain all individual sample information and are organized by sample type.

Over time, we will continue to bank samples as they are available. Future banked samples will include those collected from individuals already represented in our biological sample collection (e.g.

Duke Lemur Center: Endangered/Threatened Species permit application

organ tissues from the necropsy of a 20 year old animal which has had blood samples collected during multiple RPEs throughout its life). In that example, the animal information can be found on the list provided in [Table 2](#). However, the specific sample data (type, date of collection, storage) would be newly entered in our collection log but will not be found in this permit application.

Furthermore, we have an active breeding colony and are continually adding new individuals from which biological samples may be collected (e.g. the first RPE of a young ring-tailed lemur is generally done at one year of age, where a blood sample banked may be the first sample for that animal entered in our collection). In this case, not only new sample information, but new individual source animal information would be entered in our collection log but would not be found in this permit application. Information for all animals currently in our live colony, even if not as yet represented in the biological sample collection, is included in [Table 2](#) as samples are likely to be taken from those animals during the period of this permit. Any additional animal or sample information will be maintained by the DLC and can be provided upon request or in future renewal applications.

6. The current location of the specimen(s) (address and country):

Duke Lemur Center
3705 Erwin Rd.
Durham, North Carolina 27705
USA

7. Recipient/Sender:

We have distributed biological samples in interstate commerce to a total of 70 principal investigator recipients from 42 accredited academic institutions since 2014 under our expiring permit, and the list of associated research projects can be found in [Table 4](#) (name, position, institution, project title). We here again request a permit that will allow us to continue sale of biological samples within the United States to any DLC-approved researcher from an accredited academic institution for the duration of the permit period. Information on additional recipients of samples under the new permit will be maintained by the DLC and can be provided upon request or in future renewal applications.

SOURCE OF SPECIMEN

8. For captive-bred animals or animal(s) from which the specimen(s) are/were obtained, provide a signed and dated statement from the breeder that includes the following:

- a. Scientific name(genus, species, and, if applicable, subspecies) and common name

Please see Table 1 for scientific and common names of all captive-born individuals

- b. Name and address of the facility where the animals was bred and born;

See Table 2 "Birth Institution" for birth location. "Duke Lemur Center" = Duke Lemur Center, 3705 Erwin Road, Durham NC 27705, USA. See Table 5 for details of other accredited captive animal facilities where animals may have been born prior to transfer to the DLC. These are AZA (Association of Zoos and Aquariums)-accredited, USDA-inspected, ISIS-reporting institutions, and animals routinely move between institutions under recommendations from the Species Survival Plan (SSP) coordinator for the species for regional management of captive breeding to ensure genetic health of the captive population.

- c. Birth/hatch date (mm/dd/yyyy), and, if applicable, identification information;

Please see Table 2 "DOB" for birth date of all captive-born individuals.

- d. Location (name of facility, address, city, State, postal code) of parental stock;

Identifiable by "Birth institution" in Table 2 (see above)

- e. A statement that the animal was bred at the above facility;

I certify that each animal listed in the attached Table 2 as having Duke Lemur Center as birth institution, was bred and born at the Duke Lemur Center in Durham, NC.

Executive Director Duke Lemur Center : Greg Dye

Signature:



Date:

2/22/19

- f. Documentation demonstrating the history of transactions (e.g., chain of custody or ownership of the animal).

Please see [Table 6](#) for all animal transactions of individuals represented in our biological sample collection as well as any animals in our live colony not currently represented (from which samples are likely to be taken in the future). All animal transactions are documented via loan, donation, or transfer agreements between institutions.

9. For EACH animal/specimen taken from the wild, provide the following:

Wild-born individuals are designated by a "WB" under "Birth-type" in [Table 2](#).

a. Scientific name and common name: Please refer to [Table 1](#).

b. Specific location of where, when, and by whom was animal taken from wild:

Please refer to [Table 7](#) "Birth Institution" for capture location of wild-born individuals. All capture missions were undertaken by authorized individuals, with animal capture, care, transport, quarantine, and introduction to the captive colony overseen by qualified senior DLC staff. Names of individuals responsible for various capture missions can be found in the scanned permits corresponding to each capture ([Attachment A](#)). See [Table 7](#) for list of permit numbers for each wild caught CITES protected individual for which we have biological samples in our inventory. Scanned copies of the permits can be found easily by using the PDF bookmarks on [Attachment A](#) and matching permit number and species of the individual.

c. Purpose of removal and length of time or approximate length of time held in captivity:

Animals have been imported from Madagascar to the DLC at several points in time during the 52 year history of the center in order to maintain a captive breeding population to further the Center's goals of prosimian conservation, research, and education. Wild-born animals that entered the DLC collection are either currently still held in captivity (living animals) or did spend the remainder of their lives in captivity (dead animals).

d. If and how any remuneration, either financial or in kind, was provided for taking or capturing animals or for the collection of samples:

No remuneration of any kind was provided for taking or capturing animals or for the collection of samples.

e. Efforts to use captive specimens:

While all individuals are not captive-born, all are captive-held; as such, all biological samples in our collection are obtained from captive animals. The particular suitability of individual specimens is project dependent, and in some cases samples from wild-born, captive-held

Duke Lemur Center: Endangered/Threatened Species permit application

individuals may provide more reliable results than specimens from captive-born, captive-held individuals based on factors such as species, age, sex, sample condition, and available sample sizes.

f. Copies of foreign or domestic collecting permits or agreements:

All animals were obtained after obtaining required permits from their countries of origin and US authorities. Scanned permits for animals brought into the DCL throughout the history of the center can be found in [Attachment A](#).

g Documentation showing specimens were legally acquired:

As above, see permits in [Attachment A](#).

h. Copies of any applicable State, Tribal, Federal or Foreign government permits or licenses that authorized the removal of this animal from the wild:

See permits in [Attachment B](#).

JUSTIFICATION FOR REQUESTED ACTIVITY

10. Provide a full statement justifying the proposed activity, particularly the following:

a. Describe the purpose of your proposed activity.

We request the permit to take and sell in interstate and foreign commerce, export, or re-export blood and tissue, whole cadavers, and parts from species in the families Lemuridae, Indriidae, Cheirogaleidae, Daubentoniidae, Tarsiidae, and Lorisiidae, for scientific research and for enhancement of the propagation and survival of the species

b. Description of the technical expertise of each person (please also include CV or resume), as it relates to the proposed activities

Biological samples are collected by members of the Duke Lemur Center Veterinary and/or Research staff. Please see attached CVs for details of individual expertise ([Attachment C](#)).

c. Copies of contracts, agreements, or other documents that identify persons involved and dates of activities for which authorization is being requested.

The DLC requires potential researchers to submit a written request prior to distribution of samples. Recipients must be from an accredited academic institution, use the samples in a

Duke Lemur Center: Endangered/Threatened Species permit application

project that shows scientific merit and feasibility, and agree not to distribute samples to a third party without the permission of the DLC. Please see [Attachment D](#) as an example of the forms required prior to sample distribution. We store all of these recipient contracts electronically, and details of new requests completed under this permit can be made available upon request or at the time of renewal.

11. A statement on how the activities will enhance or benefit the wild population (e.g., in-situ and ex-situ projects).

The Duke Lemur Center has exhibited a long-term commitment to conservation activities in Madagascar, the natural home of all lemurs. As a founding member of the Madagascar Fauna Group, the DLC has initiated in-country conservation activities for over 25 years. The newly initiated SAVA conservation project continues to expand the DLC's conservation mission ([see Attachment E](#)) for details.

The use of biological samples for scientific research ultimately helps conservation efforts of wild populations in a number of ways. Most obviously, using biological samples from captive-held individuals decreases the need to collect samples from and/or interact with live animals in the wild. Furthermore, it stands to reason that the more we can learn about endangered species, the better our chances of conserving them. By studying the biology of these animals in areas such as morphology, physiology, ontogeny, genomics, and genetics, we can better define species and subspecies status, better understand their ecological requirements, and better determine a conservation plan given the animals and environment we have to work with. The DLC biological sample collection has been described above. Sharing these valuable samples with experts in the scientific community is an important step toward the long-term goal of lemur and other prosimian primate conservation. Please see [Table 8](#) for a list of scientific publications since 2014 that stem from research conducted using biological samples from the DLC collection.

12. If live specimens are to be held in captivity as part of the proposed activity:

Biological samples are at times collected from live animals. Specimens are not held SO THAT samples can be procured, but samples MAY BE procured from specimens held in our living colony if the procedure will not harm the animal and the scientific merit of the project is high. In order to obtain biological samples from our live captive colony, researchers are required to submit project proposals that must be subsequently approved by both the DLC research committee and the Duke University Institutional Animal Care and Use Committee (IACUC) before any sample collection can begin. The DLC policy is to do no research that will cause any animal harm, and there are certain types of sample collection from live animals, such as blood draws, that can be safely and non-harmfully carried out by experienced DLC veterinary staff and as such, do not conflict with our policy and are therefore allowable if approved.

IMPORTS, EXPORTS, OR RE-EXPORTS

13. For shipment of live specimens, the transport conditions must comply with the CITES Guidelines for Transport of Live Animals or, in the case of air transport,

with the International Air Transport Association (IATA) live animal regulations (contact airline for information). As such, describe:

N/A this permit does not include shipment of live animals

14. For import of southern white rhinoceroses from South Africa and Swaziland...

N/A

15. For import of LIVE CITES Appendix-I marine mammal specimens, provide a copy of your FWS or NOAA Fisheries permit or authorization.

N/A

16. For import of CITES Appendix I listed species provide information to show the import is not for primarily commercial purposes as outlined in Resolution Conf. 5.10 (www.cites.org).

N/A permit requested does not include import of specimens.

17. For export of Appendix I listed species provide a copy of the CITES import permit, or evidence one will be issued by the Management Authority of the country to which you plan to export the specimen(s). In accordance with Article III of the CITES treaty, it is required that import permits are issued before the corresponding export permit.

N/A permit is for shipment of tissues/cadavers in interstate commerce only.

18. If the specimen is being re-exported (exporting a specimen that was previously imported into the United States) provide:

N/A

19. All international shipment(s) must be through a designated port. A list of designated ports (where an inspector is posted) is available from <http://www.fws.gov/le/designated-ports.html>. If you wish to use a port not listed, please contact the Office of Law Enforcement for a Designated Port Exemption Permit (form 3-200-2).

N/A permit requested is for domestic shipments only.

Duke Corporate Accounts Payable
Box 104131
Durham, NC 27708
(919) 684-3112



Return Service Requested

Check Date: 02/19/2019

US FISH & WILDLIFE SERVICE
DMA BRANCH OF PERMITS MS-IA
5275 LEESBURG PIKE
FALLS CHURCH, VA 22041-3803

Invoice Number	Invoice Date	Voucher Number	P.O. Number	Reference	Gross Amount	Adjustment Amount	Net Amount
190218USFIS	02/18/2019	DLCRESEARCH		DLCRESEARCH	100.00	0.00	100.00
5300087453					\$100.00	\$0.00	\$100.00

WARNING - Original document has LineMark™ lines in the paper that change from light to dark in reflected to transmitted light.

Duke Corporate Accounts Payable
Box 104131
Durham, NC 27708
(919)684-3112



Date: 02/19/2019

66-156
531

** ONE HUNDRED DOLLARS AND ZERO CENTS **

AMOUNT
\$*****100.00

Pay To
The Order Of

US FISH & WILDLIFE SERVICE
DMA BRANCH OF PERMITS MS-IA
5275 LEESBURG PIKE
FALLS CHURCH, VA 22041-3803

Wells Fargo Bank, N.A.
Chapel Hill, NC 27514

Authorized Signature

WARNING - Original document develops stains from solvent or bleach alterations. • Void Feature Pantograph



Duke Lemur Center

David Haring, Registrar
3705 Erwin Road
Durham, NC 27705-5000

Phone: (919) 489-3364 ext 228
Fax: (919) 490-5394
dharing@duke.edu

RCVD FEB 08 2017 

January 31, 2017

U.S. Fish and Wildlife Service
International Affairs
5275 Leesburg Pike, MS:IA
Falls Church, VA 22041-3803

To Whom It May Concern:

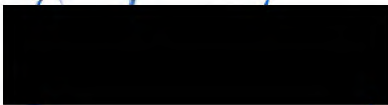
Enclosed please find a report of the Duke University Lemur Center's activities under the Duke University Lemur Center Endangered/Threatened Species permit: (new: 48515B) (old permit: PRT-679043) for the calendar year 2016.

I am including a copy of our current inventory of living animals, a report of all interstate sales of tissues, blood or cadavers of threatened or endangered primates for 2016 (including the DUCPC veterinary program to reduce mortalities), a list of mortalities and causes for calendar year 2016, an inventory of our cadaver collection and a list of publications produced from 2013-2016 from specimens traded under this permit.

If you need a copy of our blood and serum sample inventory or our ultracold tissue collections, please contact me, as those inventories consist of too many pages to print realistically. Digital files of any of these inventory sheets are available, just let me know if you would like that information on a thumb drive.

Please contact me if you have any questions about the enclosed report.

Sincerely:



David Haring
Registrar

REPORT FOR ACTIVITIES UNDER MA48515B-0 FOR CALENDAR YEAR 2016
(Interstate sales of blood, tissue or cadavers of threatened/endangered species)

Blood Sales:

5/18/16

Andrea L. Baden

Hunter College – CUNY

695 Park Avenue, Rm HN724

New York, NY 10065

1662	Cheirogaleus medius –WholeBlood 0.2 ml
3619	Cheirogaleus medius –WholeBlood 0.2 ml
3640	Cheirogaleus medius –WholeBlood 0.2 ml
7020	Microcebus murinus –WholeBlood 0.2 ml
7022	Microcebus murinus –WholeBlood 0.2 ml
7023	Microcebus murinus –WholeBlood 0.2 ml
7016	Microcebus murinus –WholeBlood 0.2 ml
7017	Microcebus murinus –WholeBlood 0.2 ml
7025	Microcebus murinus –WholeBlood 0.2 ml
7050	Microcebus murinus –WholeBlood 0.2 ml
6452	Daubentonia madagascariensis –WholeBlood 0.2 ml
6453	Daubentonia madagascariensis –WholeBlood 0.2 ml
6454	Daubentonia madagascariensis –WholeBlood 0.2 ml
6607	Daubentonia madagascariensis –WholeBlood 0.2 ml
6820	Daubentonia madagascariensis –WholeBlood 0.2 ml
6201	Daubentonia madagascariensis –WholeBlood 0.2 ml
6202	Daubentonia madagascariensis –WholeBlood 0.2 ml
6451	Daubentonia madagascariensis –WholeBlood 0.2 ml
6788	Daubentonia madagascariensis –WholeBlood 0.2 ml
6941	Daubentonia madagascariensis –WholeBlood 0.2 ml
5952	Eulemur mongoz –WholeBlood 0.2 ml
6077	Eulemur mongoz –WholeBlood 0.2 ml
6102	Eulemur mongoz –WholeBlood 0.2 ml
6263	Eulemur mongoz –WholeBlood 0.2 ml
6907	Eulemur mongoz –WholeBlood 0.2 ml
4504	Eulemur mongoz –WholeBlood 0.2 ml
5722	Eulemur mongoz –WholeBlood 0.2 ml
6237	Eulemur mongoz –WholeBlood 0.2 ml
6390	Eulemur mongoz –WholeBlood 0.2 ml
6644	Eulemur mongoz –WholeBlood 0.2 ml
6122	Eulemur rubriventer -WholeBlood 0.2ml
6121	Eulemur rubriventer -WholeBlood 0.2ml
6038	Eulemur rubriventer -WholeBlood 0.2ml
6231	Eulemur rubriventer -WholeBlood 0.2ml
6392	Eulemur rubriventer -WholeBlood 0.2ml
6338	Eulemur rubriventer -WholeBlood 0.2ml

6431	Eulemur rubriventer -WholeBlood 0.2ml
6488	Eulemur rubriventer -WholeBlood 0.2ml
6559	Eulemur rubriventer -WholeBlood 0.2ml
6629	Eulemur rubriventer -WholeBlood 0.2ml
5847	Lemur catta –WholeBlood 0.2 ml
6763	Lemur catta –WholeBlood 0.2 ml
5984	Lemur catta –WholeBlood 0.2 ml
6159	Lemur catta –WholeBlood 0.2 ml
6956	Lemur catta –WholeBlood 0.2 ml
6143	Lemur catta –WholeBlood 0.2 ml
6191	Lemur catta –WholeBlood 0.2 ml
6848	Lemur catta –WholeBlood 0.2 ml
6849	Lemur catta –WholeBlood 0.2 ml
6862	Lemur catta –WholeBlood 0.2 ml
1331	Hapalemur griseus griseus –WholeBlood 0.2 ml
1352	Hapalemur griseus griseus –WholeBlood 0.2 ml
1357	Hapalemur griseus griseus –WholeBlood 0.2 ml
1358	Hapalemur griseus griseus –WholeBlood 0.2 ml
1359	Hapalemur griseus griseus –WholeBlood 0.2 ml
1367	Hapalemur griseus griseus –WholeBlood 0.2 ml
1369	Hapalemur griseus griseus –WholeBlood 0.2 ml
1366	Hapalemur griseus griseus –WholeBlood 0.2 ml
1370	Hapalemur griseus griseus –WholeBlood 0.2 ml
6108	Propithecus coquereli –WholeBlood 0.2 ml
6538	Propithecus coquereli –WholeBlood 0.2 ml
6743	Propithecus coquereli –WholeBlood 0.2 ml
6727	Propithecus coquereli –WholeBlood 0.2 ml
6744	Propithecus coquereli –WholeBlood 0.2 ml
5944	Propithecus coquereli –WholeBlood 0.2 ml
6207	Propithecus coquereli –WholeBlood 0.2 ml
6518	Propithecus coquereli –WholeBlood 0.2 ml
6583	Propithecus coquereli –WholeBlood 0.2 ml
6610	Propithecus coquereli –WholeBlood 0.2 ml
1992	Loris tardigradus –WholeBlood 0.2 ml
2925	Loris tardigradus –WholeBlood 0.2 ml
3185	Galago moholi –WholeBlood 0.2 ml
3190	Galago moholi –WholeBlood 0.2 ml

6/16/16

Katie Seeley

The Ohio State University

The Columbus Zoo and Aquarium

5300 Powell Road

Columbus, OH 43221

6862	Lemur Catta Serum 1 ml
6440	Lemur Catta Serum 1 ml
6229	Lemur Catta Serum 1 ml
6761	Lemur Catta Serum 1 ml
6276	Lemur Catta Serum 1 ml
6857	Lemur Catta Serum 1 ml
6688	Lemur Catta Serum 1.4 ml
6622	Lemur Catta Serum 1 ml
6831	Lemur Catta Serum 1 ml
6863	Lemur Catta Serum 1 ml
6711	Lemur Catta Serum 1 ml
6864	Lemur Catta Serum 1 ml
6532	Lemur Catta Serum 1 ml
6659	Lemur Catta Serum 1.4 ml
6861	Lemur Catta Serum 1 ml
6830	Lemur Catta Serum 1 ml
6351	Lemur Catta Serum 1 ml
6957	Lemur Catta Serum 1 ml
6528	Lemur Catta Serum 1 ml
6140	Lemur Catta Serum 1 ml
6856	Lemur Catta Serum 1 ml
7085	Lemur Catta Serum 1 ml
6936	Lemur Catta Serum 1 ml
6322	Lemur Catta Serum 1 ml
6849	Lemur Catta Serum 1 ml
6159	Lemur Catta Serum 1 ml
5984	Lemur Catta Serum 1 ml
6534	Lemur Catta Serum 1 ml
6854	Lemur Catta Serum 1 ml
6955	Lemur Catta Serum 1 ml
7139	Lemur Catta Serum 1 ml
6996	Lemur Catta Serum 1 ml
7143	Lemur Catta Serum 1 ml
7176	Lemur Catta Serum 1 ml
7087	Lemur Catta Serum 1 ml
6835	Lemur Catta Serum 1 ml
6909	Lemur Catta Serum 1 ml

6/28/16

Jessica Brinkworth

Dept of Anthropology

109 Davenport Hall

607 South Mathews Ave

University of Illinois Urbana-Champaign

Urbana, IL 61801

6936f	Lemur catta - 4 ml whole blood
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7/7/16

Jen Tinsman

Columbia University

1200 Amsterdam Ave.

New York, NY 10027

6395F	Eulemur flavifrons - whole blood .2 ml
6274M	Eulemur macaco - whole blood .2ml

7/13/16

Katie Seeley

The Ohio State University

The Columbus Zoo and Aquarium

5300 Powell Road

Columbus, OH 43221

6956	Lemur Catta Serum 1 ml
7084	Lemur Catta Serum 1 ml
7086	Lemur Catta Serum 1 ml

7/14/16

Jessica Brinkworth

Dept of Anthropology

109 Davenport Hall

607 South Mathews Ave

University of Illinois Urbana-Champaign

Urbana, IL 61801

6711f	Lemur catta - 4 ml whole blood
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7/26/16

Jessica Brinkworth

Dept of Anthropology

109 Davenport Hall

607 South Mathews Ave

University of Illinois Urbana-Champaign

Urbana, IL 61801

6229f	Lemur catta - 4 ml whole blood
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8/02/16

Jessica Brinkworth

Dept of Anthropology

109 Davenport Hall

607 South Mathews Ave

University of Illinois Urbana-Champaign

Urbana, IL 61801

6761f	Lemur catta - 4 ml whole blood
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8/16/16

Jessica Brinkworth

Dept of Anthropology

109 Davenport Hall

607 South Mathews Ave

University of Illinois Urbana-Champaign

Urbana, IL 61801

6835m	Lemur catta - 4 ml whole blood
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8/30/16

Jessica Brinkworth

Dept of Anthropology

109 Davenport Hall

607 South Mathews Ave

University of Illinois Urbana-Champaign

Urbana, IL 61801

7139m	Lemur catta - 4 ml whole blood
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9/06/16

Jessica Brinkworth

Dept of Anthropology

109 Davenport Hall

607 South Mathews Ave

University of Illinois Urbana-Champaign

Urbana, IL 61801

7143m	Lemur catta - 4 ml whole blood
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9/27/16

Jessica Brinkworth

Dept of Anthropology

109 Davenport Hall

607 South Mathews Ave

University of Illinois Urbana-Champaign

Urbana, IL 61801

6996f	Lemur catta - 4 ml whole blood
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10/17/16

Jen Tinsman

Columbia University

1200 Amsterdam Ave.

New York, NY 10027

6970f	Eulemur flavifrons - Whole Blood .2 ml
5850m	Eulemur macaco - Whole Blood .2 ml

12/6/16

Jessica Brinkworth

Dept of Anthropology

109 Davenport Hall

607 South Mathews Ave

University of Illinois Urbana-Champaign

Urbana, IL 61801

6440m	Lemur catta - 4 ml whole blood
6528m	Lemur catta - 4 ml whole blood
6622m	Lemur catta - 4 ml whole blood
6831f	Lemur catta - 4 ml whole blood
6856f	Lemur catta - 4 ml whole blood
6854f	Lemur catta - 4 ml whole blood

Tissue Sales:

1/4/16

Jeff Rogers

Human Genome Sequencing Center

Baylor College of Medicine

One Baylor Plaza, N1519.04

Mail Stop BCM226

Houston, TX 77030

7022	Microcebus murinus Brain – ultracold
7022	Microcebus murinus Brain (frontal cortex) - RNAlater

4/6/16

James M. Wilson, MD, PhD

University of Pennsylvania

Gene Therapy Program

125 S 31st Street, Suite 2000

Philadelphia, PA 19104

3619f	Cheirogaleus medius - spleen
3619f	Cheirogaleus medius - small intestine
3619f	Cheirogaleus medius - liver
3619f	Cheirogaleus medius - lung
3619f	Cheirogaleus medius - serum
6451m	Daubentonia madagascariensis - spleen
6451m	Daubentonia madagascariensis - small intestine
6451m	Daubentonia madagascariensis - liver

6451m	Daubentonia madagascariensis - lung
6451m	Daubentonia madagascariensis - large intestine
6451m	Daubentonia madagascariensis - serum
5982f	Eulemur collaris - spleen
5982f	Eulemur collaris - small intestine
5982f	Eulemur collaris - liver
5982f	Eulemur collaris - lung
5982f	Eulemur collaris - serum
5547f	Eulemur albifrons - small intestine
5547f	Eulemur albifrons - liver
5547f	Eulemur albifrons - lung
5547f	Eulemur albifrons - serum
5957m	Eulemur albifrons - spleen
5957m	Eulemur albifrons - liver
5957m	Eulemur albifrons - lung
5957m	Eulemur albifrons - serum
6177f	Eulemur coronatus - spleen
6177f	Eulemur coronatus - small intestine
6177f	Eulemur coronatus - liver
6177f	Eulemur coronatus - lung
6177f	Eulemur coronatus - large intestine
6177f	Eulemur coronatus - serum
5728m	Eulemur rufus - spleen
5728m	Eulemur rufus - small intestine
5728m	Eulemur rufus - liver
5728m	Eulemur rufus - lung
5728m	Eulemur rufus - large intestine
5728m	Eulemur rufus - serum
6098f	Eulemur sanfordi - spleen
6098f	Eulemur sanfordi - liver
6098f	Eulemur sanfordi - lung
6098f	Eulemur sanfordi - serum
6848m	Lemur catta - spleen
6848m	Lemur catta - small intestine
6848m	Lemur catta - liver
6848m	Lemur catta - lung
6848m	Lemur catta - large intestine
6848m	Lemur catta - serum
2930m	Loris tardigradus - small intestine
2930m	Loris tardigradus - liver
2930m	Loris tardigradus - lung
2930m	Loris tardigradus - large intestine
2930m	Loris tardigradus - serum
2924f	Nycticebus pygmaeus - small intestine
2924f	Nycticebus pygmaeus - liver
2924f	Nycticebus pygmaeus - lung

2924f	Nycticebus pygmaeus - serum
1784f	Otolemur monteiri - spleen
1784f	Otolemur monteiri - liver
1413m	Otolemur garnettii garnettii - liver
1413m	Otolemur garnettii garnettii - lung
914m	Perodicticus potto - spleen
914m	Perodicticus potto - liver
914m	Perodicticus potto - lung
6562f	Propithecus diadema - spleen
6562f	Propithecus diadema - liver
6562f	Propithecus diadema - lung
6562f	Propithecus diadema - serum
6555f	Propithecus tattersalli - spleen
6555f	Propithecus tattersalli - liver
6555f	Propithecus tattersalli - lung
6483f	Eulemur flavifrons - spleen
6483f	Eulemur flavifrons - small intestine
6483f	Eulemur flavifrons - liver
6483f	Eulemur flavifrons - lung
6483f	Eulemur flavifrons - large intestine
6483f	Eulemur flavifrons - serum
6284m	Eulemur macaco - spleen
6284m	Eulemur macaco - small intestine
6284m	Eulemur macaco - liver
6284m	Eulemur macaco - lung
6284m	Eulemur macaco - large intestine
6284m	Eulemur macaco - serum
5952f	Eulemur macaco - spleen
5952f	Eulemur macaco - small intestine
5952f	Eulemur macaco - liver
5952f	Eulemur macaco - large intestine
5952f	Eulemur macaco - serum
6559m	Eulemur rubriventer - spleen
6559m	Eulemur rubriventer - small intestine
6559m	Eulemur rubriventer - liver
6559m	Eulemur rubriventer - lung
6559m	Eulemur rubriventer - large intestine
6559m	Eulemur rubriventer - serum
1369f	Hapalemur griseus griseus - spleen
1369f	Hapalemur griseus griseus - small intestine
1369f	Hapalemur griseus griseus - liver
1369f	Hapalemur griseus griseus - lung
1369f	Hapalemur griseus griseus - large intestine
1369f	Hapalemur griseus griseus - serum
7019m	Microcebus murinus - spleen
7019m	Microcebus murinus - small intestine
7019m	Microcebus murinus - liver
7019m	Microcebus murinus - lung
7019m	Microcebus murinus - large intestine
7019m	Microcebus murinus - serum
321f	Mirza coquereli - spleen

321f	Mirza coquereli - small intestine
321f	Mirza coquereli - liver
321f	Mirza coquereli - large intestine
1998f	Nycticebus coucang - spleen
1998f	Nycticebus coucang - small intestine
1998f	Nycticebus coucang - liver
1998f	Nycticebus coucang - lung
1998f	Nycticebus coucang - serum
2921m	Nycticebus coucang - small intestine
2921m	Nycticebus coucang - liver
2921m	Nycticebus coucang - lung
2921m	Nycticebus coucang - large intestine
2921m	Nycticebus coucang - serum
6774m	Propithecus coquereli - spleen
6774m	Propithecus coquereli - small intestine
6774m	Propithecus coquereli - liver
6774m	Propithecus coquereli - lung
6774m	Propithecus coquereli - serum
6377f	Varecia rubra - spleen
6377f	Varecia rubra - small intestine
6377f	Varecia rubra - liver
6377f	Varecia rubra - lung
6377f	Varecia rubra - large intestine
6377f	Varecia rubra - serum
5604m	Varecia variegata variegata - spleen
5604m	Varecia variegata variegata - small intestine
5604m	Varecia variegata variegata - liver
5604m	Varecia variegata variegata - lung
5604m	Varecia variegata variegata - serum
2560f	Varecia variegata variegata - spleen
2560f	Varecia variegata variegata - small intestine
2560f	Varecia variegata variegata - liver
2560f	Varecia variegata variegata - lung
2560f	Varecia variegata variegata - large intestine
2560f	Varecia variegata variegata - serum

7/20/16

Eric Gaucher

Georgia Institute of Technology

School of Biological Sciences

950 Atlantic Drive, EBB1

Atlanta, GA 30332

6725	Daubentonia madagascariensis - Liver sample - RNA .25 g
5984	Lemur catta - Liver sample - RNA .25 g
2930	Loris tardigradus - Liver sample - RNA .25 g
2924	Nycticebus pygmaeus - Liver sample - RNA .25 g

10/11/16

Elise Lauterbur

Stony Brook University

650 Life Sciences Building

Stony Brook, NY 11794

1357	Hapalemur griseus urine sample
1370	Hapalemur griseus urine sample
1366	Hapalemur griseus urine sample
6407	Eulemur flavifrons urine sample
6655	Eulemur flavifrons urine sample
6754	Eulemur flavifrons urine sample
6657	Eulemur flavifrons urine sample
6993	Eulemur flavifrons urine sample
6395	Eulemur flavifrons urine sample
6622	Lemur catta urine sample
6528	Lemur catta urine sample
6997	Lemur catta urine sample
6956	Lemur catta urine sample
6892	Lemur catta urine sample
6229	Lemur catta urine sample
6917	Varecia variegata urine sample
2560	Varecia variegata urine sample
6020	Varecia variegata urine sample
6950	Varecia variegata urine sample
6976	Varecia variegata urine sample
7045	Varecia variegata urine sample
3619	Cheirogaleus medius muscle sample
2316	Mirza zaza muscle sample
6774	Propithecus coquerli muscle sample

10/31/16

Dr. Derek Wildman

University of Illinois, Urbana-Champaign

1206 West Gregory Drive MC195

Urbana, IL 61801

6727f	Propithecus coquerli Fecal Sample Collected 11/15/2016
6727f	Propithecus coquerli Fecal Sample Collected 11/16/2016
6727f	Propithecus coquerli Fecal Sample Collected 11/18/2016
6727f	Propithecus coquerli Fecal Sample Collected 11/22/2016
6727f	Propithecus coquerli Fecal Sample Collected 11/23/2016
6727f	Propithecus coquerli Fecal Sample Collected 11/28/2016
7073f	Propithecus coquerli Fecal Sample Collected 11/16/2016
7073f	Propithecus coquerli Fecal Sample Collected 11/18/2016
7073f	Propithecus coquerli Fecal Sample Collected 11/21/2016
7073f	Propithecus coquerli Fecal Sample Collected 11/22/2016

7073f	Propithecus coquerli Fecal Sample Collected 11/23/2016
7073f	Propithecus coquerli Fecal Sample Collected 11/28/2016
7131f	Propithecus coquerli Fecal Sample Collected 11/16/2016
7131f	Propithecus coquerli Fecal Sample Collected 11/18/2016
7131f	Propithecus coquerli Fecal Sample Collected 11/21/2016
7131f	Propithecus coquerli Fecal Sample Collected 11/22/2016
7131f	Propithecus coquerli Fecal Sample Collected 11/23/2016
7131f	Propithecus coquerli Fecal Sample Collected 11/28/2016
6987f	Propithecus coquerli Fecal Sample Collected 11/16/2016
6987f	Propithecus coquerli Fecal Sample Collected 11/18/2016
6987f	Propithecus coquerli Fecal Sample Collected 11/21/2016
6987f	Propithecus coquerli Fecal Sample Collected 11/22/2016
6987f	Propithecus coquerli Fecal Sample Collected 11/23/2016
6987f	Propithecus coquerli Fecal Sample Collected 11/28/2016
7218f	Eulemur collaris Fecal Sample Collected 11/18/2016
7218f	Eulemur collaris Fecal Sample Collected 11/22/2016
6145f	Eulemur collaris Fecal Sample Collected 11/18/2016
6145f	Eulemur collaris Fecal Sample Collected 11/22/2016
6634f	Eulemur coronatus Fecal Sample Collected 11/18/2016
6634f	Eulemur coronatus Fecal Sample Collected 11/22/2016
6979f	Eulemur coronatus Fecal Sample Collected 11/18/2016
6979f	Eulemur coronatus Fecal Sample Collected 11/22/2016
6979f	Eulemur coronatus Fecal Sample Collected 11/28/2016
7149f	Eulemur coronatus Fecal Sample Collected 11/22/2016
7149f	Eulemur coronatus Fecal Sample Collected 11/28/2016
7214f	Eulemur coronatus Fecal Sample Collected 11/18/2016
7214f	Eulemur coronatus Fecal Sample Collected 11/22/2016
7214f	Eulemur coronatus Fecal Sample Collected 11/28/2016
6907f	Eulemur mongoz Fecal Sample Collected 11/18/2016
6907f	Eulemur mongoz Fecal Sample Collected 11/22/2016
6972f	Eulemur mongoz Fecal Sample Collected 11/18/2016
6972f	Eulemur mongoz Fecal Sample Collected 11/22/2016
6633f	Varecia rubra Fecal Sample Collected 11/22/2016
6633f	Varecia rubra Fecal Sample Collected 11/28/2016
6205f	Varecia rubra Fecal Sample Collected 11/18/2016
6205f	Varecia rubra Fecal Sample Collected 11/22/2016
6995f	Varecia rubra Fecal Sample Collected 11/18/2016
6995f	Varecia rubra Fecal Sample Collected 11/22/2016
7095f	Varecia rubra Fecal Sample Collected 11/18/2016
7095f	Varecia rubra Fecal Sample Collected 11/22/2016
7154f	Varecia variegata Fecal Sample Collected 11/18/2016
7154f	Varecia variegata Fecal Sample Collected 11/22/2016
7236f	Varecia variegata Fecal Sample Collected 11/18/2016
7236f	Varecia variegata Fecal Sample Collected 11/22/2016

6917f	Varecia variegata Fecal Sample Collected 11/18/2016
6917f	Varecia variegata Fecal Sample Collected 11/22/2016

Cadaver Sales:

10/3/16

Dr. Anne Burrows

Duquesne University

Dept. of Physical Therapy

600 Forbes Ave

Pittsburgh, PA 15282

6862m	Lemur catta head
7142f	Lemur catta head

Current Colony Inventory, February 2017

Latiname	Common_Name	Latin_Abbrev.	M	F	Total
Cheirogaleus medius	Fat-tailed dwarf lemur	CMED	12	9	21
Daubentonia madagascariensis	Aye-aye	DMAD	3	6	9
Eulemur collaris	Collared brown lemur	ECOL	3	2	5
Eulemur coronatus	Crowned lemur	ECOR	6	5	11
Eulemur flavifrons	Blue-eyed black lemur	EFLA	8	5	13
Eulemur macaco	Black lemur	EMAC	1	1	2
Eulemur mongoz	Mongoose lemur	EMON	7	3	10
Eulemur rubriventer	Red-bellied lemur	ERUB	1	2	3
Eulemur rufus	Red-fronted brown lemur	ERUF	1	1	2
Hapalemur griseus griseus	Eastern lesser bamboo lemur	HGG	1	2	3
Lemur catta	Ring-tailed lemur	LCAT	11	23	34
Microcebus murinus	Gray mouse lemur	MMUR	24	26	50
Nycticebus coucang	Slow loris	NCOU	.	1	1
Nycticebus pygmaeus	Pygmy slow loris	NPYG	1	4	5
Otolemur crassicaudatus	Thick-tailed greater bushbaby	OCRA	.	1	1
Propithecus coquereli	Coquerel's sifaka	PCOQ	13	21	34
Varecia rubra	Red ruffed lemur	VRUB	9	6	15
Varecia variegata variegata	Black-and-white ruffed lemur	VVV	6	3	9
Total (ALL)			107	121	228

Loan Inventory, February 2017

Latiname	Common_Name	Latin_Abbrev.	ND	M	F	Total
Daubentonia madagascariensis	Aye-aye	DMAD	1	8	6	15
Eulemur flavifrons	Blue-eyed black lemur	EFLA	.	5	3	8
Microcebus murinus	Gray mouse lemur	MMUR	.	6	1	7
Nycticebus pygmaeus	Pygmy slow loris	NPYG	.	.	1	1
Propithecus coquereli	Coquerel's sifaka	PCOQ	1	17	16	34
Varecia rubra	Red ruffed lemur	VRUB	.	.	3	3
Total (ALL)			2	36	30	68

Date of Death	Species	DLC ID#	Name	Cause of Death	Age at Death (yrs)
1/7/2016	Cmed	3640	Vireo	Acute death; lymphoma	10.5
1/17/2016	Pcoq	7232	Euphemia-A	Acute death; cerebral hemorrhage, possible aspiration	0.0
1/29/2016	Lcat	6862	Tugger	Euthanized; stroke	32.7
3/27/2016	Eruf	7238	Redbay-A	Stillborn	0.0
4/1/2016	Pcoq	6207	Tiberius	Acute death; bronchopneumonia, septicemia	18.2
4/28/2016	Vrub	5587	Cynthia	Euthanized; Necrosupporative cholangiohepatitis	35.1
5/12/2016	Dmad	6915	Ichabod	Acute death; Bronchointerstitial pneumonia	7.8
5/26/2016	Pcog	6843	Lucius Verus	Euthanized; Septicemia (listeria)	11.4
10/25/2016	Mmur	7026	Mrs. Dash	Acute death; pneumonia	10.3
10/25/2016	Dmad	6604	Merlin	Acute death; pericardial effusion, avocado toxicity	22.4
10/25/2016	Dmad	6941	Norman Bates	Acute death; pericardial effusion, avocado toxicity	7.6
10/26/2016	Dmad	6454	Morticia	Acute death; pericardial effusion, avocado toxicity	28.4
10/26/2016	Dmad	6866	Angelique	Acute death; pericardial effusion, avocado toxicity	11.1

Veterinary Program to Reduce Mortalities at Duke Lemur Center 2017 report

The following veterinary program was initiated in 1998, and is an ongoing process of improving overall health of the colony and reducing mortalities. Two Veterinarians (Dr Cathy Williams and Dr. Bobby Schopler) with the assistance of two registered veterinary technicians assures that the Duke Lemur Center has full time Veterinary coverage. DLC now has digital radiography including dental, an endoscope, in house blood chemistry capability, ultrasonography leading to efficient, accurate Veterinary Department diagnostic capability.

- A bi-yearly physical exam (including hairs and TB tests) for each animal in the colony.
- De-worming as indicated.
- Periodic viral titers on selected individuals.
- Prophylactic dental cleanings as necessary (biyearly or more often if indicated).
- Rabies vaccines for all animals with access to outdoor housing.
- Quarantine for new animals entering the colony.
- Veterinary oversight of diet formulation and food handling procedures. (In 2016 we discovered avocado to be toxic to aye aye and this food has been removed from the diet rotation for all lemurs.
- Veterinary oversight of pest control program.
- Efficacy of cage sanitation monitored regularly via Rodac plate testing.
- Water quality monitoring program.
- Food quality monitoring program.
- Complete post-mortem examinations, including histopathology on all deceased animals, to determine individual and colony patterns of mortality.

No.	F/L	Year Pub	Author	Publication
1277	L	2015	Carrigan MA, Uryasey O, Frye CB, Echman BL, Myers CR, Hurley TD and Benner SA	Hominids adapted to metabolize ethanol long before human-directed fermentation. PNAS 12(2):458-463 doi: 10.1073/pnas.1404167111
1283	L	2015	Blair C, Campbell CR and Yoder AD	Assessing the utility of whole genome amplified DNA for next-generation molecular ecology. Molecular Ecology Resources 15:5 p 1079-1090
1285	L	2015	Harstone-Rose A, Parkinson JA, Criste T, and Perry JMG	Comparing apples and oranges - the influence of food mechanical properties on ingestive bite sizes in lemurs. AJPA 157:3 p. 513-518. DOI: 10.1002/ajpa.22726
1286	L	2015	Petty JM and Drea CM	Female rule in lemurs is ancestral and hormonally mediated, <i>Scientific Reports</i> 5. doi:10.1038/srep09631
1292	L	2015	Meyer WK, Vankat A, Kermany AR, van de Geijn B, Zhang S, and Przeworski MP	Evolutionary history inferred from the de novo assembly of a non-model organism, the blue-eyed black lemur. Molecular Ecology. DOI: 10.1111/mec.13327
1293	L	2015	Huq E, Wall CE, Taylor AB	Epaxial muscle fiber architecture favors enhanced excursion and power in the leaper <i>Galago senegalensis</i> . Journal of Anatomy doi: 10.1111/joa.12351
1294	L	2015	Tennenhouse EM	The influence of growth patterns on sexual size monomorphism in lemurs. Journal of Evolutionary Biology. DOI: 10.1111/jeb.12688
1295	L	2015	Smith TD, Mucklinski MN, Jankord KD, Progar AJ, Bonar CJ, Evans S, Williams L, Vinyard CJ and DeLeon VB	Dental maturation, eruption, and gingival emergence in the upper jaw of newborn primates. Anatomical Record 298:12 p 2098-31. DOI: 10.1002/ar.23273
1297	L	2015	McKenney, EA, Rodrigo A, and Yoder AD	Patterns of Gut Bacterial Colonization in Three Primate Species. Plos One. DOI: 10.1371/journal.pone.0124618
1298	L	2015	Pastorini, J, Sauter ML, Sussman RW, Gould L, Cuozzo FP, Fernando P, Nievergelt CM, Mundy NI	Comparison of the genetic variation of captive ring-tailed lemurs with a wild population in Madagascar. Zoo Biology DOI: 10.1002/zoo.21225
1299	L	2015	Chinnadurai SK and Williams CV	The minimum alveolar concentration of sevoflurane in ring-tailed lemurs (<i>Lemur catta</i>) and aye-ayes (<i>Daubentonia madagascariensis</i>). Veterinary Anaesthesia and Analgesia. DOI: 10.1111/vaa.12266

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1303	L	2015	Perry JMG, St Clair EM, and Hartstone-Rose A	Craniomandibular signals of diet in adapids. AJPA DOI: 10.1002/ajpa.22811
1312	L	2016	Larsen PA, Hayes CE, Williams CV, Junge RE, Razafindramanana J, Mass V, Rakotondrainibe H, and Yoder AD	Blood transcriptomes reveal novel parasitic zoonoses circulating in Madagascar's lemurs. Biology Letters.
1315	L	2016	Grogan KE, McGinnis GJ, Sauter ML, Cuozzo FP and Drea CM	Next-generation genotyping of hypervariable loci in many individuals of a non-model species: Technical and theoretical implications. BMC Genomics 17:204. Available from: http://www.biomedcentral.com/1471-2164/17/204
1322	L	2016	Yoder AD, Campbell CR, dos Reis M, Blanco M, Ganzhorn JU, Goodman SM, Hunnicutt KE, Larsen PA, Kappeler PM, Rasoloarison RM, Ralison JM, Swofford D, Weisrock DW	Geogenetic patterns in mouse lemurs (genus <i>Microcebus</i>) reveal the ghosts of Madagascar's forests past. PNAS
1323	L	2016	Bradley B, Snowdon C, McGrew W, Lawler R, Guevara E, McIntosh A, O'Connor T	Nonhuman primates avoid the detrimental effects of prenatal androgen exposure in mixed-sex litters. American Journal of Primatology
1324	L	2016	Rensch T, Villar D, Horvath J, Odom DT, Flicek P	Mitochondrial heteroplasmy in vertebrates using ChIP-sequencing data. Genome Biology.
1326	L	2016	Gochman SR, Brown MB, Dominy NJ	Alcohol discrimination and preferences in two species of nectar-feeding primate. Royal Society Open Science.
1328	L	2016	Smith TD, Martell MC, Rossie JP, Bonar CJ and DeLeon VB	Ontogeny and microanatomy of the nasal turbinates in lemuriformes. The Anatomical Record.
1329	L	2016	DeLeon VB, Smith TD and Rosenberger AL	Ontogeny of the postorbital region in tarsiers and other primates. The Anatomical Record
1330	L	2016	Faherty SL, Villanueva-Canas JL, Klopfer PH, Alba MM, Yoder AD	Gene expression profiling in the hibernating primate, <i>Cheirogaleus medius</i> . Genome Biology and Evolution. doi: 10.1093/gbe/evw163
1340	L	2017	Larsen PA and Yoder AD	The Alu neurodegeneration hypothesis: A primate-specific mechanism for neuronal transcription noise, mitochondrial dysfunction, and manifestation of neurodegenerative disease. Alzheimer's & Dementia.

Name	Species	DLC ID	sex	DOB	DOD	circumstance
Ruth-A	CMED	637	F	6/28/1978	6/29/1978	
Zebadee	CMED	656	M	7/14/1980	10/8/1987	
Dias	CMED	613	F	7/18/1974	9/22/1993	E
Nathaniel	CMED	1607	M	7/31/1983	10/24/2003	E
Herodias	CMED	684	F	7/18/1982	5/27/2004	E
Tertulla	CMED	1653	F	7/18/1985	1/5/2007	FD @ 1:30 pm
Lydia	CMED	687	F	8/12/1982	10/9/2007	UNKNOWN
Vireo-B	CMED	7054	F	7/16/2011	7/17/2011	FD
Jonas	CMED	1636	M	6/17/1985	1/23/2015	E
Vireo	CMED	3640	F	7/15/2005	1/7/2016	FD @ 10:45 AM
Ardrey-A	Dmad	6771	m	12/15/2000	12/20/2000	NX
Salem-A	DMAD	6919	ND	10/12/2008	10/12/2008	FD
Ozony Avelo	DMAD	6788	M	10/25/2001	1/19/2015	DIVC
Ichabod	DMAD	6915	M	7/23/2008	5/11/2016	DIVC
Norman Bates	DMAD	6941	M	4/3/2009	10/25/2016	DIVC
Merlin	DMAD	6604	M	6/5/1994	10/25/2016	DIVC
Morticia	DMAD	6454	F	11/30/1988	10/26/2016	DIVC
Angelique	DMAD	6866	F	9/5/2005	10/26/2016	DIVC
Bellatrix-B	DMAD	7260	M	11/7/2016	11/11/2016	DIVC
Deborah	EALB	5547	F	5/18/1980	12/10/2014	E
Yvette-D	ECOL	1573	F	4/23/1974	4/25/1974	
Yvette-E	ECOL	2514	M	4/11/1975	4/11/1975	
Yvette-F	ECOL	3502	M	3/23/1977	3/25/1977	
Alain	ECOL	5800	M	5/11/1983	5/4/2004	FD in AM
Nanette	ECOL	5776	F	4/19/1983	6/7/2008	E
Claire	ECOL	LCF-100055	F	3/16/1992	9/26/2013	E
Alphonse	ECOL	5919	M	10/1/1981	11/2/2013	E
Francoise	ECOL	5982	f	4/8/1985	3/5/2014	E
Geraldine	ECOL	6305	F	4/18/1989	11/24/2014	E
Giscard	ECOL	6225	M	4/14/1988	10/6/2015	E
Ra	ECOR	4526	M	7/7/1977	3/25/1983	
Amun Ra	ECOR	5774	M	4/18/1983	6/11/1983	
Meritaten-A	ECOR	6111	M	6/12/1986	6/17/1986	
Sitamon-A	ECOR	6151	M	4/7/1987	4/7/1987	FD
Hathor-B	ECOR	6186	F	5/8/1987	5/8/1987	FD in AM
Isis-C	ECOR	6599	M	5/17/1994	6/2/1994	
Meritaten-D	ECOR	6635	M	4/30/1995	5/3/1995	FD in AM
Bastet-E	ECOR	6678	M	4/25/1996	5/21/1996	
Bes	ECOR	6251	M	5/18/1988	1/31/2001	E
Zoser	ECOR	6034	M	10/1/1979	7/1/2002	E
Khufu	ECOR	6035	M	10/1/1980	10/25/2002	E
Nefertiti	ECOR	4525	F	7/18/1977	4/11/2003	DIVC
Tefnut	ECOR	6438	F	5/21/1991	10/31/2005	E
Istnofret	ECOR	6441	F	6/4/1991	5/29/2008	E

Meritaten	ECOR	5937	F	5/29/1984	10/24/2011	E
Bastet	ECOR	6177	F	5/1/1987	10/29/2013	E
Nefertari	ECOR	6366	F	4/11/1990	2/25/2014	E
Hepburn-A	EFLA	6458	F	3/5/1992	3/7/1992	
Hepburn-C (b)	EFLA	6654	F	3/11/1996	3/13/1996	
Foster-B	EFLA	6809	F	3/19/2003	3/19/2003	FD in AM
Goldie	EFLA	6748	F	3/25/1999	2/29/2004	
Lovett	EFLA	6768	M	9/24/2000	10/25/2004	E
Witherspoon	EFLA	6793	F	3/4/2002	1/6/2006	DIVC
Foster-D	EFLA	6890	F	3/26/2007	3/26/2007	FD in AM
Lange	EFLA	6521	F	3/11/1993	5/7/2007	DIVC
Foster-E	EFLA	6906	M	3/20/2008	3/20/2008	FD in AM
Barrymore	EFLA	6248	M	5/9/1988	3/25/2011	E
Lamour	EFLA	6395	F	11/1/1989	8/3/2011	E
Redford	EFLA	6462	M	3/13/1992	7/29/2014	E
Hopkins	EFLA	6655	M	3/11/1996	3/21/2015	E
Frodo-B	EFUL	1571	F	4/20/1974	4/22/1974	
Sal-D	EFUL	2515	M	4/20/1975	4/22/1975	
Liby-A	EFUL	5621	F	5/2/1981	5/2/1981	
Frey-A	EFUL	6061	M	3/24/1986	3/24/1986	
Frey-B	EFUL	6062	F	3/24/1986	3/24/1986	
Frigga	EFUL	6123	F	3/31/1984	1/22/2014	E
Halcione-A	EMAC	5814	F	6/15/1983	6/15/1983	
Danae-C	EMAC	5830	ND	2/4/1984	2/4/1984	
Danae-D	EMAC	6056	F	3/20/1986	4/2/1986	E
Latona-B	EMAC	6457	F	3/2/1992	3/2/1992	
Blanche	EMAC	5999	F	10/1/1981	8/15/2000	E
Teucer	EMAC	6284	M	3/18/1989	11/6/2013	E
Deucalion	EMAC	6274	M	3/15/1989	12/26/2013	E
Latona	EMAC	5859	F	3/29/1984	12/3/2014	E
	EMON	4519	F	wild born	10/31/1978	UNKNOWN
Concepcion-A	EMON	6188	M	4/25/1987	4/30/1987	
Carmen-B	EMON	6383	F	5/7/1990	5/7/1990	FD
Chiquita-B	EMON	6387	F	6/7/1990	6/7/1990	
Gustavo	EMON	6030	M	6/21/1985	11/22/2003	
Moheili-A	EMON	6942	F	4/19/2009	4/19/2009	
Fabio	EMON	6237	M	4/23/1988	12/15/2010	E
Concepcion	EMON	5952	F	10/15/1984	6/18/2011	DIVC
Sancho	EMON	5722	M	10/1/1982	12/14/2012	FD @ 8:30 AM
Maddie-A	EMON	7147	M	4/5/2013	4/5/2013	FD
Carolina-A	EMON	7148	M	4/11/2013	4/14/2013	FD
Moheili	EMON	6263	F	5/13/1987	10/4/2014	DIVC
Guadalupe	EMON	6645	F	5/26/1995	11/26/2014	E
Carolina-B	EMON	7216	F	6/2/2015	6/2/2015	FD @ 9:10 AM
Flor	EMON	6102	F	5/20/1986	12/14/2015	E
Navajo	ERUB	6392	M	10/1/1988	9/18/2012	FD
Fox	ERUB	6629	F	4/7/1995	6/16/2015	E

Mohawk	ERUB	6121	M	10/1/1982	7/31/2015	DIVC
Hopi	ERUB	6358	F	3/1/1990	8/25/2015	E
Calo-B	ERUF	1567	M	4/15/1974	4/15/1974	
Hermione-A	ERUF	1566	M	4/15/1974	4/15/1974	
Calo-C	ERUF	2508	M	3/28/1975	3/30/1975	
Tana-C	ERUF	2536	F	3/13/1976	3/13/1976	
Calo-F	ERUF	3501	M	3/20/1977	3/22/1977	
Crimson-C	ERUF	5959	M	2/26/1985	2/26/1985	
Radish-B	ERUF	6672	F	4/8/1996	4/8/1996	
Rage	ERUF	6287	M	3/19/1989	12/10/2002	DIVC
Redrover	ERUF	5728	M	3/1/1982	8/11/2010	E
Fiery	ERUF	5729	M	3/3/1983	6/21/2013	E
Fara	ESAN	5633	F	5/31/1981	7/16/1981	
Meshak	ESAN	4564	M	4/24/1979	8/7/1983	
Niry	ESAN	5948	M	10/1/1981	12/3/2005	E
Hery	ESAN	6044	M	11/29/1985	10/3/2007	UNKNOWN
Haja	ESAN	6546	M	5/12/1993	11/18/2007	UNKNOWN
Bozy	ESAN	6181	F	5/2/1987	12/3/2007	UNKNOWN
Bao	ESAN	6509	F	6/30/1992	3/28/2013	E
Fara	#N/A	#N/A	#N/A	#N/A	#N/A	E
Adriana-A	EUL	1558	F	3/26/1974	3/26/1974	
Bathsheba-D	EUL	2513	M	4/11/1975	4/11/1975	
Zerlina-A	EUL	2519	M	4/27/1975	4/27/1975	
Absalom	EUL	576	M	1/9/1971	11/27/1975	FD in AM
Tia-A	EUL	2533	F	2/28/1976	2/28/1976	
Mamie	EUL	2545	F	4/5/1976	4/6/1976	
Bathsheba-E	EUL	2550	F	4/9/1976	4/9/1976	
Bathsheba-F	EUL	2551	F	4/9/1976	4/10/1976	
Miriam-A	EUL	2566	M	6/30/1976	6/30/1976	
Yen-B	EUL	2573	M	8/12/1976	8/13/1976	
Scarlett II-B	EUL	2577	M	3/8/1977	3/8/1977	
Pandora-A	EUL	2587	M	3/19/1977	3/19/1977	
Pandora-B	EUL	2588	F	3/19/1977	3/19/1977	
Bathsheba-G	EUL	3527	M	5/16/1977	5/18/1977	
Tina-A	EUL	3534	M	1/27/1978	1/27/1978	
Pasipa-A	EUL	3579	ND	4/30/1978	4/30/1978	
Song-A	EUL	4529	M	2/26/1979	2/26/1979	
Song-B	EUL	4530	F	2/26/1979	2/26/1979	
Hermione-B	EUL	5501	M	8/28/1979	8/28/1979	
Bathsheba-K	EUL	5553	F	6/6/1980	6/6/1980	
Tirzah	EUL	5550	F	5/21/1980	6/28/1980	
Solo	EUL	5536	M	5/3/1980	9/26/1980	
Claudette-A	EUL	5576	M	3/17/1981	3/20/1981	
Johanna-A	EUL	5943	F	7/3/1984	7/3/1984	
Signe	EUL	4579	F	5/16/1979	1/6/1986	

Gomer	EUL	5530	M	4/28/1980	5/24/1991	E
Ira	EUL	6367	M	4/17/1990	6/14/1999	FD in AM
Babette	EUL	5512	F	3/24/1980	12/10/1999	E
Rabodo	EUL	6315	M	5/18/1989	9/15/2006	E
Matthan	EUL	6081	M	4/16/1986	3/30/2015	E
Hannibal	EUL	6112	M	6/12/1986	9/8/2015	E
Kish	EUL	6184	M	5/7/1987	11/29/2015	E
Tahpenes	EUL	6257	F	7/11/1988	12/7/2015	E
Demitour	GDEM	3022	M	11/11/1984	1/1/1988	
Demiquaver-A	GDEM	3134	F	11/7/1988	11/7/1988	
Demigod	GDEM	3156	M	8/25/1988	3/8/1991	UNKNOWN
unknown	Gmoh	304	m	<6/1/1963	4/20/1967	
Sweetbay-A	GMOH	1076	M	1/25/1982	1/25/1982	
Basswood	GMOH	2099	M	8/18/1984	9/3/1984	
Bustic	GMOH	3005	M	10/17/1984	12/10/1984	
Amyris	GMOH	3008	M	11/12/1984	12/10/1984	
Hawthorne-A	GMOH	3011	F	12/25/1984	12/31/1984	
Strongbark	GMOH	3009	M	12/13/1984	2/8/1985	
Pussywillow-B	GMOH	3019	ND	3/22/1985	3/22/1985	
Beech-C	GMOH	3024	ND	4/28/1985	5/3/1985	
Baobab	GMOH	1080	M	3/8/1980	5/15/1985	
Alianthus-C	GMOH	3031	ND	6/4/1985	6/4/1985	
Anaqva	GMOH	3007	F	11/12/1984	10/6/1985	
Ginko-A	GMOH	3057	ND	12/16/1985	12/17/1985	
JUNEBERRY	GMOH	2016	F	1/26/1980	12/19/1985	DIVC
Sorreltree	GMOH	2041	M	5/11/1981	1/24/1986	E
Hackberry-A	GMOH	3074	F	4/30/1986	5/9/1986	
SilverBell-B	GMOH	3079	ND	5/24/1986	5/25/1986	
Lyonia-A	GMOH	3082	ND	7/8/1986	7/10/1986	
Chinquapin-C	GMOH	3085	M	8/9/1986	8/14/1986	
Papaya-B	GMOH	3116	M	9/4/1987	9/14/1987	
Arbutus	Gmoh	2000	m	1/26/1980	10/15/1987	NX
Whiteoak	GMOH	2061	M	12/6/1983	7/26/1988	E
Pond-Apple	GMOH	3123	F	2/29/1988	12/24/1988	
Papaya-D	GMOH	3138	F	1/25/1989	2/7/1989	
Mimosa	GMOH	1087	F	3/8/1980	6/26/1989	UNKNOWN
Seagrape	GMOH	3141	F	2/1/1989	9/24/1998	FD @ 10:00 am
Sugarpine	GMOH	3158	F	10/26/1990	1/26/2002	FD in AM
Silverpalm	GMOH	3143	F	2/2/1989	3/1/2003	UNKNOWN
Kepenzi	GMOH	3187	M	3/5/1999	2/15/2007	DIVC
Agave	GMOH	3190	M	2/22/2003	1/17/2008	DIVC
Farkleberry	GMOH	3185	M	8/9/2002	5/12/2009	
Bewitched	HGG	1302	F	12/1/1967	11/25/1977	DIVC
Beauty	HGG	1317	F	12/1/1982	11/13/1984	
Behold	HGG	1323	F	12/1/1983	9/1/1985	

Beclouded-B	HGG	1325	M	11/21/1985	11/25/1985	FD @ 1:00 pm
Bedeveled	HGG	1311	M	6/20/1980	3/16/1995	E
Beclouded	HGG	1313	F	12/1/1976	8/13/1997	E
Beltane	HGG	1353	F	4/12/1994	1/27/2002	FD in AM
Behemoth	HGG	1331	F	5/1/1989	1/31/2003	1/31/2003
Behave	HGG	1337	F	7/8/1991	6/29/2003	DIVC
Bejeweled	HGG	1354	M	5/13/1994	3/14/2005	
Belittle	HGG	1360	F	4/9/1996	10/23/2008	UNKNOWN
Beamish	HGG	1359	M	3/27/1996	2/25/2009	E
Munchkin	HGG	1371	M	1/25/2000	7/15/2011	UNKNOWN
Becool	HGG	1367	F	5/9/1998	8/21/2012	E
unknown	Hgg	unknown	nd	unknown	unknown	
Bediddley	HGRI	1333	M	5/22/1989	2/10/2010	E
Calpurnia-A	LCAT	1534	M	3/13/1973	3/19/1973	
Atossa-B	LCAT	6343	F	3/16/1990	3/25/1990	
Dory-A	LCAT	6661	ND	3/20/1996	3/26/1996	
Molon	LCAT	6808	F	3/18/2003	10/25/2004	E
Sophia-A	LCAT	6938	F	3/21/2009	4/10/2009	
Leto	LCAT	6953	M	7/8/2009	8/12/2009	FD @ 8:00 am
Nemo	LCAT	6143	M	3/23/1987	10/17/2010	FD
Dorieus-B	LCAT	7057	M	7/19/2011	7/19/2011	DIVC
Dorieus-C	LCAT	7058	F	7/19/2011	7/19/2011	DIVC
Cap N' Lee	LCAT	6848	M	3/25/2000	10/7/2011	FD
Justine-B	LCAT	7101	F	6/20/2012	6/20/2012	DIVC
Justine-A	LCAT	7100	F	6/20/2012	6/21/2012	DIVC
Dorieus-D	LCAT	7117	M	7/7/2012	7/7/2012	FD
Dorieus-F	LCAT	7138	F	3/23/2013	4/15/2013	E
Hibernia-A	LCAT	7145	M	3/29/2013	4/19/2013	E
Lycus	LCAT	5977	M	3/30/1985	8/21/2013	FD @ 8:45 am
Penelope	LCAT	7142	F	3/28/2013	5/24/2014	DIVC
Liesl-A	LCAT	7205	M	3/19/2015	3/21/2015	DIVC
Dory	LCAT	6276	F	3/15/1989	6/9/2015	E
Tugger	LCAT	6862	M	5/16/1983	1/29/2016	E
Tejinder	LTAR	1918	M	7/26/1986	5/25/2002	E
Samantha	LTAR	2925	F	11/6/1991	10/7/2008	E
Anil	LTAR	1992	M	3/22/1991	1/5/2009	E
Abu-A	LTAR	2934	F	10/26/2009	10/26/2009	FD @ 9:30 AM
Lavoris	LTAR	2930	M	10/17/1992	6/16/2010	E
Vanilla	MMUR	1812	F	7/6/1984	7/8/1994	E
Eglantine	MMUR	845	F	7/16/1980	7/27/1995	E
Angelica	MMUR	1830	F	6/20/1985	1/12/1999	E
Cornsilk	MMUR	7011	F	7/11/1995	7/27/2003	FD in AM
Hemp	MMUR	7003	M	8/24/1990	3/11/2005	E
Rosehip	MMUR	7006	M	6/17/1994	10/17/2006	E
Musk Rose	MMUR	7016	M	2/13/1995	12/2/2008	E
Kudzu	MMUR	7017	M	6/16/1997	4/28/2009	E

Kudzu	MMUR	7017	M	6/16/1997	4/28/2009	E
Alfalfa	MMUR	7019	M	7/15/1997	6/4/2009	E
Alfalfa	MMUR	7019	M	7/15/1997	6/4/2009	E
Basil	MMUR	7022	F	8/8/2001	9/28/2010	E
Wilbur	MMUR	7024	M	7/29/2002	10/3/2012	FD @ 12:30 PM
Cilantro	MMUR	7021	M	7/27/2001	10/21/2012	FD 8:30 AM
Tobacco	MMUR	7065	M	8/15/2011	2/10/2013	FD @ 9:30 am
Tobacco	MMUR	7065	M	8/15/2011	2/11/2013	
Orville	MMUR	7025	M	7/29/2002	5/3/2013	E
Mrs Dash	MMUR	7026	F	6/26/2006	10/25/2016	FD @ 9:00 AM
Wormwood	MMUR	7027	M	5/26/2007	1/5/2017	FD
unknown	Mmur	unknown	nd	unknown	unknown	
Dangoro	MZAZ	340	M	4/13/1986	4/21/1991	FD in AM
Papelika	MZAZ	339	F	6/16/1985	5/30/1996	E
Arosy	MZAZ	315	M	8/25/1979	8/4/1997	E
Monjo	MZAZ	360	M	4/21/1987	11/20/2002	E
Totoroka-A	MZAZ	2320	M	5/26/2003	5/27/2003	
Totoroka-B	MZAZ	2321	M	5/26/2003	5/28/2003	
Hanka	MZAZ	2301	F	5/12/1990	9/1/2005	E
Boaky	MZAZ	2304	M	3/19/1991	1/24/2006	E
Buddy	MZAZ	2316	m	6/2/1994	6/18/2012	E
Lahkshmani	NCOU	1998	F	5/18/1993	7/30/2013	E
Skimmer-D	NPYG	2920	ND	5/14/2001	5/23/2001	
Skimmer-E	NPYG	2922	M	3/4/2002	3/5/2002	FD @ 3:00 am
Pygmy Hunter	NPYG	2926	M	7/27/2002	4/4/2012	DIVC
Doodlebug	NPYG	2921	M	3/4/2002	5/8/2012	E
Junebug-A	NPYG	7102	M	6/20/2012	7/3/2012	DIVC
Skimmer	NPYG	2901	F	3/15/1994	6/14/2013	E
Red Admiral	NPYG	2928	M	6/1/2006	6/17/2015	E
Rutile-B	OGG	1422	M	11/8/1986	11/9/1986	
Emerald-A	OGG	1424	M	1/12/1987	1/13/1987	
Gallium-A	OGG	8011	ND	10/7/1989	10/14/1989	
Spessartite	OGG	8028	M	3/6/1992	3/3/2012	E
unk adult	Ogg	unknown	nd	unknown	unknown	
Usiku-A	OMA	82	ND	3/14/1968	3/14/1968	
Niobe-E	OMA	755	F	5/13/1975	5/13/1975	
Zola-A	OMA	759	F	8/10/1975	8/11/1975	
Mosi-A	OMA	1729	F	4/29/1982	5/6/1982	
Iago-C	OMA	1744	M	4/29/1983	4/30/1983	
Lela-C	OMA	1754	M	6/9/1984	6/11/1984	

Pili-C	OMA	1765	ND	8/12/1984	8/12/1984	
Pili-D	OMA	1766	M	8/12/1984	8/12/1984	
Siti-A	OMA	1767	F	8/16/1984	8/17/1984	
Siti-B	OMA	1768	M	8/16/1984	8/18/1984	
Mwatabu-A	OMA	1780	F	2/8/1985	2/11/1985	
Cheusi-B	OMA	1782	F	2/16/1985	2/20/1985	
Fatima-A	OMA	1792	M	6/14/1985	6/24/1985	
Lela-E	OMA	2716	ND	11/25/1985	11/30/1985	
Mwasaa	OMA	1749	F	8/17/1983	5/19/1987	
Salima-A	OMA	2784	ND	3/23/1988	3/23/1988	
Kumi-A	OMA	2843	F	5/2/1990	5/4/1990	
Tabu-D	OMA	2865	M	2/9/1991	2/9/1991	
unk infant	Oma	unknown	nd	unknown	unknown	
Chiku-A	OMON	1719	M	1/4/1982	1/6/1982	
Asura-A	OMON	1795	F	6/26/1985	6/27/1985	
Arusi-B	OMON	1797	F	6/27/1985	6/29/1985	
Chui	OMON	2728	M	6/6/1986	8/31/1986	
Mbili	OMON	2741	F	7/4/1986	11/14/1986	E
Afiya-A	OMON	2759	M	4/15/1987	4/15/1987	
Karibu	OMON	2845	M	5/5/1990	5/7/1990	
Tatu-C	OMON	unknown	M	4/13/1991	4/14/1991	
Paulina-A	PCOQ	6651	ND	1/8/1996	1/11/1996	FD in AM
Pulchra-B	PCOQ	6738	F	6/19/1998	6/21/1998	
Lucia	PCOQ	6273	f	3/15/1989	10/3/1999	DIVC
Paulina	PCOQ	6398	F	1/24/1991	8/29/2006	UNKNOWN
Tony	PCOQ	6845	M	2/9/2005	8/30/2006	
Pulchra-E	Pcoq	6891	M	12/30/2006	1/2/2007	UNKNOWN
Pulchra	Pcoq	6517	F	2/28/1993	12/15/2007	UNKNOWN
Nero	PCOQ	6610	M	12/4/1994	4/2/2008	DIVC
Drusilla-A	PCOQ	6963	M	2/1/2010	2/1/2010	FD in AM
Brutus	PCOQ	6774	m	2/28/2001	6/2/2011	DIVC
Leo	PCOQ	6790	M	12/26/2001	6/27/2011	
Havozo	PCOQ	6934	m	2/14/2009	7/2/2011	UNKNOWN
Crispus Ceasar	Pcoq	6804	M	1/7/2003	7/3/2011	UNKNOWN
Zeno	PCOQ	6757	m	2/2/2000	10/15/2011	DIVC
Polamalu	PCOQ	6984	M	2/1/2011	10/19/2011	DIVC
Drusilla-B	PCOQ	7078	M	1/30/2012	1/30/2012	FD
Ernestine	PCOQ	7077	F	1/26/2012	4/9/2012	FD ~8:30 AM
Irene-A	PCOQ	7133	M	1/20/2013	2/14/2013	FD
Irene-A	Pcoq	7133	M	1/20/2013	2/14/2013	FD
Xena	PCOQ	7079	F	1/28/2012	7/4/2013	UNKNOWN
Pompeia Plotina-A	PCOQ	7173	M	1/27/2014	1/27/2014	FD
Phillip the Arab	PCOQ	6747	M	2/24/1999	10/9/2014	E
Cupid	PCOQ	6933	M	2/14/1999	10/9/2014	E
Jovian	PCOQ	6583	M	4/10/1994	11/10/2014	E

Matilda-A	PCOQ	7203	M	2/28/2015	2/28/2015	FD @ 1:00 AM
Conrad	PCOQ	6920	M	12/31/2008	7/6/2015	FD @ 8:30 AM
Euphemia-A	PCOQ	7232	F	1/12/2016	1/17/2016	FD @ 12:45 am
Tiberius	PCOQ	6207	M	1/20/1988	4/1/2016	DIVC
unknown	Pcoq	unknown	nd	unknown	unknown	
unknown infant	Pcoq	unknown	nd	unknown	unknown	
Romeo	PDIA	6564	M	6/1/1993	1/21/2012	FD in AM
Kofi	PPOT	919	M	4/23/1985	12/18/2010	E?
unk adult	Ppot	unknown	nd	unknown	unknown	
unk juvenile	Ppot	unknown	nd	unknown	unknown	
unknown	Prop spp	unknown	nd	unknown	unknown	
Lucilla-A	PTAT	6259	M	8/3/1988	8/3/1988	unknown
Cicero	PTAT	6253	M	1/1/1976	8/24/1988	DIVC
Tattertot	PTAT	6703	M	4/1/1997	6/2/1997	FD
Messilina	PTAT	6555	F	7/1/1979	9/19/1998	DIVC
Valens	PTAT	6729	M	3/29/1998	2/5/2007	FD @ 10:30 PM
Titus	PTAT	6556	m	7/6/1983	12/2/2008	DIVC
unknown	Sang.Mid	unknown	m	12/13/1990	12/14/1990	
Pavo	VRUB	5628	F	5/17/1981	2/12/1989	E
Phoenix	VRUB	5629	M	5/19/1981	5/14/2003	
unknown	Vrub	1460	f	5/1/2007	8/25/2007	
Tromdenus	VRUB	6241	M	4/30/1988	3/18/2008	E
Diphda	VRUB	6378	F	4/28/1990	2/15/2010	E
Pyxis-C	VRUB	6998	F	5/16/2011	5/16/2011	FD
Pyxis-D	VRUB	6999	M	5/16/2011	5/16/2011	FD
Pyxis-E	VRUB	7092	M	5/10/2012	5/10/2012	FD
Toros	VRUB	6446	M	6/17/1991	1/6/2014	UNKNOWN
Stephano	VRUB	7213	M	5/13/2015	9/30/2015	DIVC
Cynthia	VRUB	5587	F	3/30/1981	4/28/2016	
unknown	Vrub	unknown	nd	unknown	unknown	
Mars	VVV	586	M	10/1/1966	9/2/1992	E
Babel-I	VVV	6541	M	4/8/1993	4/13/1993	FD
Hebe-A	VVV	6992	M	4/13/2011	4/13/2011	FD
Amor	VVV	5604	M	4/15/1981	5/12/2013	E
Hebe	VVV	6415	F	4/3/1991	8/27/2014	E



Duke Lemur Center

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RCVD FEB 25 2016

LB

February 19, 2016

U.S. Fish and Wildlife Service
Division of Management Authority
Branch of Permits, MS:IA
5275 Leesburg Pike
Falls Church, VA 22041-3803

To Whom It May Concern:

Enclosed please find a report of the Duke University Lemur Center's activities under the Duke University Lemur Center Endangered/Threatened Species permit: (new: 48515B) (old permit: PRT-679043) for the calendar year 2015.

I am including a copy of our current inventory of living animals, a report of all interstate sales of tissues, blood or cadavers of threatened or endangered primates for 2015 (including the DUPC veterinary program to reduce mortalities), a list of mortalities and causes for calendar year 2015, an inventory of our cadaver collection and a list of publications produced from 2013-2015 from specimens traded under this permit.

If you need a copy of our blood and serum sample inventory or our ultracold tissue collections, please contact me, as those inventories consist of too many pages to print realistically. Digital files of any of these inventory sheets are available, just let me know if you would like that information on a thumb drive.

Please contact me if you have any questions about the enclosed report.

Sincerely:

David Haring
Registrar

Current Colony Inventory, January 2016

Latinname	Common_Name	Latin_Abbrev.	M	F	Total
Cheirogaleus medius	Fat-tailed dwarf lemur	CMED	13	10	23
Daubentonia madagascariensis	Aye-aye	DMAD	6	8	14
Eulemur collaris	Collared brown lemur	ECOL	2	2	4
Eulemur coronatus	Crowned lemur	ECOR	7	5	12
Eulemur flavifrons	Blue-eyed black lemur	EFLA	7	4	11
Eulemur macaco	Black lemur	EMAC	1	1	2
Eulemur mongoz	Mongoose lemur	EMON	7	2	9
Eulemur rubriventer	Red-bellied lemur	ERUB	1	2	3
Eulemur rufus	Red-fronted brown lemur	ERUF	1	1	2
Hapalemur griseus griseus	Eastern lesser bamboo lemur	HGG	1	2	3
Lemur catta	Ring-tailed lemur	LCAT	12	21	33
Mircocebus murinus	Gray mouse lemur	MMUR	26	27	53
Nycticebus coucang	Slow loris	NCOU	.	1	1
Nycticebus pygmaeus	Pygmy slow loris	NPYG	1	3	4
Otolemur crassicaudatus	Thick-tailed greater bushbaby	OCRA	.	1	1
Propithecus coquereli	Coquerel's sifaka	PCOQ	14	18	32
Varecia rubra	Red ruffed lemur	VRUB	8	6	14
Varecia variegata variegata	Black-and-white ruffed lemur	VVV	6	2	8
Total (ALL)			113	116	229

LOAN Inventory, January 2016

Latinname	Common_Name	Latin_Abbrev.	ND	M	F	Total
Daubentonia madagascariensis	Aye-aye	DMAD	1	7	8	16
Eulemur flavifrons	Blue-eyed black lemur	EFLA	.	6	5	11
Mircocebus murinus	Gray mouse lemur	MMUR	.	2	1	3
Nycticebus pygmaeus	Pygmy slow loris	NPYG	.	.	2	2
Propithecus coquereli	Coquerel's sifaka	PCOQ	.	17	16	33
Varecia rubra	Red ruffed lemur	VRUB	.	4	5	9
Total (ALL)			1	36	37	74

Generated by the SAS System ('Local', X64_DSRV12) on January 05, 2016 at 11:45:51 AM

DLC Animal List BY SPECIES, January 05, 2016

Spec=CMED weight range=175-275 g

Spec	SB	DLC ID	Sex	Name	DOB	WC?	Age	Dam	Sire	Bldg	Area	Cage	To	FR	Chip_ID	Weight	Physical_ID	BSt	lastbreed	Due	Own
CMED	384	3621	M	Nighthawk	07/09/91	CB	24.51	676	671	NB	101			Y	00-0133-6DDF	242	short tail	B	06/26/15	.	
CMED	430	3635	F	Quetzal	07/01/99	CB	16.53	UNK	MULT3	SR	H	116	RC3	n	00-0682-8CD1	244	white tail tip	NB	05/22/11	.	
CMED	431	3636	F	Towhee	07/15/01	CB	14.48	UNK	MULT3	NB	115	CD		n	00-067B-7735	233	no shave	B	08/24/15	.	
CMED	432	3637	M	Tanager	07/15/01	CB	14.48	5	3	SR	H	116	RC4	n	00-067B-AA8D	231		NB	06/30/14	.	
CMED	433	3638	F	Ibis	07/15/02	CB	13.48	UNK	MULT3	NB	115	F		n	00-0681-0480	210		B	06/30/14	.	
CMED	434	3639	M	Osprey	07/15/04	CB	11.48	UNK	MULT3	NB	115	CD		n	00-067B-92FF	228	mid tail shave	B	08/24/15	.	
CMED	435	3640	F	Vireo	07/15/05	CB	10.48	5	3	NB	101	RC1		Y	00-0682-A24E	217	shorter tail	B	06/26/15	.	
CMED	436	3641	F	Sandpiper	07/15/05	CB	10.48	5	3	Core	O7	E	E	Y	00-0682-9C7F	269	scar on forehead	B	06/08/14	.	
CMED	437	3642	M	Thrasher	07/15/06	CB	9.48	3635	MULT3	Core	O7	E	E	Y	00-067B-7CCD	264	tip and base shave	B	06/08/14	.	
CMED	439	7055	F	Hottentot	07/16/11	CB	4.48	3640	3642	SR	H	116	RC2	n	00-0708-A4E2	205		NB	05/25/12	.	
CMED	440	7056	F	Motmot	07/16/11	CB	4.48	3640	3642	NB	115	AB		n	00-0708-9DCf	242	no shave	B	05/25/12	.	
CMED	441	7119	M	Auklet	07/23/12	CB	3.45	3641	3642	SR	H	116	RC1	n	00-074B-D7FB	268		NB	.	.	
CMED	442	7123	F	Raven	08/09/12	CB	3.41	3640	3637	NB	101			Y	00-074B-F1E9	249		B	06/19/14	.	
CMED	443	7124	M	Crow	08/09/12	CB	3.41	3640	3637	NB	115	E		n	00-074C-0D12	179	mid tail shave	B	06/06/13	.	
CMED	444	7125	M	Jaeger	08/09/12	CB	3.41	3640	3637	NB	115	H		n	00-06E6-CAD8	193	tip tail shave	B	06/06/13	.	
CMED		7161	M	Domestic Chicken	06/26/13	CB	2.53	3641	3642	NB	115	J		n	00-0724-4065	215	mid shave	NB	.	.	
CMED		7162	M	Wild Turkey	06/26/13	CB	2.53	3641	3642	Core	O19	D	D	Y	00-0726-AC84	275	base shave	NB	.	.	
CMED		7165	M	Francolin	08/27/13	CB	2.36	3636	3639	NB	115	G		n	00-0726-A34E	234	mid shave	B	.	.	
CMED		7190	F	Kiwi Bird	08/07/14	CB	1.41	3641	3642	NB	115	I		n	00-075B-7A66	190	tip shave	D	.	.	
CMED		7191	M	Kookaburra	08/07/14	CB	1.41	3641	3642	Core	O19	D	D	Y	00-0781-6633	228		NB	.	.	
CMED		7220	F	Emu	08/04/15	CB	0.42	7056	3639	NB	115	AB		n		153	mid shave	U	.	.	
CMED		7221	M	Ostrich	08/04/15	CB	0.42	7056	3639	NB	115	AB		n		165		U	.	.	
CMED		7223	M	Dunlin	08/30/15	CB	0.35	3641	3642	Core	O7	E	E	Y		183		U	.	.	

N = 23 (13M, 10F)

Spec=DMAD weight range=2.5-3.0 kg

Spec	SB	DLC ID	Sex	Name	DOB	WC?	Age	Dam	Sire	Bldg	Area	Cage	To	FR	Chip_ID	Weight	Physical_ID	BSt	lastbreed	Due	Own
DMAD	103	6201	M	Nosferatu	12/18/85	WB	30.07	WILD	WILD	NB	107		108	Y	00-0213-60C7	2870	dark face	B	.	.	
DMAD	104	6202	M	Poe	12/19/86	WB	29.07	WILD	WILD	NB	103/	103	116	Y	00-0213-6753	2800		B	06/18/15	.	
DMAD	119	6452	F	Endora	12/04/83	WB	32.11	WILD	WILD	Core	O19	C	C	Y	00-01D6-D72D	2570	L ear notch; old face	I-14	.	.	
DMAD	115	6453	F	Ozma	10/11/85	WB	30.25	WILD	WILD	Core	O19	E	E	Y	00-01FD-D137	2425	lower lip out on L side	NB	.	.	
DMAD	118	6454	F	Morticia	11/30/88	WB	27.12	WILD	WILD	Core	O19	B	B	Y	00-01BE-1606	2670	white tail tip	NB	.	.	
DMAD	131	6604	M	Merlin	06/05/94	CB	21.60	6452	6201	Core	O7	C	C	Y	00-01BA-DDOF	2830	hairless butt, grey face	NB	.	.	
DMAD	137	6674	F	Ardrey	04/15/96	CB	19.74	6454	6202	Core	O19	F	F	Y	00-0127-15CE	2820		NB	.	.	
DMAD	158	6786	F	Lucrezia	07/30/01	CB	14.44	6452	6201	NB	103/	103	116	Y	00-064D-A43C	3000		B	06/18/15	.	
DMAD	169	6821	F	Medusa	10/14/03	CB	12.24	6453	6451	NB	107		108	Y	00-064F-3973	2525		B	.	.	
DMAD	179	6866	F	Angelique	09/05/05	CB	10.34	6674	6604	Core	O7	B	D	OR4	00-064E-066D	2870	plucked tail, no L tap finger	I-15	.	.	
DMAD	192	6915	M	Ichabod	07/23/08	CB	7.46	6674	6604	Core	O7	B	D	OR4	00-0682-A77A	2800	no R tap finger tip	NB	.	.	
DMAD	196	6941	M	Norman Bates	04/03/09	CB	6.76	6454	6851	Core	O7	F	F	Y	00-06F0-5D59	2528	no 1/2 r tap finger	NB	.	.	
DMAD	201	6975	M	Grendel	05/23/10	CB	5.62	6452	6201	Core	O7	E	E	Y	00-06EB-3DD5	2940		NB	.	.	
DMAD	210	7071	F	Elphaba	11/29/11	CB	4.10	6674	6604	Core	O19	F	F	Y	00-074B-D002	2650	no R tap finger tip	U	.	.	

N = 14 (6M, 8F)

Spec=ECOL weight range=2.0-2.5 kg

Spec	SB	DLCID	Sex	Name	DOB	WC?	Age	Dam	Sire	Bldg	Area	Cage	To	FR	Chip_ID	Weight	Physical_ID	BSt	lastbreed	Due	Own
ECOL	1241	6145	F	Martine	03/25/87	CB	28.80	5597	5919	SR	F	16	17	n	00-01BA-D83E	2300		PR	.	.	
ECOL	1431	6899	M	Pascal	07/25/93	CB	22.46	6222	5974	SR	F	16	17	n	00-000D-F042	2820		N	.	.	
ECOL		7218	F	Odette	03/23/13	CB	2.79			RB	A	1	3	n	00-0758-5DC2	1905		B	.	.	OnLoan
ECOL		7219	M	Quentin	03/28/13	CB	2.78			RB	A	1	3	n	00-075D-757C	2360		B	.	.	OnLoan

N = 4 (2M, 2F)

Spec=ECOR weight range=1.4-1.8 kg

Spec	SB	DLC ID	Sex	Name	DOB	WC?	Age	Dam	Sire	Bldg	Area	Cage	To	FR	Chip_ID	Weight	Physical_ID	BSt	lastbreed	Due	Own
ECOR	49	6369	M	Ikenaten	04/18/90	CB	25.73	6177	6034	SR	G	9	10	n	00-018B-1980	1380		B	12/15/10	.	
ECOR	54	6478	M	Geb	04/06/92	CB	23.76	5937	6251	RB	B	16	17	n	00-01BA-B065	1480		B	.	.	
ECOR	68	6634	F	Set	04/30/95	CB	20.70	5937	6251	SR	G	9	10	n	00-0132-EFFB	1560		B	.	.	
ECOR	83	6800	F	Tasherit	04/15/02	CB	13.73	6681	MULT2	SR	E	11	12	n	00-0627-E27C	1500		B	02/07/14	.	
ECOR	99	6979	F	Seshat	07/13/10	CB	5.48	6800	6369	RB	A	11	13	NHE7	00-06E4-2959	1640		B	01/14/15	.	
ECOR	97	7069	M	Mosi	06/01/10	CB	5.60			RB	A	11	13	NHE7	00-06E2-418F	1660	orange RC .812 (d 8.27.15)	B	01/13/14	.	
ECOR	107	7149	F	Aria	04/21/13	CB	2.71	6800	6639	RB	B	16	17	n	00-074C-14EF	1620		B	.	.	
ECOR	108	7150	M	Xonsu	04/21/13	CB	2.71	6800	6639	SR	D	6	7	n	00-074B-DB4B	1620		NB	.	.	
ECOR	110	7153	M	Horus	05/20/13	CB	2.63	6979	7069	SR	E	11	12	n	00-0726-8C87	1580		B	.	.	
ECOR	112	7183	M	Anhotep	05/14/14	CB	1.65	6979	7069	RB	A	11	13	NHE7	00-0780-B903	1440			.	.	
ECOR	114	7189	M	Zuberi	07/16/14	CB	1.47	6800	6639	SR	D	6	7	n	00-0780-CEB3	1540	mid shave	U	.	.	
ECOR	116	7214	F	Seshen	05/18/15	CB	0.64	6979	7069	RB	A	11	13	NHE7		1020		U	.	.	

N = 12 (7M, 5F)

Spec=EFLA weight range=1.4-1.8 kg

Spec	SB	DLC ID	Sex	Name	DOB	WC?	Age	Dam	Sire	Bldg	Area	Cage	To	FR	Chip_ID	Weight	Physical_ID	BSt	lastbreed	Due	Own
EFLA	34	6407	M	Olivier	03/28/91	CB	24.79	6042	6039	SR	D	16	17	n	00-01BC-47C9	2260		NB	11/11/10	.	
EFLA	119	6754	M	Tarantino	04/23/99	CB	16.72	6395	6626	SR	G	6	8	n	00-0627-879B	3200		B	11/18/15	.	
EFLA	132	6776	M	Quinn	03/09/01	CB	14.84	6393	6039	RB	C	6	10	NHE9	00-01D8-5803	2700		B	11/18/13	.	
EFLA	201	6969	M	Presley	03/21/10	CB	5.80	6657	6407	RB	B	5	5	n	00-06C9-D64B	2300		NB	.	.	
EFLA	202	6970	F	Margret	03/21/10	CB	5.80	6657	6407	SR	G	6	8	n	00-06C9-C7FB	2560		B	11/18/15	03/17/16	
EFLA	203	6993	F	West	04/24/11	CB	4.70	6657	6407	RB	C	6	10	NHE9	00-0708-6486	2640	no collar	B	11/18/13	.	
EFLA	204	7140	M	Hiddleston	03/24/13	CB	2.79	6993	6655	SR	F	11	13	n	00-074B-F9CB	2360	no collar	B	11/20/15	.	
EFLA	206	7157	M	Hemsworth	05/29/13	CB	2.61	6657	6655	RB	B	4	4	n	00-0720-4F57	2020	no collar	NB	.	.	
EFLA	208	7180	F	Wiig	04/04/14	CB	1.76	6970	6754	SR	F	11	13	n	00-0725-055F	2060		B	11/20/15	03/19/16	
EFLA	258	7206	F	Mirren	03/23/15	CB	0.79	6993	6776	RB	C	6	10	NHE9		1700			.	.	
EFLA	259	7207	M	DiCaprio	03/26/15	CB	0.78	6970	6754	SR	G	6	8	n		1600			11/18/15	.	

N = 11 (7M, 4F)

Spec=EMAC weight range=2.1-2.6 kg

Spec	SB	DLCID	Sex	Name	DOB	WC?	Age	Dam	Sire	Bldg	Area	Cage	To	FR	Chip_ID	Weight	Physical_ID	BSt	lastbreed	Due	Own
EMAC	309	5850	M	Hesperus	03/22/84	CB	31.81	3504	4539	SR	E	6	7	n	00-0070-F936	2180	R ear tag; fulltail	NB	.	.	
EMAC	328	5942	F	Harmonia	06/27/84	CB	31.55	550	566	SR	E	6	7	n	00-01BC-537B	2360	full tail	N	.	.	

N = 2 (1M, 1F)

Spec=EMON weight range=1.4-1.6 kg

Spec	SB	DLC ID	Sex	Name	DOB	WC?	Age	Dam	Sire	Bldg	Area	Cage	To	FR	Chip_ID	Weight	Physical_ID	BSt	lastbreed	Due	Own
EMON	105	6344	M	Julio	03/19/90	CB	25.82	6077	5723	SR	D	11	11	n	00-0132-6962	1788		NB	.	.	
EMON	110	6390	M	Pedro	06/17/90	CB	25.57	6263	6131	SR	D	16	17	n	00-004F-8182	1800		PR	01/11/14	.	
EMON	1219	6717	M	Paco	06/26/97	CB	18.54	5952	6344	SR	F	1	3	n	00-01DC-015B	1460	no collar	B	12/13/12	.	
EMON	1261	6907	F	Maddie	06/02/06	CB	9.60	6686	6425	SR	F	1	3	n	00-06DD-02EE	1500	no collar	B	12/13/12	.	
EMON	1267	6972	F	Carolina	04/03/10	CB	5.76	6907	6390	Tri	L	1	2	NHE1	00-06E4-04FE	1320	pink RC .275	B	12/05/12	.	
EMON	1263	7158	M	Duggan	03/28/08	CB	7.78	63645	63644	Tri	L	1	2	NHE1	00-068A-CD48	1660	teal RC .436	B	.	.	
EMON	1282	7181	M	Oscar	04/12/14	CB	1.73	6972	7158	Tri	L	1	2	NHE1	00-0724-5149	1220	yellow RC .215	S	.	.	
EMON	1283	7182	M	Mico	05/03/14	CB	1.68	6907	6717	SR	F	1	3	n	00-0726-A250	1320		S	.	.	
EMON	1290	7208	M	Ignacio	04/11/15	CB	0.74	6907	6717	SR	F	1	3	n		1100		U	.	.	

N = 9 (7M, 2F)

Spec=ERUB weight range=2.0-2.4 kg

Spec	SB	DLCID	Sex	Name	DOB	WC?	Age	Dam	Sire	Bldg	Area	Cage	To	FR	Chip_ID	Weight	Physical_ID	BSt	lastbreed	Due	Own
ERUB	14	6038	F	Dido II	10/01/84	WB	31.28	WILD	WILD	RB	C	4	5	n	00-0132-FE4C	2060		PR	.	.	
ERUB	24	6231	F	Cheyenne	04/21/88	CB	27.73	6038	6121	SR	D	12	13	n	00-01BC-510A	2400		PR	.	.	
ERUB	49	6488	M	Iroquois	04/29/92	CB	23.70	6122	6230	RB	C	4	5	n	00-01BB-25DC	2200		NB	.	.	

N = 3 (1M, 2F)

Spec=ERUF weight range=2.0-2.4 kg

Spec	SB	DLCID	Sex	Name	DOB	WC?	Age	Dam	Sire	Bldg	Area	Cage	To	FR	Chip_ID	Weight	Physical_ID	BSt	lastbreed	Due	Own
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ERUF	1486	6615	M	Cardinal	03/15/95	CB	20.82	5783		Tri	L	15	16	NHE2	00-01DB-F68B	2300	short tail;red crown	NB	.	.	January 2016
ERUF	1488	6624	F	Redbay	03/24/95	CB	20.80	6055		Tri	L	15	16	NHE2	00-01BA-C994	1820	short tail:white face	PR	.	.	
N = 2 (1M, 1F)																					

Spec=HGG weight range=0.9-1.2 kg

Spec	SB	DLC ID	Sex	Name	DOB	WC?	Age	Dam	Sire	Bldg	Area	Cage	To	FR	Chip_ID	Weight	Physical_ID	BSt	lastbreed	Due	Own
HGG	T10052	1357	F	Beware	05/06/95	CB	20.68	1328	1324	RB	A	4	5	n	00-01BB-C165	1520	larger	PR	04/23/15	.	
HGG	T10061	1366	M	Beavis	04/08/97	CB	18.76	1357	1324	RB	A	4	5	n	00-01BA-C217	1260	no collar	PR	04/23/15	.	
HGG	T10066	1370	F	Beeper	10/06/98	CB	17.26	1357	1324	RB	A	4	5	n	00-0213-5FDF	960		PR	.	.	
N = 3 (1M, 2F)																					

Spec=LCAT weight range=2.2-2.7 kg

Spec	SB	DLC ID	Sex	Name	DOB	WC?	Age	Dam	Sire	Bldg	Area	Cage	To	FR	Chip_ID	Weight	Physical_ID	BSt	lastbreed	Due	Own
LCAT	1856	6229	F	Chloris	04/17/88	CB	27.74	6124	5667	SR	D	12	13	n	00-0133-0F3D	2240	short tail	NB	.	.	
LCAT	2219	6440	M	Aracus	05/23/91	CB	24.64	5847	MULT	Tri	R	5	8	NHE4	00-0132-5DCF	2260	black RC .175	B	10/26/14	.	
LCAT	2327	6528	M	Licinius	03/17/93	CB	22.82	6140		SR	F	4	5	n	00-01BB-D8AF	2460	no collar	NB	.	.	
LCAT	2344	6534	M	Aristides	03/21/93	CB	22.81	5847		SR	G	16	18	NHE3	00-0132-EADD	2640	1/3 tail	N	.	.	
LCAT	2554	6622	M	Teres	03/23/95	CB	20.80	6276	MULT	SR	D	14	15	n	00-01DB-7189	2560	full tail	NB	.	.	
LCAT	2787	6711	F	Sosiphanes	04/13/97	CB	18.74	5984	MULT	SR	G	16	18	NHE3	00-0213-695C	2460	no collar	NB	.	.	
LCAT	2977	6761	F	Dorieus	03/17/00	CB	15.81	6140	6435	Tri	L	9	14	NHE2	00-0133-177C	2560	orange RC .094 (d 11.6.16)	D	11/10/12	.	
LCAT	3275	6831	F	Tellus	03/18/04	CB	11.81	6276	6440	SR	F	4	5	n	00-064D-F010	2780	no collar	I-15	.	.	
LCAT	3280	6835	M	Berisades	03/28/04	CB	11.78	6711	6440	RB	A	19	20	n	00-064D-BEB9	2560	orange col.+gold hydrant	NB	.	.	
LCAT	3143	6849	M	Fritz	05/15/02	CB	13.65			RB	B	11	12	NHE8	00-0627-E11C	2480	no collar	NB	.	.	
LCAT	3328	6854	F	Alena	03/18/05	CB	10.81	6276	6440	RB	B	11	12	NHE8	00-064E-0059	2640	yellow RC .564	I-15	.	.	
LCAT	3337	6856	F	Justine	03/22/05	CB	10.80	6761	6268	Tri	L	9	14	NHE2	00-0682-B27C	2060	black RC .204	D	11/10/12	.	
LCAT	3341	6857	F	Lilah	03/28/05	CB	10.78	6711	6440	SR	G	16	18	NHE3	00-064E-4FB5	2360	gimpy arm	NB	.	.	
LCAT	3346	6861	F	Persephone	04/25/05	CB	10.70	5984	6440	SR	D	14	15	n	00-0682-AE04	2660		I-15	.	.	
LCAT	1190	6862	M	Tugger	05/16/83	CB	32.66			Tri	L	9	14	NHE2	00-0062-CDD5	2360	teal RC .377	NB	11/10/12	.	
LCAT	3064	6863	F	Sprite	03/17/01	CB	14.81			RB	C	11	14	NHE9	00-01EF-4EFC	2760	short tail	D	.	.	
LCAT	3350	6864	F	Sophia	06/18/05	CB	10.56	6796	6268	SR	E	1	4	n	00-0682-B48E	1880	small	B	.	.	
LCAT	3617	6909	F	Sierra Mist	05/01/08	CB	7.68	6863	6862	RB	A	19	20	n	00-0682-B1E2	2480	orange collar; 2 color eyes	I-15	.	.	
LCAT	3619	6936	F	Hibernia	03/17/09	CB	6.81	6761	6847	Tri	L	9	14	NHE2	00-06E3-E41D	2300	light color female	D	.	.	
LCAT	3377	6955	M	Randy	03/12/06	CB	9.82			SR	E	1	4	n	00-06E3-B46B	2820	no collar	B	11/02/10	.	
LCAT	2258	6956	F	Shroeder	03/22/92	CB	23.81			Tri	R	5	8	NHE4	00-0016-CB05	2980	very large	D	.	.	
LCAT	3624	6957	F	Liesl	07/15/08	CB	7.48	6956		Tri	R	5	8	NHE4	00-06D8-3DB7	2520	mid shave	B	10/26/14	.	
LCAT	3766	6996	F	Brigitta	05/16/11	CB	4.64	6957	6440	SR	D	19	19	n	00-0708-4E42	2165	blunt tail tip	B	11/05/15	03/14/16	
LCAT	3825	7084	M	Jones	03/17/12	CB	3.81	6863	6955	RB	C	11	14	NHE9	00-06E6-80A6	2700	orange RC .714 w/Tag	NB	.	.	
LCAT	3826	7085	F	Izze	03/17/12	CB	3.81	6863	6955	RB	C	11	14	NHE9	00-074C-0D11	2240	.	D	.	.	
LCAT	3862	7086	M	Stewart	03/30/12	CB	3.77	6876	6955	RB	C	11	14	NHE9	00-074B-E850	2720	black RC .654	NB	.	.	
LCAT	3863	7087	F	Gretl	04/09/12	CB	3.74	6957	6440	Tri	R	5	8	NHE4	00-06E6-D23D	2560	tail tip missing	D	.	.	
LCAT	3868	7139	M	Nikos	03/23/13	CB	2.79	6761	6862	SR	D	20	20	n	00-074B-D500	2180	no tail	B	11/05/15	.	
LCAT	3870	7143	M	Onyx	03/28/13	CB	2.78	6856	6862	Tri	L	9	14	NHE2	00-06E6-D262	2420	tip shave	NB	.	.	
LCAT	3990	7176	F	LuLu	03/19/14	CB	1.80	6863	6955	RB	C	11	14	NHE9	00-0780-BBE1	2180	mid shave	D	.	.	
LCAT	3991	7177	F	Willow	03/19/14	CB	1.80	6863	6955	RB	C	11	14	NHE9	00-0781-0C92	2160	base shave	D	.	.	
LCAT		7209	F	Princess Julien I	05/04/15	CB	0.67	6864	6955	SR	E	1	4	n		1165		IJ	.	.	
LCAT		7210	F	Thea	05/04/15	CB	0.67	6864	6955	SR	E	1	4	n		1010	mid shave	IJ	.	.	
N = 33 (12M, 21F)																					

Spec=MMUR weight range=2.2-2.7 kg

Spec	SB	DLC ID	Sex	Name	DOB	WC?	Age	Dam	Sire	Bldg	Area	Cage	To	FR	Chip_ID	Weight	Physical_ID	BSt	lastbreed	Due	Own
MMUR	712	7026	F	Mrs Dash	06/26/06	CB	9.53	100DGB	983CD	NB	112	HI		n	00-06DC-F383	101	ear notches; ear L1	B	04/17/13	.	
MMUR	713	7027	M	Wormwood	05/26/07	CB	8.62	197A	147HA	NB	109	AB		n	00-06FO-1534	104	ear notches	B	04/25/12	.	

MMUR	714	7028	F	Calendula	05/25/08	CB	7.62	203D	149CA	NB	114	HU		n	00-06F0-4CC7	104	ear notches	NB	05/30/12	.	.	.
MMUR	715	7029	F	Oleander	05/26/08	CB	7.62	1398CD	162D	NB	109	KL		n	00-0724-7804	103	ear notches	NB	.	.	.	
MMUR	716	7030	F	Wasabi	05/30/08	CB	7.61	943GCA	129BA	NB	114	C		n	00-067B-7E20	104	ear notches	B	04/09/14	.	.	
MMUR	718	7032	M	Pesto	06/04/08	CB	7.59	162A	1491	SR	H	117	J	n	00-06E6-AA25	86	distinct ear notches	NB	05/30/12	.	.	
MMUR	719	7033	M	Pobiano	06/06/08	CB	7.59	102CG	147BB	NB	109	EF		n	00-0708-A6F4	163	ear notches; very large	B	06/15/15	.	.	
MMUR	720	7034	F	Pimento	06/16/08	CB	7.56	965FDA	101DAA	NB	109	CD		n	00-06C9-BF8D	100	dark forehead; ear notches	B	06/15/15	.	.	
MMUR	721	7035	M	Woundwort	06/09/10	CB	5.58	7029	7027	SR	H	117	A	n	00-06E4-388C	100		NB	05/01/12	.	.	
MMUR	722	7036	M	Hazel	06/09/10	CB	5.58	7029	7027	SR	H	117	B	n	00-0708-62D8	97	mid tail shave	NB	04/17/13	.	.	
MMUR	724	7038	M	Hurtleberry	06/10/10	CB	5.58	7028	7032	NB	111	G		n	00-06E4-26AF	90		NB	07/01/13	.	.	
MMUR	725	7039	M	Butterbur	06/10/10	CB	5.58	7028	7032	NB	111	F		n	00-0708-A567	69		NB	.	.	.	
MMUR	726	7046	M	Fuggles	06/07/11	CB	4.58	7028	MULT2	NB	104			Y	00-0708-A999	103		NB	.	.	.	
MMUR	727	7047	M	Spalt	06/07/11	CB	4.58	7028	MULT2	SR	H	117	E	n	00-06E6-C9DE	72	ear L1	NB	04/25/12	.	.	
MMUR	728	7048	M	Nugget	06/07/11	CB	4.58	7028	MULT2	SR	H	117	C	n	00-0708-A90D	79		NB	.	.	.	
MMUR	729	7049	F	Sweet Annie	06/09/11	CB	4.58	7037	MULT2	NB	112	ABC		n	00-0708-6737	109	no shave	NB	04/13/13	.	.	
MMUR	730	7050	M	Joe Pye Weed	06/09/11	CB	4.58	7037	MULT2	NB	104			Y	00-0708-94C8	83	ear R5	B	.	.	.	
MMUR	731	7051	F	Loblolly	07/03/11	CB	4.51	7034	MULT2	NB	109	CD		n	00-0708-9E5C	110	long nose; short D3 R hand	NB	04/30/12	.	.	
MMUR	732	7052	F	Snapdragon	07/03/11	CB	4.51	7034	MULT2	NB	111	EH		n	00-0708-B0CD	120	no shave	NB	05/01/12	.	.	
MMUR	733	7059	F	Thistle	07/21/11	CB	4.46	7029	7032	SR	H	117	I	n	00-0708-8F7D	93		NB	.	.	.	
MMUR	734	7064	F	Tzatziki	08/15/11	CB	4.39	7030	7039	NB	109	IJ		n	00-0708-9B14	97	tip shave; ear L2	NB	04/16/14	.	.	
MMUR	736	7066	M	Butternut	08/15/11	CB	4.39	7030	7039	NB	104			Y	00-0708-AEFA	77		NB	07/01/13	.	.	
MMUR	737	7067	F	Nettle	08/24/11	CB	4.37	7026	MULT2	NB	112	J		n	00-0708-SACB	88		B	.	.	.	
MMUR	738	7068	M	Montague	08/24/11	CB	4.37	7026	MULT2	SR	H	117	G	n	00-0708-9441	86	short tail; ear L2	NB	.	.	.	
MMUR	794	7096	F	Bluebell	06/05/12	CB	3.59	7029	7068	SR	H	117	H	n	00-0708-60A4	90	base tail shave	NB	.	.	.	
MMUR	795	7097	F	Blackberry	06/05/12	CB	3.59	7029	7068	NB	109	KL		n	00-0708-95D2	97	mid tail shave	NB	.	.	.	
MMUR	796	7098	M	Pipkin	06/05/12	CB	3.59	7029	7068	NB	104			Y	00-0708-8C5D	91	ear R4	NB	04/14/14	.	.	
MMUR	797	7099	M	Dogbane	06/14/12	CB	3.56	7059	7068	NB	104			Y	00-0708-95D4	85	ear R6	NB	04/14/14	.	.	
MMUR	798	7104	F	Foxglove	06/23/12	CB	3.54	7067	MULT2	NB	114	G		n	00-0708-6D04	101	mid shave; ear R5	NB	.	.	.	
MMUR	799	7105	M	Buckwheat	06/23/12	CB	3.54	7067	MULT2	NB	114	D		n	00-0708-5AD5	95		NB	.	.	.	
MMUR	800	7106	M	Heinz	06/25/12	CB	3.53	7026	MULT2	NB	114	AB		n	00-0708-B28F	96		B	.	.	.	
MMUR	801	7108	F	Daikon	07/03/12	CB	3.51	7030	MULT2	NB	109	NO		n	00-0708-69E1	92	mid shave	B	.	.	.	
MMUR	802	7109	F	Shiso	07/03/12	CB	3.51	7030	MULT2	NB	109	M		n	00-0708-A11C	96	no shave	NB	.	.	.	
MMUR	803	7110	M	Gobo	07/03/12	CB	3.51	7030	MULT2	NB	109	AB		n	00-0708-AC90	97		B	.	.	.	
MMUR	806	7113	F	Briony	07/03/12	CB	3.51	7052	7038	NB	114	F		n	00-0708-8BD5	99		NB	.	.	.	
MMUR	807	7114	M	Huckleberry	07/03/12	CB	3.51	7052	7038	NB	111	C		n	00-0708-AFE3	64		NB	.	.	.	
MMUR	808	7120	F	Begonia	07/31/12	CB	3.43	7028	7032	NB	114	HU		n	00-074C-34B9	97		NB	.	.	.	
MMUR	809	7121	F	Virginia Creeper	07/31/12	CB	3.43	7028	7032	NB	114	HU		n	00-074B-D127	104	mid shave; ear L3	NB	.	.	.	
MMUR	810	7126	F	Creeping Jenny	08/10/12	CB	3.41	7049	7033	NB	112	FG		n	00-06E6-C086	95	ear R4	NB	05/29/14	.	.	
MMUR	811	7127	F	Juneberry	08/10/12	CB	3.41	7049	7033	NB	112	FG		n	00-074C-0AF5	103	mid shave	NB	04/17/13	.	.	
MMUR	812	7128	M	Texas Pete	08/10/12	CB	3.41	7049	7033	NB	109	EF		n	00-074B-D925	102	small	B	04/16/14	.	.	
MMUR	813	7129	M	Bulrush	08/10/12	CB	3.41	7037	MULT2	NB	109	G		n	00-074C-2F3A	95		NB	.	.	.	
MMUR	814	7159	F	Scuppernong	06/18/13	CB	2.55	7127	7031	NB	112	D1E1		n	00-0753-AC4C	99		NB	.	.	.	
MMUR	815	7160	M	Filbert	06/18/13	CB	2.55	7127	7031	NB	112	HI		n	00-0753-AA45	110		B	.	.	.	
MMUR	816	7163	F	Floretta	08/07/13	CB	2.41	7049	7033	NB	112	ABC		n	00-0753-135E	96	mid shave	NB	.	.	.	
MMUR	817	7164	F	Agnus	08/07/13	CB	2.41	7049	7033	NB	112	ABC		n	00-075E-D0C3	120	base shave	NB	.	.	.	
MMUR	818	7166	M	Prickly Pear	08/31/13	CB	2.35	7034	7038	NB	109	NO		n	00-0724-CE1A	97		B	.	.	.	
MMUR	819	7184	F	Mushmelon	06/18/14	CB	1.55	7052	7098	NB	111	EH		n	00-075A-1D86	95	mid shave	NB	.	.	.	
MMUR	820	7185	M	Gumbo	06/18/14	CB	1.55	7052	7098	NB	111	AB		n	00-075A-0787	96		NB	.	.	.	
MMUR	821	7186	M	Pistachio	06/18/14	CB	1.55	7052	7098	NB	111	AB		n	00-077E-77B5	97	mid shave	NB	.	.	.	
MMUR	822	7187	F	Sriracha	06/18/14	CB	1.55	7064	7033	NB	109	H		n	00-0753-9441	102	mid tail shave	NB	.	.	.	
MMUR	823	7188	F	Jicama	06/18/14	CB	1.55	7064	7033	NB	109	IJ		n	00-0726-8BCB	95		NB	.	.	.	
MMUR	824	7192	M	Wandering Willie	08/07/14	CB	1.41	7026	7027	NB	114	AB		n	00-0780-BD33	90	short tail	B	.	.	.	

N = 53 (26M, 27F)

Spec=NCOU weight range=0.9-1.3 kg

Spec	SB	DLCID	Sex	Name	DOB	WC?	Age	Dam	Sire	Bldg	Area	Cage	To	FR	Chi ID	Weight	Physical ID	BSt	lastbreed	Due	Own
NCOU	1484	2916	F	Dharma	03/09/00	CB	15.84	1987	1971	NB	103/	103	103	Y	00-01D8-2A21	1020		NB	.	.	.

N = 1 (0M, 1F)

Spec=NPYG weight range=400-550 g

Spec	SB	DLCID	Sex	Name	DOB	WC?	Age	Dam	Sire	Bldg	Area	Cage	To	FR	Chip_ID	Weight	Physical_ID	BSt	lastbreed	Due	Own
NPYG	2422	2923	F	Flea	12/09/97	WB	18.08	WILD	WILD	Core	O19	E	E	Y	00-064D-DF92	490	R ear notch	NB	.	.	
NPYG	2502	2932	F	Junebug	01/07/07	CB	9.00			Core	O19	D	D	Y	00-018E-10F7	642	.	B	.	.	OnLoan
NPYG	2608	2933	F	Sovanni	09/18/08	CB	7.30			Core	O7	A	A	Y	00-064D-359D	600		NB	.	.	OnLoan
NPYG	2622	2936	M	lo Moth	09/17/10	CB	5.30	2932	2928	Core	O7	C	C	Y	00-0708-AD1F	630		NB	.	.	

N = 4 (1M, 3F)

Spec=OCRA weight range=400-550 g

Spec	SB	DLC ID	Sex	Name	DOB	WC?	Age	Dam	Sire	Bldg	Area	Cage	To	FR	Chip_ID	Weight	Physical_ID	BSt	lastbreed	Due	Own
OCRA	1157	2866	F	Pretoria	10/28/03	CB	12.20	UNK	UNK	Core	O19	B	B	Y	00-06E4-1079	1560	long tail	NB	.	.	

N = 1 (0M, 1F)

Spec=PCOQ weight range=3.4-4.5 kg

Spec	SB	DLC ID	Sex	Name	DOB	WC?	Age	Dam	Sire	Bldg	Area	Cage	To	FR	Chip_ID	Weight	Physical_ID	BSt	lastbreed	Due	Own
PCOQ	140	6207	M	Tiberius	01/20/88	CB	27.98	6109	5945	SR	E	8	10	n	00-0134-1F36	3260		NB	07/30/11	.	
PCOQ	154	6518	M	Julian	03/04/93	CB	22.85	6108	597	RB	C	16	20	NHE9	00-01D6-D109	3940	no collar	B	01/24/15	.	
PCOQ	156	6538	F	Drusilla	04/06/93	CB	22.76	6109	5945	RB	C	16	20	NHE9	00-01DB-7277	4300	no collar	Preg!	01/24/15	.	
PCOQ	166	6650	M	Gordian	12/17/95	CB	20.07	6273	6333	RB	B	18	20	n	00-01DB-F76A	3740	no collar	NB	09/05/13	.	
PCOQ	178	6727	F	Antonia	02/22/98	CB	17.88	6398	6450	RB	B	18	20	n	00-01BE-1719	4580	no collar	D	09/05/13	.	
PCOQ	183	6743	F	Pia	02/15/99	CB	16.90	6110	5944	SR	G	11	15	NHE3	00-01D8-63A6	4700	teal RC .763 w/Tag	D	10/13/14	.	
PCOQ	184	6744	F	Rupillia	02/16/99	CB	16.90	6108	597	RB	A	16	18	NHE7	00-01DB-FFF6	3820	no collar	I-15	08/10/12	.	
PCOQ	208	6827	M	Marcus Aurelius	02/16/04	CB	11.89	6538	6518	Tri	R	1	4	NHE4	00-064D-C07B	4220		NB	.	.	
PCOQ	212	6843	M	Lucius Verus	01/07/05	CB	11.00	6744	6610	SR	G	11	15	NHE3	00-067B-9124	4040		B	12/27/13	.	
PCOQ	223	6882	M	Charlemagne	01/02/07	CB	9.01	6743	6583	SR	D	1	4	n	00-067B-83E9	3920	smaller	B	.	.	
PCOQ	228	6897	F	Rodelinda	08/06/07	CB	8.42	6517	6207	Tri	R	1	4	NHE4	00-06DD-00C4	5140	teal RC .412 (d 11.6.15)	I-15	.	.	
PCOQ	229	6900	F	Matilda	12/21/07	CB	8.05	6743	6583	RB	B	15	15	NHE8	00-0682-893F	4296	teal RC .315 (d 11.6.15)	B	12/27/13	.	
PCOQ	231	6903	M	Martinianus	01/25/08	CB	7.95	6538	6518	RB	B	13	14	NHE8	00-067B-AA81	4500	no collar	B	.	.	
PCOQ	237	6922	F	Pompeia Plotina	02/04/09	CB	6.92	6538	6518	SR	D	1	4	n	00-06C9-A946	5540	larger	Preg!	.	.	
PCOQ	242	6959	M	Rupert	12/15/09	CB	6.06	6727	6608	Tri	L	5	8	NHE2	00-06E4-19C0	3600	orange RC .554	B	.	.	
PCOQ	247	6964	M	Romulus	02/03/10	CB	5.92	6744	6207	RB	A	16	18	NHE7	00-06C9-DA36	4000	tip shave	NB	08/09/12	.	
PCOQ	252	6985	F	Euphemia	02/15/11	CB	4.89	6828	6797	SR	F	6	10	n	00-074B-F7FC	4180	no collar	Preg!	.	.	
PCOQ	254	6987	F	Bertha of Sulzbach	02/18/11	CB	4.88	6897	6827	SR	E	8	10	n	00-0708-8868	5180	no collar	I-15	.	.	
PCOQ	255	7070	M	Thrax	11/12/11	CB	4.15	6828	6797	SR	F	6	10	n	00-06E3-A714	3860	no collar	S	.	.	
PCOQ	256	7073	F	Gisela	01/07/12	CB	4.00	6743	6583	Tri	L	5	8	NHE2	00-06E6-B31B	3840	black RC .235 (d 11.6.15)	Preg!	.	.	
PCOQ	258	7075	M	Remus	01/12/12	CB	3.98	6744	6207	RB	A	16	18	NHE7	00-06D4-F5A5	3760		NB	.	.	
PCOQ	266	7131	F	Beatrice of Swabia	12/19/12	CB	3.05	6897	6827	Tri	R	1	4	NHE4	00-06E6-A81B	4020	red RC .383	D	.	.	
PCOQ	271	7136	M	Pontius Pilate	02/04/13	CB	2.92	6538	6518	RB	C	16	20	NHE9	00-074B-F635	3220	mid shave	U	.	.	
PCOQ	272	7137	M	Ferdinand	02/17/13	CB	2.88	6743	6583	SR	G	11	15	NHE3	00-06E6-B529	3460		U	.	.	
PCOQ	278	7170	F	Gertrude	01/05/14	CB	2.00	6743	6583	SR	G	11	15	NHE3	00-0726-7085	3600		U	.	.	
PCOQ	279	7171	F	Eleanor of Portugal	01/05/14	CB	2.00	6897	6827	Tri	R	1	4	NHE4	00-0753-D351	3980		U	.	.	
PCOQ	282	7174	F	Aemilia	02/02/14	CB	1.92	6538	6518	RB	C	16	20	NHE9	00-0725-08D8	3260	tip tail shave	U	.	.	
PCOQ	289	7199	F	Lupicina	01/08/15	CB	0.99	6985	6843	SR	F	6	10	n		2560		U	.	.	
PCOQ	290	7200	M	Wenceslaus the Idle	01/24/15	CB	0.95	6897	6827	Tri	R	1	4	NHE4		2980		U	.	.	
PCOQ	291	7201	F	Isabella	01/25/15	CB	0.95	6922	6882	SR	D	1	4	n		2680		U	.	.	
PCOQ	292	7202	F	Valeria	01/28/15	CB	0.94	6727	6650	RB	B	18	20	n		2540		U	.	.	
PCOQ	297	7228	F	Matilda's f	12/28/15	CB	0.02	6900	6903	RB	B	15	15	NHE8		98		U	.	.	

N = 32 (14M, 18F)

Spec=VRUB weight range=3.2-3.9 kg

Spec	SB	DLC ID	Sex	Name	DOB	WC?	Age	Dam	Sire	Bldg	Area	Cage	To	FR	Chip_ID	Weight	Physical_ID	BSt	lastbreed	Due	Own
VRUB	274	6205	F	Galaxy	10/01/84	WB	31.28	WILD	WILD	SR	E	13	15	n	00-0133-F52B	3760	short tail	B?	03/15/15	.	
VRUB	275	6206	M	Comet	10/01/84	WB	31.28	WILD	WILD	SR	G	2	5	n	00-0133-CDFE	3680		B	01/30/15	.	
VRUB	287	6240	M	Borealis	04/30/88	CB	27.70	5587	5768	RB	C	1	3	n	00-0133-395A	3340		B	03/02/14	.	
VRUB	343	6311	F	Antlia	04/22/89	CB	26.72	5900	5698	SR	F	18	20	n	00-0133-22B3	3580	l ear tag	N	01/11/11	.	
VRUB	578	6590	M	Minias	04/26/94	CB	21.71	6203	6241	SR	F	18	20	n	00-01DB-5B51	3960	bald tail tip	NB	.	.	

VRUB	601	6633	F	Pyxis II	04/29/95	CB	20.70	6205	6206	RB	C	1	3	n	00-0132-FFE2	3420	stumpy arm; no tail	B	.	.	.
VRUB	617	6684	M	Hunter	05/17/96	CB	19.65	6203	6241	SR	E	13	15	n	00-018C-S6DD	3680	no collar	B	03/15/15	.	.
VRUB	1711	6995	F	Pandora	05/10/11	CB	4.66	6838	6310	SR	G	2	5	n	00-0708-A120	3960	no collar	B	01/30/15	.	.
VRUB	1759	7093	M	Titan	05/10/12	CB	3.66	6633	6684	RB	B	6	10	NHE8	00-074B-F4C7	4380	orange RC .584	NB	.	.	.
VRUB	1760	7094	M	Puck	05/10/12	CB	3.66	6633	6684	RB	B	6	10	NHE8	00-074C-2526	4000	black RC .524	NB	.	.	.
VRUB	1761	7095	F	Carme	05/10/12	CB	3.66	6633	6684	RB	B	6	10	NHE8	00-06E6-B42E	3665	no collar	I-15	.	.	.
VRUB		7211	F	Celeste	05/13/15	CB	0.65	6995	6206	SR	G	2	5	n		2820	tip shave	U	.	.	.
VRUB		7212	M	Arche	05/13/15	CB	0.65	6995	6206	SR	G	2	5	n		2940	white on feet	U	.	.	.
VRUB		7215	M	Bode	05/27/15	CB	0.61	6633	6240	RB	C	1	3	n		3100		U	.	.	.
N = 14 (8M, 6F)																					

Spec=VVV weight range=3.2-3.9 kg																					
Spec	SB	DLC ID	Sex	Name	DOB	WC?	Age	Dam	Sire	Bldg	Area	Cage	To	FR	Chip_ID	Weight	Physical_ID	BSt	lastbreed	Due	Own
VVV	2390	6917	F	Kizzy	04/17/05	CB	10.73			RB	A	6	10	NHE6	00-06E4-1F9D	4660	blk spot back, wht strp tail	I-15	02/03/13	.	On Loan
VVV	3494	6950	M	Krok	05/22/09	CB	6.63	6917	5604	RB	B	1	3	n	00-06DD-6063	3500	no collar	NB	12/10/13	.	On Loan
VVV	3526	6976	M	Magellan	05/24/10	CB	5.62	6917	5604	RB	A	6	10	NHE6	00-06E4-1969	3540	tail tip shave	NB	.	.	On Loan
VVV	3968	7151	M	Rees	05/17/13	CB	2.64	6917	5604	RB	A	6	10	NHE6	00-075E-D8B8	3960	teal RC .884 (d 1.4.16); mid-shave	NB	.	.	On Loan
VVV	3969	7152	M	Amor Jr.	05/17/13	CB	2.64	6917	5604	RB	A	6	10	NHE6	00-0753-86CD	3540	.	NB	.	.	On Loan
VVV	3974	7154	F	Halley	05/21/13	CB	2.63	6918	6950	SR	D	8	10	n	00-0726-9A27	3200	.	B	.	.	
VVV	3975	7155	M	Herschel	05/21/13	CB	2.63	6918	6950	RB	B	1	3	n	00-0726-77CA	3440	white stripe above eyes	NB	.	.	
VVV	2341	7194	M	Ravo	06/05/03	CB	12.59			SR	D	8	10	n	00-0633-A2BF	3720	white on tail	B	.	.	On Loan
N = 8 (6M, 2F)																					

REPORT FOR ACTIVITIES UNDER MA48515B-0 FOR CALENDAR YEAR 2015
(Interstate sales of blood, tissue or cadavers of threatened/endangered species)

Blood Sales:

4/15/15

Dr. Derek Wildman

University of Illinois

Urbana-Champaign

1206 West Gregory Drive MC195

Urbana, IL 61801

6727f	Propithecus coquereli – Blood sample - 0.2ml
6743f	Propithecus coquereli – Blood sample - 0.2ml
6900f	Propithecus coquereli – Blood sample - 0.2ml

7/01/2015

Raymond Vagell

Hunter College – CUNY

695 Park Avenue, Rm HN724

New York, NY 10065

6205f	Varecia rubra - 1ml whole blood sample
6311f	Varecia rubra - 1ml whole blood sample
6633f	Varecia rubra - 1ml whole blood sample
6995f	Varecia rubra - 1ml whole blood sample
7072f	Varecia rubra - 1ml whole blood sample
7095f	Varecia rubra - 1ml whole blood sample
6917f	Varecia variegata variegata - 1ml whole blood sample
7154f	Varecia variegata variegata - 1ml whole blood sample

11/11/15

Dr. Derek Wildman

University of Illinois, Urbana-Champaign

1206 West Gregory Drive MC195

Urbana, IL 61801

6205f	Varecia rubra - whole blood (banked) - 0.2ml
6633f	Varecia rubra - whole blood (banked) - 0.2ml
6995f	Varecia rubra - whole blood (banked) - 0.2ml
7072f	Varecia rubra - whole blood (banked) - 0.2ml

Tissue Sales:

1/5/15

Dr. Derek Wildman

University of Illinois

Urbana-Champaign

1206 West Gregory Drive MC195

Urbana, IL 61801

[illegible]

1/27/15

Dr. Christopher Brown

University of Pennsylvania

Genetics Dept

415 Curie Blvd., Rooms 538-540

Clinical Research Building

Philadelphia, PA 19104

1409m	Otolemur garnettii garnettii - Liver Sample
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4/15/15

Dr. Derek Wildman

University of Illinois

Urbana-Champaign

1206 West Gregory Drive MC195

Urbana, IL 61801

[illegible]

Cadaver Sales:**2/16/15****Dr. Christopher Vinyard****NEOMED****4209 St. Rt 44, PO Box 95****Rootstown, OH 44272**

5977m	Lemur catta cadaver
5604m	Varecia variegata cadaver

2/18/15**Jay Villamarette****Museum of Osteology****10313 S. Sunnyslane****Oklahoma City, OK 73160**

6451m	Daubentonia madagascariensis - Cadaver
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3/30/15**Dr. Chris Vinyard****NEOMED – Anatomy & Neurobiology****4209 St. Rt. 44 Box 95/Room E-145****Rootstown, OH 44272**

7118	Lemur catta - Cadaver (in formalin)
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9/14/15**Dr. Chris Vinyard****NEOMED – Anatomy & Neurobiology****4209 St. Rt. 44 Box 95/Room E-145****Rootstown, OH 44272**

6905f	Propithecus coquereli - Cadaver
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Veterinary Program to Reduce Mortalities at Duke Lemur Center (11 January 2016)

The following veterinary program was initiated in 1998, and is an ongoing process of improving overall health of the colony and reducing mortalities. Two Veterinarians (Dr Cathy Williams and Dr. Bobby Schopler) with the assistance of two registered veterinary technicians assures that the Duke Lemur Center has full time Veterinary coverage. DLC now has digital dental radiography as well as a digital radiograph machine, increasing efficiency, speed and accuracy of Veterinary Department diagnostic capability. In 2014 a new ultrasound machine was purchased and both veterinarians have attended continuing education classes in basic and intermediate ultrasonography.

- A bi-yearly physical exam (including hairs and TB tests) for each animal in the colony.
- De-worming as indicated.
- Periodic viral titers on selected individuals.
- Prophylactic dental cleanings as necessary (biyearly or more often if indicated).
- Rabies vaccines for all animals with access to outdoor housing.
- 30 day (minimum) quarantine for new animals entering the colony.
- Veterinary oversight of diet formulation and food handling procedures.
- Veterinary oversight of pest control program.
- Efficacy of cage sanitation monitored regularly via Rodac plate testing.
- Water quality monitoring program.
- Food quality monitoring program.
- Complete post-mortem examinations, including histopathology on all deceased animals, to determine individual and colony patterns of mortality.

Death Log 2015

[illegible]

Duke Lemon Center Cadaver Inventory 1/25/16

Name	Species	DLC ID	sex	DOB	DOD	circumstance	TOD	Time Frozen
Vireo	CMED	3640	F	7/15/2005	1/7/2016	FD @ 10:45 AM	9:45 AM	1:17 PM
Jonas	CMED	1636	M	6/17/1985	1/23/2015	E	3:18 PM	4:55 PM
Vireo-B	CMED	7054	F	7/16/2011	7/17/2011	FD	unknown	
Lydia	CMED	687	F	8/12/1982	10/9/2007	UNKNOWN		
Tertulla	CMED	1653	F	7/18/1985	1/5/2007	FD @ 1:30 pm	11:00 AM	
Herodias	CMED	684	F	7/18/1982	5/27/2004	E	9:00 AM	
Nathaniel	CMED	1607	M	7/31/1983	10/24/2003	E	10:45 AM	
Dias	CMED	613	F	7/18/1974	9/22/1993	E	unknown	
Zebadee	CMED	656	M	7/14/1980	10/8/1987			
Ruth-A	CMED	637	F	6/28/1978	6/29/1978			
Salem-A	DMAD	6919	ND	#REF!	#REF!	FD		
Deborah	EALB	5547	F	5/18/1980	12/10/2014	E	9:30AM	11:30 AM
Giscard	ECOL	6225	M	4/14/1988	10/6/2015	E	9:50 AM	12:24 PM
Geraldine	ECOL	6305	F	4/18/1989	11/24/2014	E	12:21 PM	1:30 PM
Francoise	ECOL	5982	f	4/8/1985	3/5/2014	E	10:42 AM	12:45 PM
Alphonse	ECOL	5919	M	10/1/1981	11/2/2013	E	3:06 PM	
Claire	ECOL	LCF-100055	F	3/16/1992	9/26/2013	E	unknown	
Nanette	ECOL	5776	F	4/19/1983	6/7/2008	E	2:20 PM	3:40 PM
Alain	ECOL	5800	M	5/11/1983	5/4/2004	FD in AM	dead > 6 hr	
Yvette-F	ECOL	3502	M	3/23/1977	3/25/1977			
Yvette-E	ECOL	2514	M	4/11/1975	4/11/1975			
Yvette-D	ECOL	1573	F	4/23/1974	4/25/1974			
Nefertari	ECOR	6366	F	4/11/1990	2/25/2014	E	9:38 AM	
Bastet	ECOR	6177	F	5/1/1987	10/29/2013	E	10:14 AM	12:40 PM
Meritaten	ECOR	5937	F	5/29/1984	10/24/2011	E	2:25 PM	5:46 PM
Istnofret	ECOR	6441	F	6/4/1991	5/29/2008	E	3:50 PM	
Tefnut	ECOR	6438	F	5/21/1991	10/31/2005	E	10:15 AM	
Nefertiti	ECOR	4525	F	7/18/1977	4/11/2003	DIVC	1:20 PM	
Khufu	ECOR	6035	M	10/1/1980	10/25/2002	E	11:25 AM	
Zoser	ECOR	6034	M	10/1/1979	7/1/2002	E	unknown	
Bes	ECOR	6251	M	5/18/1988	1/31/2001	E	2:45 PM	
Bastet-E	ECOR	6678	M	4/25/1996	5/21/1996			

Meritaten-D	ECOR	6635	M	4/30/1995	5/3/1995	FD in AM	unknown	
Isis-C	ECOR	6599	M	5/17/1994	6/2/1994			
Hathor-B	ECOR	6186	F	5/8/1987	5/8/1987	FD in AM	unknown	
Sitamon-A	ECOR	6151	M	4/7/1987	4/7/1987	FD	unknown	
Meritaten-A	ECOR	6111	M	6/12/1986	6/17/1986			
Ra	ECOR	4526	M	7/7/1977	3/25/1983			
Hopkins	EFLA	6655	M	3/11/1996	3/21/2015	E		
Redford	EFLA	6462	M	3/13/1992	7/29/2014	E	9:36 AM	11:50 AM
Lamour	EFLA	6395	F	11/1/1989	8/3/2011	E	2:15 PM	6:15 PM
Barrymore	EFLA	6248	M	5/9/1988	3/25/2011	E	10:01 AM	
Foster-E	EFLA	6906	M	3/20/2008	3/20/2008	FD in AM	unknown	
Lange	EFLA	6521	F	3/11/1993	5/7/2007	DIVC	8:45 AM	
Foster-D	EFLA	6890	F	3/26/2007	3/26/2007	FD in AM	unknown	
Witherspoon	EFLA	6793	F	3/4/2002	1/6/2006	DIVC	11:30 AM	
Lovett	EFLA	6768	M	9/24/2000	10/25/2004	E	unknown	
Goldie	EFLA	6748	F	3/25/1999	2/29/2004			
Foster-B	EFLA	6809	F	3/19/2003	3/19/2003	FD in AM	10:00 AM	
Hepburn-C (b)	EFLA	6654	F	3/11/1996	3/13/1996			
Hepburn-A	EFLA	6458	F	3/5/1992	3/7/1992			
Frigga	EFUL	6123	F	3/31/1984	1/22/2014	E	10:12 AM	12:55 PM
Freya-A	EFUL	6061	M	3/24/1986	3/24/1986			
Freya-B	EFUL	6062	F	3/24/1986	3/24/1986			
Liby-A	EFUL	5621	F	5/2/1981	5/2/1981			
Sal-D	EFUL	2515	M	4/20/1975	4/22/1975			
Frodo-B	EFUL	1571	F	4/20/1974	4/22/1974			
Latona	EMAC	5859	F	3/29/1984	12/3/2014	E	9:21 AM	11:47 AM
Deucalion	EMAC	6274	M	3/15/1989	12/26/2013	E	11:00 AM	1:20 PM
Teucer	EMAC	6284	M	3/18/1989	11/6/2013	E	11:03 AM	1:03 PM
Blanche	EMAC	5999	F	10/1/1981	8/15/2000	E	10:00 AM	
Latona-B	EMAC	6457	F	3/2/1992	3/2/1992			
Danae-D	EMAC	6056	F	3/20/1986	4/2/1986	E	unknown	
Danae-C	EMAC	5830	ND	2/4/1984	2/4/1984			
Halcyone-A	EMAC	5814	F	6/15/1983	6/15/1983			
Flor	EMON	6102	F	5/20/1986	12/14/2015	E	10:30 AM	12:30?

Guadalupe	EMON	6645	F	5/26/1995	11/26/2014	E	8:38 AM	10:45 PM
Moheli	EMON	6263	F	5/13/1987	10/4/2014	DIVC	11:23 AM	2:15 PM
Carolina-A	EMON	7148	M	4/11/2013	4/14/2013	FD	5:00 AM	
Maddie-A	EMON	7147	M	4/5/2013	4/5/2013	FD	6:30 AM	10:45 AM
Sancho	EMON	5722	M	10/1/1982	12/14/2012	FD @ 8:30 AM	4:30 AM	6:40 PM
Concepcion	EMON	5952	F	10/15/1984	6/18/2011	DIVC	5:45 PM	11:57 AM
Fabio	EMON	6237	M	4/23/1988	12/15/2010	E	9:55 AM	12:30 PM
Moheli-A	EMON	6942	F	4/19/2009	4/19/2009			
Gustavo	EMON	6030	M	6/21/1985	11/22/2003			
Chiquita-B	EMON	6387	F	6/7/1990	6/7/1990			
Carmen-B	EMON	6383	F	5/7/1990	5/7/1990	FD	12:00 PM	
Concepcion-A	EMON	6188	M	4/25/1987	4/30/1987			
	EMON	4519	F	wild born	10/31/1978	UNKNOWN		
Hopi	ERUB	6358	F	3/1/1990	8/25/2015	E	10:58 AM	1:00 PM
Navajo	ERUB	6392	M	10/1/1988	9/18/2012	FD	early AM	3:07 PM
Fiery	ERUF	5729	M	3/3/1983	6/21/2013	E	10:21 AM	12:15 PM
Redrover	ERUF	5728	M	3/1/1982	8/11/2010	E	12:50 PM	2:51 PM
Rage	ERUF	6287	M	3/19/1989	12/10/2002	DIVC	9:45 AM	
Radish-B	ERUF	6672	F	4/8/1996	4/8/1996			
Crimson-C	ERUF	5959	M	2/26/1985	2/26/1985			
Calo-F	ERUF	3501	M	3/20/1977	3/22/1977			
Tana-C	ERUF	2536	F	3/13/1976	3/13/1976			
Calo-C	ERUF	2508	M	3/28/1975	3/30/1975			
Calo-B	ERUF	1567	M	4/15/1974	4/15/1974			
Hermione-A	ERUF	1566	M	4/15/1974	4/15/1974			
Bao	ESAN	6509	F	6/30/1992	3/28/2013	E		
Bozy	ESAN	6181	F	5/2/1987	12/3/2007	UNKNOWN		
Haja	ESAN	6546	M	5/12/1993	11/18/2007	UNKNOWN		
Hery	ESAN	6044	M	11/29/1985	10/3/2007	UNKNOWN		
Niry	ESAN	5948	M	10/1/1981	12/3/2005	E	4:15 PM	
Meshak	ESAN	4564	M	4/24/1979	8/7/1983			
Matthan	EUL	6081	M	4/16/1986	3/30/2015	E	11:07 AM	
Rabodo	EUL	6315	M	5/18/1989	9/15/2006	E	9:30 AM	
Babette	EUL	5512	F	3/24/1980	12/10/1999	E	1:35 PM	

Ira	EUL	6367	M	4/17/1990	6/14/1999	FD in AM	6:00 AM	
Gomer	EUL	5530	M	4/28/1980	5/24/1991	E	7:00 AM	
Signe	EUL	4579	F	5/16/1979	1/6/1986			
Johanna-A	EUL	5943	F	7/3/1984	7/3/1984			
Claudette-A	EUL	5576	M	3/17/1981	3/20/1981			
Bathsheba-K	EUL	5553	F	6/6/1980	6/6/1980			
Hermione-B	EUL	5501	M	8/28/1979	8/28/1979			
Song-A	EUL	4529	M	2/26/1979	2/26/1979			
Song-B	EUL	4530	F	2/26/1979	2/26/1979			
Pasipa-A	EUL	3579	ND	4/30/1978	4/30/1978			
Tina-A	EUL	3534	M	1/27/1978	1/27/1978			
Bathsheba-G	EUL	3527	M	5/16/1977	5/18/1977			
Pandora-A	EUL	2587	M	3/19/1977	3/19/1977			
Pandora-B	EUL	2588	F	3/19/1977	3/19/1977			
Scarlett II-B	EUL	2577	M	3/8/1977	3/8/1977			
Yen-B	EUL	2573	M	8/12/1976	8/13/1976			
Miriam-A	EUL	2566	M	6/30/1976	6/30/1976			
Bathsheba-F	EUL	2551	F	4/9/1976	4/10/1976			
Bathsheba-E	EUL	2550	F	4/9/1976	4/9/1976			
Mamie	EUL	2545	F	4/5/1976	4/6/1976			
Tia-A	EUL	2533	F	2/28/1976	2/28/1976			
Absalom	EUL	576	M	1/9/1971	11/27/1975	FD in AM		
Zerlina-A	EUL	2519	M	4/27/1975	4/27/1975			
Bathsheba-D	EUL	2513	M	4/11/1975	4/11/1975			
Adriana-A	EUL	1558	F	3/26/1974	3/26/1974			
Demigod	GDEM	3156	M	8/25/1988	3/8/1991	UNKNOWN		
Demiquaver-A	GDEM	3134	F	11/7/1988	11/7/1988			
Demitour	GDEM	3022	M	11/11/1984	1/1/1988			
Farkleberry	GMOH	3185	M	8/9/2002	5/12/2009			
Agave	GMOH	3190	M	2/22/2003	1/17/2008	DIVC	3:00 PM	
Kepenzi	GMOH	3187	M	3/5/1999	2/15/2007	DIVC	4:50 PM	
Silverpalm	GMOH	3143	F	2/2/1989	3/1/2003	UNKNOWN	unknown	
Sugarpine	GMOH	3158	F	10/26/1990	1/26/2002	FD in AM	10:00 AM	
Seagrape	GMOH	3141	F	2/1/1989	9/24/1998	FD @ 10:00 am	unknown	

Mimosa	GMOH	1087	F	3/8/1980	6/26/1989	UNKNOWN	unknown	
Papaya-D	GMOH	3138	F	1/25/1989	2/7/1989			
Pond-Apple	GMOH	3123	F	2/29/1988	12/24/1988			
Whiteoak	GMOH	2061	M	12/6/1983	7/26/1988	E	unknown	
Papaya-B	GMOH	3116	M	9/4/1987	9/14/1987			
Chinquapin-C	GMOH	3085	M	8/9/1986	8/14/1986			
Lyonia-A	GMOH	3082	ND	7/8/1986	7/10/1986			
SilverBell-B	GMOH	3079	ND	5/24/1986	5/25/1986			
Hackberry-A	GMOH	3074	F	4/30/1986	5/9/1986			
Sorreltree	GMOH	2041	M	5/11/1981	1/24/1986	E	unknown	
JUNEBERRY (GMO)	GMOH	2016	F	1/26/1980	12/19/1985	DIVC	12:00 PM	
Ginko-A	GMOH	3057	ND	12/16/1985	12/17/1985			
Anaqua	GMOH	3007	F	11/12/1984	10/6/1985			
Alanthus-C	GMOH	3031	ND	6/4/1985	6/4/1985			
Baobab	GMOH	1080	M	3/8/1980	5/15/1985			
Beech-C	GMOH	3024	ND	4/28/1985	5/3/1985			
Pussywillow-B	GMOH	3019	ND	3/22/1985	3/22/1985			
Hawthorne-A	GMOH	3011	F	12/25/1984	12/31/1984			
Amyris	GMOH	3008	M	11/12/1984	12/10/1984			
Basswood	GMOH	2099	M	8/18/1984	9/3/1984			
Sweetbay-A	GMOH	1076	M	1/25/1982	1/25/1982			
unknown	Gmoh	304	m	<6/1/1963	4/20/1967			
unknown	Hgg	unknown	nd	unknown	unknown			
Becool	HGG	1367	F	5/9/1998	8/21/2012	E	9:45 AM	12:32 PM
Munchkin	HGG	1371	M	1/25/2000	7/15/2011	UNKNOWN	unknown	
Beamish	HGG	1359	M	3/27/1996	2/25/2009	E	2:15 PM	4:45 PM
Belittle	HGG	1360	F	4/9/1996	10/23/2008	UNKNOWN	unknown	
Bejeweled	HGG	1354	M	5/13/1994	3/14/2005			
Behave	HGG	1337	F	7/8/1991	6/29/2003	DIVC	12:10 PM	
Behemoth	HGG	1331	F	5/1/1989	1/31/2003	1/31/2003	2:30 PM	
Beltane	HGG	1353	F	4/12/1994	1/27/2002	FD in AM	6:00 AM	
Beclouded	HGG	1313	F	12/1/1976	8/13/1997	E	9:38 AM	
Bedeveled	HGG	1311	M	6/20/1980	3/16/1995	E	unknown	
Beclouded-B	HGG	1325	M	11/21/1985	11/25/1985	FD @ 1:00 pm	unknown	

Behold	HGG	1323	F	12/1/1983	9/1/1985			
Beauty	HGG	1317	F	12/1/1982	11/13/1984			
Bewitched	HGG	1302	F	12/1/1967	11/25/1977	DIVC	8:50 AM	
Bediddley	HGRI	1333	M	5/22/1989	2/10/2010	E	10:42 AM	
Liesl-A	LCAT	7205	M	3/19/2015	3/21/2015	DIVC	1:00 PM	
Penelope	LCAT	7142	F	3/28/2013	5/24/2014	DIVC	2:47 PM	1:30 PM
Lycus	LCAT	5977	M	3/30/1985	8/21/2013	FD @ 8:45 am	12:00 AM	1:15 PM
Hibernia-A	LCAT	7145	M	3/29/2013	4/19/2013	E	10:55 AM	12:05 PM
Dorieus-F	LCAT	7138	F	3/23/2013	4/15/2013	E	2:35 PM	
Dorieus-D	LCAT	7117	M	7/7/2012	7/7/2012	FD	8:30 AM	
Justine-A	LCAT	7100	F	6/20/2012	6/21/2012	DIVC	7:30 AM	
Justine-B	LCAT	7101	F	6/20/2012	6/20/2012	DIVC	8:45 AM	
Cap N' Lee	LCAT	6848	M	3/25/2000	10/7/2011	FD	8:00 AM	4:06 PM
Dorieus-B	LCAT	7057	M	7/19/2011	7/19/2011	DIVC	11:45 AM	12:00 PM
Dorieus-C	LCAT	7058	F	7/19/2011	7/19/2011	DIVC	11:45 AM	12:00 PM
Nemo	LCAT	6143	M	3/23/1987	10/17/2010	FD	9:30 AM	
Leto	LCAT	6953	M	7/8/2009	8/12/2009	FD @ 8:00 am	4:00 AM	9:30 AM
Sophia-A	LCAT	6938	F	3/21/2009	4/10/2009			
Molon	LCAT	6808	F	3/18/2003	10/25/2004	E		
Dory-A	LCAT	6661	ND	3/20/1996	3/26/1996			
Atossa-B	LCAT	6343	F	3/16/1990	3/25/1990			
Calpurnia-A	LCAT	1534	M	3/13/1973	3/19/1973			
Lavoris	LTAR	2930	M	10/17/1992	6/16/2010	E	11:20 AM	1:00 PM
Anil	LTAR	1992	M	3/22/1991	1/5/2009	E		4:30 PM
Samantha (LTAR)	LTAR	2925	F	11/6/1991	10/7/2008	E	9:44 AM	11:35 AM
Tejinder	LTAR	1918	M	7/26/1986	5/25/2002	E	11:00 AM	
unknown	Mmur	unknown	nd	unknown	unknown			
Orville	MMUR	7025	M	7/29/2002	5/3/2013	E	10:12 AM	11:20 AM
Tobacco	MMUR	7065	M	8/15/2011	2/11/2013		unknown	
Cilantro	MMUR	7021	M	7/27/2001	10/21/2012	FD 8:30 AM	est 20:01 AM	10:28 AM
Wilbur	MMUR	7024	M	7/29/2002	10/3/2012	FD @ 12:30 PM	8:30 AM	5:38 PM
Basil	MMUR	7022	F	8/8/2001	9/28/2010	E	10:00 AM	12:06 PM
Alfalfa	MMUR	7019	M	7/15/1997	6/4/2009	E		
Kudzu	MMUR	7017	M	6/16/1997	4/28/2009	E		

Musk Rose	MMUR	7016	M	2/13/1995	12/2/2008	E	10:00 AM	11:37 AM
Rosehip	MMUR	7006	M	6/17/1994	10/17/2006	E	3:00 PM	
Hemp	MMUR	7003	M	8/24/1990	3/11/2005	E	12:00 PM	
Cornsilk	MMUR	7011	F	7/11/1995	7/27/2003	FD in AM		
Angelica	MMUR	1830	F	6/20/1985	1/12/1999	E	2:00 PM	
Egiantine	MMUR	845	F	7/16/1980	7/27/1995	E		
Vanilla	MMUR	1812	F	7/6/1984	7/8/1994	E	unknown	
Buddy (MZAZ)	MZAZ	2316	m	6/2/1994	6/18/2012	E	10:15 AM	12:01 PM
Boaky	MZAZ	2304	M	3/19/1991	1/24/2006	E	3:00 PM	
Hanka	MZAZ	2301	F	5/12/1990	9/1/2005	E	12:30 PM	
Totoroka-B	MZAZ	2321	M	5/26/2003	5/28/2003			
Totoroka-A	MZAZ	2320	M	5/26/2003	5/27/2003			
Monjo	MZAZ	360	M	4/21/1987	11/20/2002	E	10:00 AM	
Arosy	MZAZ	315	M	8/25/1979	8/4/1997	E	12:30 PM	
Papelika	MZAZ	339	F	6/16/1985	5/30/1996	E	5:00 PM	
Dangoro	MZAZ	340	M	4/13/1986	4/21/1991	FD in AM	unknown	
Lahkshmani	NCOU	1998	F	5/18/1993	7/30/2013	E	10:16 AM	12:30 PM
Skimmer	NPYG	2901	F	3/15/1994	6/14/2013	E	1:11 PM	12:10 PM
Junebug-A	NPYG	7102	M	6/20/2012	7/3/2012	DIVC	12:20 PM	3:25 PM
Doodlebug	NPYG	2921	M	3/4/2002	5/8/2012	E	2:45 PM	4:55 PM
Pygmy Hunter	NPYG	2926	M	7/27/2002	4/4/2012	DIVC	10:17 AM	1:20 PM
Skimmer-E	NPYG	2922	M	3/4/2002	3/5/2002	FD @ 3:00 am	3:00 AM	
Skimmer-D	NPYG	2920	ND	5/14/2001	5/23/2001			
unk adult	Ogg	unknown	nd	unknown	unknown			
Spessartite	OGG	8028	M	3/6/1992	3/3/2012	E		
Gallium-A	OGG	8011	ND	10/7/1989	10/14/1989			
Emerald-A	OGG	1424	M	1/12/1987	1/13/1987			
Rutile-B	OGG	1422	M	11/8/1986	11/9/1986			
unk infant	Oma	unknown	nd	unknown	unknown			
Tabu-D	OMA	2865	M	2/9/1991	2/9/1991			
Kumi-A	OMA	2843	F	5/2/1990	5/4/1990			
Salima-A	OMA	2784	ND	3/23/1988	3/23/1988			
Mwasaa	OMA	1749	F	8/17/1983	5/19/1987			
Lela-E	OMA	2716	ND	11/25/1985	11/30/1985			

Fatima-A	OMA	1792	M	6/14/1985	6/24/1985			
Cheusi-B	OMA	1782	F	2/16/1985	2/20/1985			
Mwatabu-A	OMA	1780	F	2/8/1985	2/11/1985			
Siti-B	OMA	1768	M	8/16/1984	8/18/1984			
Siti-A	OMA	1767	F	8/16/1984	8/17/1984			
Pili-C	OMA	1765	ND	8/12/1984	8/12/1984			
Pili-D	OMA	1766	M	8/12/1984	8/12/1984			
Lela-C	OMA	1754	M	6/9/1984	6/11/1984			
Iago-C	OMA	1744	M	4/29/1983	4/30/1983			
Mosi-A	OMA	1729	F	4/29/1982	5/6/1982			
Zola-A	OMA	759	F	8/10/1975	8/11/1975			
Niobe-E	OMA	755	F	5/13/1975	5/13/1975			
Usiku-A	OMA	82	ND	3/14/1968	3/14/1968			
Tatu-C	OMON	unknown	M	4/13/1991	4/14/1991			
Karibu	OMON	2845	M	5/5/1990	5/7/1990			
Afiya-A	OMON	2759	M	4/15/1987	4/15/1987			
Mbili	OMON	2741	F	7/4/1986	11/14/1986	E	unknown	
Arusi-B	OMON	1797	F	6/27/1985	6/29/1985			
Asura-A	OMON	1795	F	6/26/1985	6/27/1985			
Chiku-A	OMON	1719	M	1/4/1982	1/6/1982			
unknown	Pcoq	unknown	nd	unknown	unknown			
unknown infant	Pcoq	unknown	nd	unknown	unknown			
Matilda-A	PCOQ	7203	M	2/28/2015	2/28/2015	FD @ 1:00 AM	stillborn	
Jovian	PCOQ	6583	M	4/10/1994	11/10/2014	E	12:43 PM	4:00 PM
Cupid	PCOQ	6933	M	2/14/1999	10/9/2014	E		
Phillip the Arab	PCOQ	6747	M	2/24/1999	10/9/2014	E		
Pompeia Plotina-A	PCOQ	7173	M	1/27/2014	1/27/2014	FD	2:00 AM	2:25 PM
Xena	PCOQ	7079	F	1/28/2012	7/4/2013	UNKNOWN		
Irene-A	Pcoq	7133	M	1/20/2013	2/14/2013	FD		
Ernestine	PCOQ	7077	F	1/26/2012	4/9/2012	FD ~8:30 AM	1:00 AM	3:30 PM
Drusilla-B	PCOQ	7078	M	1/30/2012	1/30/2012	FD	10:00 AM	12:16 PM
Crispus Ceasar	Pcoq	6804	M	1/7/2003	7/3/2011	UNKNOWN		
Havozo	PCOQ	6934	m	2/14/2009	7/2/2011	UNKNOWN		
Leo	PCOQ	6790	M	12/26/2001	6/27/2011			

Brutus	PCOQ	6774	m	2/28/2001	6/2/2011	DIVC	1:30 PM	4:30 PM
Drusilla-A	PCOQ	6963	M	2/1/2010	2/1/2010	FD in AM	12:01 AM	12:58 PM
Nero	PCOQ	6610	M	12/4/1994	4/2/2008	DIVC	8:35 PM	
Pulchra	Pcoq	6517	F	2/28/1993	12/15/2007	UNKNOWN		
Pulchra-E	Pcoq	6891	M	12/30/2006	1/2/2007	UNKNOWN		
Tony	PCOQ	6845	M	2/9/2005	8/30/2006			
Paulina	PCOQ	6398	F	1/24/1991	8/29/2006	UNKNOWN	unknown	
Lucia	PCOQ	6273	f	3/15/1989	10/3/1999	DIVC	8:45 AM	
Pulchra-B	PCOQ	6738	F	6/19/1998	6/21/1998			
Paulina-A	PCOQ	6651	ND	1/8/1996	1/11/1996	FD in AM	overnight	
Romeo	PDIA	6564	M	6/1/1993	1/21/2012	FD in AM	5:00 AM	1:40 PM
unk adult	Ppot	unknown	nd	unknown	unknown			
unk juvenile	Ppot	unknown	nd	unknown	unknown			
Kofi	PPOT	919	M	4/23/1985	12/18/2010	E?		
Titus	PTAT	6556	m	7/6/1983	12/2/2008	DIVC	5:50 PM	8:50 PM
Valens	PTAT	6729	M	3/29/1998	2/5/2007	FD @ 10:30 PM	9:00 PM	
Messilina	PTAT	6555	F	7/1/1979	9/19/1998	DIVC	12:05 AM	
Tattertot	PTAT	6703	M	4/1/1997	6/2/1997	FD	6:30 AM	
Cicero	PTAT	6253	M	1/1/1976	8/24/1988	DIVC	10:00 AM	
unknown	Sang.Mid	unknown	m	12/13/1990	12/14/1990			
unknown	Vrub	unknown	nd	unknown	unknown			
Stephano	VRUB	7213	M	5/13/2015	9/30/2015	DIVC	3:17 AM	12:38 PM
Toros	VRUB	6446	M	6/17/1991	1/6/2014	UNKNOWN	unknown	
Pyxis-E	VRUB	7092	M	5/10/2012	5/10/2012	FD	6:30 AM	11:00 AM
Pyxis-C	VRUB	6998	F	5/16/2011	5/16/2011	FD	12:00 PM	4:00 PM
Pyxis-D	VRUB	6999	M	5/16/2011	5/16/2011	FD	12:00 PM	5:10 PM
Diphda	VRUB	6378	F	4/28/1990	2/15/2010	E	2:34 PM	5:12 PM
Tromdenus	VRUB	6241	M	4/30/1988	3/18/2008	E		
Phoenix	VRUB	5629	M	5/19/1981	5/14/2003			
Pavo	VRUB	5628	F	5/17/1981	2/12/1989	E		
Hebe	VVV	6415	F	4/3/1991	8/27/2014	E	9:41 AM	12:20 PM
Amor	VVV	5604	M	4/15/1981	5/12/2013	E	6:00 PM	
Hebe-A	VVV	6992	M	4/13/2011	4/13/2011	FD	5:30 AM	
Babel-I	VVV	6541	M	4/8/1993	4/13/1993	FD	unknown	

Mars	VVV	586	M	10/1/1966	9/2/1992	E	unknown	
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No.	F/L	Year Pub	Author	Publication
1225	L	2013	Herculano-Houzel S, Collins CE, Leitch DB, Wong P, Kaas JH,	Faster scaling of visual neurons in cortical areas relative to subcortical structures in non-human primate brains. <i>Brain Structure and Function</i> 218 (3): 805-816.
1231	L	2013	Yoder, A.D.	The Lemur Revolution Starts Now: the genomic coming of age of a non-model organism. <i>Molecular Phylogenetics and Evolution</i> 66(2):442-52. doi: 10.1016/j.ympev.2012.08.024
1232	L	2013	delBarco-Trillo J., Harelimana I.H., Goodwin T.E., and Drea C.M.	Chemical differences between voided and bladder urine in the aye-aye (<i>Daubentonia madagascariensis</i>): Implications for olfactory communication studies. <i>American Journal of Primatology</i> 75 (7): 695-702.
1234	L	2013	Muchlinski, MN, Durham EL, Smith TD, and Burrows AM	Comparative histomorphology of intrinsic vibrissa musculature among primates: implications for the evolution of sensory ecology and "face touch". <i>American Journal of Physical Anthropology</i> 150 (2): 301-12. doi: 10.1002/ajpa.22206
1236	L	2013	Drea, C.M., Boulet, M., delBarco-Trillo, J., Greene, L., Sacha, C., Goodwin, T, & Dubay, G.R.	The 'secret' in secretions: Methodological considerations in deciphering primate olfactory communication. <i>American Journal of Primatology</i> . 75 (7): 621-642.
1237	L	2013	Smith T, DeLeon, and Rosenberger	At birth, tarsiers lack a postorbital bar or septum. <i>Anatomical Record</i> 296 (3): 365-77. doi: 10.1002/ar.22648
1241	L	2013	Perry GH, Louis EE, Ratan A, Bedoya-Reina OC , Burhans R, Lei R, Johnson E, Schuster SC and Miller W	Aye-aye population genomic analyses highlight an important center of endemism in northern Madagascar. <i>PNAS</i> 110 (15): 5823-5828.
1245	L	2013	Perrin M.	The gastro-intestinal anatomy of the lesser bamboo lemur <i>Hapalemur griseus</i> , with comments on digestive function. <i>South African Journal of Wildlife Research</i> 43(1):79-83. DOI: 10.3957/056.043.0112
1246	L	2013	Gyambibi A. and Lemelin P.	Comparative and quantitative myology of the forearm and hand of prosimian primates. <i>The Anatomical Record</i> . 296(8):1196-206. DOI: 10.1002/ar.22721
1248	L	2013	Granatosky M, Lemelin P, Chester S, Pampush J and Schmitt D	Functional and evolutionary aspects of axial stability in euarchontans and other mammals. <i>Journal of Morphology</i> DOI: 10.1002/jmor.20216
1261	L	2014	Yoder AD, Chan LM, dos Reis M, Larsen PA, Campbell CR, Rasolarison R, Barrett M, Roos C, Kappeler P, Bielawski JP and Yang Z	Molecular Evolutionary Characterization of a VIR Subfamily Unique to Strepsirrhine Primates. <i>Genome Biology and Evolution</i> 6(1): 213-227.

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1262	L	2013	Meyer WK, Zhang S, Hayakawa S, Imai H and Przeworski M	The convergent evolution of blue iris pigmentation in primates took distinct molecular paths. <i>American Journal of Physical Anthropology</i> 151: 398-407.
1266	L	2014	Larsen PA, Heilman AM and Yoder AD	The utility of PacBio circular consensus sequencing for characterizing complex gene families in non-model organisms. <i>BMC Genomics</i> 15:720 doi:10.1186/1471-2164-15-720
1267	L	2014	Larsen PA, Campbell CR and Yoder AD	Next-generation approaches to advancing ecoimmunogenomic research in critically endangered primates. <i>Molecular Ecology Resources</i> 14: 1198–1209
1268	L	2014	Smith TD, Kentzel ES, Cunningham JM, Bruening AE, Jankord KD, Trupp SJ, Bonar CJ, Rehorek SJ and DeLeon VB	Mapping bone cell distributions to assess ontogenetic origin of primate midfacial form. <i>Am J Phys Anthropol.</i> 2014 Jul;154(3):424-35. doi: 10.1002/ajpa.22540
1270	L	2014	del Barco-Trillo J and Drea CM	Socioecological and phylogenetic patterns in the chemical signals of strepsirrhine primates. <i>Animal Behavior</i> 97:249-253. doi:10.1016/j.anbehav.2014.07.009
1273	L	2014	Katzourakis A, Aiewsakun P, Jia H, Wolfe ND, LeBreton M, Yoder AD, Switzer WM	Discovery of prosimian and afrotherian foamy viruses and potential cross species transmissions amidst stable and ancient mammalian co-evolution. <i>Retrovirology</i> 11:61 doi:10.1186/1742-4690-11-61
1277	L	2015	Carrigan MA, Uryasey O, Frye CB, Echman BL, Myers CR, Hurley TD and Benner SA	Hominids adapted to metabolize ethanol long before human-directed fermentation. <i>PNAS</i> 12(2):458-463 doi: 10.1073/pnas.1404167111
1283	L	2015	Blair C, Campbell CR and Yoder AD	Assessing the utility of whole genome amplified DNA for next-generation molecular ecology. <i>Molecular Ecology Resources</i> 15:5 p 1079-1090
1285	L	2015	Harstone-Rose A, Parkinson JA, Criste T, and Perry JMG	Comparing apples and oranges - the influence of food mechanical properties on ingestive bite sizes in lemurs. <i>AJPA</i> 157:3 p. 513-518. DOI: 10.1002/ajpa.22726
1286	L	2015	Petty JM and Drea CM	Female rule in lemurs is ancestral and hormonally mediated, <i>Scientific Reports</i> 5. doi:10.1038/srep09631
1292	L	2015	Meyer WK, Vankat A, Kermany AR, van de Geijn B, Zhang S, and Przeworski MP	Evolutionary history inferred from the de novo assembly of a non-model organism, the blue-eyed black lemur. <i>Molecular Ecology</i> . DOI: 10.1111/mec.13327
1293	L	2015	Huq E, Wall CE, Taylor AB	Epaxial muscle fiber architecture favors enhanced excursion and power in the leaper <i>Galago senegalensis</i> . <i>Journal of Anatomy</i> doi: 10.1111/joa.12351

Duke University Primate Center Publication List

1294	L	2015	Tennenhouse EM	The influence of growth patterns on sexual size monomorphism in lemurs. <i>Journal of Evolutionary Biology</i> . DOI: 10.1111/jeb.12688
1295	L	2015	Smith TD, Mucklinski MN, Jankord KD, Progar AJ, Bonar CJ, Evans S, Williams L, Vinyard CJ and DeLeon VB	Dental maturation, eruption, and gingival emergence in the upper jaw of newborn primates. <i>Anatomical Record</i> 298:12 p 2098-31. DOI: 10.1002/ar.23273
1297	L	2015	McKenney, EA, Rodrigo A, and Yoder AD	Patterns of Gut Bacterial Colonization in Three Primate Species. <i>Plos One</i> . DOI: 10.1371/journal.pone.0124618
1298	L	2015	Pastorini, J, Sauter ML, Sussman RW, Gould L, Cuzzo FP, Fernando P, Nievergelt CM, Mundy NI	Comparison of the genetic variation of captive ring-tailed lemurs with a wild population in Madagascar. <i>Zoo Biology</i> DOI: 10.1002/zoo.21225
1299	L	2015	Chinnadurai SK and Williams CV	The minimum alveolar concentration of sevoflurane in ring-tailed lemurs (<i>Lemur catta</i>) and aye-ayes (<i>Daubentonia madagascariensis</i>). <i>Veterinary Anaesthesia and Analgesia</i> . DOI: 10.1111/vaa.12266
1303	L	2015	Perry JMG, St Clair EM, and Hartstone-Rose A	Craniomandibular signals of diet in adapids. <i>AJPA</i> DOI: 10.1002/ajpa.22811
1312	L	2016	Larsen PA, Hayes CE, Williams CV, Junge RE, Razafindramanana J, Mass V, Rakotondrainibe H, and Yoder AD	Blood transcriptomes reveal novel parasitic zoonoses circulating in Madagascar's lemurs. <i>Biology Letters</i> .



Duke Lemur Center

David Haring, Registrar
3705 Erwin Road
Durham, NC 27705-5000

Phone: (919) 489-3364 ext 228
Fax: (919) 490-5394
dharing@duke.edu

February 13, 2018

U.S. Fish and Wildlife Service
International Affairs
5275 Leesburg Pike, MS:IA
Falls Church, VA 22041-3803

RCUD FEB 27 2018

To Whom It May Concern:

Enclosed please find a report of the Duke University Lemur Center's activities under the Duke University Lemur Center Endangered/Threatened Species permit: (new: 48515B) (old permit: PRT-679043) for the calendar year 2017.

I am including a copy of our current inventory of living animals, a report of all interstate sales of tissues, blood or cadavers of threatened or endangered primates for 2017 (including the DUPC veterinary program to reduce mortalities), a list of mortalities and causes for calendar year 2017, an inventory of our cadaver collection and a list of publications produced from 2013-2017 from specimens traded under this permit.

If you need a copy of our blood and serum sample inventory or our ultracold tissue collections, please contact me, as those inventories consist of too many pages to print realistically. Digital files of any of these inventory sheets are available, just let me know if you would like that information on a thumb drive.

Please contact me if you have any questions about the enclosed report.

Sincerely:

David Haring
Registrar

REPORT FOR ACTIVITIES UNDER MA48515B-0 FOR CALENDAR YEAR 2017
(Interstate sales of blood, tissue or cadavers of threatened/endangered species)

Blood Sales:

01/10/17

Michael Snyder
Stanford University
3165 Porter Drive
Palo Alto, CA 94304

7039M	Microcebus Murinus - whole blood .25 ml
7129M	Microcebus Murinus - whole blood .25 ml
7108F	Microcebus Murinus - whole blood .25 ml
7067F	Microcebus Murinus - whole blood .25 ml
7184F	Microcebus Murinus - whole blood .25 ml

02/06/17

Michael Snyder
Stanford University
3165 Porter Drive
Palo Alto, CA 94304

7166M	Microcebus Murinus - whole blood .25 ml
7187F	Microcebus Murinus - whole blood .25 ml
7104F	Microcebus Murinus - whole blood .25 ml

04/18/17

Jue Lin/Elizabeth Blackburn Lab
Mission Bay UCSF
600 16th St
Room 5316, Genentech Hall
San Francisco, CA 94158

1636M	Cheirogaleus medius - whole blood .5 ml
3619F	Cheirogaleus medius - whole blood .2 ml
3640F	Cheirogaleus medius - whole blood .5 ml
3640F	Cheirogaleus medius - whole blood .5 ml
3640F	Cheirogaleus medius - whole blood .5 ml

05/19/17

Jason Kamilar
University of Massachusetts – Amherst
Machmer Hall, Room W16
Amherst, MA 01003

6903m	Propithecus coquereli - whole blood .20 ml
6897f	Propithecus coquereli - whole blood .20 ml
6615m	Eulemur rufus - whole blood .20 ml
6624f	Eulemur rufus - whole blood .20 ml
6488m	Eulemur rubriventer - whole blood .20 ml
6038f	Eulemur rubriventer - whole blood .20 ml

6991f	Eulemur mongoz - whole blood .20 ml
7158m	Eulemur mongoz - whole blood .20 ml
6939m	Eulemur flavifrons - whole blood .20 ml
6970f	Eulemur flavifrons - whole blood .20 ml

06/12/17

Tonia Schwartz

Auburn University – Biological Sciences

101 Rouse Life Science Bldg

Auburn, AL 36849

7020	Microcebus murinus whole blood .20ml
7066	Microcebus murinus whole blood .20ml
7025	Microcebus murinus whole blood .20ml

06/12/17

Jason Kamilar

University of Massachusetts – Amherst

Machmer Hall, Room W16

Amherst, MA 01003

6903m	Propithecus coquereli whole blood .20ml
6897f	Propithecus coquereli whole blood .20ml
6615m	Eulemur rufus whole blood .20ml
6624f	Eulemur rufus whole blood .20ml
6488m	Eulemur rubriventer whole blood .20ml
6038f	Eulemur rubriventer whole blood .20ml
6991f	Eulemur mongoz whole blood .20ml
7158m	Eulemur mongoz whole blood .20ml
6939m	Eulemur macaco flavifrons whole blood .20ml
6970f	Eulemur macaco flavifrons whole blood .20ml

09/19/17

Peter Zimmerman

Case Western Reserve University

10900 Euclid Avenue

BRB Bldg Room 409A

Cleveland, OH 44106

6711f	Lemur catta - Whole Blood - Frozen .20ml
6583m	Propithecus coquerli - Whole Blood - Frozen .20ml

Tissue Sales:

08/15/17

Terri Roth

Cincinnati Zoo

3400 Vine St.

Cincinnati, OH 45220

6821f	4/13/2017-Aye-aye fecal samples
6821f	4/21/2017-Aye-aye fecal samples
6821f	4/26/2017-Aye-aye fecal samples
6821f	4/28/2017-Aye-aye fecal samples
6821f	5/2/2017-Aye-aye fecal samples
6821f	5/5/2017-Aye-aye fecal samples
6821f	5/10/2017-Aye-aye fecal samples
6821f	5/12/2017-Aye-aye fecal samples
6821f	5/16/2017-Aye-aye fecal samples
6821f	5/19/2017-Aye-aye fecal samples
6821f	5/23/2017-Aye-aye fecal samples
6821f	5/26/2017-Aye-aye fecal samples
6821f	5/30/2017-Aye-aye fecal samples
6821f	5/31/2017-Aye-aye fecal samples
6821f	6/1/2017-Aye-aye fecal samples
6821f	6/2/2017-Aye-aye fecal samples
6821f	6/5/2017-Aye-aye fecal samples
6821f	6/7/2017-Aye-aye fecal samples
6821f	6/9/2017-Aye-aye fecal samples
6821f	6/10/2017-Aye-aye fecal samples
6821f	6/12/2017-Aye-aye fecal samples
6821f	6/12/2017-Aye-aye fecal samples
6821f	6/14/2017-Aye-aye fecal samples
6821f	6/14/2017-Aye-aye fecal samples
6821f	6/23/2017-Aye-aye fecal samples
6821f	7/6/2017-Aye-aye fecal samples

Cadaver Sales:

04/08/17

Kristin Prufrock

Johns Hopkins University School of Medicine

1830 E Monument St

Rm 303 (Perry Lab)

Baltimore, MD 21205

7057M	Lemur catta - cadaver head
7078M	Propithecus coquereli - cadaver head
6984M	Propithecus coquereli - cadaver head
6999M	Varecia rubra - cadaver head
7213M	Varecia rubra - cadaver head

06/12/17

Adam Hartstone-Rose

University of South Carolina School of Medicine

Cell Biology and Anatomy

6439 Garners Ferry Road

Building 1 CBA room C-35

Columbia, SC 29209

687f	Cheirogaleus medius - head
6915m	Daubentonia madagascariensis - whole cadaver
6251m	Eulemur coronatus - head
6248m	Eulemur flavifrons - head
6030m	Eulemur mongoz - head
1812f	Microcebus murinus - upper limb
845f	Microcebus murinus - upper limb
7011f	Microcebus murinus - whole cadaver
7016m	Microcebus murinus - upper limb
7065m	Microcebus murinus - upper limb
7126f	Microcebus murinus - upper limb
2304m	Mirza zaza - head
6253m	Propithecus tattersalli - cranium (missing mandible)

07/05/17

Dr. Chris Vinyard

NEOMED – Anatomy & Neurobiology

4209 St. Rt. 44 Box 95/Room E-145

Rootstown, OH 44272

6251f	Eulemur fulvus albifrons - intact; premature (formalin cadaver)
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10/16/17

Kristin Prufrock

Johns Hopkins University School of Medicine

1830 E Monument St

Rom 303 (Perry Lab)

Baltimore, MD 21205

6651	Propithecus coquereli - Cadaver head-Frozen
6757	Propithecus coquereli - Cadaver head-Frozen
6457	Eulemur macaco flavifrons - Cadaver head-Frozen
6056	Eulemur macaco flavifrons - Cadaver head-Frozen
5999	Eulemur macaco flavifrons - Cadaver head-Frozen
6938	Lemur catta - Cadaver head-Frozen
6661	Lemur catta - Cadaver head-Frozen
6998	Varecia rubra - Cadaver head-Frozen
7092	Varecia rubra - Cadaver head-Frozen
7133	Propithecus coquereli - Cadaver head-Frozen
unknown	Varecia rubra - Cadaver head-Frozen

8/22/17

Lindsay Mullen

Arizona State University

951 S. Cady Mall

Social Science Rm 103

Tempe, AZ 85287

6102	Eulemur mongoz - cadaver (frozen -20)
6517	Propithecus coquereli - cadaver (frozen -20)
6494	Varecia rubra - cadaver (frozen -20)

Current Colony Inventory, February 2018

Latiname	Common Name	Latin Abbrev.	M	F	Total
Cheirogaleus medius	Fat-tailed dwarf lemur	CMED	13	9	22
Daubentonia madagascariensis	Aye-aye	DMAD	3	7	10
Eulemur collaris	Collared brown lemur	ECOL	3	3	6
Eulemur coronatus	Crowned lemur	ECOR	8	5	13
Eulemur flavifrons	Blue-eyed black lemur	EFLA	8	8	16
Eulemur macaco	Black lemur	EMAC	1	1	2
Eulemur mongoz	Mongoose lemur	EMON	7	3	10
Eulemur rubriventer	Red-bellied lemur	ERUB	1	2	3
Eulemur rufus	Red-fronted brown lemur	ERUF	1	1	2
Hapalemur griseus griseus	Eastern lesser bamboo lemur	HGG	1	1	2
Lemur catta	Ring-tailed lemur	LCAT	11	23	34
Microcebus murinus	Gray mouse lemur	MMUR	24	22	46
Nycticebus coucang	Slow loris	NCOU	.	1	1
Nycticebus pygmaeus	Pygmy slow loris	NPYG	.	1	1
Otolemur crassicaudatus	Thick-tailed greater bushbaby	OCRA	.	1	1
Propithecus coquereli	Coquerel's sifaka	PCOQ	14	19	33
Varecia rubra	Red ruffed lemur	VRUB	8	5	13
Varecia variegata variegata	Black-and-white ruffed lemur	VVV	6	3	9
Total (ALL)			109	115	224

Loan Inventory, February 2018

Latiname	Common_Name	Latin_Abbrev.	M	F	Total
Daubentonia madagascariensis	Aye-aye	DMAD	8	7	15
Eulemur flavifrons	Blue-eyed black lemur	EFLA	6	4	10
Microcebus murinus	Gray mouse lemur	MMUR	7	2	9
Nycticebus pygmaeus	Pygmy slow loris	NPYG	.	1	1
Propithecus coquereli	Coquerel's sifaka	PCOQ	18	17	35
Varecia rubra	Red ruffed lemur	VRUB	.	2	2
Total (ALL)			39	33	72

3 January 2018: Veterinary Program to Reduce Mortalities at Duke Lemur Center for 2017 USFWS report

The following veterinary program was initiated in 1998, and is an ongoing process of improving overall health of the colony and reducing mortalities. Two Veterinarians (Dr Laura Ellsaesser (starting here 10/2017) and Dr. Bobby Schopler (here since 8/2005) with the assistance of two registered veterinary technicians (Megan Davison and Cat Ostrowski) assures that the Duke Lemur Center has full time Veterinary coverage. Dr. Cathy Williams who has served as senior veterinarian since 1996 at DLC has transitioned to Curator of the colony, giving a veterinary perspective to the management of the colony. DLC has digital radiography (including digital dental radiography), an endoscope, in house blood chemistry capability, and ultrasonography allowing for an efficient, accurate Veterinary Department diagnostic capability.

- A bi-yearly physical exam (including rabies vaccine and TB tests) for each animal in the colony.
- De-worming as indicated.
- Prophylactic dental cleanings as necessary (biyearly or more often if indicated).
- Rabies vaccines for all animals with access to outdoor housing.
- Quarantine for new animals entering the colony.
- Veterinary oversight of diet formulation and food handling procedures. (In 2016 we discovered avocado to be toxic to aye aye and this food has been removed from the diet rotation for all lemurs.
- Veterinary oversight of pest control program.
- Efficacy of cage sanitation monitored regularly via Rodac plate testing.
- Water quality monitoring program.
- Food quality monitoring program.
- Complete post-mortem examinations, including histopathology on all deceased animals, to determine individual and colony patterns of mortality.

Death Log 2017

Date of Death	Species	DLC ID#	Name	Cause of Death	Age at Death (yrs)	D.O.B.	
1/5/2017	Mmur	7027	Wormwood	Acute; Cardiac terminal hypoxia	9.6	5/26/2007	
1/17/2017	Cmed	3621	Nighthawk	Euthanized; gradual decline (age related)	25.5	7/9/1991	
1/19/2017	Npyg	7266	Junebug B	Neonatal death; failure to thrive	0.0	1/18/2017	
4/5/2017	Emon	6717	Paco	Euthanasia; Esophageal obstruction	19.8	6/26/1997	
4/24/2017	Mmur	7126	Creeping Jenny	Acute; lymphosarcoma	4.7	8/10/2012	
5/11/2017	Pcoq	7263	Gothicus	Euthanasia; attacked by sibling	0.3	1/6/2017	
5/23/2017	Pcoq	6727	Antonia	Euthanasia; renal failure	19.3	2/22/1998	
6/7/2017	Npyg	7245	Nox	Euthanasia; bronchopneumonia, septicemia	11.2	3/24/2006	
6/30/2017	Mmur	7159	Scuppernong	Euthanasia; hind end paresis due to axonal injury	4.0	6/18/2013	
8/11/2017	Hgg	1370	Beeper	Euthanasia; renal failure	18.8	10/6/1998	
9/15/2017	Vvv	7236	Naissance	Acute death; suspected snake bite	7.3	5/23/2010	
10/16/2017	Pcoq	7284	Lupicina-A	Stillborn	0.0	10/16/2017	
10/26/2017	Npyg	2923	Flea	Euthanized; chronic weight loss and anorexia of 10 days duration.	19.9	12/9/1997	
11/22/2017	Npyg	7285	Kiri	Euthanized; unknown sudden decline	7.7	3/14/2010	

Duke Lemur Center Cadaver Inventory (1/15/18)

Name	Species	DLC ID	sex	DOB	DOD	circumstance	TOD	Time Frozen		
Ruth-A	CMED	637	F	6/28/1978	6/29/1978					
Herodias-B	CMED	697	F	6/29/1983	6/29/1983					
Herodias-C	CMED	698	ND	6/29/1983	6/29/1983					
Zebadee	CMED	656	M	7/14/1980	10/8/1987					
Dias	CMED	613	F	7/18/1974	9/22/1993	E	unknown			
Nathaniel	CMED	1607	M	7/31/1983	10/24/2003	E	10:45 AM			
Herodias	CMED	684	F	7/18/1982	5/27/2004	E	9:00 AM			
Tertulla	CMED	1653	F	7/18/1985	1/5/2007	FD @ 1:30 pm	11:00 AM			
Lydia	CMED	687	F	8/12/1982	10/9/2007	UNKNOWN				
Vireo-A	CMED	7053	M	7/16/2011	7/17/2011					
Vireo-B	CMED	7054	F	7/16/2011	7/17/2011	FD	unknown			
Jonas	CMED	1636	M	6/17/1985	1/23/2015	E	3:18 PM	4:55 PM		
Vireo	CMED	3640	F	7/15/2005	1/7/2016	FD @ 10:45 AM	9:45 AM	1:17 PM		
Nighthawk	CMED	3621	M	7/9/1991	1/17/2017	E	11:00 AM	11:00 AM		
Ardrey-A	DMAD	6771	m	12/15/2000	12/20/2000	NX	1:20 AM	ultracold		
Salem-A	DMAD	6919	ND	10/12/2008	10/12/2008	FD				
Ozony Avelo	DMAD	6788	M	10/25/2001	1/19/2015	DIVC				
Norman Bates	DMAD	6941	M	4/3/2009	10/25/2016	DIVC		8:30 PM		
Merlin	DMAD	6604	M	6/5/1994	10/25/2016	DIVC	4:10 PM	7:05 PM		
Angelique	DMAD	6866	F	9/5/2005	10/26/2016	DIVC	5:00 AM	8:40 AM		
Bellatrix-B	DMAD	7260	M	11/7/2016	11/11/2016	DIVC	3:00 PM	12:00 PM		
Deborah	EALB	5547	F	5/18/1980	12/10/2014	E	9:30AM	11:30 AM		
Colette-B	ECOL	32	ND	4/17/1965	4/17/1965					
Yvette-D	ECOL	1573	F	4/23/1974	4/25/1974					
Yvette-E	ECOL	2514	M	4/11/1975	4/11/1975					
Yvette-F	ECOL	3502	M	3/23/1977	3/25/1977					
Nicole-A	ECOL	6295	F	4/7/1989	4/8/1989					
Alain	ECOL	5800	M	5/11/1983	5/4/2004	FD in AM	dead > 6 hr			
Nanette	ECOL	5776	F	4/19/1983	6/7/2008	E	2:20 PM	3:40 PM		
Claire	ECOL	LCF-100055	F	3/16/1992	9/26/2013	E	unknown			
Alphonse	ECOL	5919	M	10/1/1981	11/2/2013	E	3:06 PM			
Francoise	ECOL	5982	f	4/8/1985	3/5/2014	E	10:42 AM	12:45 PM		

Geraldine	ECOL	6305	F	4/18/1989	11/24/2014	E	12:21 PM	1:30 PM		
Giscard	ECOL	6225	M	4/14/1988	10/6/2015	E	9:50 AM	12:24 PM		
Ra	ECOR	4526	M	7/7/1977	3/25/1983					
Amun Ra	ECOR	5774	M	4/18/1983	6/11/1983					
Meritaten-A	ECOR	6111	M	6/12/1986	6/17/1986					
Sitamon-A	ECOR	6151	M	4/7/1987	4/7/1987	FD	unknown			
Hathor-B	ECOR	6186	F	5/8/1987	5/8/1987	FD in AM	unknown			
Bastet-A	ECOR	6326	M	7/23/1989	7/26/1989					
Meritaten-B	ECOR	6364	F	4/5/1990	4/21/1990					
Isis-C	ECOR	6599	M	5/17/1994	6/2/1994					
Meritaten-D	ECOR	6635	M	4/30/1995	5/3/1995	FD in AM	unknown			
Bastet-E	ECOR	6678	M	4/25/1996	5/21/1996					
Bes	ECOR	6251	M	5/18/1988	1/31/2001	E	2:45 PM			
Zoser	ECOR	6034	M	10/1/1979	7/1/2002	E	unknown			
Khufu	ECOR	6035	M	10/1/1980	10/25/2002	E	11:25 AM			
Nefertiti	ECOR	4525	F	7/18/1977	4/11/2003	DIVC	1:20 PM			
Tefnut	ECOR	6438	F	5/21/1991	10/31/2005	E	10:15 AM			
Istnofret	ECOR	6441	F	6/4/1991	5/29/2008	E	3:50 PM			
Meritaten	ECOR	5937	F	5/29/1984	10/24/2011	E	2:25 PM	5:46 PM		
Seshat-A	ECOR	7115	F	7/5/2012	7/5/2012					
Bastet	ECOR	6177	F	5/1/1987	10/29/2013	E	10:14 AM	12:40 PM		
Nefertari	ECOR	6366	F	4/11/1990	2/25/2014	E	9:38 AM			
Garland-A	EFLA	6363	F	4/4/1990	4/4/1990					
Hepburn-A	EFLA	6458	F	3/5/1992	3/7/1992					
Hepburn-C (b)	EFLA	6654	F	3/11/1996	3/13/1996					
Foster-B	EFLA	6809	F	3/19/2003	3/19/2003	FD in AM	10:00 AM			
Goldie	EFLA	6748	F	3/25/1999	2/29/2004					
Lovett	EFLA	6768	M	9/24/2000	10/25/2004	E	unknown			
Witherspoon	EFLA	6793	F	3/4/2002	1/6/2006	DIVC	11:30 AM			
Foster-D	EFLA	6890	F	3/26/2007	3/26/2007	FD in AM	unknown			
Lange	EFLA	6521	F	3/11/1993	5/7/2007	DIVC	8:45 AM			
Foster-E	EFLA	6906	M	3/20/2008	3/20/2008	FD in AM	unknown			
Barrymore	EFLA	6248	M	5/9/1988	3/25/2011	E	10:01 AM			
Lamour	EFLA	6395	F	11/1/1989	8/3/2011	E	2:15 PM	6:15 PM		

Redford	EFLA	6462	M	3/13/1992	7/29/2014	E	9:36 AM	11:50 AM		
Hopkins	EFLA	6655	M	3/11/1996	3/21/2015	E				
Frodo-B	EFUL	1571	F	4/20/1974	4/22/1974					
Sal-D	EFUL	2515	M	4/20/1975	4/22/1975					
Liby-A	EFUL	5621	F	5/2/1981	5/2/1981					
Freya-A	EFUL	6061	M	3/24/1986	3/24/1986					
Freya-B	EFUL	6062	F	3/24/1986	3/24/1986					
Frigga	EFUL	6123	F	3/31/1984	1/22/2014	E	10:12 AM	12:55 PM		
Alcmene-A	EMAC	5573	M	3/16/1981	3/16/1981					
Zeus II	EMAC	5574	M	3/16/1981	5/10/1981					
Andromeda-A	EMAC	5748	M	3/29/1983	3/29/1983					
Andromeda-B	EMAC	5749	F	3/29/1983	3/29/1983					
Alcmene-C	EMAC	5787	F	4/27/1983	4/27/1983					
Halcyone-A	EMAC	5814	F	6/15/1983	6/15/1983					
Danae-C	EMAC	5830	ND	2/4/1984	2/4/1984					
Danae-D	EMAC	6056	F	3/20/1986	4/2/1986	E	unknown			
Hestia-A	EMAC	6239	F	4/27/1988	4/28/1988					
Latona-B	EMAC	6457	F	3/2/1992	3/2/1992					
Blanche	EMAC	5999	F	10/1/1981	8/15/2000	E	10:00 AM			
Teucer	EMAC	6284	M	3/18/1989	11/6/2013	E	11:03 AM	1:03 PM		
Deucalion	EMAC	6274	M	3/15/1989	12/26/2013	E	11:00 AM	1:20 PM		
Latona	EMAC	5859	F	3/29/1984	12/3/2014	E	9:21 AM	11:47 AM		
	EMON	4519	F	10/1/1965	10/31/1978	UNKNOWN				
Aimee-B	EMON	6084	ND	4/20/1986	4/20/1986					
Concepcion-A	EMON	6188	M	4/25/1987	4/30/1987					
Jacinta-A	EMON	6324	M	6/15/1989	6/16/1989					
Carmen-B	EMON	6383	F	5/7/1990	5/7/1990	FD	12:00 PM			
Chiquita-B	EMON	6387	F	6/7/1990	6/7/1990					
Gustavo	EMON	6030	M	6/21/1985	11/22/2003					
Moheli-A	EMON	6942	F	4/19/2009	4/19/2009					
Fabio	EMON	6237	M	4/23/1988	12/15/2010	E	9:55 AM	12:30 PM		
Concepcion	EMON	5952	F	10/15/1984	6/18/2011	DIVC	5:45 PM	11:57 AM		
Sancho	EMON	5722	M	10/1/1982	12/14/2012	FD @ 8:30 AM	4:30 AM	6:40 PM		

Maddie-A	EMON	7147	M	4/5/2013	4/5/2013	FD	6:30 AM	10:45 AM		
Carolina-A	EMON	7148	M	4/11/2013	4/14/2013	FD	5:00 AM			
Moheli	EMON	6263	F	5/13/1987	10/4/2014	DIVC	11:23 AM	2:15 PM		
Guadalupe	EMON	6645	F	5/26/1995	11/26/2014	E	8:38 AM	10:45 PM		
Carolina-B	EMON	7216	F	6/2/2015	6/2/2015	FD @ 9:10 AM	stillborn	10:45 AM		
Paco	EMON	6717	M	6/26/1997	4/5/2017	DIVC	1:20 PM			
Navajo	ERUB	6392	M	10/1/1988	9/18/2012	FD	early AM	3:07 PM		
Fox	ERUB	6629	F	4/7/1995	6/16/2015	E	10:05 AM	12:45 PM		
Mohawk	ERUB	6121	M	10/1/1982	7/31/2015	DIVC	10:22 AM	1:15 PM		
Hopi	ERUB	6358	F	3/1/1990	8/25/2015	E	10:58 AM	1:00 PM		
Calo-B	ERUF	1567	M	4/15/1974	4/15/1974					
Hermione-A	ERUF	1566	M	4/15/1974	4/15/1974					
Calo-C	ERUF	2508	M	3/28/1975	3/30/1975					
Tana-C	ERUF	2536	F	3/13/1976	3/13/1976					
Calo-F	ERUF	3501	M	3/20/1977	3/22/1977					
Crimson-C	ERUF	5959	M	2/26/1985	2/26/1985					
Radish-A	ERUF	6613	M	2/28/1995	2/28/1995					
Radish-B	ERUF	6672	F	4/8/1996	4/8/1996					
Rage	ERUF	6287	M	3/19/1989	12/10/2002	DIVC	9:45 AM			
Redrover	ERUF	5728	M	3/1/1982	8/11/2010	E	12:50 PM	2:51 PM		
Fiery	ERUF	5729	M	3/3/1983	6/21/2013	E	10:21 AM	12:15 PM		
Fara (EUL)	ESAN	5633	F	5/31/1981	7/16/1981					
Meshak	ESAN	4564	M	4/24/1979	8/7/1983					
Niry	ESAN	5948	M	10/1/1981	12/3/2005	E	4:15 PM			
Hery	ESAN	6044	M	11/29/1985	10/3/2007	UNKNOWN				
Haja	ESAN	6546	M	5/12/1993	11/18/2007	UNKNOWN				
Bozy	ESAN	6181	F	5/2/1987	12/3/2007	UNKNOWN				
Bao	ESAN	6509	F	6/30/1992	3/28/2013	E				
Fara (ESAN)	ESAN	5951	F	10/1/1982	9/1/2015	E	9:50 AM	11:45 AM		
Shulamite-A	EUL	575	F	1/9/1971	1/10/1971					
Adriana-A	EUL	1558	F	3/26/1974	3/26/1974					
Bathsheba-D	EUL	2513	M	4/11/1975	4/11/1975					
Zerlina-A	EUL	2519	M	4/27/1975	4/27/1975					

Absalom	EUL	576	M	1/9/1971	11/27/1975	FD in AM				
Tia-A	EUL	2533	F	2/28/1976	2/28/1976					
Mamie	EUL	2545	F	4/5/1976	4/6/1976					
Ike	EUL	2546	M	4/5/1976	4/6/1976					
Bathsheba-E	EUL	2550	F	4/9/1976	4/9/1976					
Bathsheba-F	EUL	2551	F	4/9/1976	4/10/1976					
Miriam-A	EUL	2566	M	6/30/1976	6/30/1976					
Yen-B	EUL	2573	M	8/12/1976	8/13/1976					
Scarlett II-B	EUL	2577	M	3/8/1977	3/8/1977					
Pandora-A	EUL	2587	M	3/19/1977	3/19/1977					
Pandora-B	EUL	2588	F	3/19/1977	3/19/1977					
Bathsheba-G	EUL	3527	M	5/16/1977	5/18/1977					
Tina-A	EUL	3534	M	1/27/1978	1/27/1978					
Pasipa-A	EUL	3579	ND	4/30/1978	4/30/1978					
Song-A	EUL	4529	M	2/26/1979	2/26/1979					
Song-B	EUL	4530	F	2/26/1979	2/26/1979					
Hermione-B	EUL	5501	M	8/28/1979	8/28/1979					
Bathsheba-K	EUL	5553	F	6/6/1980	6/6/1980					
Tirzah	EUL	5550	F	5/21/1980	6/28/1980					
Solo	EUL	5536	M	5/3/1980	9/26/1980					
Claudette-A	EUL	5576	M	3/17/1981	3/20/1981					
Huni-A	EUL	5619	F	4/26/1981	4/26/1981					
Judith-C	EUL	5797	M	5/6/1983	5/6/1983					
Johanna-A	EUL	5943	F	7/3/1984	7/3/1984					
Signe	EUL	4579	F	5/16/1979	1/6/1986					
Azubah-A	EUL	6214	F	3/21/1988	3/21/1988					
Gomer	EUL	5530	M	4/28/1980	5/24/1991	E	7:00 AM			
Ira	EUL	6367	M	4/17/1990	6/14/1999	FD in AM	6:00 AM			
Babette	EUL	5512	F	3/24/1980	12/10/1999	E	1:35 PM			
Rabodo	EUL	6315	M	5/18/1989	9/15/2006	E	9:30 AM			
Matthan	EUL	6081	M	4/16/1986	3/30/2015	E	11:07 AM			
Hannibal	EUL	6112	M	6/12/1986	9/8/2015	E	9:43 AM	12:02 PM		
Kish	EUL	6184	M	5/7/1987	11/29/2015	E	4:06 PM	10:32 AM		
Tahpenes	EUL	6257	F	7/11/1988	12/7/2015	E	10:00 AM	12:15 PM		

Demitour	GDEM	3022	M	11/11/1984	1/1/1988					
Demiquaver-A	GDEM	3134	F	11/7/1988	11/7/1988					
Demigod	GDEM	3156	M	8/25/1988	3/8/1991	UNKNOWN				
unknown	Gmoh	304	m	<6/1/1963	4/20/1967					
Sweetbay-A	GMOH	1076	M	1/25/1982	1/25/1982					
Beetree	GMOH	2049	M	7/19/1983	8/4/1983					
Basswood	GMOH	2099	M	8/18/1984	9/3/1984					
Bustic	GMOH	3005	M	10/17/1984	12/10/1984					
Amyris	GMOH	3008	M	11/12/1984	12/10/1984					
Hawthorne-A	GMOH	3011	F	12/25/1984	12/31/1984					
Strongbark	GMOH	3009	M	12/13/1984	2/8/1985					
Pussywillow-B	GMOH	3019	ND	3/22/1985	3/22/1985					
Beech-C	GMOH	3024	ND	4/28/1985	5/3/1985					
Baobab	GMOH	1080	M	3/8/1980	5/15/1985					
Balsa	GMOH	2001	F	1/26/1980	5/19/1985					
Alianthus-C	GMOH	3031	ND	6/4/1985	6/4/1985					
Anaqua	GMOH	3007	F	11/12/1984	10/6/1985					
Ginko-A	GMOH	3057	ND	12/16/1985	12/17/1985					
JUNEBERRY (GMOH)	GMOH	2016	F	1/26/1980	12/19/1985	DIVC	12:00 PM			
Sorreltree	GMOH	2041	M	5/11/1981	1/24/1986	E	unknown			
Hackberry-A	GMOH	3074	F	4/30/1986	5/9/1986					
Whistlewood	GMOH	2056	M	10/4/1979	5/9/1986					
Witchhazel	GMOH	2055	F	10/11/1979	5/16/1986					
SilverBell-B	GMOH	3079	ND	5/24/1986	5/25/1986					
Lyonia-A	GMOH	3082	ND	7/8/1986	7/10/1986					
Chinquapin-C	GMOH	3085	M	8/9/1986	8/14/1986					
Papaya-B	GMOH	3116	M	9/4/1987	9/14/1987					
Arbutus	Gmoh	2000	m	1/26/1980	10/15/1987	NX		ultracold		
Whiteoak	GMOH	2061	M	12/6/1983	7/26/1988	E	unknown			
Pond-Apple	GMOH	3123	F	2/29/1988	12/24/1988					
Papaya-D	GMOH	3138	F	1/25/1989	2/7/1989					
Mimosa	GMOH	1087	F	3/8/1980	6/26/1989	UNKNOWN	unknown			
Seagrape	GMOH	3141	F	2/1/1989	9/24/1998	FD @ 10:00 am	unknown			
Sugarpine	GMOH	3158	F	10/26/1990	1/26/2002	FD in AM	10:00 AM			

Silverpalm	GMOH	3143	F	2/2/1989	3/1/2003	UNKNOWN	unknown			
Kepenzi	GMOH	3187	M	3/5/1999	2/15/2007	DIVC	4:50 PM			
Agave	GMOH	3190	M	2/22/2003	1/17/2008	DIVC	3:00 PM			
Farkleberry	GMOH	3185	M	8/9/2002	5/12/2009					
Bewitched	HGG	1302	F	12/1/1967	11/25/1977	DIVC	8:50 AM			
Beauty	HGG	1317	F	12/1/1982	11/13/1984					
Behold	HGG	1323	F	12/1/1983	9/1/1985					
Beclouded-B	HGG	1325	M	11/21/1985	11/25/1985	FD @ 1:00 pm	unknown			
Bedeviled	HGG	1311	M	6/20/1980	3/16/1995	E	unknown			
Beclouded	HGG	1313	F	12/1/1976	8/13/1997	E	9:38 AM			
Beltane	HGG	1353	F	4/12/1994	1/27/2002	FD in AM	6:00 AM			
Behemoth	HGG	1331	F	5/1/1989	1/31/2003	1/31/2003	2:30 PM			
Behave	HGG	1337	F	7/8/1991	6/29/2003	DIVC	12:10 PM			
Bejeweled	HGG	1354	M	5/13/1994	3/14/2005					
Belittle	HGG	1360	F	4/9/1996	10/23/2008	UNKNOWN	unknown			
Beamish	HGG	1359	M	3/27/1996	2/25/2009	E	2:15 PM	4:45 PM		
Munchkin	HGG	1371	M	1/25/2000	7/15/2011	UNKNOWN	unknown			
Becool	HGG	1367	F	5/9/1998	8/21/2012	E	9:45 AM	12:32 PM		
Beeper	HGG	1370	F	10/6/1998	8/11/2017	E	9:40 AM	11:35 AM		
Bediddley	HGRI	1333	M	5/22/1989	2/10/2010	E	10:42 AM			
Calpurnia-A	LCAT	1534	M	3/13/1973	3/19/1973					
Atossa-B	LCAT	6343	F	3/16/1990	3/25/1990					
Dory-A	LCAT	6661	ND	3/20/1996	3/26/1996					
Molon	LCAT	6808	F	3/18/2003	10/25/2004	E				
Apollonus-B	LCAT	6889	ND	3/24/2007	3/24/2007					
Sophia-A	LCAT	6938	F	3/21/2009	4/10/2009					
Leto	LCAT	6953	M	7/8/2009	8/12/2009	FD @ 8:00 am	4:00 AM	9:30 AM		

Nemo	LCAT	6143	M	3/23/1987	10/17/2010	FD	9:30 AM			
Dorieus-B	LCAT	7057	M	7/19/2011	7/19/2011	DIVC	11:45 AM	12:00 PM		
Dorieus-C	LCAT	7058	F	7/19/2011	7/19/2011	DIVC	11:45 AM	12:00 PM		
Cap N' Lee	LCAT	6848	M	3/25/2000	10/7/2011	FD	8:00 AM	4:06 PM		
Justine-B	LCAT	7101	F	6/20/2012	6/20/2012	DIVC	8:45 AM			
Justine-A	LCAT	7100	F	6/20/2012	6/21/2012	DIVC	7:30 AM			
Dorieus-D	LCAT	7117	M	7/7/2012	7/7/2012	FD	8:30 AM			
Dorieus-F	LCAT	7138	F	3/23/2013	4/15/2013	E	2:35 PM			
Hibernia-A	LCAT	7145	M	3/29/2013	4/19/2013	E	10:55 AM	12:05 PM		
Lycus	LCAT	5977	M	3/30/1985	8/21/2013	FD @ 8:45 am	12:00 AM	1:15 PM		
Penelope	LCAT	7142	F	3/28/2013	5/24/2014	DIVC	2:47 PM	1:30 PM		
Liesl-A	LCAT	7205	M	3/19/2015	3/21/2015	DIVC	1:00 PM			
Dory	LCAT	6276	F	3/15/1989	6/9/2015	E	12:41 PM	3:55 PM		
Tugger	LCAT	6862	M	5/16/1983	1/29/2016	E	9:54 AM			
Tejinder	LTAR	1918	M	7/26/1986	5/25/2002	E	11:00 AM			
Samantha (LTAR)	LTAR	2925	F	11/6/1991	10/7/2008	E	9:44 AM	11:35 AM		
Anil	LTAR	1992	M	3/22/1991	1/5/2009	E		4:30 PM		
Abu-A	LTAR	2934	F	10/26/2009	10/26/2009	FD @ 9:30 AM	9:30 AM			
Lavoris	LTAR	2930	M	10/17/1992	6/16/2010	E	11:20 AM	1:00 PM		
Horehound	MMUR	893	M	12/1/1982	11/5/1984					
Vanilla	MMUR	1812	F	7/6/1984	7/8/1994	E	unknown			
Eglantine	MMUR	845	F	7/16/1980	7/27/1995	E				
Angelica	MMUR	1830	F	6/20/1985	1/12/1999	E	2:00 PM			
Hemp	MMUR	7003	M	8/24/1990	3/11/2005	E	12:00 PM			
Rosehip	MMUR	7006	M	6/17/1994	10/17/2006	E	3:00 PM			
Musk Rose	MMUR	7016	M	2/13/1995	12/2/2008	E	10:00 AM	11:37 AM		
Kudzu	MMUR	7017	M	6/16/1997	4/28/2009	E				
Kudzu	MMUR	7017	M	6/16/1997	4/28/2009	E	11:30 AM	1:00 PM		
Alfalfa	MMUR	7019	M	7/15/1997	6/4/2009	E				
Basil	MMUR	7022	F	8/8/2001	9/28/2010	E	10:00 AM	12:06 PM		
Wilbur	MMUR	7024	M	7/29/2002	10/3/2012	FD @ 12:30 PM	8:30 AM	5:38 PM		
Cilantro	MMUR	7021	M	7/27/2001	10/21/2012	FD 8:30 AM	est 20:01 AM	10:28 AM		
Tobacco	MMUR	7065	M	8/15/2011	2/11/2013	FD @ 9:30 am	8:00 PM	2:00 PM		
Orville	MMUR	7025	M	7/29/2002	5/3/2013	E	10:12 AM	11:20 AM		

Asparagus	MMUR	7031	M	5/30/2008	8/5/2015					
Mrs Dash	MMUR	7026	F	6/26/2006	10/25/2016	FD @ 9:00 AM	12:00 AM	11:17 AM		
Wormwood	MMUR	7027	M	5/26/2007	1/6/2017	FD	9:00 PM	11:30 AM		
Creeping Jenny	MMUR	7126	F	8/10/2012	4/23/2017	FD in AM	12:00 AM			
Scuppernong	MMUR	7159	F	6/18/2013	6/30/2017	E	9:33 AM	11:45 AM		
unknown	Mmur	unknown	nd	unknown	unknown					
unknown	Mmur	unknown	nd	unknown	unknown					
Etsoa-E	MZAZ	390	M	5/12/1988	5/14/1988					
Dangoro	MZAZ	340	M	4/13/1986	4/21/1991	FD in AM	unknown			
Papelika	MZAZ	339	F	6/16/1985	5/30/1996	E	5:00 PM			
Arosy	MZAZ	315	M	8/25/1979	8/4/1997	E	12:30 PM			
Monjo	MZAZ	360	M	4/21/1987	11/20/2002	E	10:00 AM			
Totoroka-A	MZAZ	2320	M	5/26/2003	5/27/2003					
Totoroka-B	MZAZ	2321	M	5/26/2003	5/28/2003					
Hanka	MZAZ	2301	F	5/12/1990	9/1/2005	E	12:30 PM			
Boaky	MZAZ	2304	M	3/19/1991	1/24/2006	E	3:00 PM			
Buddy (MZAZ)	MZAZ	2316	m	6/2/1994	6/18/2012	E	10:15 AM	12:01 PM		
Lahkshmani	NCOU	1998	F	5/18/1993	7/30/2013	E	10:16 AM	12:30 PM		
Skimmer-D	NPYG	2920	ND	5/14/2001	5/23/2001					
Skimmer-E	NPYG	2922	M	3/4/2002	3/5/2002	FD @ 3:00 am	3:00 AM			
Pygmy Hunter	NPYG	2926	M	7/27/2002	4/4/2012	DIVC	10:17 AM	1:20 PM		
Doodlebug	NPYG	2921	M	3/4/2002	5/8/2012	E	2:45 PM	4:55 PM		
Junebug-A	NPYG	7102	M	6/20/2012	7/3/2012	DIVC	12:20 PM	3:25 PM		
Skimmer	NPYG	2901	F	3/15/1994	6/14/2013	E	1:11 PM	12:10 PM		
Red Admiral	NPYG	2928	M	6/1/2006	6/17/2015	E	9:27 AM	11:53 AM		
Nox	NPYG	7245	M	3/24/2006	6/7/2017	E	11:22 AM	1:11 PM		
Flea	NPYG	2923	F	12/9/1997	10/26/2017	E		12:00 PM		
Kiri	NPYG	7285	M	3/14/2010	11/22/2017	E				
Rutile-B	OGG	1422	M	11/8/1986	11/9/1986					
Emerald-A	OGG	1424	M	1/12/1987	1/13/1987					
Gallium-A	OGG	8011	ND	10/7/1989	10/14/1989					
Spessartite	OGG	8028	M	3/6/1992	3/3/2012	E				
unk adult	Ogg	unknown	nd	unknown	unknown					

Usiku-A	OMA	82	ND	3/14/1968	3/14/1968					
Niobe-E	OMA	755	F	5/13/1975	5/13/1975					
Zola-A	OMA	759	F	8/10/1975	8/11/1975					
Mosi-A	OMA	1729	F	4/29/1982	5/6/1982					
Iago-C	OMA	1744	M	4/29/1983	4/30/1983					
Lela-C	OMA	1754	M	6/9/1984	6/11/1984					
Pili-C	OMA	1765	ND	8/12/1984	8/12/1984					
Pili-D	OMA	1766	M	8/12/1984	8/12/1984					
Siti-A	OMA	1767	F	8/16/1984	8/17/1984					
Siti-B	OMA	1768	M	8/16/1984	8/18/1984					
Mwatabu-A	OMA	1780	F	2/8/1985	2/11/1985					
Cheusi-B	OMA	1782	F	2/16/1985	2/20/1985					
Fatima-A	OMA	1792	M	6/14/1985	6/24/1985					
Lela-E	OMA	2716	ND	11/25/1985	11/30/1985					
Mwasaa	OMA	1749	F	8/17/1983	5/19/1987					
Salima-A	OMA	2784	ND	3/23/1988	3/23/1988					
Salima-B	OMA	2794	M	1/24/1989	1/28/1989					
Kumi-A	OMA	2843	F	5/2/1990	5/4/1990					
Tabu-D	OMA	2865	M	2/9/1991	2/9/1991					
unk infant	Oma	unknown	nd	unknown	unknown					
Chiku-A	OMON	1719	M	1/4/1982	1/6/1982					
Asura-A	OMON	1795	F	6/26/1985	6/27/1985					
Arusi-B	OMON	1797	F	6/27/1985	6/29/1985					
Chui	OMON	2728	M	6/6/1986	8/31/1986					
Mbili	OMON	2741	F	7/4/1986	11/14/1986	E	unknown			
Afiya-A	OMON	2759	M	4/15/1987	4/15/1987					
Bakari-A	OMON	2821	ND	11/1/1989	11/1/1989					
Hasini-B	OMON	2839	ND	4/27/1990	5/5/1990					
Hasini-C	OMON	2840	ND	4/27/1990	5/5/1990					
Karibu	OMON	2845	M	5/5/1990	5/7/1990					
Tatu-C	OMON	unknown	M	4/13/1991	4/14/1991					
Pofu	OMON	2828	M	11/5/1989						
Pala	OMON	2829	F	11/5/1989						
Julia-B	PCOQ	6154	F	12/30/1985	12/30/1985					

Paulina-A	PCOQ	6651	ND	1/8/1996	1/11/1996	FD in AM	overnight			
Paulina-A	PCOQ	6651	ND	1/8/1996	1/11/1996					
Pulchra-B	PCOQ	6738	F	6/19/1998	6/21/1998					
Lucia	PCOQ	6273	f	3/15/1989	10/3/1999	DIVC	8:45 AM			
Marius	PCOQ	6759	M	2/18/2000	7/15/2004	E	9:15 AM			
Paulina	PCOQ	6398	F	1/24/1991	8/29/2006	UNKNOWN	unknown			
Tony	PCOQ	6845	M	2/9/2005	8/30/2006					
Pulchra-E	Pcoq	6891	M	12/30/2006	1/2/2007	UNKNOWN				
Nero	PCOQ	6610	M	12/4/1994	4/2/2008	DIVC	8:35 PM			
Drusilla-A	PCOQ	6963	M	2/1/2010	2/1/2010	FD in AM	12:01 AM	12:58 PM		
Otho	PCOQ	6608	M	9/12/1994	6/22/2010	DIVC	6:00 PM	9:00 PM		
Brutus	PCOQ	6774	m	2/28/2001	6/2/2011	DIVC	1:30 PM	4:30 PM		
Leo	PCOQ	6790	M	12/26/2001	6/27/2011					
Havozo	PCOQ	6934	m	2/14/2009	7/2/2011	UNKNOWN				
Crispus Ceasar	Pcoq	6804	M	1/7/2003	7/3/2011	UNKNOWN				
Zeno	PCOQ	6757	m	2/2/2000	10/15/2011	DIVC	5:55 PM			
Polamalu	PCOQ	6984	M	2/1/2011	10/19/2011	DIVC				
Drusilla-B	PCOQ	7078	M	1/30/2012	1/30/2012	FD	10:00 AM	12:16 PM		
Ernestine	PCOQ	7077	F	1/26/2012	4/9/2012	FD ~8:30 AM	1:00 AM	3:30 PM		
Adelaide	PCOQ	6982	F	1/8/2011	7/3/2012	FD @ 8:30 AM	12:01 AM	6:30 PM		
Irene-A	Pcoq	7133	M	1/20/2013	2/14/2013	FD				
Irene-A	PCOQ	7133	M	1/20/2013	2/14/2013	FD	~4:00 AM	1:00 PM		
Xena	PCOQ	7079	F	1/28/2012	7/4/2013	UNKNOWN				
Pompeia Plotina-A	PCOQ	7173	M	1/27/2014	1/27/2014	FD	2:00 AM	2:25 PM		
Phillip the Arab	PCOQ	6747	M	2/24/1999	10/9/2014	E				
Cupid	PCOQ	6933	M	2/14/1999	10/9/2014	E				
Jovian	PCOQ	6583	M	4/10/1994	11/10/2014	E	12:43 PM	4:00 PM		
Matilda-A	PCOQ	7203	M	2/28/2015	2/28/2015	FD @ 1:00 AM	stillborn			
Conrad	PCOQ	6920	M	12/31/2008	7/6/2015	FD @ 8:30 AM	unknown	1:25 PM		
Euphemia-A	PCOQ	7232	F	1/12/2016	1/17/2016	FD @ 12:45 am	12:45 AM	11:35 AM		
Tiberius	PCOQ	6207	M	1/20/1988	4/1/2016	DIVC				
Lucius	PCOQ	6843	M	1/7/2005	5/26/2016	DIVC	10:05 AM	1:00 PM		
Loka	PCOQ	6904	M	2/8/2008	8/27/2016	DIVC				
Gothicus	PCOQ	7263	M	1/6/2017	5/11/2017	DIVC	7:00 PM			

Antonia	PCOQ	6727	F	2/22/1998	5/23/2017	E	10:08 AM	12:50 PM		
unknown	Pcoq	unknown	nd	unknown	unknown					
unknown infant	Pcoq	unknown	nd	unknown	unknown					
Romeo	PDIA	6564	M	6/1/1993	1/21/2012	FD in AM	5:00 AM	1:40 PM		
Kofi	PPOT	919	M	4/23/1985	12/18/2010	E?				
unk adult	Ppot	unknown	nd	unknown	unknown					
unk juvenile	Ppot	unknown	nd	unknown	unknown					
unknown	Prop spp	unknown	nd	unknown	unknown					
Lucilla-A	PTAT	6259	M	8/3/1988	8/3/1988	unknown	unknown			
Cicero	PTAT	6253	M	1/1/1976	8/24/1988	DIVC	10:00 AM			
Tattertot	PTAT	6703	M	4/1/1997	6/2/1997	FD	6:30 AM			
Messilina	PTAT	6555	F	7/1/1979	9/19/1998	DIVC	12:05 AM			
Valens	PTAT	6729	M	3/29/1998	2/5/2007	FD @ 10:30 PM	9:00 PM			
Titus	PTAT	6556	m	7/6/1983	12/2/2008	DIVC	5:50 PM	8:50 PM		
unknown	Sang.Mid	unknown	m	12/13/1990	12/14/1990					
Saturna-C	VRUB	5586	M	3/30/1981	3/30/1981					
Pavo	VRUB	5628	F	5/17/1981	2/12/1989	E				
Cynthia-A	VRUB	6302	M	4/18/1989	4/18/1989					
Phoenix	VRUB	5629	M	5/19/1981	5/14/2003					
unknown	Vrub	1460	f	5/1/2007	8/25/2007					
Tromdenus	VRUB	6241	M	4/30/1988	3/18/2008	E				
Diphda	VRUB	6378	F	4/28/1990	2/15/2010	E	2:34 PM	5:12 PM		
Pyxis-C	VRUB	6998	F	5/16/2011	5/16/2011	FD	12:00 PM	4:00 PM		
Pyxis-D	VRUB	6999	M	5/16/2011	5/16/2011	FD	12:00 PM	5:10 PM		
Pyxis-E	VRUB	7092	M	5/10/2012	5/10/2012	FD	6:30 AM	11:00 AM		
Toros	VRUB	6446	M	6/17/1991	1/6/2014	UNKNOWN	unknown			
Stephano	VRUB	7213	M	5/13/2015	9/30/2015	DIVC	3:17 AM	12:38 PM		
Cynthia	VRUB	5587	F	3/30/1981	4/28/2016		12:20 PM			
unknown	Vrub	unknown	nd	unknown	unknown					
unknown "73"	VRUB	#N/A	#N/A	#N/A	#N/A					
Mars	VVV	586	M	10/1/1966	9/2/1992	E	unknown			
Babel-I	VVV	6541	M	4/8/1993	4/13/1993	FD	unknown			
Hebe-A	VVV	6992	M	4/13/2011	4/13/2011	FD	5:30 AM			
Amor	VVV	5604	M	4/15/1981	5/12/2013	E	6:00 PM			

Hebe	VVV	6415	F	4/3/1991	8/27/2014	E	9:41 AM	12:20 PM		
Naissance	VVV	7236	F	5/23/2010	9/15/2017	DIVC	12:03 PM	3:10 PM		

Duke University Primate Center Publication List

No.	Year Pub	Author	Publication
1312	2016	Larsen PA, Hayes CE, Williams CV, Junge RE, Razafindramanana J, Mass V, Rakotondrainibe H, and Yoder AD	Blood transcriptomes reveal novel parasitic zoonoses circulating in Madagascar's lemurs. <i>Biology Letters</i> .
1315	2016	Grogan KE, McGinnis GJ, Sauter ML, Cuozzo FP and Drea CM	Next-generation genotyping of hypervariable loci in many individuals of a non-model species: Technical and theoretical implications. <i>BMC Genomics</i> 17:204. Available from: http://www.biomedcentral.com/1471-2164/17/204
1322	2016	Yoder AD, Campbell CR, dos Reis M, Blanco M, Ganzhorn JU, Goodman SM, Hunnicutt KE, Larsen PA, Kappeler PM, Rasoloarison RM, Ralison JM, Swofford D, Weisrock DW	Geogenetic patterns in mouse lemurs (genus <i>Microcebus</i>) reveal the ghosts of Madagascar's forests past. <i>PNAS</i>
1323	2016	Bradley B, Snowdon C, McGrew W, Lawler R, Guevara E, McIntosh A, O'Connor T	Nonhuman primates avoid the detrimental effects of prenatal androgen exposure in mixed-sex litters. <i>American Journal of Primatology</i>
1324	2016	Rensch T, Villar D, Horvath J, Odom DT, Flicek P	Mitochondrial heteroplasmy in vertebrates using ChIP-sequencing data. <i>Genome Biology</i> .
1326	2016	Gochman SR, Brown MB, Dominy NJ	Alcohol discrimination and preferences in two species of nectar-feeding primate. <i>Royal Society Open Science</i> .
1328	2016	Smith TD, Martell MC, Rossie JP, Bonar CJ and DeLeon VB	Ontogeny and microanatomy of the nasal turbinates in lemuriformes. <i>The Anatomical Record</i> .
1329	2016	DeLeon VB, Smith TD and Rosenberger AL	Ontogeny of the postorbital region in tarsiers and other primates. <i>The Anatomical Record</i>
1330	2016	Faherty SL, Villanueva-Canas JL, Klopfer PH, Alba MM, Yoder AD	Gene expression profiling in the hibernating primate, <i>Cheirogaleus medius</i> . <i>Genome Biology and Evolution</i> . doi: 10.1093/gbe/evw163
1340	2017	Larsen PA, Lutz MW, Hunnicutt KE, Mihovilovic M, Saunders AM, Yoder AD, Roses AD	The Alu neurodegeneration hypothesis: A primate-specific mechanism for neuronal transcription noise, mitochondrial dysfunction, and manifestation of neurodegenerative disease. <i>Alzheimer's & Dementia</i> .
1346	2017	Smith TD, McMahon MJ, Millen ME, Llera C, Engel SM, Li L, Bhatnagar KP, Burrows AM, Zumpano MP, DeLeon VB	Growth and development at the sphenoethmoidal junction in perinatal primates. <i>Anatomical Record</i> . DOI: 10.1002/ar.23630

Duke University Primate Center Publication List

1347	2017	Yapuncich GS, Seiffert ER, Boyer DM	euarchontans, with implications for the evolution of primate positional behavior. <i>American Journal of Physical Anthropology</i> 163(2):367-406. doi: 10.1002/ajpa.23213
1348	2017	McKenney EA, Greene LK, Drea CM, Yoder AD	Down for the count: Cryptosporidium infection depletes the gut microbiome in Coquerel's sifaka. <i>Microbial Ecology in Health and Disease</i> . 28:1. doi/full/10.1080/16512235.2017.1335165
1349	2017	Kistler L, Johnson SM, Irwin MT, Louis EE, Ratan A, Perry GH	A massively parallel strategy for STR marker development, capture, and genotyping. <i>Nucleic Acids Research</i> .
1355	2017	Ritzman TB, Banovich N, Buss KP, Guida J, Rubel M, Pinney J, Khang B, Ravosa MJ, Stone AC	Facing the facts: Changes in the Runx2 gene modulates facial morphology in primates. <i>Journal of Human Evolution</i> 11110:34 AM139-151. doi.org/10.1016/j.jhevol.2017.06.014
1357	2017	Bankoff RJ, Jerjos M, Hohman B, Lauterbur ME, Kistler L, Perry GH	Testing convergent evolution in auditory processing genes between echolocating mammals and the aye aye, a percussive-foraging primate. <i>Genome Biology and Evolution</i> . 9(7):1978-1989. doi.org/10.1093/gbe/evx140
1358	2017	Smith TD, Muchlinski MN, Bucher WR, Vinyard CJ, Bonar CJ, Evans S, Williams LE, DeLeon VB	Relative tooth size at birth in primates: Life history correlates. <i>American Journal of Physical Anthropology</i> . 164(3):623-634. DOI: 10.1002/ajpa.23302
1360	2017	Burrows AM	Functional morphology of mimetic musculature in primates: How social variables and body size stack up to phylogeny. <i>The Anatomical Record</i>
1362	2017	Berthelot C, Villar D, Horvath JE, Odom DT, Flicek P	Complexity and conservation of regulatory landscapes underlie evolutionary resilience of mammalian gene expression. <i>Nature Ecology and Evolution</i> .
1363	2017	Larsen P, Harris RA, Liu Y, Murali SC, Campbell CR, Brown AD, Sullivan BA, Shelton J, Brown SJ, Raveendran M, Dudchenko O, Machol I, Durand NC, Shamim MS, Aiden EL, Muzny DM, Gibbs RA, Yoder AD, Rogers J, Worley KC	Hybrid de novo genome assembly and centromere characterization of the gray mouse lemur (<i>Microcebus murinus</i>). <i>BMC Biology</i>
1378	2017	Trizzino M, Park Y, Holsbach-Beltrame M, Aracena K, Mika K, Caliskan M, Perry GH, Lynch VJ, Brown CD	Transposable elements are the primary source of novelty in primate gene regulation. <i>Genome Research</i> 27:1623-1633. DOI 10.1101/gr.218149.116
1381	2016	Maiolino SA, Kingston AK, Lemelin P	Comparative and functional morphology of the primate hand integument. In Kivell T, Lemelin P, Richmond B, Schmitt D (eds) <i>The Evolution of the Primate Hand. Developments in Primatology: Progress and Prospects</i> . Springer, New York NY.. DOI https://doi.org/10.1007/978-1-4939-3646-5_8

Duke University Primate Center Publication List

1382	2016	Schmitz J, Noll A, Raabe CA, Churakov G, Voss R, Kieffmann M, Rozhdestvensky T, Brosius J, Baertsch R, Clawson H, Roos C, Zimin A, Minx P, Montague MJ, Wilson RK, Warren WC	Genome sequence of the basal haplorrhine primate <i>Tarsius syrichta</i> reveals unusual insertions. <i>Nature Communications</i> 7:12997. doi: 10.1038/ncomms12997
1383	2017	McKenney	Bamboo specialists from two mammalian orders (Primates, Carnivora) share a high number of low-abundance gut microbes. <i>Microbial Ecology</i>
1384	2017	McKenney	Feeding strategy shapes gut metagenomic enrichment and functional specialization in captive lemurs. <i>Gut Microbes</i>
1386	2018	Muchlinski MN, Hemingway HW, Pastor J, Omstead KM, Burrows AM	How the brain may have shaped muscle anatomy and physiology: A preliminary study. <i>Anatomical Records</i> .
1387	2018	Rodriguez Barbon A, Cowen R, Knott C, Hughes K, Allinson K, Williams CV, Routh A.	Disease in wildlife or exotic species: Neoplasia in three aye-aye. <i>Journal of Comparative Psychology</i> .
1388	2018	Huq E, Taylor AB, Su Z, Wall CE	Fiber type composition of epaxial muscles is geared toward facilitating rapid spinal extension in the leaper <i>Galago senegalensis</i> . <i>American Journal of Physical Anthropology</i> .
1389	2018	Larsen PA, Hunnicutt KE, Larsen RJ, Yoder AD, Saunders AM	Warning SINEs: Alu elements, evolution of the human brain, and the spectrum of neurological disease. <i>Chromosome Research</i> .



Duke Lemur Center

David Haring, Registrar
3705 Erwin Road
Durham, NC 27705-5000

Phone: (919) 489-3364 ext 228
Fax: (919) 490-5394
dharing@duke.edu

February 10, 2019

U.S. Fish and Wildlife Service
International Affairs
5275 Leesburg Pike, MS:IA
Falls Church, VA 22041-3803

RCVD FEB 28 2019

To Whom It May Concern:

Enclosed please find a report of the Duke University Lemur Center's activities under the Duke University Lemur Center Endangered/Threatened Species permit: (new: 48515B) (old permit: PRT-679043) for the calendar year 2018.

I am including a copy of our current inventory of living animals, a report of all interstate sales of tissues, blood or cadavers of threatened or endangered primates for 2018 (including the DUPC veterinary program to reduce mortalities), a list of mortalities and causes for calendar year 2018, an inventory summary of our biosample collection and a list of publications produced from 2013-2018 from specimens traded under this permit.

If you need a more detailed list of specific items listed in the biosample inventory summary sheet (tissues, cadavers, blood products, or urine), please contact me, as those inventories consist of too many pages to print realistically. Digital files of any of these inventory sheets are available, just let me know if you would like that information on a thumb drive.

Please contact me if you have any questions about the enclosed report.

Sincerely:

David Haring
Registrar

Current Colony Inventory, February 2019

Latiname	Common_Name	Latin_Abbrev.	M	F	Total
Cheirogaleus medius	Fat-tailed dwarf lemur	CMED	13	9	22
Daubentonia madagascariensis	Aye-aye	DMAD	2	7	9
Eulemur collaris	Collared brown lemur	ECOL	2	3	5
Eulemur coronatus	Crowned lemur	ECOR	7	5	12
Eulemur flavifrons	Blue-eyed black lemur	EFLA	8	10	18
Eulemur mongoz	Mongoose lemur	EMON	7	3	10
Eulemur rubriventer	Red-bellied lemur	ERUB	.	1	1
Eulemur rufus	Red-fronted brown lemur	ERUF	1	1	2
Hapalemur griseus griseus	Eastern lesser bamboo lemur	HGG	1	1	2
Lemur catta	Ring-tailed lemur	LCAT	11	22	33
Microcebus murinus	Gray mouse lemur	MMUR	24	20	44
Nycticebus coucang	Slow loris	NCOU	.	1	1
Nycticebus pygmaeus	Pygmy slow loris	NPYG	.	1	1
Propithecus coquereli	Coquerel's sifaka	PCOQ	13	18	31
Varecia rubra	Red ruffed lemur	VRUB	7	6	13
Varecia variegata variegata	Black-and-white ruffed lemur	VVV	5	5	10
Total (ALL)			101	113	214

Loan Inventory, February 2019

Latiname	Common_Name	Latin_Abbrev.	M	F	Total
Daubentonia madagascariensis	Aye-aye	DMAD	8	8	16
Eulemur flavifrons	Blue-eyed black lemur	EFLA	6	4	10
Microcebus murinus	Gray mouse lemur	MMUR	7	3	10
Nycticebus pygmaeus	Pygmy slow loris	NPYG	.	1	1
Propithecus coquereli	Coquerel's sifaka	PCOQ	19	16	35
Varecia rubra	Red ruffed lemur	VRUB	.	2	2
Total (ALL)			40	34	74

REPORT FOR ACTIVITIES UNDER MA48515B-0 FOR CALENDAR YEAR 2018
(Interstate sales of blood, tissue or cadavers of threatened/endangered species)

Blood Sales:

1/24/2018

Anthony Tosi, Ph D
Kent State University
750 Hilltop Drive, Rm 226
Kent, OH 44141

6622M	Lemur catta - 3 ml whole blood
1366M	Hapalemur griseus - 3 ml whole blood

2/19/2018

Jessica Brinkworth
Dept of Anthropology
109 Davenport Hall
607 South Mathews Ave
University of Illinois Urbana-Champaign
Urbana, IL 61801

6528M	Lemur catta - 4 ml whole blood
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2/26/2018

Jessica Brinkworth
Dept of Anthropology
109 Davenport Hall
607 South Mathews Ave
University of Illinois Urbana-Champaign
Urbana, IL 61801

6831F	Lemur catta - 4 ml whole blood
6854F	Lemur catta - 4 ml whole blood
7084M	Lemur catta - 4 ml whole blood

3/05/2018

Jessica Brinkworth
Dept of Anthropology
109 Davenport Hall
607 South Mathews Ave
University of Illinois Urbana-Champaign
Urbana, IL 61801

6955M	Lemur catta - 4 ml whole blood
6440M	Lemur catta - 4 ml whole blood

3/14/2018

Jue Lin/Elizabeth Blackburn Lab

Mission Bay UCSF

Room S316, Genetech Hall

San Francisco, CA 94158

3639	Cheirogaleus medius - Whole Blood - .25 ml
3642	Cheirogaleus medius - Whole Blood - .25 ml
3638	Cheirogaleus medius - Whole Blood - .25 ml
7119	Cheirogaleus medius - Whole Blood - .25 ml
3635	Cheirogaleus medius - Whole Blood - .25 ml
7161	Cheirogaleus medius - Whole Blood - .25 ml
3637	Cheirogaleus medius - Whole Blood - .25 ml
7223	Cheirogaleus medius - Whole Blood - .25 ml
3639	Cheirogaleus medius - Whole Blood - .25 ml
3642	Cheirogaleus medius - Whole Blood - .25 ml
3638	Cheirogaleus medius - Whole Blood - .25 ml
7119	Cheirogaleus medius - Whole Blood - .25 ml
3635	Cheirogaleus medius - Whole Blood - .25 ml
7161	Cheirogaleus medius - Whole Blood - .25 ml
3637	Cheirogaleus medius - Whole Blood - .25 ml
7223	Cheirogaleus medius - Whole Blood - .25 ml

5/22/2018

Jessica Brinkworth

Dept of Anthropology

109 Davenport Hall

607 South Mathews Ave

University of Illinois Urbana-Champaign

Urbana, IL 61801

6957F	Lemur catta - whole blood sample(4 ml)
7087F	Lemur catta - whole blood sample(4 ml)
6956F	Lemur catta - whole blood sample(4 ml)

7/26/2018

Jessica Brinkworth

Dept of Anthropology

109 Davenport Hall

607 South Mathews Ave

University of Illinois Urbana-Champaign

Urbana, IL 61801

7139M	Lemur catta - whole blood sample(4 ml)
6996F	Lemur catta - whole blood sample(4 ml)
6622M	Lemur catta - whole blood sample(4 ml)
6861F	Lemur catta - whole blood sample(4 ml)
7143M	Lemur catta - whole blood sample(4 ml)
6926F	Lemur catta - whole blood sample(4 ml)

09/18/2018

Olga Dudchenko, PhD

Baylor College of Medicine, room 908B

1 Baylor Plaza

Houston, TX 77025

1352f	Hapalemur griseus griseus - Whole blood (Ultracold .2ml)
1359m	Hapalemur griseus griseus - Whole blood (Ultracold .2ml)
1636m	Cheirogaleus medius - Whole blood (Ultracold .2ml)
2866f	Otolemur crassicaudatus - Whole blood (Ultracold .2ml)
2867f	Otolemur crassicaudatus - Whole blood (Ultracold .2ml)
3619f	Cheirogaleus medius - Whole blood (Ultracold .2ml)
5859f	Eulemur macaco - Whole blood (Ultracold .2ml)
6121m	Eulemur rubriventer - Whole blood (Ultracold .2ml)
6225m	Eulemur collaris - Whole blood (Ultracold .2ml)
6248m	Eulemur flavifrons - Whole blood (Ultracold .2ml)
6274m	Eulemur macaco - Whole blood (Ultracold .2ml)
6338f	Eulemur rubriventer - Whole blood (Ultracold .2ml)
6362f	Eulemur collaris - Whole blood (Ultracold .2ml)
6395f	Eulemur flavifrons - Whole blood (Ultracold .2ml)
6451m	Daubentonia madagascariensis - Whole blood (Ultracold .2ml)
6866f	Daubentonia madagascariensis - Whole blood (Ultracold .2ml)

10/16/2018

Jue Lin/Elizabeth Blackburn Lab

Mission Bay UCSF

Room S316, Genetech Hall

San Francisco, CA 94158

3641	Cheirogaleus medius - whole blood sample
3642	Cheirogaleus medius - whole blood sample
3638	Cheirogaleus medius - whole blood sample
7119	Cheirogaleus medius - whole blood sample
3635	Cheirogaleus medius - whole blood sample
7161	Cheirogaleus medius - whole blood sample
3637	Cheirogaleus medius - whole blood sample
7223	Cheirogaleus medius - whole blood sample

10/23/2018

Jue Lin/Elizabeth Blackburn Lab

Mission Bay UCSF

Room S316, Genetech Hall

San Francisco, CA 94158

3639	Cheirogaleus medius - whole blood sample (.25 ml)
3642	Cheirogaleus medius - whole blood sample (.25 ml)
3638	Cheirogaleus medius - whole blood sample (.25 ml)
7119	Cheirogaleus medius - whole blood sample (.25 ml)
3635	Cheirogaleus medius - whole blood sample (.25 ml)
7161	Cheirogaleus medius - whole blood sample (.25 ml)
3637	Cheirogaleus medius - whole blood sample (.25 ml)
7223	Cheirogaleus medius - whole blood sample (.25 ml)

10/24/2018

Elizabeth Tapanes

George Washington Univ

Anthropology

Suite 6000, CASHP

800 22nd St NW

Washington, D.C. 20052

6564M	Propithecus diadema - whole blood sample (.4 ml)
#2F	Propithecus diadema - whole blood sample (.2 ml)

10/31/2018

Anthony Tosi, PhD

Kent State University

750 Hilltop Drive, Rm 226

Kent, OH 44141

1636M	Cheirogaleus medius - .25 ml whole blood
6201M	Daubentonia madagascariensis - .2 ml whole blood
6237M	Eulemur mongoz - .2 ml whole blood
3185M	Galago moholi - .2 ml whole blood
1992M	Loris tardigradus - .2 ml whole blood
2316M	Mirza coquereli - .2 ml whole blood
1960M	Nycticebus coucang - .2 ml whole blood
6564M	Propithecus diadema - .2 m. whole blood
6206M	Varecia rubra - .2 ml whole blood
7194M	Varecia variegata variegata - .2 ml whole blood

Tissue Sales:

03/27/2018

Stefan Ruhl

University at Buffalo

Oral Biology Dept

3435 Main Street, Foster Hall Rm 213A

Buffalo, NY 14214

6622M	Lemur catta - saliva sample - .25 ml
6622M	Lemur catta - saliva sample - .25 ml
6622M	Lemur catta - saliva sample - .25 ml
6861F	Lemur catta - saliva sample - .25 ml
6861F	Lemur catta - saliva sample - .25 ml

04/06/2018

Catherine Pei-lu Lu

1230 York Ave, Box 300

New York, NY 10021

7113F	Microcebus murinus - skin sample (dorsal torso)
7113F	Microcebus murinus - skin sample (ventral torso)
7113F	Microcebus murinus - skin sample (dorsal tail)
7113F	Microcebus murinus - Left foot
7113F	Microcebus murinus - Right foot
7113F	Microcebus murinus - Left hand
7113F	Microcebus murinus - Right hand

04/17/2018

Stacey Tecot

University of Arizona

1009 E South Campus Drive

Haury Building

Tuscon, AZ 85721

6827M	Propithecus coquereli - urine sample
6964M	Propithecus coquereli - urine sample
6964M	Propithecus coquereli - urine esample
6807M	Propithecus coquereli - urine sample
6807M	Propithecus coquereli - urine sample
6920M	Propithecus coquereli - urine sample
6920M	Propithecus coquereli - urine sample
6920M	Propithecus coquereli - urine sample
6843M	Propithecus coquereli - urine sample
6827M	Propithecus coquereli - urine sample
6797M	Propithecus coquereli - urine sample
6797M	Propithecus coquereli - urine sample
6807M	Propithecus coquereli - urine sample
6774M	Propithecus coquereli - urine sample

6774M	Propithecus coquereli - urine sample
6827M	Propithecus coquereli - urine sample

07/05/2018

Catherine Pei-lu Lu

1230 York Ave, Box 300

New York, NY 10021

2866F	Otolemur crassicaudatus - skin sample (dorsal torso)
2866F	Otolemur crassicaudatus - skin sample (ventral torso)
2866F	Otolemur crassicaudatus - skin sample (dorsal tail)

07/07/2018

Olga Dudchenko, PhD

Baylor College of Medicine, room 908B

1 Baylor Plaza

Houston, TX 77025

1352f	Hapalemur griseus griseus - Kidney sample (RNAlater .27g)
1352f	Hapalemur griseus griseus - Kidney sample (Ultracold .25g)
1352f	Hapalemur griseus griseus - Spleen sample (Ultracold .3g)
1352f	Hapalemur griseus griseus - Liver sample (Ultracold .31g)
1359m	Hapalemur griseus griseus - Kidney sample (RNAlater .27g)
1359m	Hapalemur griseus griseus - Spleen sample (Ultracold .26g)
1359m	Hapalemur griseus griseus - Kidney sample (Ultracold .28g)
1359m	Hapalemur griseus griseus - Liver sample (Ultracold .29g)
1636m	Cheirogaleus medius - Liver sample (Ultracold .28g)
5859f	Eulemur macaco - Liver sample (Ultracold .25g)
5859f	Eulemur macaco - Kidney sample (Ultracold .3g)
5859f	Eulemur macaco - Spleen sample (Ultracold .26g)
6121m	Eulemur rubriventer - Liver sample (LiqNitrogen .26g)
6121m	Eulemur rubriventer - Kidney sample (Ultracold .25g)
6121m	Eulemur rubriventer - Liver sample (Ultracold .31g)
6225m	Eulemur collaris - Spleen sample (LiqNitrogen .26g)
6248m	Eulemur flavifrons - Liver sample (Ultracold .25g)
6248m	Eulemur flavifrons - Spleen sample (Ultracold .26g)
6248m	Eulemur flavifrons - Kidney sample (Ultracold .32g)
6274m	Eulemur macaco - Liver sample (Ultracold .28g)
6274m	Eulemur macaco - Spleen sample (Ultracold .29g)
6274m	Eulemur macaco - Kidney sample (Ultracold .31g)
6338f	Eulemur rubriventer - Liver sample (Ultracold .31g)
6362f	Eulemur collaris - Kidney sample (Ultracold .27g)
6395f	Eulemur flavifrons - Spleen sample (RNAlater .27g)
6395f	Eulemur flavifrons - Liver sample (Ultracold .26g)
6395f	Eulemur flavifrons - Spleen sample (Ultracold .3g)
6395f	Eulemur flavifrons - Kidney sample (Ultracold .32g)
6451m	Daubentonia madagascariensis - Spleen sample (Ultracold .27g)

6451m	Daubentonia madagascariensis - Kidney sample (Ultracold .28g)
6866f	Daubentonia madagascariensis - Kidney sample (Ultracold .33g)
6866f	Daubentonia madagascariensis - Liver sample (Ultracold .3g)

09/10/2018

Olga Dudchenko, PhD

Baylor College of Medicine, room 908B

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Houston, TX 77025

1352ff	Hapalemur griseus griseus - Liver sample (RNAlater .25g)
1359m	Hapalemur griseus griseus - Liver sample (RNAlater .29g)
1359m	Hapalemur griseus griseus - Spleen sample (RNAlater .25g)
3619f	Cheirogaleus medius - Kidney sample (RNAlater .28g)
3619f	Cheirogaleus medius - Liver sample (RNAlater .27g)
3619f	Cheirogaleus medius - Kidney sample (Ultracold .32g)
6121m	Eulemur rubriventer - Kidney sample (LiqNitrogen .25g)
6121m	Eulemur rubriventer - Spleen sample (LiqNitrogen .27g)
6225m	Eulemur collaris - Kidney sample (LiqNitrogen .3g)
6225m	Eulemur collaris - Liver sample (LiqNitrogen .26g)
6225m	Eulemur collaris - Liver sample (Ultracold .3g)
6248m	Eulemur flavifrons - Kidney sample (RNAlater .27g)
6248m	Eulemur flavifrons - Liver sample (RNAlater .27g)
6248m	Eulemur flavifrons - Spleen sample (RNAlater .25g)
6338f	Eulemur rubriventer - Kidney sample (LiqNitrogen .25g)
6338f	Eulemur rubriventer - Liver sample (LiqNitrogen .26g)
6362f	Eulemur collaris - Kidney sample (RNAlater .28g)
6362f	Eulemur collaris - Liver sample (RNAlater .26g)
6362f	Eulemur collaris - Spleen sample (RNAlater .27g)
6362f	Eulemur collaris - Liver sample (Ultracold .28g)
6395f	Eulemur flavifrons - Kidney sample (RNAlater .25g)
6395f	Eulemur flavifrons - Liver sample (RNAlater .25g)
6451m	Daubentonia madagascariensis - Liver sample (Ultracold .3g)

09/18/2018

Olga Dudchenko, PhD

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Houston, TX 77025

1636m	Cheirogaleus medius - Kidney sample (LiqNitrogen .28g)
1636m	Cheirogaleus medius - Liver sample (LiqNitrogen .27g)
1636m	Cheirogaleus medius - Kidney sample (Ultracold .25g)
2866f	Otolemur crassicaudatus - Liver sample (LiqNitrogen .26g)
2866f	Otolemur crassicaudatus - Spleen sample (LiqNitrogen .32g)
5859f	Eulemur macaco - Kidney sample (LiqNitrogen .26g)
5859f	Eulemur macaco - Liver sample (LiqNitrogen .25g)

5859f	Eulemur macaco - Spleen sample (LiqNitrogen .26g)
6225m	Eulemur collaris - Kidney sample (Ultracold .25g)
6274m	Eulemur macaco - Liver sample (RNAlater .25g)
6274m	Eulemur macaco - Kidney sample (RNAlater .29g)
6274m	Eulemur macaco - Spleen sample (RNAlater .25g)
6338f	Eulemur rubriventer - Spleen sample (LiqNitrogen .29g)
6451m	Daubentonia madagascariensis - Kidney sample (RNAlater .3g)
6451m	Daubentonia madagascariensis - Liver sample (RNAlater .25g)
6451m	Daubentonia madagascariensis - Spleen sample (RNAlater .29g)
6866f	Daubentonia madagascariensis - Kidney sample (LiqNitrogen .28g)
6866f	Daubentonia madagascariensis - Liver sample (LiqNitrogen .26g)
6866f	Daubentonia madagascariensis - Spleen sample (LiqNitrogen .27g)

10/24/2018
Elizabeth Tapanes
George Washington Univ
Anthropology
Suite 6000, CASHP
800 22nd St NW
Washington, D.C. 20052

6564M	Propithecus diadema - skin sample (RNA Later .29g)
6564M	Propithecus diadema - liver sample (RNA Later .27g)
6562F	Propithecus diadema - skin sample (frozen .27g)
6562F	Propithecus diadema - liver sample (frozen .19g)
6563M	Propithecus diadema - liver sample (frozen .29g)
#2F	Propithecus diadema - liver sample (frozen .3g)

11/26/2018
Anthony Tosi, PhD
Kent State University
750 Hilltop Drive, Rm 226
Kent, OH 44141

1359M	Hapalemur griseus griseus - liver sample (RNAlater)
1367F	Hapalemur griseus griseus - liver sample (RNAlater)
1370F	Hapalemur griseus griseus - liver sample (frozen)
1333N	Hapalemur hybrid - liver sample (RNAlater)
5984F	Lemur catta - liver sample (RNAlater)
6159F	Lemur catta - liver sample (RNAlater)
6862N	Lemur catta - liver sample (frozen)
6583N	Propithecus coquereli - liver sample (frozen)
6608N	Propithecus coquereli - liver sample (RNAlater)
6727F	Propithecus coquereli - liver sample (frozen)
6825F	Propithecus coquereli - liver sample (RNAlater)
6110F	Propithecus coquereli - liver sample (frozen)

Cadaver Sales:

8/21/2018

Jonathan Perry

Johns Hopkins University

Functional Anatomy and Evolution

Rm 301, 1830 E Monument St

Baltimore, MD 21205

6201M	Daubentonia madagascariensis - Cadaver
7077F	Propithecus coquereli - Cadaver
6953M	Lemur catta - Cadaver
2865M	Otolemur monteiri argentatus - Cadaver
1792M	Otolemur monteiri argentatus - Cadaver

11/14/2018

Dr. Chris Vinyard

NEOMED – Anatomy & Neurobiology

4209 St. Rt. 44 Box 95/Room E-145

Rootstown, OH 44272

5774m	Eulemur coronatus - cadaver (frozen)
6364f	Eulemur coronatus - cadaver (formalin)
6326m	Eulemur coronatus - cadaver (formalin)
2049m	Galago moholi - cadaver (formalin)
5586m	Varecia rubra - cadaver (formalin)
2728m	Otolemur monteiri - cadaver (frozen)
6259m	Propithecus tattersalli - cadaver (frozen)

12/05/2018

Kristen Prufrock

Johns Hopkins University

Functional Anatomy and Evolution

Rm 301, 1830 E Monument St

Baltimore, MD 21205

6324m	Eulemur mongoz - cadaver (formalin)
3009m	Galago moholi - cadaver (frozen)

***16 January 2019: Veterinary Program to Reduce Mortalities at Duke Lemur Center for 2018
USFWS report***

The following veterinary program was initiated in 1998, and is an ongoing process of improving overall health of the colony and reducing mortalities. Two Veterinarians (Dr Laura Ellsaesser (starting here 10/2017) and Dr. Bobby Schopler (here since 8/2005) with the assistance of two registered veterinary technicians (Megan Davison and Cat Ostrowski) assures that the Duke Lemur Center has full time Veterinary coverage. Dr. Cathy Williams who served as senior veterinarian since 1996 at DLC transitioned to Curator of the colony in 2018, giving a veterinary perspective to the management of the colony. DLC has digital radiography (including digital dental radiography), an endoscope, in house blood chemistry capability, and ultrasonography allowing for an efficient, accurate Veterinary Department diagnostic capability.

- A bi-yearly physical exam (including rabies vaccine and TB tests) for each animal in the colony.
- De-worming as indicated.
- Prophylactic dental cleanings as necessary (biyearly or more often if indicated).
- Rabies vaccines for all animals with access to outdoor housing.
- Quarantine for new animals entering the colony.
- Veterinary oversight of diet formulation and food handling procedures. (In 2016 we discovered avocado to be toxic to aye aye and this food has been removed from the diet rotation for all lemurs.
- Veterinary oversight of pest control program.
- Efficacy of cage sanitation monitored regularly via Rodac plate testing.
- Water quality monitoring program.
- Food quality monitoring program.
- Complete post-mortem examinations, including histopathology on all deceased animals, to determine individual and colony patterns of mortality.

Duke Lemur Center Death Log 2018

Date of Death	Species	DLC ID#	Name	Cause of Death	Age at Death (yrs)	D.O.B.
1/29/2018	Mmur	7067f	Nettle	Euthanized; wound involving anus	6.4	8/24/2011
2/2/2018	Mmur	7097f	Blackberry	Euthanized; sarcoma reoccurrence	5.7	6/5/2012
3/14/2018	Efla	7290f	Wiig-A	Acute death/stillborn; dystocia	0.0	3/14/2018
4/1/2018	Ecor	7293f	Sanura-A	Acute death; likely head trauma at birth	0.0	4/1/2018
4/6/2018	Mmur	7113f	Briony	Euthanized; mass on soft palate	5.8	7/3/2012
5/14/2018	Vrub	7299m	Pandora-A	Died in utero, stillborn	0.0	5/14/2018
6/7/2018	Pcoq	7300m	Rupillia-A	Died in utero, stillborn	0.0	6/7/2018
7/3/2018	Ocra	2866f	Pretoria	Euthanized; pleural effusion	14.7	10/28/2003
7/25/2018	Erub	6038f	Dido II	Euthanized; ventral cervical mass	33.7	~1/1/1984 - 12/3/1984
7/30/2018	Dmad	6201m	Nosferatu	Euthanized; fractured mandible	32.6	~1/1/1985-12/31/1985
8/6/2018	Vrub	6311f	Antlia	Euthanized; hepatocellular carcinoma	29.3	4/22/1989
8/15/2018	Emac	6407	Olivier	Euthanized, salmonella	27.3	3/28/1991
8/17/2018	Erub	6488f	Iroquois	Euthanized; fractured elbow	26.2	4/29/1992
8/20/2018	Mmur	7028f	Calendula	Euthanized; Wallerian degeneration of cervical spine	10.1	5/25/2008
8/22/2018	Mmur	7160m	Filbert	Euthanized; chronic neuropathy, hereditary axonopathy	5.1	6/18/2013
9/4/2018	Emac	5850m	Hesperus	Euthanized, hepatic mass	34.0	3/22/1984

Duke Lemur Center Death Log 2018

10/6/2018	Vvv	7252m	Astro	Acute death;snake bite	2.3	6/8/2016
10/15/2018	Pcoq	6819m	Luther		15.1	8/29/2003
10/17/2018	Pcoq	6743f	Pia		19.6	2/15/1999
10/24/2018	Emac	5942f	Harmonia	euthanized,seizure	34.2	6/27/1984
10/25/2018	Ecor		Geb		26.5	4/6/1992
11/2/2018	Pcoq	6986	Sophie		7.6	1/9/2011
11/26/2018	Mmur	7108	Daikon	euthanized; osteosarcoma?	6.3	7/3/2012

Duke Lemur Center: biosample inventory summary

Species Code	Individuals	Tissues	Cadavers	BloodProducts	Urine	Total Samples
CMAJ	3	4	2	0	0	6
CMED	55	230	16	130	35	411
DMAD	39	310	11	509	184	1014
EALB	5	63	2	75	0	140
ECOL	41	288	14	532	32	866
ECOR	45	273	22	316	42	653
EFLA	67	340	17	535	59	951
EFUL	7	30	8	61	10	109
EMAC	26	242	18	375	14	649
EMON	60	335	19	509	36	899
ERUB	13	244	8	310	14	576
ERUF	32	128	14	192	7	341
ESAN	11	81	7	156	4	248
EUL	45	148	42	257	12	459
GAL	1	3	0	0	0	3
GDEM	9	10	5	0	0	15
GMOH	52	115	35	25	0	175
HALA	1	3	0	3	0	6
HGG	35	228	18	255	3	504
HGRI	5	37	1	54	0	92
LCAT	141	446	24	968	56	1494
LTAR	20	166	7	31	5	209
MMUR	81	437	30	106	39	612
MZAZ	30	101	12	43	0	156
NCOU	25	147	3	93	10	253
NPYG	27	258	11	126	51	446
OCRA	2	52	1	34	1	88
OGG	29	11	9	18	0	38
OMA	23	3	21	0	0	24
OMON	20	24	13	0	0	37
PCOQ	127	819	48	1016	267	2150
PDIA	4	57	2	30	3	92
PPOT	8	12	4	9	0	25
Prop sp	1	0	1	0	0	1
PTAT	13	94	8	49	0	151
PVV	2	3	1	0	0	4
Sang.Mid	1	0	1	0	0	1
TAR	1	1	0	1	0	2
TBAN	2	1	1	0	0	2
TSYR	6	8	2	0	0	10
unknown	2	1	3	0	0	4
VAR	1	0	1	0	0	1
VRUB	64	340	16	684	82	1122
VVV	48	222	10	282	27	541
TOTAL	1230	6315	488	7784	993	15580

Duke Lemur Center: explanation of species code

Genus species	Common Name	Species Code
<i>Acrocebus</i>	Golden potto	ARCT
<i>Cheirogaleus major</i>	Greater dwarf lemur	CMAJ
<i>Cheirogaleus medius</i>	Fat-tailed dwarf lemur	CMED
<i>Daubentonia madagascariensis</i>	Aye-aye	DMAD
<i>Eulemur</i>	Eulemur hybrid	EUL
<i>Eulemur albifrons</i>	White-fronted brown lemur	EALB
<i>Eulemur collaris</i>	Collared brown lemur	ECOL
<i>Eulemur coronatus</i>	Crowned lemur	ECOR
<i>Eulemur flavifrons</i>	Blue-eyed black lemur	EFLA
<i>Eulemur fulvus</i>	Common brown lemur	EFUL
<i>Eulemur macaco</i>	Black lemur	EMAC
<i>Eulemur mongoz</i>	Mongoose lemur	EMON
<i>Eulemur rubriventer</i>	Red-bellied lemur	ERUB
<i>Eulemur rufus</i>	Red-fronted brown lemur	ERUF
<i>Eulemur sanfordi</i>	Sanford's brown lemur	ESAN
<i>Galago</i>	Lesser bushbaby	GAL
<i>Galago demidoff</i>	Demidoff's galago	GDEM
<i>Galago moholi</i>	Mohol bushbaby	GMOH
<i>Galago senegalensis</i>	Senegal bushbaby	GSEN
<i>Haplemur</i>	Gentle bamboo lemur hybrid	HAP
<i>Haplemur alaotrensis</i>	Alaotra gentle bamboo lemur	HALA
<i>Haplemur griseus griseus</i>	Eastern lesser bamboo lemur	HGG
<i>Lemur catta</i>	Ring-tailed lemur	LCAT
<i>Lepilemur mustelinus</i>	Sportive lemur	LEPI
<i>Loris tardigradus</i>	Slender loris	LTAR
<i>Microcebus murinus</i>	Gray mouse lemur	MMUR
<i>Mirza coquereli</i>	Northern giant mouse lemur	MZAZ
<i>Nycticebus coucang</i>	Slow loris	NCOU
<i>Nycticebus pygmaeus</i>	Pygmy slow loris	NPYG
<i>Otolemur crassicaudatus</i>	Thick-tailed greater bushbaby	OCRA
<i>Otolemur crassicaudatus crassicaudatus</i>	Thick-tailed greater bushbaby	OCC
<i>Otolemur garnettii garnettii</i>	Northern greater galago	OGG
<i>Otolemur monteiri</i>	Silvery greater galago	OMON
<i>Otolemur monteiri argentatus</i>	Silvery greater galago	OMA
<i>Perodicticus potto</i>	Potto	PPOT
<i>Propithecus coquereli</i>	Coquerel's sifaka	PCOQ
<i>Propithecus diadema</i>	Diademed sifaka	PDIA
<i>Propithecus tattersalli</i>	Golden-crowned sifaka	PTAT
<i>Propithecus verreauxi verreauxi</i>	Verreaux's sifaka	PVV
<i>Tarsius bancanus</i>	Horsfield's tarsier	TBAN
<i>Tarsius syrichta</i>	Mindanao Phillipine tarsier	TSYR
<i>Varecia</i>	Varecia hybrid	VAR
<i>Varecia rubra</i>	Red ruffed lemur	VRUB
<i>Varecia variegata variegata</i>	Black-and-white ruffed lemur	VVV

Duke Lemur Center publications list (research from biosample sales)

No.	Year Pub	Author	Publication
1261	2014	Yoder AD, Chan LM, dos Reis M, Larsen PA, Campbell CR, Rasoliarison R, Barrett M, Roos C, Kappeler P, Bielawski JP and Yang Z	Molecular Evolutionary Characterization of a VIR Subfamily Unique to Strepsirrhine Primates. <i>Genome Biology and Evolution</i> 6(1): 213-227.
1266	2014	Larsen PA, Heilman AM and Yoder AD	The utility of PacBio circular consensus sequencing for characterizing complex gene families in non-model organisms. <i>BMC Genomics</i> 15:720 doi:10.1186/1471-2164-15-720
1267	2014	Larsen PA, Campbell CR and Yoder AD	Next-generation approaches to advancing ecoimmunogenomic research in critically endangered primates. <i>Molecular Ecology Resources</i> 14: 1198-1209
1268	2014	Smith TD, Kentzel ES, Cunningham JM, Bruening AE, Jankord KD, Trupp SJ, Bonar CJ, Rehorek SJ and DeLeon VB	Mapping bone cell distributions to assess ontogenetic origin of primate midfacial form. <i>Am J Phys Anthropol.</i> 2014 Jul;154(3):424-35. doi: 10.1002/ajpa.22540
1270	2014	del Barco-Trillo J and Drea CM	Socioecological and phylogenetic patterns in the chemical signals of strepsirrhine primates. <i>Animal Behavior</i> 97:249-253. doi:10.1016/j.anbehav.2014.07.009
1273	2014	Katzourakis A, Aiewsakun P, Jia H, Wolfe ND, LeBreton M, Yoder AD, Switzer WM	Discovery of prosimian and afrotherian foamy viruses and potential cross species transmissions amidst stable and ancient mammalian co-evolution. <i>Retrovirology</i> 11:61 doi:10.1186/1742-4690-11-61
1277	2015	Carrigan MA, Uryasey O, Frye CB, Echman BL, Myers CR, Hurley TD and Benner SA	Hominids adapted to metabolize ethanol long before human-directed fermentation. <i>PNAS</i> 12(2):458-463 doi: 10.1073/pnas.1404167111
1283	2015	Blair C, Campbell CR and Yoder AD	Assessing the utility of whole genome amplified DNA for next-generation molecular ecology. <i>Molecular Ecology Resources</i> 15:5 p 1079-1090
1284	2016	Yoder AD, Weisrock DW, Rasoliarison RM, Kappeler PM	Cheirogaleid diversity and evolution: Big questions about small primates. <u><i>Evolutionary Biology and Ecology of the Cheirogaleidae</i></u> . S. L. Lehman, L. Radespiel and E. Zimmermann. Cambridge, Cambridge University Press.

Duke Lemur Center publications list (research from biosample sales)

1292	2015	Meyer WK, Vankat A, Kermay AR, van de Geijn B, Zhang S, and Przeworski MP	Evolutionary history inferred from the de novo assembly of a non-model organism, the blue-eyed black lemur. <i>Molecular Ecology</i> . DOI: 10.1111/mec.13327
1293	2015	Huq E, Wall CE, Taylor AB	Epaxial muscle fiber architecture favors enhanced excursion and power in the leaper <i>Galago senegalensis</i> . <i>Journal of Anatomy</i> doi: 10.1111/joa.12351
1295	2015	Smith TD, Mucklinski MN, Jankord KD, Progar AJ, Bonar CJ, Evans S, Williams L, Vinyard CJ and DeLeon VB	Dental maturation, eruption, and gingival emergence in the upper jaw of newborn primates. <i>Anatomical Record</i> 298:12 p 2098-31. DOI: 10.1002/ar.23273
1298	2015	Pastorini, J, Sauter ML, Sussman RW, Gould L, Cuzzo FP, Fernando P, Nievergelt CM, Mundy NI	Comparison of the genetic variation of captive ring-tailed lemurs with a wild population in Madagascar. <i>Zoo Biology</i> DOI: 10.1002/zoo.21225
1303	2015	Perry JMG, St Clair EM, and Hartstone-Rose A	Cranio-mandibular signals of diet in adapids. <i>AJPA</i> DOI: 10.1002/ajpa.22811
1312	2016	Larsen PA, Hayes CE, Williams CV, Junge RE, Razafindramana J, Mass V, Rakotondrainibe H, and Yoder AD	Blood transcriptomes reveal novel parasitic zoonoses circulating in Madagascar's lemurs. <i>Biology Letters</i> . DOI: 10.1098/rsbl.2015.0829
1315	2016	Grogan KE, McGinnis GJ, Sauter ML, Cuzzo FP and Drea CM	Next-generation genotyping of hypervariable loci in many individuals of a non-model species: Technical and theoretical implications. <i>BMC Genomics</i> 17:204. Available from: http://www.biomedcentral.com/1471-2164/17/204
1317	2016	Hotaling S, Foley ME, Lawrence NM, Bocanegra J, Blanco MB, Rasoloarison R, Kappeler PM, Barrett MA, Yoder AD and Weisrock DW	Species discovery and validation in a cryptic radiation of endangered primates: coalescent-based species delimitation in Madagascar's mouse lemurs. <i>Molecular Ecology</i> 25(9):2029-45. doi: 10.1111/mec.13604
1318	2016	McCluskey et al (40 authors)	The US Culture Collection Network lays the foundation for progress in preservation of valuable microbial resources. <i>Phytopathology</i> 106(6):532-40. doi: 10.1094/PHYTO-02-16-0074-RVW
1322	2016	Yoder AD, Campbell CR, dos Reis M, Blanco M, Ganzhorn JU, Goodman SM, Hunnicutt KE, Larsen PA, Kappeler PM, Rasoloarison RM, Ralison JM, Swofford D, Weisrock DW	Geogenetic patterns in mouse lemurs (genus <i>Microcebus</i>) reveal the ghosts of Madagascar's forests past. <i>PNAS</i> 113(29):8049-8056. doi: 10.1073/pnas.1601081113

Duke Lemur Center publications list (research from biosample sales)

1324	2016	Rensch T, Villar D, Horvath J, Odom DT, Flicek P	Mitochondrial heteroplasmy in vertebrates using ChIP-sequencing data. <i>Genome Biology</i> 17:139. DOI: 10.1186/s13059-016-0996-y
1328	2016	Smith TD, Martell MC, Rossie JP, Bonar CJ and DeLeon VB	Ontogeny and microanatomy of the nasal turbinates in lemuriformes. <i>The Anatomical Record</i> 299(11):1492-1510. doi: 10.1002/ar.23465
1329	2016	DeLeon VB, Smith TD and Rosenberger AL	Ontogeny of the postorbital region in tarsiers and other primates. <i>The Anatomical Record</i> 299(12):1631-1645. doi: 10.1002/ar.23476.
1330	2016	Faherty SL, Villanueva-Canas JL, Klopfer PH, Alba MM, Yoder AD	Gene expression profiling in the hibernating primate, <i>Cheirogaleus medius</i> . <i>Genome Biology and Evolution</i> . doi: 10.1093/gbe/evw163
1340	2017	Larsen PA, Lutz MW, Hunicutt KE, Mihovilovic M, Saunders AM, Yoder AD, Roses AD	The A1u neurodegeneration hypothesis: A primate-specific mechanism for neuronal transcription noise, mitochondrial dysfunction, and manifestation of neurodegenerative disease. <i>Alzheimer's & Dementia</i> . doi: 10.1016/j.jalz.2017.01.017
1346	2017	Smith TD, McMahon MJ, Millen ME, Llera C, Engel SM, Li L, Bhatnagar KP, Burrows AM, Zumpano MP, DeLeon VB	Growth and development at the sphenothmoidal junction in perinatal primates. <i>Anatomical Record</i> . DOI: 10.1002/ar.23630
1347	2017	Yapuncich GS, Seiffert ER, Boyer DM	Quantification of the position and depth of the flexor hallucis longus groove in euarchontans, with implications for the evolution of primate positional behavior. <i>American Journal of Physical Anthropology</i> 163(2):367-406. doi: 10.1002/ajpa.23213
1349	2017	Kistler L, Johnson SM, Irwin MT, Louis EE, Ratan A, Perry GH	A massively parallel strategy for STR marker development, capture, and genotyping. <i>Nucleic Acids Research</i> 45(15):e142. https://doi.org/10.1093/nar/gkx574
1355	2017	Ritzman TB, Banovich N, Buss KP, Guida J, Rubel M, Pinney J, Khang B, Ravosa MJ, Stone AC	Facing the facts: Changes in the Runx2 gene modulates facial morphology in primates. <i>Journal of Human Evolution</i> 111:10-34 AM139-151. doi.org/10.1016/j.jhevol.2017.06.014
1356	2017	Grogan KE, Sauter ML, Cuzzo FP, Drea CM	Genetic wealth, population health: Major Histocompatibility Complex variation in captive and wild ring-tailed lemurs (<i>Lemur catta</i>). <i>Ecology and Evolution</i> . DOI: 10.1002/ece3.3317

Duke Lemur Center publications list (research from biosample sales)

1357	2017	Bankoff RJ, Jerjos M, Hohman B, Lauterbur ME, Kistler L, Perry GH	Testing convergent evolution in auditory processing genes between echolocating mammals and the aye aye, a percussive-foraging primate. <i>Genome Biology and Evolution</i> . 9(7):1978-1989. doi.org/10.1093/gbe/evx140
1358	2017	Smith TD, Muchlinski MN, Bucher WR, Vinyard CJ, Bonar CJ, Evans S, Williams LE, DeLeon VB	Relative tooth size at birth in primates: Life history correlates. <i>American Journal of Physical Anthropology</i> . 164(3):623-634. DOI: 10.1002/ajpa.23302
1360	2018	Burrows AM	Functional morphology of mimetic musculature in primates: How social variables and body size stack up to phylogeny. <i>The Anatomical Record</i> 301(2):202-215. https://doi.org/10.1002/ar.23710
1362	2018	Berthelot C, Villar D, Horvath JE, Odom DT, Flicek P, Larsen J, Harris RA, Liu T, Ivorian SC, Campocci CR, Brown AD, Sullivan BA, Shelton J, Brown SJ, Ravendran M, Dudchenko O, Machol I, Durand NC, Shamim MS, Aiden EL, Muzny DM, Gibbs RA, Yoder AD, Rogers J, Worley KC	Complexity and conservation of regulatory landscapes underlie evolutionary resilience of mammalian gene expression. <i>Nature Ecology & Evolution</i> 2:152-163. doi:10.1038/s41559-017-0377-2
1363	2017		Hybrid de novo genome assembly and centromere characterization of the gray mouse lemur (<i>Microcebus murinus</i>). <i>BMC Biology</i> 15:110 https://doi.org/10.1186/s12915-017-0439-6
1368	2015	Yao H, Gao M, Liu K, Zhao S	Sequence characterization and phylogeny analysis of the complete mitochondrial genome of verreaux's sifaka, <i>Propithecus verreauxi</i> (primates: indridae). <i>Mitochondrial DNA Part A</i> . 27(6). doi/full/10.3109/19401736.2015.1089558
1370	2017	Tenenhouse EM, Putman S, Boisseau NP, Brown JL	Relationships between steroid hormones in hair and social behaviour in ring-tailed lemurs (<i>Lemur catta</i>). <i>Primates</i> 58(1):199-209. doi.org/10.1007/s1032
1378	2017	Trizzino M, Park Y, Holsbach-Beltrame M, Aracena K, Mika K, Caliskan M, Perry GH, Lynch VJ, Brown CD	Transposable elements are the primary source of novelty in primate gene regulation. <i>Genome Research</i> 27:1623-1633. DOI 10.1101/gr.218149.116
1381	2016	Maiolino SA, Kingston AK, Lemelin P	Comparative and functional morphology of the primate hand integument. In Kivell T, Lemelin P, Richmond B, Schmitt D (eds) <i>The Evolution of the Primate Hand. Developments in Primatology: Progress and Prospects</i> . Springer, New York NY. DOI https://doi.org/10.1007/978-1-4939-3646-5_8
1382	2016	Schmitz J, Noll A, Raabe CA, Churakov G, Voss R, Kieffmann M, Rozhdestvensky T, Brosius J, Baertsch R, Clawson H, Roos C, Zimin A, Minx P, Montague MJ, Wilson RK, Warren WC	Genome sequence of the basal haplorhine primate <i>Tarsius syrichta</i> reveals unusual insertions. <i>Nature Communications</i> 7:12997. doi: 10.1038/ncomms12997

Duke Lemur Center publications list (research from biosample sales)

1383	2017	McKenney EA, Maslanka M, Rodrigo A, Yoder AD	Bamboo specialists from two mammalian orders (Primates, Carnivora) share a high number of low-abundance gut microbes. <i>Microbial Ecology</i> . doi.org/10.1007/s00248-017-1114-8
1384	2017	McKenney EA, O'Connell TM, Rodrigo A, Yoder AD	Feeding strategy shapes gut metagenomic enrichment and functional specialization in captive lemurs. <i>Gut Microbes</i> . doi.org/10.1080/19490976.2017.1408762
1385	2018	Faherty SL, Villanueva-Canas JL, Blanco MB, Alba MM, Yoder AD	Transcriptomics in the wild: Hibernation physiology in free-ranging dwarf lemurs. <i>Molecular Ecology</i> . https://doi.org/10.1111/mec.14483
1386	2018	Muchlinski MN, Hemingway FW, Pastor J, Omstead KM, Burrows AM	How the brain may have shaped muscle anatomy and physiology: A preliminary study. <i>The Anatomical Record</i> 301(3): 528-537. https://doi.org/10.1002/ar.23746
1387	2018	Rodriguez Barbon A, Cowen R, Knott C, Hughes K, Allinson K, Williams CV, Routh A.	Disease in wildlife or exotic species: Neoplasia in three aye-ayes. <i>Journal of Comparative Pathology</i> . https://doi.org/10.1016/j.jcpa.2017.12.008
1388	2018	Huq E, Taylor AB, Su Z, Wall CE	Fiber type composition of epaxial muscles is geared toward facilitating rapid spinal extension in the leaper <i>Galago senegalensis</i> . <i>American Journal of Physical Anthropology</i> . https://doi.org/10.1002/ajpa.23405
1389	2018	Larsen PA, Hunnicutt KE, Larsen RJ, Yoder AD, Saunders AM	Warning SINEs: Alu elements, evolution of the human brain, and the spectrum of neurological disease. <i>Chromosome Research</i> 26(102):93-111. https://doi.org/10.1007/s10577-018-9573-4
1397	2018	Greene LK and McKenzie EA	The inside tract: The appendicular, cecal, and colonic microbiome of captive aye-ayes. <i>American Journal of Physical Anthropology</i> 2018:1-8. https://doi.org/10.1002/ajpa.23481
1412	2018	Young JW, Jankord K, Saunders MM, Smith TD	Getting into shape: Limb bone strength in perinatal <i>Lemur catta</i> and <i>Propithecus coquerli</i> . <i>The Anatomical Record</i>
1414	2019	Canuti M, Williams C, Sagan SM, Munnink BBO, Gadi S, Verhoeven JTP, Kellam P, Cotten M, Lang AS, Junge RE, Cullen JM, Hoek L	Virus discovery reveals frequent infection by diverse novel members of the Flaviviridae in wild lemurs. <i>Archives of Virology</i>