

MIAMI METROZOO MEDICAL RECORD

DATE OF
ACQUISITION
OR BIRTH 1975

ANIMAL ELEPHANT, AFRICAN

ACCES.NO. 269 stbk#145 SEX 0.1 HOUSE NAME PEGGY

03/17/95 Has developed small open wound in skin on middle of left lateral thorax; keeper believes it may have been caused by hook (has disposed of the hook, and inspection of other ankus' shows only blunted ends); wound is slightly swollen and exudative. Keeper instructed to flush it with water and apply betadine sol'n to wound once or twice daily until healed.

05/28/96 BLOOD/CBC, chem screen (opportunistic).

10/24/96 BLOOD/CBC, chem screen (to check against another with "edema").

11/12/96 Normal on 11/10, loose stools on 11/11; today seems to be generally sore on all feet, stiff lying down and has decreased appetite. Vet out-of-town: Dr. Richard Houck consulted by phone - recommended tempting with browse and produce and feeding bran for a few nights with grain. RX/Banamine 2500mg IM.

11/13/96 Somewhat improved, brighter and better appetite & stool production but still stiff.

11/16/96 Essentially back to normal this am.

11/20/97 COMT/will begin once weekly blood collection TFN on both cows, to track estrous cycles in preparation for possible breeding next year (?). BLOOD/save serum only.

05/14/98 Per USDA mandate, each elephant has been conditioned to allow saline to be instilled into their trunk and then to blow it back out into a plastic bag ("trunk washing" technique) for mycobacterial cultures. PROC/collected 40-50ml (60ml saline total placed down into trunk) of "trunk wash" sample (after overnight water withholding) for mycobacterial culture on each of three consecutive mornings (5/12, 5/13, & today) - frozen samples from 5/12 & 13, and refrig'd sample from 5/14 sent overnight to NVSL as per protocol, to complete ANNUAL TB TESTING requirement. Elephants well-behaved and performed sampling without problems.

06/03/98 BLOOD/CBC, chem screen, serum saved (opportunistic sampling while blood drawn for hormonal monitoring).

01/20/99 Keeper reports that Peggy is tearing and has some focal clouding of her left cornea (presumed scratch or ulcer). RX/keeper to apply triple a'biotic ointment OS BID for next few days, and inform vet if lesion does not resolve quickly or if worsens.

01/25/99 Keeper reports that eye is clear and problem is resolved.

01/28/99 BLOOD/whole blood drawn in EDTA (~40ml) for DNA study & banking by D.Schmitt (Missouri St. Univ.).

05/06/99 PROC/collected 40-50ml (60ml saline total placed down into trunk) of "trunk wash" sample (after overnight water withholding) for mycobacterial culture on each of three consecutive mornings (5/4, 5/5, & today) - frozen samples from 5/4 & 5, and refrig'd sample from 5/6 sent overnight to NVSL as per USDA-mandated-protocol, to complete ANNUAL TB TESTING requirement. Additionally, BLOOD/CBC, chem screen, serum protein electrophoresis, save serum - collected yesterday for screening purposes (when bled for hormone monitoring).

06/07/00 PROC/collected 40-50ml (60ml saline total placed down into trunk) of "trunk wash" sample (after overnight water withholding) for mycobacterial culture on each of three consecutive mornings (6/5,

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6/6, & today) - frozen samples from 6/5 & 6, and partially frozen sample from 6/7 sent overnight to NVSL as per USDA-mandated-protocol, to complete ANNUAL TB TESTING requirement. Additionally, BLOOD/CBC, chem screen, save serum - collected this morning for surveillance purposes (when bled for hormone monitoring).

11/14/00 BLOOD/collected whole blood in heparin and some serum today for "iron assays" (D.Paglia, UCLA).

04/17/01 Keepers trimmed the "points" off her tusks today - both pieces sent to USDI Forensics Lab as specimens.

06/20/01 PROC/collected 40-50ml (60ml saline total placed down into trunk) of "trunk wash" sample (after overnight water withholding) for mycobacterial culture on each of three consecutive mornings (6/18, 6/19, & today) - frozen samples from 6/18 & 19, and partially frozen sample from 6/20 sent overnight to NVSL as per USDA-mandated-protocol (very well-behaved with conditioned trunk-wash procedures). BLOOD/CBC, chem screen, save serum (collected with trunk-wash routine, for annual check). COMT/no signs of ill-health, no problems reported.

06/12/02 PROC/collected 40-50ml (60ml saline total placed down into trunk) of "trunk wash" sample (after overnight water withholding) for mycobacterial culture on each of three consecutive mornings (6/10, 6/11, & today) - frozen samples sent overnight to NVSL as per USDA-mandated-protocol (very well-behaved with conditioned trunk-wash procedures).

06/25/02 BLOOD/CBC, chem screen; save serum. COMT/annual check of elephants - all reported to be doing well, no problems recognized.

03/12/03 BLOOD/sent banked sample of serum in for West Nile virus serology (survey of elephant collection) - results all negative. - CLM

05/13/03 BLOOD/CBC, chem screen, save serum. COMT/in addition to routine weekly collection for hormone assays, blood was collected today for annual check during TB-testing procedures (see below); keepers report no apparent health problems at this time and elephant appears to be in good health and overall condition. - CLM

05/14/03 ANNUAL TB TESTING: PROC/collected 40-50ml (60ml saline total placed down into trunk) of "trunk wash" sample (after overnight water withholding) for mycobacterial culture on each of three consecutive mornings (5/12, 5/13, & today) - frozen samples from 5/12 & 13, and partially frozen sample from 5/14 sent overnight to NVSL as per USDA-mandated-protocol (well-behaved for collection routine). - CLM

06/04/03 WT=9852 lbs. SMM

09/16/03 WT=9800 lbs.

11/04/03 The latest assay results from Peggy's weekly blood draws have shown that Peggy has become a "flatliner" and is no longer cycling; prolactin assays done recently are elevated in Peggy's serum and are postulated to have some sort of connection to her acyclic status (not sure if cause or symptom).

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ANIMAL ELEPHANT, AFRICAN DATE OF ACQUISITION OR BIRTH 1975
 ACCES.NO. 269 stbk#145 SEX 0.1 HOUSE NAME PEGGY

12/25/03 WT=9844 lbs.
 03/12/04 Trying to meet AZA demands that each elephant has baseline foot radiographs on file: borrowed portable xray machine from Dr. Templeton for part of day. XRAY/oblique plantar-dorsal views of each digit (corresponding to toenails) on both hindfeet (6 total) [kvp=48, mas=1.6] COMT/Peggy a little nervous, but overall well-behaved; running out of time this afternoon - stopped with these for now, will plan to do front feet at another date. - CLM
 05/07/04 Tried to do xrays on Peggy's front feet today - too nervous to cooperate - will have to work on further conditioning for a while. - CLM
 05/19/04 Continuing conditioning routine for xrays on front feet - doing better, not quite there yet. Meanwhile, BLOOD/CBC, chem screen, protein electrophoresis, save serum. In anticipation of starting Peggy on a drug trial for her elevated prolactin levels and her acyclicity next week. - CLM
 05/24/04 RX/begin cabergoline 1mg PO twice weekly on Mondays and Thursdays for next 6 months or TFN. Took first dose with no problems today. This drug is to suppress her elevated prolactin levels and hopefully re-initiate normal estrous cycles (see details of proposal by Brown & Ball) in record. - CLM
 05/28/04 Now Peggy is doing much better with the vet, and knows what we want her to do with her front feet. XRAY/oblique dorsal-palmar views of each digit on both forefeet (8 toes total) [kvp=48 mas=1.6 for all but 4th digits, which needed deeper penetration: kvp=52-56]. - CLM
 06/08/04 ANNUAL TB TESTING: PROC/collected 40-50ml of "trunk wash" sample (after overnight water withholding on 6/6 and 6/7 and two hour withholding on 6/8; 60ml sterile saline were placed in each trunk) for mycobacterial culture on each of three consecutive mornings (6/6, 6/7 & today 6/8); all samples were immediately frozen, and shipped overnight on ice to NVSL, as per USDA-mandated-protocol. All elephants were well-behaved for collection routine. SMM
 06/09/04 Dr. Dennis Schmitt at Metrozoo today to perform ultrasonographic assessments of each elephant's reproductive tract. Peggy has a normal reproductive tract (including ovaries) as far as can be detected. Written report will be added to her record when received. - CLM
 06/17/04 WT=9894 lbs.
 07/14/04 All elephants due for tetanus booster. VAX/tetanus toxoid 2.0ml IM (left caudal thigh). - CLM
 07/19/04 Results from the last batch of serum assays for progesterone & prolactin show that although Peggy is still "flatlining" (acyclic), her prolactin levels actually dropped to baseline quite a while before we started the cabergoline. RX/discontinue cabergoline (last dose on 15th) until further notice, since she is no longer a viable candidate for the research study. Hopefully, Peggy will start cycling again spontaneously, sometime soon. - CLM

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ACCES.NO. 269 stbk#145 SEX 0.1 HOUSE NAME PEGGY

01/26/05 WT=9540 lbs.

Medical History Report - Summary for Individual Specimen
MIAMI METROZOO

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Scientific Name: **LOXODONTA AFRICANA AFRICANA** Accession #: 269
Common Name: South African bush elephant Female
Name: PEGGY Birth: 31.Dec.1976 (Estimated)
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.....2000...

- 24.Jan Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.
NO PARASITES SEEN
- 23.Mar Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.
NO PARASITES SEEN
- 22.May Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.
NO PARASITES SEEN
- 7.Jun Blood sample: (EDTA) (10:10.0) Hematology/Chemistry/Serology results.
WBC:12.10 *10³/UL; HCT: 48.0%; BUN:8 MG/DL;
- 25.Jul Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.
NO PARASITES SEEN
- 26.Sep Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.
NO PARASITES SEEN
- 14.Nov Blood sample: Chemistry results.
- 11.Dec Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.
NO PARASITES SEEN

.....2001...

- 23.Jan Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.
NO PARASITES SEEN
- 20.Mar Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.
NO PARASITES SEEN
- 29.May Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.
NO PARASITES SEEN
- 20.Jun Blood sample: (EDTA) Hematology/Chemistry/Serology results.
WBC:7.20 *10³/UL; BUN:11 MG/DL;
- 24.Jul Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.
NO PARASITES SEEN
- 25.Sep Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.
NO PARASITES SEEN
- 28.Nov Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.

Medical History Report - Summary for Individual Specimen
MIAMI METROZOO

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Scientific Name: LOXODONTA AFRICANA AFRICANA           Accession #: 269
Common Name: South African bush elephant             Female
Name: PEGGY                                           Birth: 31.Dec.1976 (Estimated)
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.....2001...

28.Nov NO PARASITES SEEN

.....2002...

22.Jan Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.
NO PARASITES SEEN

19.Mar Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.
NO PARASITES SEEN

14.May Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.
NO PARASITES SEEN

25.Jun Blood sample: (EDTA) Hematology/Chemistry/Serology results.
WBC:8.00 *10³/UL; HCT: 35.0%; BUN:5 MG/DL;

23.Jul Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.
NO PARASITES SEEN

25.Sep Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.
NO PARASITES SEEN

20.Nov Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.
NO PARASITES SEEN

17.Dec Blood sample:

.....2003...

29.Jan Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.
NO PARASITES SEEN

27.Mar Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.
NO PARASITES SEEN

13.May Blood sample: (EDTA) Hematology/Chemistry/Serology results.
WBC:8.90 *10³/UL; HCT: 48.0%; BUN:9 MG/DL;

30.May Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.
NO PARASITES SEEN

31.Jul Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.
NO PARASITES SEEN

16.Sep Weight: 4446 Kg (9799 Lb)

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Name: PEGGY Birth: 31.Dec.1976 (Estimated)
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.....2003...

1.Oct Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.
NO PARASITES SEEN

19.Nov Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.
NO PARASITES SEEN

25.Dec Weight: 4466 Kg (9843 Lb)

.....2004....

27.Jan Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.
NO PARASITES SEEN

23.Mar Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.
NO PARASITES SEEN

19.May Blood sample: (EDTA) (10:30.0) Hematology/Chemistry/Serology results.
WBC:9.30 *10³/UL; HCT: 37.0%; BUN:6 MG/DL;

25.May Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.
NO PARASITES SEEN

17.Jun Weight: 4489 Kg (9894 Lb)

14.Jul Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.
NO PARASITES SEEN
Purpose/Problem: SuperTet w/havlogen
Vaccination: TETANUS TOXOID 2.0ml IM
Clinical note recorded. (CLM)

29.Sep Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.
NO PARASITES SEEN

17.Nov Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.
NO PARASITES SEEN

.....2005....

26.Jan Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.
NO PARASITES SEEN

Weight: 4328 Kg (9539 Lb)

Clinical Pathology Report - Specimen Spreadsheet
MIAMI METROZOO

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Common Name: South African bush elephant             Female
Name: PEGGY                                           Birth: 31.Dec.1976 (Estimated)
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Date           7.Jun.2000           14.Nov.2000           20.Jun.2001
Time           10:10.0           :                       :
Restraint      Manual             Manual                 Manual
Health         Normal             Normal                 Normal
Fasting        < 8 hours           < 8 hours             < 8 hours
Activity       Calm                 Active                 Active
Hematology laboratory      U OF M                 U OF M
Hematology anticoagulant   EDTA                   EDTA
Hematology quality problems none                     none
    
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WBC           *10^3/UL           12.1                   7.2
RBC           *10^6/UL           3.70                   4.00
HGB           GM/DL              16.2                   16.0
HCT           %                   48                     *56
SEGS          % (*10^3/UL)         44 (5.324)             64 (4.608)
LYMPHOCYTES  % (*10^3/UL)         54 (6.534)             32 (2.304)
MONOCYTES    % (*10^3/UL)           2 (0.242)              3 (0.216)
EOSINOPHILS % (*10^3/UL)           0                       1 (0.072)
BASOPHILS   % (*10^3/UL)           0                       0
    
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Chemistry laboratory      U OF M                 PAGLIA                 U OF M
Chemistry sample:        Serum                   Serum                   Serum
Chemistry quality problems none                     none                     none
    
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ALBUMIN (E)
GLUCOSE        MG/DL           95                     88
BUN            MG/DL           8                      11
CREAT.         MG/DL           1.4                   1.4
URIC ACID      MG/DL           0.2                   0.2
CA             MG/DL           11.6                  11.7
PHOS           MG/DL           5.0                   5.4
NA             MEQ/L          137                   138
K              MEQ/L           5.2                   4.7
CL             MEQ/L           90                    92
IRON           MCG/DL                    62
CHOL           MG/DL           60                    62
TRIG           MG/DL           85                    63
T.PROT. (C)    GM/DL           8.7                   7.9
ALBUMIN (C)    GM/DL           3.7                   3.3
GLOBULIN (C)  GM/DL           5.0                   4.6
AST (SGOT)     IU/L            16                    10
ALT (SGPT)     IU/L            13                    15
T. BILI.       MG/DL           0.4                   0.3
D. BILI        MG/DL           0.1                   0.2
    
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Scientific Name: **LOXODONTA AFRICANA AFRICANA** Accession #: 269
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Name: **PEGGY** Birth: 31.Dec.1976 (Estimated)
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AMYLASE	U/L	457	414
ALK. PHOS.	IU/L	113	87
LDH	IU/L	1061	854
CPK	IU/L	121	80
CO2	MMOL/L	23	26
GGT	IU/L	13	12
FE SATURATN.		29.1	

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Scientific Name: **LOXODONTA AFRICANA AFRICANA** Accession #: 269
Common Name: South African bush elephant Female
Name: PEGGY Birth: 31.Dec.1976 (Estimated)

Date	25.Jun.2002	17.Dec.2002	13.May.2003
Time	:	:	:
Restraint	Manual	Manual	Manual
Health	Normal	Normal	Normal
Fasting	< 8 hours	< 8 hours	< 8 hours
Activity	Active	Active	Active
Hematology laboratory	U OF M		U OF MIAMI
Hematology anticoagulant	EDTA		EDTA
Hematology quality problems	none		none

WBC	*10 ³ /UL	8.0	8.9
RBC	*10 ⁶ /UL		3.71
HGB	GM/DL	13.3	15.4
HCT	%	35*	48
SEGS	% (*10 ³ /UL)	29 (2.320)	42 (3.738)
LYMPHOCYTES	% (*10 ³ /UL)	68 (5.440)	42 (3.738)
MONOCYTES	% (*10 ³ /UL)	0	13 (1.157)
EOSINOPHILS	% (*10 ³ /UL)	3 (0.240)	3 (0.267)
BASOPHILS	% (*10 ³ /UL)	0	
NRBC	/100 WBC		0
PLATE. EST.			DECR

ANISOCYTOSIS			SLT
TARGET CELLS			SLT

Chemistry laboratory	U OF M	CORNELL DX'C L	U OF MIAMI
Chemistry sample:	Serum	Serum	Serum
Chemistry quality problems	none	none	none

ALBUMIN (E)			
GLUCOSE	MG/DL	78	81
BUN	MG/DL	5	9
CREAT.	MG/DL	1.3	1.4
URIC ACID	MG/DL	<0.2	<0.2
CA	MG/DL	11.1	11.9
PHOS	MG/DL	5.2	5.0
NA	MEQ/L	132	134
K	MEQ/L	4.7	5.1
CL	MEQ/L	88	85
CHOL	MG/DL	68	86
TRIG	MG/DL	63	65
T.PROT. (C)	GM/DL	8.4	9.0
ALBUMIN (C)	GM/DL	3.7	4.3
GLOBULIN (C)	GM/DL	4.7	4.7
AST (SGOT)	IU/L	14	13

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ALT (SGPT)	IU/L	16	17
T. BILI.	MG/DL	0.1	0.2
D. BILI	MG/DL	0.1	0.1
AMYLASE	U/L	330	343
ALK. PHOS.	IU/L	78	100
LDH	IU/L	927	998
CPK	IU/L	152	103
CO2	MMOL/L	25	26
GGT	IU/L	16	16
WNV AB			NEG

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Common Name: South African bush elephant             Female
Name: PEGGY                                           Birth: 31.Dec.1976 (Estimated)
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Date                19.May.2004
Time                10:30.0
Restraint           Manual
Health              Normal
Fasting             < 8 hours
Activity            Active
Hematology laboratory      U OF MIAMI
Hematology anticoagulant   EDTA
Hematology quality problems none

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WBC      *10^3/UL      9.3
RBC      *10^6/UL      2.65
HGB      GM/DL        12.5
HCT      %            37
SEGS     % (*10^3/UL)  33 (3.069)
LYMPHOCYTES % (*10^3/UL) 54 (5.022)
MONOCYTES % (*10^3/UL)  9 (0.837)
EOSINOPHILS % (*10^3/UL) 4 (0.372)
BASOPHILS % (*10^3/UL)  0

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Chemistry laboratory      U OF MIAMI
Chemistry sample:         Serum
Chemistry quality problems none

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ALBUMIN (E)  GM/DL      2.54
GAMMA GLOB  GM/DL      0.93
GLUCOSE     MG/DL      98
BUN         MG/DL      6
CREAT.     MG/DL      1.2
URIC ACID  MG/DL      <0.2
CA         MG/DL     10.5
PHOS       MG/DL      4.2
NA         MEQ/L     114
K         MEQ/L      4.6
CL         MEQ/L      90
CHOL       MG/DL      70
TRIG       MG/DL      60
T.PROT. (C) GM/DL      8.2
ALBUMIN (C) GM/DL      3.6
GLOBULIN (C) GM/DL     4.6
AST (SGOT) IU/L      11
ALT (SGPT) IU/L      15
T. BILI.   MG/DL      0.1
D. BILI   MG/DL      0.0

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Common Name: South African bush elephant Female
Name: PEGGY Birth: 31.Dec.1976 (Estimated)
=====

AMYLASE	U/L	286
ALK. PHOS.	IU/L	85
LDH	IU/L	721
CPK	IU/L	115
CO2	MMOL/L	28
GGT	IU/L	14
ALPHA-1 GLOB	GM/DL	0.84
ALPHA-2 GLOB	GM/DL	0.81
BETA GLOB.	GM/DL	2.08