

Elephant Profile – Pearl

House Name: Pearl

STB #: 234

Sex: female

Birthplace: Wild

Common Name: Asian Elephant

Scientific Name: *Elephas maximus*

DOB: ~1971

Sire/Dam: (name and location) *unknown*

Currently Managed: In accordance with the Saint Louis Zoo Elephant Management Policy

Transaction History:

Date	Type	To	From
11/29/73	Purchase	St. Louis Zoo	Southwick Wild An Pk.
3/28/90	Breeding Loan	Dickerson Park Zoo	St. Louis Zoo
1991	Return Breeding Ln	St. Louis Zoo	Dickerson Park Zoo

Physical Characteristics: Large bulge beneath tail due to prolapsed uterus after birth of first and only calf; yellow eyes; long trunk finger.

Medical History: See medical records

Reproductive Status: gave birth to first and only calf (1.0 "Raja") 12/27/92. See medical records for further details.

Temperament/Behavior History: One of the more dominant cows. **Blood behavior:** Blood can be collected at an open panel or howdy wall.

Pearl's Behavior/Command List:

- Come
- Square
- Over
- Pad
- Stool
- Foot
- Lift
- Rear
- Back
- Steady
- Alright
- No
- Beak
- Blow
- Lay Down
- Tail
- Ear
- Ahh
- Line
- Kneel
- Bow
- Shift

- Chute
- Come Around
- Move Around
- Move Up
- Salute
- Stretch
- Half (refresh)
- Trunk
- Head Down
- Head Up
- Tub
- Easy
- Step Out
- Brace
- Split
- Switch
- Tub it up
- Stand
- Turn

Preferred Reinforcers: Most produce. Responds well to tactile and verbal reinforcers.

Reviewed/Revised January 2007

Medical History Report - Summary for Individual Specimen
ST. LOUIS ZOOLOGICAL PARK

- page 1 -

ELEPHAS MAXIMUS (no subsp)
INDIAN ELEPHANT (E,I)
Name: PEARL

Sex: Female
Age: 36Y Est.

Acc. #: 073666
Birth: 1.Jan.1971

.....2006....

- 12.May Clinical note recorded. (MW)
24.May Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.
NO PARASITES SEEN
Clinical note recorded. (PM)
6.Jun Blood sample: (EDTA) (19:45.0) Hematology results.
WBC:6.30 *10³/UL; HCT: 29.4%;
Clinical note recorded. (PM)
7.Jun Clinical note recorded. (REJ)
25.Jul Clinical note recorded. (MJA)
26.Jul Clinical note recorded. (REJ)
27.Jul Clinical note recorded. (REJ)
6.Oct Clinical note recorded. (REJ)
1.Nov Clinical note recorded. (MW)
2.Nov Clinical note recorded. (REJ)
7.Nov Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.
NO PARASITES SEEN
Clinical note recorded. (PM)

.....2007....

- 9.Jan Blood sample: Hematology/Chemistry/Serology results.
WBC:6.70 *10³/UL; HCT: 27.4%; BUN:13 MG/DL;
10.Jan Clinical note recorded. (MW)
Clinical note recorded. (REJ)
11.Jan

Weight: 2929 Kg (6456 Lb)

=====

ELEPHAS MAXIMUS (no subsp)
INDIAN ELEPHANT (E,I)
Name: PEARL

Sex: Female
Age: 36Y Est.

Acc. #: 073666
Birth: 1.Jan.1971

=====

Clinical Note:

12.May.2006

Problem: prolapsed uterus (Confirmed)
O: Trunk wash samples collected 3/1 - 3/3/2006 negative for
Mycobacteria (NVSL). (MW)

Clinical Note:

24.May.2006

Problem: prolapsed uterus (Confirmed)
Fecal flotation-negative (PM)

Submission Data >>

Type: Fecal sample
Purpose: ROUTINE EXAMINATION

Sample id.: 2006-0390
Date collected: 24.May.2006
Time collected: 9:00
Collected by: SW

Collected from:

From an individual specimen.

Enclosure: RIVERS E

Examination Data >>

Storage: room temperature
Consistency: formed
Gross appearance: Typical

Date examined: 24.May.2006
at: 15:30
by: PM

Tests & Results >>

FLOATATION - NA NITRATE

NO PARASITES SEEN

Clinical Note:

6.Jun.2006

Problem: prolapsed uterus (Confirmed)
Free catch urine sample- pH-8 protein-trace glucose-neg
ketones-neg
bili-neg blood-trace urobilogen-normal color- light yellow and
cloudy

sediment-clumps of RBCs, occasional epithelial cells, amorphous debris
1+ (PM)

Clinical Pathology Records - Specimen Report
ST. LOUIS ZOOLOGICAL PARK

ELEPHAS MAXIMUS (no subsp)
INDIAN ELEPHANT (E,I)
Name: PEARL

Sex: Female
Age: 36Y Est.

Acc. #: 073666
Birth: 1.Jan.1971

Collection Information >>

Health Status: Normal
Fasting Time: < 8 hours
Activity: Calm
Weight: 2942 Kg on 10.Jan.2006
Manual restraint used.

Date of Collection: 6.Jun.2006
Time of Collection: 19:45.0
Collected by: RJ
Sample Collection Site: EAR VEIN

Hematology >>

Analysis Information >>

Anticoagulant: EDTA
Storage: Fresh
Sample Quality: No quality problems.

Laboratory: ADV. VET LG MAM
Date of Analysis: 6.Jun.2006
Time of Analysis:
Analysis by: RJ
Automated analysis.

Tests and Results >>

WHITE BLOOD CELL COUNT	<	6.3		*10 ³ /UL
RED BLOOD CELL COUNT	<	2.38		*10 ⁶ /UL
HEMOGLOBIN	<	11.0		GM/DL
HEMATOCRIT	<	29.4		%
MCV		124		fL
MCH		46.2		uug
MCHC		37.4		gm/dL
SEGMENTED NEUTROPHILS	<	18	(1.134)	% (*10 ³ /UL)
NEUTROPHILIC BANDS		2	(0.126)	% (*10 ³ /UL)
LYMPHOCYTES	<	33	(2.079)	% (*10 ³ /UL)
MONOCYTES		37	(2.331)	% (*10 ³ /UL)
EOSINOPHILS		10	(0.630)	% (*10 ³ /UL)
PLATELET COUNT	<	344		*10 ³ /UL

Morphology Results >>

ANISOCYTOSIS 1, TARGET CELLS 1

ELEPHAS MAXIMUS (no subsp)
INDIAN ELEPHANT (E,I)
Name: PEARL

Sex: Female
Age: 36Y Est.

Acc. #: 073666
Birth: 1.Jan.1971

Clinical Note: 7.Jun.2006
Problem: prolapsed uterus (Confirmed)
Results of bloodwork: Chem panel and CBC within expected ranges. (REJ)

Clinical Note: 25.Jul.2006
Problem: prolapsed uterus (Confirmed)
PROCEDURE: Trunk wash
Collected first of three samples for mycobacteriosis screening. (MJA)

Clinical Note: 26.Jul.2006
Problem: prolapsed uterus (Confirmed)
Trunk wash for mycobacteriosis screening, sample 2 of 3. (REJ)

Clinical Note: 27.Jul.2006
Problem: prolapsed uterus (Confirmed)
Trunk wash collected for mycobacterial screening, samples 3 of 3. (REJ)

Clinical Note: 6.Oct.2006
Problem: prolapsed uterus (Confirmed)
Trunk wash culture results from samples July 25,26,27 - no isolation
of Mycobacterium (NVSL). (REJ)

Clinical Note: 1.Nov.2006
Problem: prolapsed uterus (Confirmed)
Proc: Trunk wash for routine TB screening. Day 1 of 3. (MW)

Clinical Note: 2.Nov.2006
Problem: prolapsed uterus (Confirmed)
Trunk wash procedure for routine TB screening, day 2 of 3. (REJ)

Clinical Note: 7.Nov.2006
Problem: prolapsed uterus (Confirmed)
Fecal floatation-negative (PM)

=====

ELEPHAS MAXIMUS (no subsp)
INDIAN ELEPHANT (E,I)
Name: PEARL

=====

Sex: Female
Age: 36Y Est.

Acc. #: 073666
Birth: 1.Jan.1971

Parasitology Examination:

Submission Data >>

Type: Fecal sample
Purpose: ROUTINE EXAMINATION

Sample id.: 2006-0790
Date collected: 7.Nov.2006
Time collected: 8:30
Collected by: CB

Collected from:

Group of specimens housed together.

Enclosure: RE

Examination Data >>

Storage: room temperature
Consistency: formed
Gross appearance: Typical

Date examined: 7.Nov.2006
at: 16:30
by: PM

Tests & Results >>

FLOATATION - NA NITRATE

NO PARASITES SEEN

Clinical Pathology Records - Specimen Report
ST. LOUIS ZOOLOGICAL PARK

ELEPHAS MAXIMUS (no subsp)
INDIAN ELEPHANT (E,I)
Name: PEARL

Sex: Female
Age: 36Y Est.

Acc. #: 073666
Birth: 1.Jan.1971

Collection Information >>

Health Status: Normal
Fasting Time: < 8 hours
Activity: Calm
Weight: 2942 Kg on 10.Jan.2006
Manual restraint used.

Date of Collection: 9.Jan.2007
Time of Collection:
Collected by:
Sample Collection Site: EAR VEIN

Hematology >>

Analysis Information >>

Anticoagulant:
Storage: Fresh
Sample Quality: No quality problems.

Laboratory: ADV. VET LG MAM
Date of Analysis: 9.Jan.2007
Time of Analysis:
Analysis by:
Automated analysis.

Tests and Results >>

WHITE BLOOD CELL COUNT	<	6.7		*10 ³ /UL
RED BLOOD CELL COUNT	<	2.24		*10 ⁶ /UL
HEMOGLOBIN	<	10.4		GM/DL
HEMATOCRIT	<	27.4		%
MCV		122		fL
MCH		46.4		uug
MCHC		38.0		gm/dL
SEGMENTED NEUTROPHILS	<	15	(1.005)	% (*10 ³ /UL)
LYMPHOCYTES	<	23	(1.541)	% (*10 ³ /UL)
MONOCYTES		57	(3.819)	% (*10 ³ /UL)
EOSINOPHILS		4	(0.268)	% (*10 ³ /UL)
BASOPHILS		1	(0.067)	% (*10 ³ /UL)
PLATELET COUNT	<	404		*10 ³ /UL

Morphology Results >>

ANISOCYTOSIS 1-2, TARGET CELLS 1

Comments >>

Monocytes very granulated

Clinical Pathology Records - Specimen Report
ST. LOUIS ZOOLOGICAL PARK

ELEPHAS MAXIMUS (no subsp)
INDIAN ELEPHANT (E,I)
Name: PEARL

Sex: Female
Age: 36Y Est.

Acc. #: 073666
Birth: 1.Jan.1971

Collection Information >>

Health Status: Normal
Fasting Time: < 8 hours
Activity: Calm
Weight: 2942 Kg on 10.Jan.2006
Manual restraint used.

Date of Collection: **9.Jan.2007**
Time of Collection:
Collected by:
Sample Collection Site: EAR VEIN

Chemistry >>

Analysis Information >>

Chemistry Sample: Serum
Storage: Fresh
Sample Quality: No quality problems.

Laboratory: **ADV. VET LG MAM**
Date of Analysis: **9.Jan.2007**
Time of Analysis:
Analysis by:
Automated analysis.

Tests and Results >>

GLUCOSE	102	MG/DL
BLOOD UREA NITROGEN	13	MG/DL
CREATININE	1.3	MG/DL
BUN/creatinine ratio	10.0	
CALCIUM	< 9.8	MG/DL
PHOSPHORUS	< 3.8	MG/DL
calcium/phosphorus ratio	2.58	
SODIUM	127	MEQ/L
POTASSIUM	4.9	MEQ/L
sodium/potassium ratio	25.9	
CHLORIDE	>> 98	MEQ/L
MAGNESIUM	2.0	MG/DL
TOTAL PROTEIN (COLORIMETRY)	7.5	GM/DL
ALBUMIN (COLORIMETRY)	< 2.5	GM/DL
ASPARTATE AMINOTRANSFERASE	8	IU/L
ALANINE AMINOTRANSFERASE	10	IU/L
TOTAL BILIRUBIN	0.3	MG/DL
ALKALINE PHOSPHATASE	< 42	IU/L
CREATINE PHOSPHOKINASE	118	IU/L
FIBRINOGEN	500	MG/DL
GAMMA GLUTAMYLTRANSFERASE	9	IU/L

=====

ELEPHAS MAXIMUS (no subsp)

Sex: Female

Acc. #: 073666

INDIAN ELEPHANT (E,I)

Age: 36Y Est.

Birth: 1.Jan.1971

Name: PEARL

=====

Clinical Note:

10.Jan.2007

Problem: prolapsed uterus (Confirmed)

O: Urinalysis results - pH 7.0. ++ protein; negative glucose, ketones, bilirubin, and blood. Urobilinogen normal. Urine yellow, cloudy, USG 1.014. Sediment - 1-2 RBC/hpf, 4-5 WBC/hpf, occasional epithelial cells.

A: Protein may be due to floor contamination, depending on how sample was collected. It may also reflect the presence of RBCs, WBCs, and epithelial cells in the sample. These are probably an effect from the chronic uterine prolapse that this animal has. (MW)

Clinical Note:

10.Jan.2007

Problem: prolapsed uterus (Confirmed)

Annual exam. Physical examination completed with operant conditioning. Examination of all feet revealed all pads in excellent condition, with no wear, erosions, or lesions. Eyes normal, oral exam normal (unable to visualize caudal cavity) - mucus membranes pink and healthy, tush normal, molars normal. Caudal swelling in urogenital canal unchanged, no apparent effect on health.

Results of Mycobacterium culture (NVSL) from samples collected Nov 1,2,3 -

no isolation. Results of bloodwork - CBC normal (WBC = 6700), chem normal (BUN = 13, creat 1.3, TP 7.5, fib 500). Morphology comment that monocytes were granulated. (REJ)

=====

Clinical Pathology Records Report - ISIS/In-House Reference Values
ST. LOUIS ZOOLOGICAL PARK

Scientific name: *ELEPHAS MAXIMUS*
Common Name: INDIAN ELEPHANT (E,I)

		ISIS Values			In-House Values				
		Mean	S.D.	(N)	Mean	S.D.	Min.	Max.	(N)
WBC	*10 ³ /UL	14.41 ±	4.418	(920)	12.04 ±	4.20	5.800	24.00	(100)
RBC	*10 ⁶ /UL	3.11 ±	0.55	(778)	2.765 ±	0.339	2.140	3.990	(98)
HGB	GM/DL	13.3 ±	2.1	(814)	12.27 ±	1.30	9.600	15.70	(100)
HCT	%	37.7 ±	5.8	(987)	34.46 ±	3.55	26.90	43.20	(98)
MCH	MG/DL	43.4 ±	4.9	(752)	45.60 ±	11.13	30.91	153.0	(100)
MCHC	uug	35.4 ±	3.7	(808)	35.60 ±	1.47	28.07	39.02	(100)
MCV	fL	122.4 ±	15.6	(773)	128.6 ±	31.1	110.3	430.1	(99)
SEGS	*10 ³ /UL	4.927 ±	2.953	(704)	4.208 ±	1.890	0.000	12.38	(95)
BANDS	*10 ³ /UL	0.431 ±	0.660	(124)	0.127 ±	0.501	0.000	2.940	(42)
LYMPHOCYTES	*10 ³ /UL	5.635 ±	3.373	(705)	5.335 ±	2.944	1.680	15.43	(97)
MONOCYTES	*10 ³ /UL	3.517 ±	2.925	(567)	1.594 ±	1.524	0.000	5.880	(90)
EOSINOPHILS	*10 ³ /UL	0.483 ±	0.540	(529)	0.281 ±	0.277	0.000	1.533	(85)
BASOPHILS	*10 ³ /UL	0.124 ±	0.088	(66)	0.045 ±	0.077	0.000	0.292	(63)
NRBC	/100 WBC	0 ±	1	(47)	0.333 ±	0.577	0.000	1.000	(3)
PLATE. CNT.	*10 ³ /UL	549 ±	132	(161)	386.0 ±	144.7	75.00	713.0	(56)
RETICS	%	0.0 ±	0.1	(6)	0.000 ±	0.000	0.000	0.000	(2)
GLUCOSE	MG/DL	88 ±	20	(630)	83.97 ±	19.16	29.00	141.0	(86)
BUN	MG/DL	12 ±	4	(635)	13.78 ±	3.03	6.000	20.00	(88)
CREAT.	MG/DL	1.6 ±	0.4	(599)	1.407 ±	0.216	0.900	1.900	(85)
URIC ACID	MG/DL	0.2 ±	0.2	(249)	0.079 ±	0.142	0.000	0.400	(14)
CA	MG/DL	10.7 ±	0.7	(579)	10.70 ±	0.53	9.500	12.10	(87)
PHOS	MG/DL	5.0 ±	1.0	(461)	5.332 ±	0.773	4.000	7.600	(34)
NA	MEQ/L	130 ±	5	(481)	131.3 ±	3.4	124.0	140.0	(86)
K	MEQ/L	4.6 ±	0.5	(491)	4.628 ±	0.389	3.700	6.100	(83)
CL	MEQ/L	89 ±	4	(460)	87.98 ±	2.92	82.00	95.00	(85)
IRON	MCG/DL	69 ±	23	(60)					
MG	MG/DL	2.00 ±	0.51	(33)	1.818 ±	0.140	1.600	2.000	(11)
HCO3	MMOL/L	25.2 ±	2.8	(25)					
CHOL	MG/DL	45 ±	11	(400)	42.29 ±	8.07	20.00	59.00	(31)
TRIG	MG/DL	50 ±	29	(346)	57.79 ±	32.12	15.00	145.0	(29)
T.PROT. (C)	GM/DL	8.1 ±	0.8	(598)	8.016 ±	0.605	6.600	9.600	(83)
T.PROT. (R)	GM/DL	8.4 ±	0.4	(23)					
ALBUMIN (C)	GM/DL	3.3 ±	0.4	(316)	3.054 ±	0.746	1.800	4.400	(82)
GLOBULIN (C)	GM/DL	5.0 ±	0.9	(312)	5.440 ±	0.865	3.500	8.000	(48)
AST (SGOT)	IU/L	21 ±	13	(607)	16.70 ±	5.05	5.000	40.00	(84)
ALT (SGPT)	IU/L	7 ±	8	(457)	5.511 ±	3.833	0.000	20.00	(47)
T. BILI.	MG/DL	0.2 ±	0.1	(447)	0.244 ±	0.111	0.000	0.500	(84)
D. BILI.	MG/DL	0.1 ±	0.1	(164)	0.050 ±	0.071	0.000	0.100	(2)
I. BILI.	MG/DL	0.1 ±	0.1	(157)	0.050 ±	0.071	0.000	0.100	(2)
AMYLASE	U/L	3600 ±	2366	(70)	5221 ±	391	4633	5855	(13)
ALK.PHOS.	IU/L	139 ±	73	(576)	116.7 ±	53.8	57.00	265.0	(84)
LDH	IU/L	471 ±	357	(352)	499.2 ±	208.0	230.0	1092	(17)

Clinical Pathology Records Report - ISIS/In-House Reference Values
ST. LOUIS ZOOLOGICAL PARK

Scientific name: *ELEPHAS MAXIMUS*
 Common Name: **INDIAN ELEPHANT (E,I)**

	ISIS Values			In-House Values				
	Mean	S.D.	(N)	Mean	S.D.	Min.	Max.	(N)
CPK IU/L	223 ±	165	(287)	222.5 ±	126.7	61.00	518.0	(19)
OSMOLARITY MOSMOL/L	234 ±	96	(8)	263.1 ±	6.3	251.0	274.0	(44)
ALPHA GLOB. MG/DL	250.4 ±	353.1	(2)	500.0 ±	0.0	500.0	500.0	(1)
ALPHA-1 GLOB GM/DL	1.0 ±	0.0	(1)					
ALPHA-2 GLOB GM/DL	0.7 ±	0.0	(1)					
BETA GLOB. GM/DL	1.0 ±	0.6	(2)	0.600 ±	0.000	0.600	0.600	(1)
Body Temperature:	36.3 ±	0.5	(4)					
CO2 MMOL/L	24.7 ±	3.6	(99)	26.27 ±	1.48	22.00	28.00	(26)
CORTISOL UG/DL	1.8 ±	0.5	(3)					
ESR MM/HR	98 ±	32	(7)	108.5 ±	11.1	81.00	135.0	(26)
FIBRINOGEN MG/DL	387 ±	223	(56)	315.9 ±	58.1	210.0	403.0	(25)
GGT IU/L	7 ±	5	(139)	5.615 ±	3.097	1.000	12.00	(13)
CA++				4.267 ±	0.116	4.200	4.400	(3)
LEPTO. CANI.				400.0 ±	0.0	400.0	400.0	(1)
LEPTO. ICT.				1600 ±	0	1600	1600	(1)
LEPTO. POM.				200.0 ±	0.0	200.0	200.0	(1)
LIPASE U/L	17 ±	28	(22)	25.00 ±	0.00	25.00	25.00	(13)
MEAN PLATELET VOLUME				4.367 ±	0.392	3.500	5.100	(15)
OSMOLALITY MOSMOL/KG				268.6 ±	6.4	259.0	279.0	(14)
PROGESTERONE NG/DL	8.785 ±	38.20	(299)	0.800 ±	0.000	0.800	0.800	(1)
RED CELL DISTRIBUTION WI				15.63 ±	0.91	13.70	17.70	(25)
TESTOSTERONE NG/ML	40.10 ±	0.000	(1)					
VITAMIN E UG/ML	0 ±	0	(2)					
TOTAL T4 MCG/DL	10.5 ±	2.0	(6)					
T3 UPTAKE %	28 ±	2	(2)					
ALBUMIN (E) GM/DL	3.7 ±	0.2	(2)	3.800 ±	0.000	3.800	3.800	(1)
GAMMA GLOB GM/DL	3.1 ±	3.2	(9)	1.800 ±	0.000	1.800	1.800	(1)