

Connie

Public Name – Pinky

Studbook # - 105

Date of birth – 1964

Acquisition date – 25 NOV 1981

Birthplace – Asia

Transaction History – Asia, Abilene Zoo, Dickerson Park Zoo

Chronic or recurring medical problems – none

Weight – 7,500 lbs.

Socialization/behavior history – She is currently the matriarch of the herd. She is somewhat aggressive with less dominant elephants, not including calves. She has been known to bite tails, kick and shove other elephants. She is very submissive and solicitous with keepers.

Commands – trunk up, put it away, open wide, head down, let me see your trunk, salute, bow, kneel, brace, split, foot pad, foot front, come here, move over, back up, move up, tail up, break, push, pick it up, get your butt over, get your head over, steady, stretch, lay down, come around, move around, come in line, hand it here, break it, kick it, step up, alright, come up and salute and open it (gate). Keepers can ride on her neck.

Reproduction – She has had three calves. The first calf was stillborn in 1985. The second calf was born in 1991, but died in 1993 of EEHV. The third calf was born here in 1995 and currently resides at the Oklahoma City Zoo.

Report Start Date
1/1/1900

Specimen Report for DICKERSON / 1101

Report End Date
4/19/2007



Taxonomic name: *Elephas maximus*

Family: Elephantidae

Common name: Asiatic elephant

Order : Proboscidea

Current information

Sex: Female Sire ID:
Birth type: Wild Born Dam ID:
Birth Location: Rearing: Unknown
Birthdate-Age: ~ Jan 1963 - 44Y,3M,16D +/-1 Mo. Hybrid: Not a hybrid
Time since last Acq: 25Y,4M,23D as of report end date

<u>Date in</u>	<u>Acquisition - Vendor/local Id</u>	<u>Holder</u>	<u>Disposition - Recipient/local Id</u>	<u>Date out</u>
25 Nov 1981	Purchase from ABILENE / 21	DICKERSON / 1101		

<u>Date</u>	<u>Identifier type</u>	<u>Identifier</u>	<u>Location</u>	<u>Comments</u>
24 Nov 1964	Regional Studbook #	105	UNKNOWN STUDBOOK	105 "International Studbook Number" from ARKS 2 records
25 Nov 1981	House Name	CONNIE		

<u>Date</u>	<u>Note type</u>	<u>Comments</u>
25 Nov 1981	Price	026500

<u>Date</u>	<u>Sex</u>	<u>Comments</u>
25 Nov 1981	Female	

<u>Date</u>	<u>Rearing</u>	<u>Comments</u>
25 Nov 1981	Unknown	

Medical History Report - Summary for Individual Specimen
DICKERSON PARK ZOO

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ELEPHAS MAXIMUS (no subsp)           Sex: Female           Acc. #: 1101
Asiatic elephant                     Age: 44Y 3M Est.     Birth: 1.Jan.1963
Name: CONNIE
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- 21.Apr Purpose/Problem: annual tetanus vacc.
Vaccination: TETANUS TOXOID 1ml IM SID

Dispensing Note: Dispense one dose. Each dose: 1 ml.
P) Annual Tetanus vacc.
T) Rx: Tetanus toxoid (Ft Dodge Ser. #277336A) 1 ml IM (DH)

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

- 10.Aug Trimmed lateral nail on right rear foot. Nail undermined and blown out. Cleaned up well but will need follow-up. (JB)

- 15.Sep Trimmed RR3 nail defect, quarter sized. (JB)

- 24.Oct PROBLEM: corneal opacity - right eye (onset)
Purpose/Problem: Corneal abrasion of 4-5 mm.
Rx: TAO OINTMENT ml topically QID for 7 days.
Topical treatment: Apply to right eye (OD) four times daily.
OD corneal abrasion
S) Visible with light from ophthalmoscope, a 4-5 mm corneal abrasion is visible. Connie resisted fluorescein staining. Notified keepers that a ophthalmic culture or cytology swab could be done, but they declined since she has had epiphora before.
A) Corneal abrasion
P) Rx: TAO OINTMENT mg topically QID for 7 days. Need ophthalmic flush for the eye. Called Colette repeatedly on radio with no answer. Got him on cell phone and requested a Visine like product.
Rx: TAO OINTMENT ml topically QID for 7 days. (SB)

- 26.Oct Purpose/Problem: Corneal abrasion
Rx: FLURBIPROFEN 0.0600mg topically BID for 4 days.
Topical treatment: Apply to right eye twice a day, two drops per treatment.
Elephant committe discussed options to enhance breeding success. Decided to pair #1101 "CONNIE" and #3320 "PATIENCE" and place with #5500 "SABU" in north yard during the day. #65 "MINYAHK paired with #4022 "MOOLA" in south yard. #1101 and #3320 separated at night to avoid possible tail biting etc. This situation will provide SABU with prolonged experience with females with the hopes of resulting in breeding success. (JB)
Right eye examined, no improvement
S) Abrasion is no smaller than on Monday. Increased opacity may be indicating wbc infiltration. No blood vessels can be detected entering the cornea.

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- 26.Oct A) Could be herpes lesion, need CBC
P) She is resisting TAO ointment so ophthalmic liquid drops are being ordered. Flurbiprofen added for pain management.
Rx: FLURBIPROFEN 0.0600 mg topically BID for 4 days. (SB)
- 28.Oct Blood sample: (EDTA) Hematology results.
WBC:11.30 *10³/UL; HCT: 41.8%;
Connie and Patience parted from Sabu due to excessive aggression towards Patience. Patience sustained numerous scrapes and bruises, no significant injuries. (JB)
- 31.Oct CBC results (rule out herpes) and visual exam
S) Corneal ulceration has not improved although keepers report she is less painful (she is not irritating it as much). Flurbiprofen was exhausted on Sunday. Center of lesion has white foci that is concerning. Requested from SK Jeff that I get a corneal swab when it is appropriate so I can culture and target antimicrobial therapy more effectively. I informed him that it is a very low risk, no pain procedure that is just uncomfortable rather than invasive (just a wet swab of the eye with a culture stick).
O) Elevated Hemoglobin 15.5 and hematocrit 41.8.
No mention of herpes inclusions in RBCs.
WBC levels entered in diagnostics section. WBC count = normal.
P) Hopefully, get a culture swab of the eye. (SB)
- 2.Nov Corneal OD ulceration examination
S) No change, still has 1 mm diameter opacity in center of abrasion. Connie continues to be hesitant during medication and examination. She was examined on her side which I suggested they continue for drug administration. SK Jeff agrees, and he continues to be successful in administering drugs with her in left lateral recumbency.
I administered Visine drops, followed by flurbiprofen. The drops need to be given quickly as she is very apprehensive.
P) Continue to treat with Visine flushing followed by TAO drops and flurbiprofen. Still plan to get culture of eye if Connie allows it. (SB)
- 7.Nov Recheck of eye
S) Diameter of lesion appears to be decreasing. There is still a focal opacity in the center with a 1-2mm debris at edge of lesion. I treated eye with Visine, flurbiprofen, and TAO drops.
P) Continue treatment (SB)
- 14.Nov Parasitology examination: (DIAGNOSTIC EXAMINATION) Fecal sample.
NO PARASITES SEEN
Fecal direct: one fungal conidia
S) See Moola's record, searching for fungal fruiting bodies in

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- 14.Nov feces. Only one fruiting body found on direct. (SB)
- 21.Nov Parasitology examination: (DIAGNOSTIC EXAMINATION) Fecal sample.
NO PARASITES SEEN
Eye recheck, slight improvement
S) With flashlight, eye inspection revealed there are three white foci of 2 to 3 mm in diameter (likely hypopyon). There is no visible evidence of a corneal abrasion which is improved. Told SK Jeff to discontinue flurbiprofen, but continue TAO drops until end of next week. Jeff notified me later that while he and John Bradford were gone, keepers (I have to assume MC, SL, and DL) decided to stop flurbiprofen and TAO drops (treatment sheet not handed in since treatment was supposed to continue, keepers did not request change in therapy or notify me that they decided to end therapy). They asked Jeff to request of me that we not continue therapy. Flurbiprofen is to be stopped, but I told Jeff I want TAO drops continued until end of next week. Risk of infection warrants antibiotic therapy. Flurbiprofen was instituted to allieve pain associated with corneal abrasion. Keepers (assumed to be MC, SL, and DL) inappropriately ended treatment without notifying veterinarian. SK Jeff will ensure Connie is treated.
P) Requested SK Jeff and keeper John Bradford monitor eye during my vacation. If eye's condition deteriorates, they are instructed to call Dr. Schmitt or Michael Stafford (back up vet).
11/30/05 Update
Meeting with elephant keepers hopefully corrected any problems with future lack of communication. They felt their safety was at risk giving eye medications so they stopped meds without consulting me. They did not communicate Connie's reluctance to therapy, but we are now keeping channels more open during therapy so this does not happen again. (SB)
- 24.Nov Checked right eye, three white spots on cornea but no indication inflammation or irritation noted. Jeff Glazier concurred it appears normal.
Continue TAO and Visine treatment through tomorrow. (JB)
- 25.Nov Right eye appears normal (except for three spots). Discontinue eye treatment as per Dr. Boylan. (JB)
- 30.Nov Weight: 3167 Kg (6980 Lb)
- 6.Dec Eye examination
S) Three white foci are 1-2 mm (smaller than last checkup).
A) Very mild hypopyon (WBC infiltrate) consistent with 88% healed corneal ulceration due to trauma, herpes, etc.
P) Continue to monitor. Eye is continuing to improve. During elephant meeting, keepers report animal is recalcitrant treatment.

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6.Dec  That was the reason for meds being discontinued previously. (SB)
27.Dec                                     Weight: 3199 Kg ( 7051 Lb)
28.Dec  Eye recheck, 3 foci still present but small
        S) Three small foci of 1 mm are still present on cornea (wbc).
        A) No significant change. Animal is eating well and behaving
           normally.
        P) May try some oral lysine to see if the corneal disruption is due
           to herpes. (SB)

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3.Jan                                     Weight: 3240 Kg ( 7141 Lb)
9.Jan  Eye recheck
        S) Without flashlight, no wbc plaques are visible. Eye looked
           normal inside bull barn without supplemental light. (SB)
10.Jan                                     Weight: 3244 Kg ( 7150 Lb)
12.Jan
        Confirmed breeding this PM between Connie and Khun Chorn. North yard
        of bull bldg, Patience also in yard. Sabu in East yard. (JB)
        Forefeet survey radiographs
        S) 70, 25, 0.4 seconds. Two rads per front feet for survery
           radiographs.
        Right forelimb digits 2-5 show significant bone remodeling at P3.
        Digit 1 not visible for evaluation. Joint spaces are normal. P2's
        are normal. Left forefoot is similar. P3 on each digit shows
        evidence of bone remodeling. Joint spaces are normal.
        A) Mild-moderate bone remodeling on all forefeet digits P3 bones.
        Joint spaces are normal. No evidence of arthritis, but P3 remodeling
        suggests abnormal weight bearing (walking on digits "pigeon toed").
        No report from keepers of any abnormal movement or pain.
        P) Rear foot RADs were cancelled today due to time restraints on
           elephant keepers. Need to reschedule rear foot survey RADs and RADs
           for each individual digit on forefeet. (SB)
13.Jan  Confirmed breeding this AM between Connie and Khun Chorn in north
        yard of bull bldg. Patience also present. Elephants together last
        night due to Khun Chorn's reluctance to separate from Connie. (JB)
18.Jan                                     Weight: 3226 Kg ( 7110 Lb)
24.Jan  Eye recheck: improvement
        S) Two minor 1 mm opacities are still present. They are translucent
           and improved since last evaluation.
        A) Corneal hypopyon plaques are continuing to heal. (SB)
25.Jan  Footwork performed on all four feet. Cracks on front nails, digits
        three and four of each forefoot trimmed and cleaned. All other nails
        and pads in good condition. Started training Sheila Samek on use of

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25.Jan foot grinder.
 Procedure performed in corral of new cow barn. (JB)
 Second day outside in new yard
 S) Elephant is grazing on grass and enjoying dirt mounds. New yard:
 needs more obstacles to separate public from elephants
 S) Emailed director Mike Crocker, head curator John Collette, and
 senior elephant keeper Jeff Glazier that I feel the public's
 proximity to the pool is too close and there are not currently
 sufficient barriers or signs to avoid accidents. The public can
 easily throw things at the animals, and people can walk over the one
 hotwire to enter the exhibit. It represents a possible threat to
 elephant and public safety. More barriers and signs were requested.
 Also, elephants will likely learn to splash the public (TB concern).
 P) TB testing on order, JB has ordered test kits.
 Update: 1/30/06
 S) Director informed me that the barriers are sufficient for AZA
 standards. Our barriers are better than many institutions. (SB)

1.Feb Weight: 3353 Kg (7390 Lb)
 2.Feb Weight: 3353 Kg (7390 Lb)
 5.Feb Urinalysis: crystalluria of amorphous phosphates (NGS)

O)
 Leukocytes neg
 urobiliogen normal 0.2
 Protein neg
 pH 8.4 on urine stick, 8.8 on pH stick
 Blood neg
 S.G. 1.008 on urine stick, 1.085 dog (refractometer), 1.07 cat
 refrac
 Ketone neg
 Bili neg
 Glucose neg
 Cytology
 1. Wet mount unstained: amorphous crystals. White precipitate at
 bottom of container.
 2. Centrifuge pellet with stain: excessive amorphous phosphate
 crystals
 Expected given the herbivorous diet and alkaline urine pH. (SB)

7.Feb P) Begin 3 day regimen of trunk washes for TB testing. (JB)
 8.Feb Second day of trunk washes for TB testing. (JB)
 9.Feb Third day of trunk washes for TB testing. (JB)
 13.Feb TB negative by trunk washes (3)
 O) Neg AFB smear by Missouri State TB Lab (SB)
 14.Feb

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- 14.Feb Foot trimming: touched up cracks on front nails. (JB)
 Eye recheck; Foot rads completed all 4 feet: D2,P3 changes rear feet.
 S)
 Left Rear: Digit #2, P3 shows an old fracture 2/3 (66%) along its length. There is mild cranial periosteal proliferation of P3. No lysis evident. All other digits appear normal.
 Right Rear: Digit #2, P3 also has an old fracture at the end 10% of the length of the phalanges. There is moderate cranial periosteal proliferation on P3. All other digits appear normal.
 Front feet bilaterally: Digits 2, 3, 4: P 3 each foot
 A) Rear feet: same lesions on digit #2, P3 reveals a "pigeon toed" stance that is consistent with previous RADs of front feet and repeat RADs of front feet taken today.
 Front feet: P3 periosteal proliferation (moderate to intense) on digits 2, 3, and 4 bilaterally as seen on RADs taken last month. Digit 5 appears normal bilaterally. Digit 1 shows mild periosteal proliferation bilaterally.
 P) RADs reveal chronic changes likely associated with "pigeon toed" stance. Since there are no previous radiographs, the progression of the changes are unknown. These changes likely reflect individual changes. Minyakh has been on the same flooring for a longer period of time without these changes. SK Jeff reports she tends to "scuff"/kick with her feet at night.
 Eye recheck
 S) 1 1 mm plaque still visible on cornea.
 A) Continued improvement, corneal lesion almost entirely gone.
 P) Monitor (SB)
- 15.Feb Blood sample: (EDTA) Hematology/Chemistry/Serology results.
 WBC:12.20 *10³/UL; HCT: 34.2%; BUN:16 MG/DL;
- 16.Feb Started daily application of mineral oil on cuticles to soften and facilitate trimming of cuticles. Will periodically use HOOFFLEX.
 Connie has propensity towards overgrown cuticles. (JB)
- 19.Feb Chemistry results from 2/15/2006:
 O) Bloodwork monitoring program
 1. Mildly high Ca 11.8 (10.7-0.6) normal for herd?
 2. Mildly low glucose 55 (86-19) likely due to eating habits that day
 3. Mildly elevated ALT 11 (4-5) normal for this elephant? No liver specific disease detected (other liver panel enzymes are wnl). Herd normal
 P) Monitor monthly, see spreadsheet for tracking chemistry values for analysis (SB)
- 21.Feb CBC data entered diagnostic module (SB)

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- 21.Feb Weight: 3394 Kg (7480 Lb)
- 23.Feb USDA examined feet of all cow elephants, no non-compliance noted.
Suggestion made that follow-up on problem feet be better documented.
(JB)
- 28.Feb Weight: 3394 Kg (7480 Lb)
- 15.Mar Blood sample: (EDTA) (9:15.0) Hematology/Chemistry/Serology results.
WBC:11.70 *10³/UL; HCT: 37.1%; BUN:16 MG/DL;
- 21.Mar Weight: 3367 Kg (7421 Lb)
- 27.Mar Yard observation
S) Eating with Minyahk in new exhibit area. BAR. (SB)
- 30.Mar Weight: 3362 Kg (7410 Lb)
- 3.Apr Connie and Sabu mixed for breeding purposes in north yard.
S) Observation at 3 PM saw no obvious signs of trauma on Connie.
(SB)
- 4.Apr Tetanus update (no vaccination)
S) Evaluation of risk of tetanus suggests elephants can go every
three years for boosting (not every year). (SB)
Weight: 3362 Kg (7410 Lb)
- 9.Apr Diet reduction
S) Jeff has reported weights on all the elephants which are
increased.
P) Female elephants will receive a slightly decreased amount in
pellets to maintain ideal body weight. (SB)
- 12.Apr Blood sample: (EDTA) Hematology/Chemistry/Serology results.
WBC:14.30 *10³/UL; HCT: 36.7%; BUN:14 MG/DL;
Blood draw for routine monitoring
P) CBC and chem collected for routine monitoring program. Submit to
St. John's and Cox respectfully tomorrow given time. (SB)
- 13.Apr PROBLEM: corneal opacity - right eye (resolved)
Eye recheck
S) Opacity is barely detectable.
A) Healing well
P) NIN
Mineral added to dirt mounds for enrichment discussed.
S) Discussed a JB idea of adding mineral to soil piles for elephant
females to search through. Jeff is concerned about Minyahk eating
sand, but he was happier if we added mineral to the mud like soil.
Melissa appears to be in support of idea. I am looking into
granular mineral that Patti uses with wallabies.
A) Jeff's point about sand is valid = impaction. (SB)
- 17.Apr Trunk wash culture TB neg, bloodwork results
O) Chem:

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- 17.Apr 1. Elevated amylase 12015 (3,017-2492)
- 2. Elevated calcium 11.9 (10.6-0.8)
- 3. Low glucose 62 (91-21)
- 4. High TP 9 (8.1-0.8)
- 5. High ALT 16 (7-8)
- 6. High triglycerides 166 (61-42) (SB)

- 18.Apr Weight: 3348 Kg (7379 Lb)

- 11.May Started BID application of Udder Balm on pressure point (sloughing 5 x 10 cm area of skin) on left side of head. (JB)
- 16.May Weight: 3330 Kg (7339 Lb)
- 17.May Blood sample: (EDTA) Hematology/Chemistry/Serology results.
WBC:12.60 *10³/UL; HCT: 37.7%; BUN:15 MG/DL;
Hemolysis
Routine bloodwork: hemolysis
A) see spreadsheet, NSF (SB)
- 31.May Endophyte fescue: low infection
S) Dr. Stafford tested grass in elephant yard and found what he considers low level of infection.
A) Fescue toxicosis is not likely a factor for Moola's pregnancy.
P) NIN, cut grass, allow non pregnant female to graze down growth.
(SB)

- 14.Jun Blood sample: (EDTA) Hematology/Chemistry/Serology results.
WBC:12.60 *10³/UL; HCT: 37.9%; BUN:15 MG/DL;
- 20.Jun Weight: 3285 Kg (7240 Lb)
- 22.Jun Trimmed overgrown cuticles using hoof clipper. (JB)
- 26.Jun Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.
NO PARASITES SEEN

- 28.Jul Trimmed front cuticles with grinder. (JB)

- 8.Aug Weight: 3308 Kg (7291 Lb)
- 9.Aug Patience and Connie in the yard during pool test: BAR & WNL (SB)
- 16.Aug Blood sample: (EDTA) Hematology results.
WBC:16.20 *10³/UL; HCT: 36.1%;
- 30.Aug PROBLEM: ulcer - corneal opacity (onset)
Epiphora OD
S) JG reports dusty soil may be irritating the bulls and a few cows' eyes. "Wookie" the infant if fine. Connie also hit herself in the eyes again with cane stalks.
Exam found some epiphora in right eye. 3-5 mm diameter corneal abrasion OD found during yard exam. No hypopyon.
P) Due to the reported reluctance of Connie to accept eye

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- 30.Aug medication, the OD lesion will be observed for changes. (SB)
- 31.Aug PROBLEM: EYE TEARING (onset)
PE 6 PM: Epiphora OD continues, mildly lethargic at closing
S) LH asked for help in the PM. Connie was standing at the door to the inner corral for an unusually long time. There appeared to be something wrong to Lee about Connie's attitude. He was also concerned about the epiphora OD because he was unaware of changes from yesterday. I was able to examine Connie in the corral with Minyahk present. Both animals were inquisitive without any signs of aggression. Both were superbly behaved. Connie allowed an up close look into her eye. The corneal abrasion is unchanged. No hypopyon yet. Due to herpes recrudescence, I gathered some chopped apples and hand fed Connie. She allowed me to place the pieces directly onto her tongue while Lee kept Minyahk occupied with a half apple in pieces. Tongue is pink, no petechaie, no edema. Eating hay and apples.
A) OD corneal abrasion, epiphora, possible herpes recrudescence.
P) Called JB, requested CBC and chemistry. (SB)
- 1.Sep Blood sample: (Heparin) Hematology/Chemistry/Serology results.
WBC:14.60 *10³/UL; HCT: 37.8%; BUN:14 MG/DL;
- 2.Sep Purpose/Problem: EYE TEARING, Cloudiness (eraser size) indicates infec
Rx: TAO OINTMENT ml topically SID
Topical treatment: Apply to cornea of right eye
Rx: TAO drops, Hypopyon started:
S) JB called with news that there is beginning to a white color to corneal ulcer OD. I notified him to start TAO drops at least SID, TID preferred.
Rx: TAO OINTMENT ml topically SID for 1 day. (SB)
- 3.Sep Switch to TAO ointment
S) Allows for less frequent administration as Connie is apprehensive to treatment. (SB)
- 4.Sep CBC, Chemistry run on 9/3/06 Hypopyon started OD
CBC: wnl
Chem
O) Low Alk phos 73 (143-66)
Elevated globulin 6.2 (5.0-1)
Mildly low glucose NGS
Elevated TP (globulin)
Mildly elevated ALT 17 (normal for Connie, see spreadsheet)
3:30 exam with JG
S) Eye is mildly cloudy showing some leukocyte migration. Corneal abrasion appears smaller today. Healing process is working well. Connie was treated twice today with TAO ointment. She is very

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- 4.Sep hesitant to allow eye treatment, but she allowed Jeff to apply ointment while I offered apples. Tongue and mm are normal (pink). BAR, very approachable.
P) Treat as often as she allows. (SB)
 - 5.Sep Purpose/Problem: EYE TEARING (Confirmed)
Rx: TAO OINTMENT 3.500mg subconjunctivally BID for 19 days.
Originally prescribed until further notice.
Discontinued on 23.Sep.2006
Rx: TAO OINTMENT 3.500 mg subconjunctivally BID until further notice. (SB)
 - 6.Sep More TAO ointment given to JG. West Nile Vax Discussion.
S) MC and JG consulted and agreed with West Nile vaccination trial starting with Khunchorn 2 cc IM, followed in 4 weeks by booster of same volume. If all goes well, cows and Sabu will also be vaccinated. (SB)
 - 7.Sep OD, moderate inflammation
S) Exam found 50% of the cornea lightly cloudy except for a 3 mm solid opacity in the center. TAO drops and ointment are being applied at least twice a day.
A) Possible herpes, resistant bacteria, or fungal keratitis > bacterial
P) 5 PM: Attempted to get a sterile swab of cornea. She was positioned on her left side. With and without manual restraint, Connie continued to use her third eyelid to prevent access to the cornea. Of the three attempts, the last swab will be sent off for culture tomorrow by JB to Avian & Exotic. The culture will likely be contaminated by the flora on third eyelid. (SB)
 - 12.Sep Purpose/Problem: West Nile prophylaxis
Vaccination: WEST NILE VIRUS VACCINE 2ml IM SID
Left triceps using spinal needle, repeat in four weeks.
West Nile, OD exam
S) Right eye is less cloudy. 2 mm white opaque foci remains. Overall, the eye is greatly improved.
P) Continue TAO ointment and drops
Rx: WEST NILE VIRUS VACCINE 2 ml IM q28d for 2 doses. (SB)
 - 17.Sep Approved organic apples minus seeds
S) JG was excellent again in checking if natural apples provided by Alice Counts were okay to feed. I asked that the seeds just be removed (split apples) to remove minor traces of cyanide in seeds. Connie started allowing calf "Nisha" to frequently nurse as if calf were her own. (SB)
 - 18.Sep Eye exam: much improved
S) 2 mm opaque foci remains, but the rest of the cornea is clear. She loves to accept apples by direct placement in her mouth.

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- 18.Sep P) Continue TAO ointment BID with supplemental TAO drops when possible. (SB)
- 23.Sep Sedated: BUTORPHANOL
Tranquilized for eye treatment and culture. Little if any effect.
Purpose/Problem: EYE TEARING (Confirmed); Corneal ulcer
Rx: CIPROFLOXACIN % topically TID for 38 days.
Topical treatment: Apply to right eye
Originally prescribed until further notice.
Discontinued on 30.Oct.2006
ITRACONAZOLE topically TID for 38 days.
Topical treatment: Apply to right eye BID. As of 9-26 wait ten minutes post Cipro treatment before administering itraconazole.
Originally prescribed until further notice.
Discontinued on 30.Oct.2006
FLURBIPROFEN ml topically BID for 32 days.
Topical treatment: Apply to right eye BID.
Originally prescribed until further notice.
Discontinued on 24.Oct.2006
TRIPLE ANTIBIOTIC SOLUTION 1.750mg subconjunctivally TID for 133 days.
Originally prescribed for 132 days.
Discontinued on 2.Feb.2007 after 133 days.
Rx: CIPROFLOXACIN OPHTHALMIC SOLUTION % topically TID until further notice
Rx: ITRACONAZOLE/DMSO % topically BID until further notice.
Rx: FLURBIPROFEN ml topically BID until further notice.
Rx: TRIPLE ANTIBIOTIC SOLUTION 1 cc OD TID until further notice.
(SB)
- 26.Sep Purpose/Problem: EYE TEARING (Confirmed)
Rx: ATROPINE % topically BID for 29 days.
Topical treatment: Apply to right eye twice daily (first and last treatment)
Originally prescribed until further notice.
Discontinued on 24.Oct.2006
Eye examined by Dr. Stafford. Decision made to continue existing treatment regimen with the addition of atropine twice daily. He indicated Connie needed to be kept out of the sun and wait ten minutes between Cipro and Itraconazole treatment. Started using 18 gauge feeding needle to administer treatment. While Connie is in left lateral recumbency, gently insert feeding needle 1 cm into posterior corner of eye and slowly dispense drug. This seems to create minimal discomfort and for Connie and excellent placement of drugs. Ointment can be seen on edge of nictitating membrane and cornea. ATROPINE OPHTHALMIC SOLUTION 1% % topically SID until

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Asiatic elephant                     Age: 44Y 3M Est.     Birth: 1.Jan.1963
Name: CONNIE
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.....2006...

26.Sep further notice. (MS)
30.Sep OD exam

S) Keepers report the eye looks better. This is my first examination since returning from conference; a corneal defect is obvious and significant. Eye only has a 2 mm white opacity when I left which resolved last time without incident (TAO and flurbiprofen). The eye currently has a hyphema ring 180 degrees along the lower rim of the iris. The cornea shows a 4-5 mm defect that is 1-2 mm deep (concave) that is likely a healing stromal abscess. (SB)

1.Oct Culture results OD

S) Eye was flushed with sterile saline by JB per my directions (away at AAZV) and Dr. Stafford. Low yield procedure due to contamination, but a corneal scrape was not possible as butorphanol sedation was not effective to prevent third eyelid (75 mg).
O) Klebsiella moderate (sensitive to cipro)
Enterobacter moderate (sensitive to cipro)
Neomycin resistant, Polymixin B resistant (multiple resistances)
(SB)

2.Oct Exam: mild improvement

S) Cornea overall is becoming more clear. 5 mm defect (concavity) is unchanged. Hyphema is less. Connie showed no hesitation with working with eye.
P) I approved allowing her outside access at night for her mental and foot health. I do not want her outside during the day as the light may irritate the eye. Either environment is dusty. (SB)

3.Oct Purpose/Problem: EYE TEARING (Confirmed); Equine herpes 1 or 2 (ocular)
Rx: LYSINE 5gm PO BID for 121 days.

Originally prescribed until further notice.
Discontinued on 31.Jan.2007

OD exam: improved, Rx: lysine

S) Less hyphema. White opacity in cornea outside of defect/stromal abscess is less.

A) Eye continues to improve
P)

Rx: LYSINE 5 gm PO BID until further notice. (SB)

10.Oct Purpose/Problem: West Nile vaccination, booster.
Vaccination: WEST NILE VIRUS VACCINE 2ml IM SID

West Nile vaccination, booster.

Rx: WEST NILE VIRUS VACCINE 2 ml IM SID for 1 day. (SB)

19.Oct Purpose/Problem: EYE TEARING (Confirmed); Lower part of cornea appears
Rx: TOBRAMYCIN % topically TID for 12 days.

Topical treatment: Apply to right eye TID.

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- 19.Oct Originally prescribed until further notice.
 Discontinued on 30.Oct.2006
Rx: TOBRAMYCIN OPHTHALMIC SOLUTION .3% % topically TID until
 further noti (SB)
- 22.Oct Back from Africa recheck
 S) No real change. Corneal defect remains. Vascularization
 remains. Connie does not appear to be painful. She allows ample
 examination.
 P) Remove flurbiprofen and atropine tomorrow or Tuesday. (SB)
- 24.Oct D/C atropine and flurbiprofen in eye meds
 S) No significant healing progress since my Uganda trip of 12 days.
 Tobramycin added in case AB resistance has occurred.
 P) D/C flurbiprofen in case it is slowing healing. D/C atropine as
 pain does not seem to be a problem (avoid any colic issues).
 Tetracaine will continue to be used. (SB)
- 25.Oct Eye recheck, footwork done, allow 3 hours outside access
 S) Mild improvement on the eye. JB performed footwork. Digital pad
 looks excellent after footwork. I watched the procedure to gain a
 better understanding of footwork. Pictures were taken pre, during,
 and post footwork. Connie tolerated the procedure extremely well.
 She ate and drank showing absolutely no discomfort during the
 procedure. My presence did not seem to affect her. JB was fast and
 very thorough. All black cracks were removed on all four feet.
 Right rear foot was not trimmed due to time constraints, will trim
 at a later date.
 P) Connie's eye is making mild improvment. Allowed 3 hours outside
 access in good weather to improve her disposition and help with
 exercise. (SB)
- 29.Oct Purpose/Problem: EYE TEARING (Confirmed)
 Rx: ATROPINE OPHTHALMIC OINTMENT 2oth topically BID for 15 days.
 Topical treatment: Apply the equivalent of 2 droops to the right
 eye twice a day (AM and PM)
 Originally prescribed until further notice.
 Discontinued on 12.Nov.2006
 Eye recheck, granulation tissue
 S) I allowed Connie 3 hours outside access for several days. Her
 examination today found the erosion is filled with a 2 X 3 mm
 white-pink mass that is 1 mm in height (granulation tissue). WBC
 infiltrate is significant again.
 A) Corneal ulcer, granulation tissue, hypopyon, etc.
 P) Called Doug Hardy for contacts for veterinary ophthamologists.
 Will contact a vet. ophthamologist ASAP for an exam and possible
 surgery. Restart atropine.
 Rx: ATROPINE OPHTHALMIC OINTMENT 2 oth topically BID until further

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- 29.Oct notice.
Asked SK JG to pull blood for serum to use topically on eye. (SB)
- 30.Oct Discussed case with ophthalmologists: decrease meds
S) Called two veterinary boarded ophthal.: Dr. Moore at UM and Hunckle (KC). Both suggested the tissue seen is likely granulation tissue and given history, infectious etiology is no longer a concern. Suggestions are to go with pain management and TAO only. Pictures of lesion taken today were sent to each vet. ophth.
A) Dr. Moore saw the pictures today and suggests the mass appears to be "fibrovascular tissue that will flatten out with progressive fibrosis."
P) Atropine bid with serum. TAO drops TID. Keep her inside a few days. (SB)
- 31.Oct Recheck: dorsal area of eye clearing
S) Fibrovascular tissue remains, it protudes ~2 mm from surface. Blood vessels are still clearly visible migrating in the ventral portion of eye. Dorsal border is slightly clearer (JB and I). (SB)
- 5.Nov Eye recheck OD: mild improvement
S) The "height" of the fibrovascular tissue is down by 1 mm. The tissue appears to be scarring down (shrinking).
A) BAR, good attitude
P) Went outside today. Will evaluate needs for medication at the end of the week. May D/C atropine. (SB)
- 8.Nov Eye recheck OD, no significant change
S) Ventral blood vessels in cornea are thin (< 1mm) but remain prominent. Fibrovascular tissue is the same or slightly smaller than last exam. This exam occurred outside with better light. Pictures were again taken. Connie does not squint very much as long as no light source is brought near her eye. The hypopyon appears more translucent indicating a possible improvement to the eye.
A) Normal progressive healing for this lesion. No discomfort noticed. Connie readily allows me to examine her eye as I give her a few apples. BAR, easily approachable. Connie does appear to have temporary, mildly reduced vision with the fibrovascular tissue present which is expected until the healing fibrovascular tissue regresses.
P) Continue TAO TID, atropine 0.3 cc with 0.5 cc serum (pulled today) BID til Sunday. Likely D/C atropine and go with TAO and serum for another week before re-evaluation. Made more atropine/serum drugs and informed JG and DL of plan to try to reduce meds if we see continued mild improvement. (SB)
- 12.Nov Eye recheck, D/C atropine
S) No significant change in eye. Dorsal area of eye clear, ventral area below fibrovascular tissue has blood vessels and some hypopyon.

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- 12.Nov Fibrovascular tissue has not changed significantly.
A) Status quo, slow healing, but eye is stable. Animal is BAR.
P) Allow Connie several hours a day outside access even if mildly sunny. D/C atropine (SB)
- 14.Nov Eye recheck: no change (SB)
- 16.Nov Eye recheck: no change (SB)
- 19.Nov Eye recheck: no change (SB)
- 21.Nov JB reports improvement
S) JB reported that while the granulation tissue has not changed, the surrounding vascular bed and hypopyon has decreased. (SB)
- 28.Nov Ophthalmology consult
S) JG had his ophthalmologist come examine Connie's eye. She did not take up any fluorescein stain indicating no damage to the corneal barrier. Hypopigmentation of the ventral iris indicated past uveitis which is gone. He suggests we stay on course of TAO treatment as she appears fine. He also brought up herpes as the likely etiology given the history and symptoms.
P) He suggested an acyclovir ophthalmic antiviral drug given q2h for several days and reduced to Q4H for a week or more total duration. Humans with herpes infections respond rapidly. Keepers were informed of treatment frequency. I asked JG to notify director of future costs of this drug for next year's likely outbreak.
We need to identify the stressor of August-September that starts this cycle of OD herpes uveitits. (SB)
- 29.Nov PROBLEM: EYE TEARING (resolved)
- 3.Dec Eye recheck: improvement
S) I examined the eye with JG and found the fibrovascular tissue appears smaller in diameter and height. It is almost flush with the level of the cornea, and it appears to be slowly decreasing in diameter (1 mm smaller than last week).
A) Healing slowly
P) Continue TAO drops TID. TAO ointment may not be cost effective or as efficacious in delivery (discussion with JG, he feels Connie is tolerating TID very well with TAO drops). (SB)
- 7.Dec Trimmed right rear pads/nails/cuticles. Overgrown but no defects. This foot was not addressed during last footwork session in October. Bradford and Melissa D. attending. (JB)
Eye recheck : significant improvement
S) The area ventral to the fibrovascular tissue is clear of hypopyon and vessels are no longer prominent. Only the caudal ventral aspect of the limbus to the cornea remains mildly opaque and infiltrated with blood vessels. Overall, the eye is noticeably clearer than

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- 7.Dec last exam.
 - A) Significant improvement
 - P) Continue TAO drops TID or TAO ointment BID (SB)
- 13.Dec Eye recheck: tremendous improvement
 - S) The fibrovascular tissue is not the same thickness as the cornea. Very little hypopyon remains in the caudal area from the limbus to the central defect. The eye is 75% completely clear now. There is no raised areas of granulation tissue and the neovascularization of the eye is very reduced.
 - A) Tremendous improvement, Connie is well on the way to recovery.
 - P) No change in therapy. TAO drops TID (SB)
- 15.Dec Trimmed cuticles on all feet using rotary grinder. Procedure performed in cow bldg corral. J. Bradford and M. Dixon attending. (JB)

Weight: 3385 Kg (7461 Lb)
- 17.Dec Eye recheck: no change
 - S) Picture taken, eye remains unchanged from last inspection. The healing has been remarkable this week. Suspect we may be able to suspend treatment the end of January or in February. Eagerly took slices of apple and pear during exam. Connie allowed a flashlight and camera without much hesitation.
 - A) Eye corneal abscess/herpes will likely resolve in 2-4 months. Excellent progress recently.
 - P) Continue TAO drops TID (SB)

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- 4.Jan Eye recheck
 - S) No change. Minor hypopyon remains. Eye is 75% normal and doing well. (SB)
- 22.Jan Right eye recheck
 - S) Very clear, minor white opacity at center of cornea.
 - A) Excellent progress
 - P) Continue TAO drops TID (SB)
- 25.Jan Purpose/Problem: Trauma to distal end of tail.
 - Rx: SILVER SULFADIAZINE topically BID until further notice.
 - Topical treatment: Apply to end of tail.
 - Tail trauma
 - S) JB reports Connie likely hit her tail on a wall or stall bars. Mild bleeding occurred.
 - P)
 - Rx: SILVER SULFADIAZINE topically to lesion on tip of tail BID for UFN. (SB)
- 31.Jan D/C Lysine oral treatment

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- 31.Jan S) Eye is 90% normal.
P) (SB)

 - 2.Feb PROBLEM: ulcer - corneal opacity (resolved)
Last day for TAO solution treatment (SB)
 - 13.Feb Tail examintion, mild exudate, eye recheck
Tail
S) JG reported exudate coming from the tail which was being treated with SSD by keepers. Exudate was not seen on previous exam. Exam found mild exudate on an exposed area 1 cm in diameter where the keratinized skin was absent. I observed a draining track under dry, cracked skin of 2 cm in length.
P) 1:30 chlorhexidine gluconate mixed with epsom salts.
Eye
S) No change, mild translucent opacity of 9 mm in the center of the cornea. (SB)
 - 14.Feb Purpose/Problem: tail
Rx: CHLORHEXIDINE GLUCONATE 150.0mg topically BID until further notice.
Topical treatment: Apply to the tail in 4 liters of 70 F water for 10 minutes.
Rx: tail bath and interaction
S) During Nisha's exam, Connie came up for a visit. She "squeaked" (happy noise) once while I stoked her sides.
P)
Rx: CHLORHEXIDINE GLUCONATE 500 mls topically BID until further notice.
Mix chlorhex with 4 gallons of warm water and 8 cups Epsom salts to treat tail.
Called Dr. Plymate about getting some Chitosan to help the tail heal. He may bring some buy tomorrow with a supplier's list. (SB)
 - 1.Mar All cuticles trimmed, rear pads and nails trimmed. No defects. (JB)
 - 6.Mar 1st of three TB trunk washes. (JB)
 - 7.Mar 2nd of Three TB trunk washes. (JB)
Tail re-examined
S) Previously traumatized tissue has a pale white color and is enlarged. Some excessively keratined skin is still present toward the periphery. The white tissue appears mildly keratinized and normal. No erythema is present. There may be some fluid accumulation in the white tissue.
A) The tissue is likely granulation tissue. This tissue matches inflammation due to pain and swelling, but there is no noticeable heat or redness.

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Name: CONNIE		

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- 7.Mar P) Oral pain meds may be used. Tramadol is being considered. (SB)
Weight: 3435 Kg (7571 Lb)
- 8.Mar 3rd of three TB trunk washes. (JB)
- 14.Mar Tail evaluation
S) Tissue appears healed and keratinization normal. Connie is very hesitant to allow restraint of tail.
A) The tissue may be painful, but no inflammation is obvious. Her hesitation may be apprehension/learned.
P) Will try a tramadol pain treatment 4 mg/kg tomorrow with 2 blood draws for PK data at 1 and 3 hours post oral dosing. (SB)
- 19.Mar TB negative (3 washes)
O) Missouri State Tuberculosis Laboratory: Three consecutive AFB smears negative. Reported 3/16/07 (SB)
- 21.Mar Tail healed, D/C soaks
S) Tail is 99% healed. Connie's right eye is unchanged.
A) There will always be mild white corneal coloration reducing vision by a small amount (5-10%). Previous inflammation left some permanent changes (fibrosis) that are not affecting Connie's comfort or ability to navigate. The mild opacity was predictable and unavoidable.
The tail is almost completely healed. Healing was rapid for this species in the past 2 weeks.
P) Ophthalmic antiviral drugs were will used in combination with antibiotics when the herpes lesion recurrns in the fall or late summer.
Today was the last tail soak. (SB)
- 22.Mar Front pads trimmed. Procedure performed in Cow Bldg Stall #3 while Connie in standing position. J. Bradford and J. Glazier attending. (JB)

Connie
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- 21 APR 05 Connie, 1101, received her annual Tetanus vaccination this morning in her left triceps (1 ml Fort Dodge Product, IM). – J Glazier
- 27 APR 05 Khun Chorn, 699 was observed showing breeding interest in Patience, 3320, this morning. Chasing behavior was observed, but no mounting. Connie, 1101, was put in his yard for part of the day, but no interest was shown in her. At the afternoon routine, Khun Chorn let Connie go, but he would not allow Patience to come in the barn. – J Glazier
- 01 MAY 05 0.4 were in stalls 3-5 yesterday afternoon. This morning it was obvious that Minyahk and Patience had been fighting overnight. Minyahk suffered several abrasions on the left side of head and trunk area, and her right tusk had been broken off up in her lip, leaving only a small 2" sliver of ivory tusk that was treated with Peroxide / Nolvason / Furicon and Albicillin ointment. There appears to be no exposed root or tissue. Minyahk was also given 8 gm Bute in the afternoon as a loading dose, then 4 gram twice daily through 3 May. Patience has several abrasions on the front and sides of her head. Her left tusk was broken off. Keepers flushed and treated it with the Peroxide, Nolvason, Furicin and Albicillin ointment. Both cows are acting sore. Patience and Minyahk are separated for the evening. Patience and Connie are together. Minyahk and Moola are together with the stall door cracked.
- 13 MAY 05 After lunch, keeper checked on elephants and noticed that Minyahk and Patience were fighting. This went on non-stop for 15-20 minutes. Connie, who was in the yard, was pacing back and forth watching what was going on. Connie was moved into the east stall with Minyahk and Patience, and the fighting stopped. Patience went and stood in the corner for a while. There was no fighting for the rest of the day. Minyahk and Patience had a few new scrapes, but nothing severe. – S Luedde
- 05 JUN 05 First thing this morning, keepers noticed Minyahk and Patience fighting. She was running after Patience, and at one point Connie blocked Patience so she would stop. Keepers drove around toward the east yard where the girls were, and the fighting stopped. Patience ran inside. When keepers came for the routine, Patience had several scuff marks on her, and the tip of her left ear was gone. She is being treated with furacin salve, and she was given two doses of 8 Bute pills in the morning and 4 pills in the afternoon. After the routine, girls were put back out together so they could be watched while keepers cleaned yards. Minyahk kept putting her head up on Patience and pushing on her. This continued throughout the day. The girls were separated in the evening.
- S Luedde
- 19 SEP 05 Repairs were made to the scale in the ERD today. The following weights were obtained: Sabu, #5500, 9,060 lbs.; Khun Chorn, #699, 11,120 lbs.; Connie, #1101, 7,120 lbs.; Minyahk, 65, 8,580 lbs.

Connie
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- 24 OCT 05 Connie's right eye was watering very badly this morning. Dr. Boylan stained her eye and decided to put triple antibiotic ointment in it at least four times a day for seven days. – S Luedde
- 25 OCT 05 Connie weighed 6,960 this morning before food and water. – D Luedde
- 26 OCT 05 Sabu was put in with Patience and Connie for four hours. Sabu only showed minor interest in Patience. He smelled her twice and near the end of the day he drove her and pushed on her minimally. Patience sustained a dime-sized abrasion on her rump from his pushing on her with his tusks. Sabu was primarily interested in Connie and spent the four hours alternating between sparring with her, attempting to breed her (four times) and eating hay together. Connie did not appear concerned by Sabu, and she would often follow him around the yard or into the building. Connie would choose to stand and eat with him instead of at the other hay pile. Connie would spar with Sabu head to head and then submit to him throughout the day until the end of the day when she wouldn't submit and even moved into his space when he would stop sparring. Their last sparring match, Connie continued to keep her head up, challenging Sabu, and he became more aggressive, scraping her forehead twice. Keepers separated them as the aggression escalated. Connie had a dime-sized scrape on her. Sabu weighed 8,650 lbs this morning. – M Carden
- 27 OCT 05 Sabu was placed with Patience and Connie for two hours. It was decided to shorten the introduction from the previous day's four hours due to the increase in aggression at the end of the day. Sabu showed very little interest in Connie, smelling her twice and eating hay with her periodically throughout the time. Connie was calm and seemed undisturbed by Sabu. Sabu's major focus was on Patience today. He frequently would smell Patience and push on her mildly to get her to move forward. If Patience would refuse to move forward, turn sideways to confront him or crouch / stretch, then Sabu would shove her harder until she would get up and move. Patience has about 506 new dime-sized abrasions from Sabu's tusks on her rear. Keepers observed them throughout the intro time to be prepared to separate them if aggression escalated as it did on Wednesday. Sabu had a plate-sized smear of mucous on the floor on Tuesday and Wednesday and semi-loose stools. – M Carden
- 28 OCT 05 Patience, Connie and Sabu were put together after break. Initially there were no problems. Sabu came out and checked Connie and Patience and ate some hay and walked around the yard a little bit. After about 5-10 minutes, Sabu came over and started pushing on Patience. When he would approach her, she would drop down in to a "crouch" position or "stretch." Sabu would continue to tusk her, regardless of the position she was in. When she would run, he would chase after her and continue to tusk her. Connie would run interference for Patience every once in a while. During this time, Patience had several stress stools. Sabu continued to

tusk her, mostly on her rear, but would also climb on her when she was stretched out and tusk her around her neck area. After he beat around the yard for a solid 30 minutes, Sabu was removed from the yard. Patience had two or three bloody gashes on her head from when Sabu was ramming her into the rails. Her rear area was swollen, as well as her left side. Keepers applied Furacin salve to her abrasions on her head, rear and back left knee. She was started on Bute. – S Luedde

- 08 NOV 05 Connie weighed 6,980 lbs today before foot and water. – D Luedde
- 16 NOV 05 Connie weighs 6,950 lbs. – M Carden
- 18 NOV 05 Part-time keeper observed breeding behavior with Khun Chorn and one of the cows, either Patience or Connie. Not sure if there was penetration. Will compare with future blood work. – D Luedde
- 21 NOV 05 Weighed 7,480 lbs after free access to water all day. – D Luedde
- 22 NOV 05 The following weights were obtained this morning: 65 – 8,460 lbs; 699 - 11,180 lbs; 1101 – 6,960 lbs; 3320 – 7,430 lbs; and 4022 – 8,620 lbs. – J Glazier
- 25 NOV 05 Eye treatment was discontinued as per Dr. Boylan. – S Luedde
- 30 NOV 05 1101 weighs 6,980 lbs; 3230 weighs 7,480 lbs; 4022 weighs 8,660 lbs; 65 weighs 8,550 lbs; 5500 weighs 7,780 lbs; and 699 weighs 11,020 lbs. – D Luedde
- 10 DEC 05 Unable to weigh Connie and Patience due to cold temperature. – D Luedde
- 20 DEC 05 Connie weighs 7,080 lbs. – M Carden
- 12 JAN 06 Took radiographs of Connie's front foot this morning. Keepers observed breeding activity observed around noon between Khun-Chorn and Connie. – J Glazier
- 13 JAN 06 Confirmed breeding between Connie and Khun Chorn. Khun Chorn not let the cows be separated from him for two days. – M Carden
- 14 JAN 06 No breeding interest was observed today with repeated observations. Khun Chorn came into the crush this afternoon. He was left with the cows in the afternoon as he has been breeding Connie the past two days. – M Carden

Connie
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- 18 JAN 06 Cow pairings were changed this afternoon following last weeks' breeding activity with Connie and Khun Chorn. Moola was taken from the cow barn to the bull building to be with Patience. Connie was taken from the bull building to the cow barn to be with Minyahk. – J Glazier
Connie weighs 7,110; Moola weighs 8,750; Minyahk weighs 8,790; and Patience weighs 3,320. – M Carden
- 24 JAN 06 Minyahk and Connie were put out into the new exhibit yard for approximately 40 minutes this afternoon. They explored the pool (empty) and the south lobe of the yard. Nothing was damaged other than sod.
– J Glazier
- 07 FEB 06 Administered Sentinel to 5121, 5510, 5511, 5512, 5805, 5915, and 5920.
– P Rader
- 08 FEB 06 TB trunk wash tests. – M Carden
- 09 FEB 06 Finished TB test. – M Carden
- 14 FEB 06 Took radiographs of Connie's front and back feet this morning.
– J Glazier
- 15 FEB 06 Drew blood for CBC and chemistry in addition to normal weekly blood draw. To be done monthly for six months as per Dr. Boylan. – J Glazier
- 29 MAR 06 Connie was put in with Sabu for four hours during the day. Keeper observed (not full time) throughout the day. Sabu was observed following Connie, playfully sparring and attempting to breed her three times. He was mounted with an erection, and Connie was standing well, but Sabu did not make full penetration and appeared to ejaculate externally. No actual breeding was observed. – M Carden
- 30 MAR 06 Connie and Sabu were put together in the north yard with stall f and 5 this morning for five hours. Keepers observed some moderate head-on sparring mid-day. A few half-hearted breeding attempts (no mounting, semi-erection with some following) were noted throughout the day. By afternoon, Connie and Sabu were standing quietly together inside eating hay. When they were sparring, Connie generally didn't back down, but instead planted her feet and stretched forward to absorb the shock when Sabu shoved her head on. Placing hay inside and outside broke up the sparring several times, with Sabu going inside to eat while Connie stayed outside. The sparring seems to escalate if not interrupted by keepers.
– M Carden
- 01 APR 06 5500 and 1101 appear very comfortable together, choosing to stand together even inside the barn at times and eating hay. No sparring was noted today. No breeding activity was noted today or yesterday.
– M Carden

- 06 APR 06 Decreased Minyahk and Connie's pellet ration back to 3/4 scoop twice daily each due to weight gain over the past few months. They have been getting one scoop each per feeding. Diet change approved by Dr. Boylan. – J Glazier
- 07 APR 06 Sabu and Connie were observed for approximately 2 ½ hours today. One breeding bout was observed with penetration. Sabu may have prematurely ejaculated, but it wasn't clear. He did have good penetration for approximately one minute and stepped down on his own. Connie responded well to him. They were observed throughout the day and are getting along well. Only minor sparring was associated with the breeding, and Connie submitted quickly. – M Carden
- 09 APR 06 Sabu as observed mounting Connie. It was not possible to see any penetration. Blood was drawn this morning. – D Luedde
- 10 APR 06 Connie, 1101, has a pressure sore, approximately 3" diameter, on her left cheek. She is being treated with udder balm. – M Carden
- 20 APR 06 Mounting was observed by Senior Keeper. He could not confirm penetration but Connie was standing well. – M Carden
- 25 APR 06 Sabu was noted with a full erection following Connie, but no mounting was observed. – M Carden
- 26 APR 06 Sabu has been refusing the crush and has been very difficult to separate from Connie in the evening he last few days. This evening, keepers were unable to separate them, so they were left locked together in stalls #4 and 5 for the night. – M Carden
- 28 APR 06 Sabu continues to guard Connie and not allow her to be separated from him. He has often been observed following her with an erection, but no mounting has been observed for the last couple of days. They have been together 24 hours a day with both yard access in stalls #4 and 5 locked in without trouble. – M Carden
- 10 APR 06 Connie, 1101, has a pressure sore, approximately 3" diameter, on her left cheek. She is being treated with udder balm. – M Carden
- 26 JUN 06 Fecals collected today tested negative for Elephants 65, 1101, 4022 and 3320. – D Luedde
- 28 JUN 06 Moola, 4022, was put in the exhibit yard with Minyahk, 65, and Connie, 1101, around 9:30 a.m. The three elephants spent the day together without incident. Pulled Moola back out around 3:00 p.m. – J Glazier

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- 19 JUL 06 Connie, 1101, and Mnyahk, 65, were brought into the cow barn with a stall separating them from the calf initially. After a short perbd, they were allowed in the adjoining stall without problems. – M Carden
- 20 JUL 06 Moola, 4022, and the caf, 6002, are being allowed in the cow barn, corral and south yard during the day, with Connie, 1101, and Mnyahk, 65, without problems. The calf weighs 238 lbs today. The calf was observed urinating and defecating this afternoon. Moola and the calf are being locked in the back two stalls at night. Tonight is the last night of keeper observations. – M Carden
- 21 JUL 06 The calf, 6002, weighs 238 lbs today. Moola, 4002, Connie, Minayhk and the calf were placed in the exhibit yard for the day without incidence. The calf has been observed urinating and defecating normally. The calf has been drinking more water from the tub now. – M Carden
- 08 AUG 06 Calf, 6002, weighs 271 lbs. Patience, 3320 weighs 7,820 lbs. Connie, 1101, weighs 7,290 lbs. Mnyahk, 65, weighs 8,780 lbs. Sabu weighs 9,300 lbs. Khun Chorn weighs 12,760 lbs. – D Luedde
- 18 AUG 06 Connie and Sabu (1101 and 5500) were put together in stalls #4 and 5 and the north yard at the bul barn. Breeding with confirmed penetration was observed (with back flush) in the morning. Two other bouts of probably breeding were observed just after, with Sabu standing beside Connie with his penis distended. Her backlegs were wet. – M Carden
- 19 AUG 06 Sabu and Connie (5500 and 1101) were together in the north yard with stalls 4 and 5. No breeding interested observed. – D Luedde
- 21 AUG 06 Sabu, 5500, was observed mounting Connie, 1101, but there dd not appear to be any penetration. – D Luedde
- 29 AUG 06 Connie (1101) appears to have a small abrasion on her right eye, and it is tearing. Consulted vet and will begin eye drops. – M Carden
- 06 SEP 06 The cloudiness in 1101's right eye associated with the central lesion has grown to encompass approximately $\frac{3}{4}$ of her visible eye. Antibiotics are continuing to be applied twice per day. Keepers will also begin hosing the eye lightly to assist with debris removal. – M Carden
- 07 SEP 06 Dr. Boylan examined 1101's eye and attempted to get a culture but was unsuccessful. Antibiotic ointment is still being administered twice daily. She will be mildly sedated early next week to better access her eye for the culture. – M Carden
- 08 SEP 06 All three cows, 65, 1101, 3320, were hanging together at the bars this morning. Re-introductions continue and are going well so far. – M Carden

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- 12 SEP 06 Connie, 1101, was given the first of a two-shot series of West Nile vaccine.
– J Glazier
- 19 SEP 06 Nisha has been observed attempting to nurse from Connie, 1101, the past two days. Connie is allowing it. – J Glazier
- 20 SEP 06 Connie's, 1101, eye is still watering profusely, but the cloudiness is about the same. Introductions between Connie, 1101, Patience, 3320, and Minyahk, 65, are going well. They are being put together in the exhibit yard for about two hours each morning since Tuesday. Minyahk, 65, showed some initial "watching" behavior in an intimidating manner for about 45 minutes but no actual physical contact was observed. Patience continues to present a submissive attitude toward Connie and Minyahk. – M Carden
- 22 SEP 06 1101's eye is still watering profusely and is developing more cloudiness again. Her eyelid is also very swollen, and she is only opening it between $\frac{1}{4}$ to $\frac{1}{2}$ of the way. – M Carden
- 23 SEP 06 Sedated 1101 this afternoon to attempt to get an eye culture on the right eye. A direct culture was not attempted, but a collection of saline flush was acquired for the culture. Treatment was administered. Current treatment will be continued for three days with pain drops twice daily – see MedArks for treatment. – D Luedde
- 26 SEP 06 1101's eye is completely clouded over now, and the central lesion / ulcer has enlarged. Dr. Stafford examined her and prescribed a combination of anti-fungal, antibiotic and pain-relief medications to be given 2-3 times per day – See MedArks for complete record of medications. She is being kept inside during the day to keep her out of the sunlight and being let out into the corral at night. Dr. Stafford prescribed no sunlight until further notice. – M Carden
- 27 SEP 06 Tetracaine was added to the treatment for 1101's eye, three times daily, for main management. – M Carden
- 29 SEP 06 1101's eye is showing improvement, with the globe turning from an opaque white to a more translucent white, particularly along the edges. The central ulcer is still prominent and still has the hab surrounding it. – M Carden
- 04 OCT 06 1101's eye is showing great improvement. The globe is nearly clear now, but the central lesion and hab are still prominent. – M Carden
- 10 OCT 06 Connie, 1101, was given West Nile booster – see MedArks. – D Luedde

- 11 OCT 06 Dr. Stafford re-examined Connie's, 1101, right eye. The eye is much improved and is responding well to the treatment for a fungal infection. The current treatment regimen of three treatments daily are to be continued. She was released to go outside on cloudy days. She should be monitored, and if the sunlight appears to be bothering her, she should be brought back inside. – J Glazier
- 17 OCT 06 Connie's, 1101, eye has cleared to almost normal on the top half of her eye (on a diagonal). The ulcer and hab ware still prominent, with the bottom half (on the diagonal) still being cloudy. On the bottom of the eye from the ulcer down, a ¼" rectangle is distinctly covered with what appears to be blood-filled capillaries. This region coincides with the area that the ophthalmic ointment most commonly rests in her eye as it dissolves. This has been occurring for 1 ½ weeks. – M Carden
- 19 OCT 06 Right eye treatment on lower part of 1101's cornea has developed reddish, inflamed appearance. Added Tobramycin (eye antibiotic) to treatment regimen. Upper part of cornea appears improved.
- 24 OCT 06 Dr. Boylan dropped the Atropine and Flurbiprofen from Connie's, 1101, right eye treatment. He recommended no more than three hours of sunlight exposure at this point in her recovery. She may still be out on cloudy days. – M Carden
- 29 OCT 06 Dr. Boylan examined 1101's right eye and agreed that it is getting worse. He will contact an ophthalmologist. In the meantime, Atropine will be added back into the treatment. See MedArks for details. – D Luedde
- 30 OCT 06 Connie's, 1101, right eye was examined by Dr. Boylan. After consultation with two veterinary ophthalmologists, the treatment has been changed to the following: TAO drops three times daily (about .5 cc), and Atropine (0.1 cc) and Serum (about .5 cc) twice daily. The Flurbiprofen, Ciprofloxacin, Tobramycin, and Itraconazole have been discontinued, as the experts' opinion is that we do not likely have an infectious problem at this time. They suspect the tissue seen in the eye is granulation tissue. – J Glazier
- 12 NOV 06 Dr. Boylan checked Connie, 1101's, eye. Starting tomorrow the Atropin will be discontinued and serum will be added to all three treatments (increased from twice daily). – D Luedde
- 12 DEC 06 Had a short (approximately 1 hour) introduction session with Patience and Nisha through the bars in the morning. Put Moola, Nisha, Minyahk and Connie in stalls #5 and 6 at the cow barn. Allowed Patience into stalls #3 and 4. Session was uneventful.

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13 DEC 06 Did another short (approximately ½ hour) introduction session with Patience and Nisha through the bars this morning. Put Minyahk and Connie in with Moola and Nisha in stall #6. Put Patience in the adjacent stall #4 while keepers cleaned the other stalls. Session was uneventful.
– J Glazier