

REPORT ON SAM-GREEN TURTLE AT KOPOHO

By DR. ROBERT MORRIS 8/2005

BACKGROUND

Sam is a mature male green turtle maintained in a private thermal saltwater pond located in Kopoho Beach Lots, Kopoho, HI. He was reported to have been placed in this pond as a juvenile approximately 30 years ago. This is a pre-act turtle so it is actually owned by the property owner Peggy Forges. For the past year Sam has been under the care of Alice Nix, the rental agent for the property.

Sam was reported to be off feed and having cloudy eyes around August 22. One eye was observed to be closed but is now open. He was bumping into objects and did not seem to be "right". I was requested to fly down and do a veterinary examination (8-26-05). I had done a previous exam on 3-19-03 and collected blood for CBC and chemistries. Recommendations were made at that time to improve the feeding husbandry.

EXAMINATION

The turtle appeared in good body condition.

The shell and plastron were normal. A mild growth of algae was present on the shell.

The neck was normal

The skin was normal.

The mouth exam was normal.

The right eye was normal.

The left eye was cloudy with little if any vision. This was due to corneal edema with evidence of conjunctivitis and corneal ulceration. The globe was intact. No lesions were noted around the eye.

The flippers were normal. A metal tag was present on the right front flipper. Blood was drawn for CBC and chemistries.

The turtle was observed in the water and had started to eat a little two days ago. Swimming movements were normal but vision seemed limited to the right side only.

ASSESSMENT

The only abnormal finding was the left eye. The keratitis and ulceration could have been caused by trauma (scraping or rubbing of the cornea). There

could be a secondary infection after the trauma. Prognosis for visual recovery is guarded. It will take several weeks for corneal clearing. Corneal scarring could also cause limited vision. I am hopeful that the globe will remain intact and will not collapse.

TREATMENT

The eye was treated with an antibiotic ophthalmic ointment while on land. The injectable antibiotic Amikacin (300mg) was given (will last 3 days). Vitamin A injection (18,000 IU).

BLOOD RESULTS

The chemistries showed some mild elevations in the alkaline phosphatase but improved over the 2003 value. The AST was also slightly elevated but within the normal range. It also was much lower than the 2003 value. These values can indicate muscle and/or liver problems but the exact interpretation in sea turtles is still being determined. The other values were in the normal range. The red blood count was normal. The white blood count was in the normal range. The ratio of types of white blood cells indicates the possibility of inflammation or infection. This could be caused by the eye problem.

COMMENTS

I am hopeful that that Sam's problem was just due to the eye trauma. It is important to keep a close observation on his appetite and the appearance of the eye. If gradual improvement is noted then no follow up is needed. Feel free to call me or E-mail with any questions. Use the food guideline I gave you and keep a well balanced diet. Try to keep the pond clear of any floating debris. I would discourage any swimming in the pond at night as that might startle Sam (which is one possibility for the injury). I must commend Alice Nix for her concern and excellent care of Sam.

Robert A. Morris MS, DVM

Measurements:

ccl 72.2 cm

ccw 61.0 cm

plastron lt. 55.0 cm

plastron lt. Including pps 57.0 cm

TURTLE ID SAM-KOPAKO
 DATE 3/19/03 8/24/05

	MEAN	SD	RANGE		
ALK. PHOS.	33.5	12.2	12-62	157	99
ALT (SGPT)	3.9	7.0	0-50	27	6
AST (SGOT)	158.4	41.5	1-270	935	263
CK				348	461
LDH	203.8	180.4	55-1286	101	158
ALBUMIN	1.7	.4	.6-2.2	0.9	1.2
TOTAL PROTEIN	4.2	.6	2.9-5.6	3.2	3.7
GLOBULIN	2.7	.5	1.8-4.0	2.3	2.5
BUN	25.8	70.7	0-320	15	20
CREATININE	.2	.1	.1-.5	0.3	0.3
CHOLESTEROL	140	43	32-280	235	282
GLUCOSE	114.7	35	64-234	85	93
CALCIUM	9.1	1.7	1.1-12.1	8.7	10.7
PHOSPHORUS	8.2	1.3	5.9-11.8	4.8	5.3
POTASSIUM	5.2	.9	3.9-8.6	4.7	3.6
SODIUM	158	4.0	146-170	151	149
A/G RATIO	.6	.2	.2-1.2	0.4	0.5
URIC ACID	1.3	.8	0-4.5	0.8	1.6
CA/P RATIO	1.1	.13	.18-1.0		
WBC ESTIMATE					
WBC COUNT	13.8	5.3	5.9-23.6	7.9	10.5
HEMATOCRIT	29	4	17-35	30	29.0
HETEROPHILS	10	3	4-17	15	57
NEUTROPHILS				2	4
LYMPHOCYTES	71	8	53-83	62	38
MONOCYTES	6	3	4-17		
EOSINOPHILS	13	6	4-29	1	1
BASOPHILS	0	0	0-1		
ABSOL HETS	1380		236-4012	1185	5985
ABSOL NEUT				158	420
ABSOL LYMPH	9798		3127-19588	6478	3980
ABSOL EOSINO	1794		236-6844	79	105
ABSOL MONO	828		236-4012		
THROMBOCYTES				ADKQ	ADKQ
LYM/HET RATIO	70				



DR. ROBERT MORRIS
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KAILUA, HI 96734

808-254-1740

Account: 1303

Owner: NIX
Patient: SAM
Species: GREENSEA TURTLE
Breed: GREENSEA TURTLE
Age: 30
Gender: M

1-888-433-9987
Online results at
www.vetconnect.com

Requisition #: 800486
Accession #: L7346151
Order rec'd: 08/28/2005
Ordered by: MORRIS
Reported: 08/30/2005

REPTILIAN PROFILE #1		REPTILIAN PANEL #1		
Test	Result	Reference Range	Flag	Bar Graph
ALK. PHOSPHATASE	99	- IU/L		
ALT (SGPT)	6	- IU/L		
AST (SGOT)	263	- IU/L		
CK	461	- IU/L		
LDH	158	- IU/L		
ALBUMIN	1.2	- g/dL		
TOTAL PROTEIN	3.7	- g/dL		
GLOBULIN	2.5	- g/dL		
BUN	20	- mg/dL		
CREATININE	0.3	- mg/dL		
CHOLESTEROL	282	- mg/dL		
GLUCOSE	93	- mg/dL		
CALCIUM	10.7	- mg/dL		
PHOSPHORUS	5.3	- mg/dL		
POTASSIUM	3.6	- mEq/L		
SODIUM	149	- mEq/L		
A/G RATIO	0.5			
URIC ACID	1.6	- mg/dL		

REPTILIAN PROFILE #1		AVIAN/EXOTIC CBC AND PLASMA PROTEIN		
Test	Result	Reference Range	Flag	Bar Graph
WBC COUNT	10.5	- THOUS.		
HCT	29.0	- %		
HETEROPHILS	57	- %		
NEUTROPHIL SEG	4	- %		
LYMPHOCYTES	38	- %		
EOSINOPHIL	1	- %		
ABSOLUTE HETEROPHIL	5985	- /uL		
ABSOLUTE NEUTROPHIL SEG	420	- /uL		
ABSOLUTE LYMPHOCYTE	3990	- /uL		

NIX, SAM
08/30/2005

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ABSOLUTE EOSINOPHIL	105	- /uL		
THROMBOCYTES	ADEQUATE			
POLYCHROMASIA	SLIGHT			
BLOOD PARASITES	NO PARASITES SEEN			
REMARKS	<p>SLIDE TO BE REVIEWED BY DR. JOSEPH. SLIDES ARE REVIEWED ON TUES AND THURS. PLEASE CALL CUSTOMER SERVICE IF REVIEW IS NEEDED SOONER.</p> <p>*****SLIDE REVIEWED BY DR JOSEPH*****</p> <p>THE WBC AND DIFFERENTIAL IS CORRECT. THE OVERALL CELL LINES LOOK HEALTHY. DR J</p> <p>NEUTROPHIL SEG = AZUROPHILS</p> <p>FEW REACTIVE LYMPHS PRESENT</p>			
RETICULOCYTE ESTIMATE	1+			

FOODS FOR SAM

BEST DIET MELICK AQUAFEED TURTLE FINISHER PELLETS 7MM
FLOATING

SENIOR DOG FOOD – EUKANUBA IS GOOD BRAND-GET LOWEST
FAT CONTENT (17% OR LOWER) SEVERAL CUPS DAILY SHOULD
FURNISH THE NECESSARY CALORIES (DON'T OVERFEED-USE
YOUR BEST JUDGEMENT AND COMMON SENSE)

SUPPLEMENTS: CAN BE GIVEN DAILY

SPINACH

BROCCOLI

CARROTS

COLLARD GREENS

KALE

MUSTARD GREENS

TURNIP GREENS

LETTUCE (NOT A LOT OF NUTRITION IN THIS BUT A LITTLE WILL
NOT HURT)

A FEW FISH (smelt, mackerel, herring, anchovies) once or twice a week
would add some calcium and phosphorus supplement to the diet). Frozen
smelt is usually available and has good calcium to phosphorus ratio.

USE THIS AS A GUIDE. THE TURTLE PELLETS ARE IN 40 LB BAGS
AND CAN BE FEDEXED. STORE IN A COOL DRY PLACE

ROBERT A. MORRIS MS, DVM

9-26-05

MELICK AQUAFEED

TURTLE FINISHER

GUARANTEED ANALYSIS

Crude Protein.....(min.)	35%
Crude Fat.....(min.)	4%
Crude Fiber.....(max.)	5%
Phosphorus(P).....(min.)	1%
Ash.....(max.)	15%

Ingredients

Animal Protein Products, Plant Protein Products, Processed Grain By-Products, Fish Oil, Soy Lecithin, Calcium Lignin Sulfonate, Vitamin A Supplement, Vitamin D3 Supplement, Riboflavin Supplement, Niacin Supplement, Calcium Pantothenate, Vitamin B12 Supplement, Choline, Chloride, d-Biotin, Thiamine Mononitrate, Pyridoxine Hydrochloride, Vitamin E Supplement, Menadione Sodium Bisulfite Complex (source of Vitamin K activity), Folic Acid, L-ascorbyl-2-Polyphosphate (source of Vitamin C), Ethoxyquin (A preservative), Potassium Iodate, Salt, Manganese Sulfate, Zinc Sulfate, Copper Sulfate, Sodium Selenite

CAUTION

Store in a dry, well ventilated area, free from rodents and insects. Do not use moldy or insect infested feed.

Manufactured By:
Melick Aquafeed
139 South First Street
Catawissa, Pennsylvania 17820
1-800-358-6595
NET WT. 40 lbs.

7.0 MM

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