

Rounds

Animal Health
Department

Medical Rounds

"medicine for all"



Caring for Stranded Marine Animals

NATIONAL
MARINE
L I F E
CENTER

Notes

Veterinary Research
Department

Under the microscope

rwilliams@nmlc.org

Rounds Notes is a report on the health of animals at the National Marine Life Center from Sea Rogers Williams VMD for the staff, volunteers, and community of the center including professionals involved the captive care of similar species, the views expressed are not necessarily that of NMLC. Information in Rounds Notes should be considered confidential and used solely to benefit the health of aquatic animals everywhere.

July 14, 2009

Rounds Notes

15: 37-39 (2009)

Clinical Update:

Life's A Beach, and Then You Bask

Patty's progress is marked by the continued resolution of the hyphemia in the left eye (which is down to a whisp) and slow improvement of use of her right hind leg. We have started "basking" therapy which is also improving the health of the carapace. She is producing good quality feces with what appears to be some shell bits that resemble the shrimp that can no longer be found in her tank, a coincidence ? I think not !

We are still monitoring the yellow discoloration of some of the carapace scutes and the flaking of the caudal vertebral and some plastron scutes. The skin lesions and minor abrasions continue to heal and there is no significant generalized edema. Patty will get a mercury-vapor bulb while indoors (we can't bask her all the time) and this will be on a 8 hour daily cycle to add additional heat and UVB. That combined with a varied diet and the possibility of capturing live prey are all positive signs.



Terrapins, Cooters, and Turtles, oh my . . . :

Keep those growin shell clean and healthy

At Rounds I noticed some debris accumulating in the suture lines of the carapace scutes of some of the Red-bellied cooters. They were all taken out and examined carefully, weighed, and measured. A scoring system was designed to monitor the progression and healing of these minor lesions.

We will further improve the husbandry of the Red-bellied tank with the edition of a mercury-vapor bulb, a cuttle bone, and daily cleaning.

Red-bellied Cooter Carapace

Cleaning Protocol:

- 1) remove all the cooters from the tank
- 2) identify the cooter by it's shell marks and select it's individual toothbrush (you wouldn't want to share a toothbrush with anyone, neither to they and we do not want to spread disease)
- 3) dilute the chlorohexidine solution 1:8 with sterile saline in a small cup (we only need a little)
- 4) scrub between the scutes to removed any loose debris, no elbow grease needed, allow the bristles to do the gentile work of cleaning.
- 5) allow the soap to sit on the shell for 5 min.
- 6) wipe off the soap with a 1x1 sponge
- 7) apply a small amount 1% silver sulfadiazine cream to the lesions, use a new Q-tip for each application, do not cross contaminate, wipe off extra.
- 8) allow to sit inside in a sunny area for 1 hr.
- 9) return cooters to tank
- 10) clean and dry the tooth(shell)-brushes for the next day.



So what causes these minor lesions ? bacteria, fungal, rapid growth, lack of natural sunlight, metabolic disease, water-quality issues ? The answer is, yes.

While I do not know the specific cause, all of these may play a role. Infections are likely secondary and would require deep biopsy to elucidate which is not indicated at this time. Strict adherence to water quality, daily water changes, addition of a new UVB and heat source plus the cleaning should pull us through. The smallest cooter (#198) has a SCL of 80mm, a mere 5mm away from the target release size. We should achieve this goal in growth by next month for all six cooters, at which time they can all be released. For in this case, sunshine is best medicine.

Where in the World:

Fletcher's Travels

Fletcher's tag is working great and he seems content to 'hang-out'.

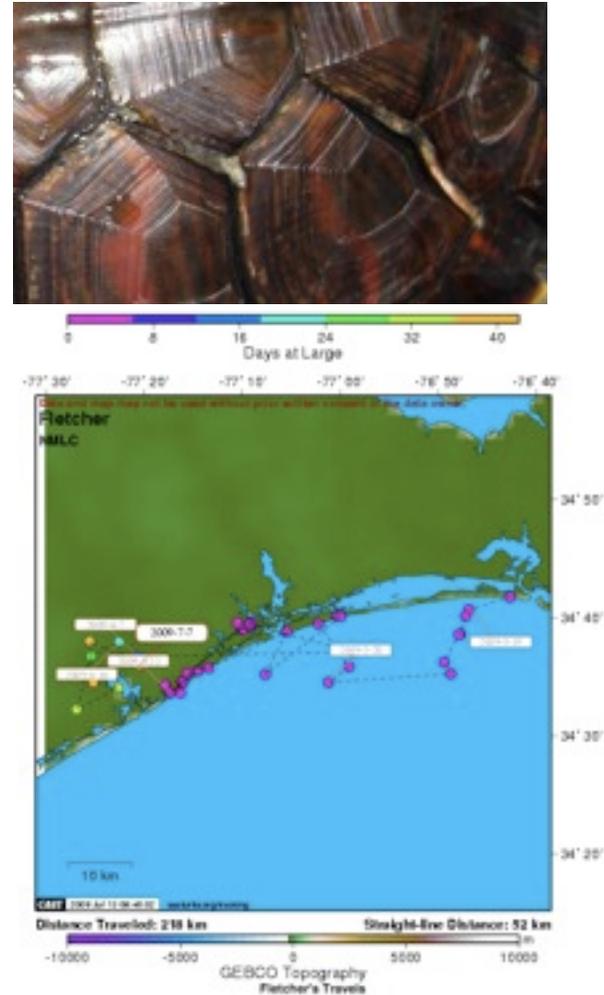
Safety Seal of Approval:

safety first, and second, and third . . .



No routine staff access to the site while the steel is being set-up.

This is a particularly dangerous time with all the steel overhead. Absolutely all access must be pre-approved and supervised.



C. Rogers Williams VMD

Sea Rogers Williams VMD
attending veterinarian and director of science

