

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

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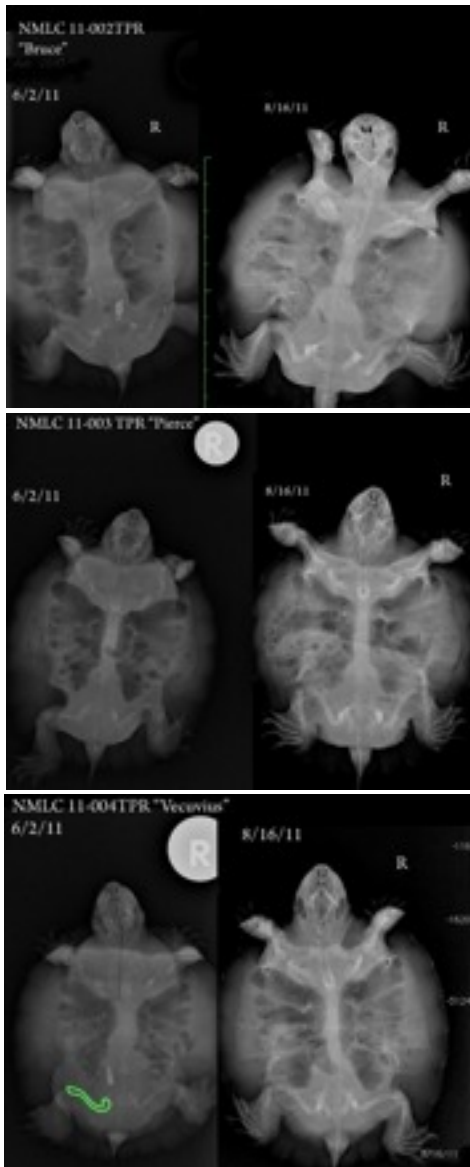
Rounds Notes is a report on the health of animals at the National Marine Life Center from Sea Rogers Williams VMD for the staff, volunteers, and community of the center including professionals involved the captive care of similar species, the views expressed are not necessarily that of NMLC. Information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

September, 2011

Rounds Notes

7: 21-24 (2011)

Headlines News: Cooters are mineralizing up soft shells are no longer on the menu



As you can see to the left, repeat radiographs on the three cooters with metabolic bone disease show increased mineralization and better bone density and definition. Some lesions, such as warping, folding, and incomplete osteopenia still exist, and the spine is still not visualized, but we do see growth and improvement in all three cooters. None of the cooters are clinically ill at this time, just deformed, and all have good appetites and motor ability both on land and in their tank. Shell shape also appears to be improving somewhat. My main concern is the pelvic and inguinal areas, as the opening may not be as wide as a normal cooter and I don't want to release any animals that would be at too great a risk for egg binding as adults. The female turtles (these could be all males, we don't know) will form eggs and create a shell prior to laying, we want to be sure the eggs can be passed from the uterus through the cloaca without getting hung up on the pelvis, or this would have disastrous consequences in a wild cooter where surgical intervention is not possible. While we've seen improvement I think it is still too soon to tell what their adult morphology will be so we can assess this risk.

The rehabilitation plan is still the same, once the two smallest cooters have acceptable ionized calcium levels, to continue the oral calcium and vitamin D3 orally and consider calcitonin to further improve bone density. Once we feel we can no longer improve their metabolic condition by using exams, radiographs, and perhaps CT to assess the pelvic outlet, make a release decision, which may have to wait until spring.

Clinical Update:

Catch22, appetite down, waiting for results, blood results are OK

Catch has taken to another fasting period, her maximum weight was 790g and she lost a little (740g) but not 10% of her body weight. We collected a lymph contaminated blood sample and ran a blood gas analysis and nothing startling showed up, so we will continue to monitor her appetite and tempt with novel food items. She was tube feed some reptomin® with dextrose/saline to provide sugars and electrolytes and see if that stimulates her appetite. We have not heard from the fungal lab in Texas on the species identify and fungal sensitivity of the isolate collected by Cornel, this information is critical and should provide the anti-fungal agent that is most likely to work on Catch's infection.



Sea Turtles:

Open Again !

The NMLC has passed it's federal (NOAA Fisheries) inspection and is once again open to assist the Sea Turtle Stranding and Salvage Network (USFWS- approved facility) with long term sea turtle rehabilitation. Our state permit has all of our admits coming from the New England Aquarium so we are on stand-by to assist where needed. We are open and ready for patients now, but expect our first cases will come in the busy cold-stun season, late November - December.



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

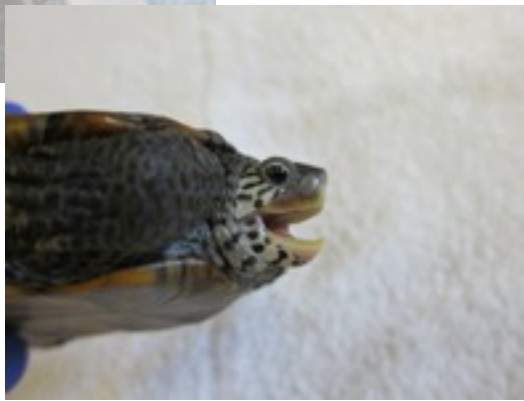
welcome Eleanor, a fine Diamondback terrapin

Eleanor is a one year old diamondback terrapin that was taken from the Cape as what was thought to be an abandoned hatchling, the turtle was further taken out of state and reared in captivity. Once it was clear the terrapin would survive the people brought the terrapin back to the Cape for release and brought the turtle to the center first on their way down-Cape. We were able to collect and hold the terrapin, pending guidance from the state.



First, Diamondback terrapins are a protected species in MA, and even further listed as a 'threatened' species. Special permits are required to handle, collect, or interact with the species. I believe that it is never a good idea wildlife without specific training, and often state and federal Take a picture, and if your a local wildlife rehabilitator or state authority. Never collect a turtle without permission and training in and medical care of the species in

to handle knowledge permitting. concerned call or local from the wild the husbandry question.



What should we do now ? Our first concern was to assess the health of the little terrapin and so far so good. Some 'tissue' enzymes were elevated and we will recheck these values prior to release and have instituted a reverse-quarantine or pre-release period. This is a 40 day period of treating the turtle like it is in quarantine, and monitoring for any disease that may be carried back to the wild population. Radiographs, blood gas, and ionized calcium are in good shape and we have started a slow acclimation to brackish water and are feeding more appropriate food items, similar to what the terrapin may find in the wild.

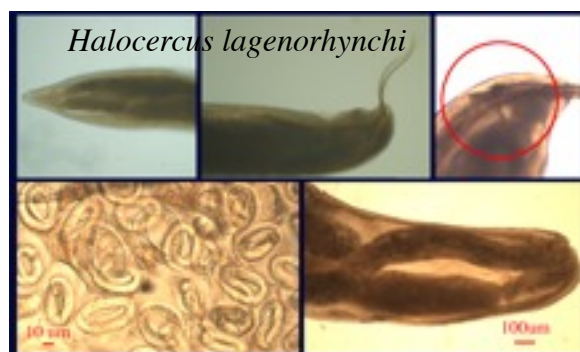
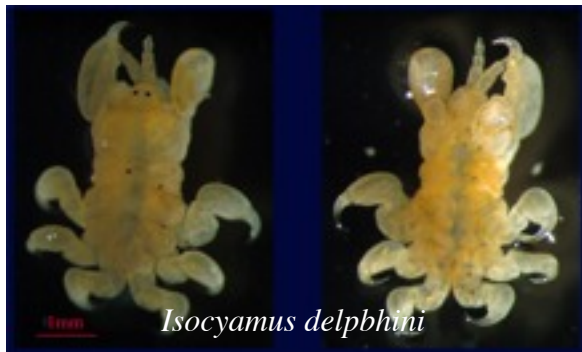
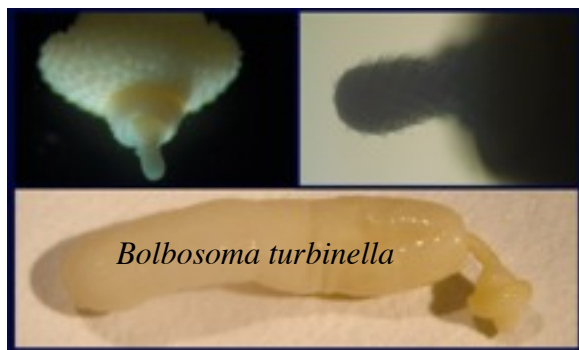
We don't know the exact conditions surrounding the collection of Eleanor, hatchling may appear abandoned but they don't get a lot of maternal care and to the uninitiated they may look lost, forlorn, and abandoned, when really their just being a reptile. Taking the animal out of state could expose the animal to novel pathogens (fungi, viruses, bacteria, and parasites) that the native population would never be exposed, and life in captivity is stressful which can suppress the immune system and make these animals susceptible to infections that would not normally be a problem, agents that it could then introduce into the wild population with devastating results. We'll do what we can to insure this does not happen. Diamondback's once thrived on Cape Cod, and human's are largely responsible for their current plight. Leave the remaining Diamondbacks where they belong and let's be part of the generations of people that improve the numbers and lives of this threatened sub-population and does not cause any further harm.

Under the microscope:

Marine Mammal Parasite Program coming soon . . .

A few years of trying, the National Marine Life Center has received a Prescott award for our Marine Mammal Morphological Parasite Identification Program, along with co-investigators Dr. Murray Dailey and Kathleen Toughy-Moore from IFAW's Marine Mammal Rescue and Research we will establish a laboratory at the NMLC to study the types and effects of parasites on stranded marine mammals. So stay tuned for a whole host (sorry, I could not resist) of exciting parasite case studies to cross the center, and these pages.

Here are just a few of the exciting marine mammal parasites we have already worked with . . .



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ISTAFF: Kathv Zaazebksi. Brideet Dunnigan. Brian Moore. Joanne Nicholson!