

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.

May 25th, 2010

Rounds Notes

7: 18- 21(2009)

Headlines News: Mass Biopsy Results and a Granulomatous One Year Anniversary

DX: tissue necrosis, heterophilic granulomatous inflammation

The mass we biopsied a few weeks ago is not an organ or cancer, but a focal area of sterile and necrotic tissue that has been walled off and is likely a remnant of the process that claimed Patty's shell. The mass is the same size or smaller then when first identified, and now easily moves under the skin and does not seem to be bothering her. We received the biopsy results along with some recuts of the infarcted necrotic dermal bone from Northwest Zoopath while recuts of the actual biopsy are pending. The fungal and bacterial cultures were negative. There does not seem to be a pressing need to go in surgically to remove the mass at this time, but this may be necessary in the future. Meanwhile Patty has regained her weight and is doing well, with a few things we are monitoring. The pseudoshell continues to blister. Cytology collected and concentrated from these area shows mostly degenerate cells, RBC's mostly and what I technically called 'shmoutz'. Bacteria were very rare if any were present and I do not feel a culture is necessary at this time but we must continue to watch this area as Patty is very vulnerable without a full shell to protect her.

Happy One Year Anniversary of Rehabilitation Patty, we brought you some live clams, while I know you would rather dig your own seafood, I think you are a little safer at the NMLC.

We held a little turtle party for Patty and she celebrated in true turtle style, by blowing an air bubble out her nose and taking a nap, perhaps she'll have the clams later . . . shhhhhhh . . .



Terrapins, Cooters, and Turtles, oh my . . . : pre-release exams all around, it must be spring

The red-bellied cooters had their exit physical exams (all passed), photo ID sheets were prepared for future identification. The mild shell erosions have cleaned up nicely and they were turned-in to the state this Thursday and released back to the wild over the Memorial Day weekend.

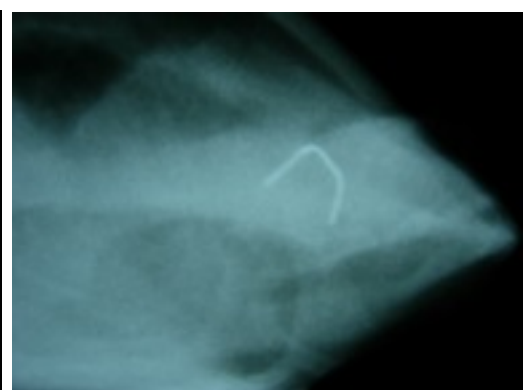
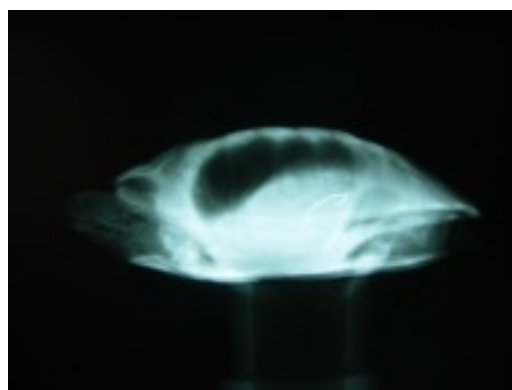
Our Cooter #5 (aka 424 or NMLC 09-037TPR) was used by the state as an example of a excellent head-start specimen.



Catch-22

Out of the over 100 cooters released a dozen or so were identified to have shell lesions, a problem which has been seen before. Wild release and exposure to sunlight and a high quality wild pond environment is likely to resolve these problems, two were held-back for additional evaluation, the NMLC has one (Catch -22, notch 122) and another when to Buttonwood Zoo. The history included small size, white patches on the carapace and plastron, open-mouth breathing, and left hind limb weakness.

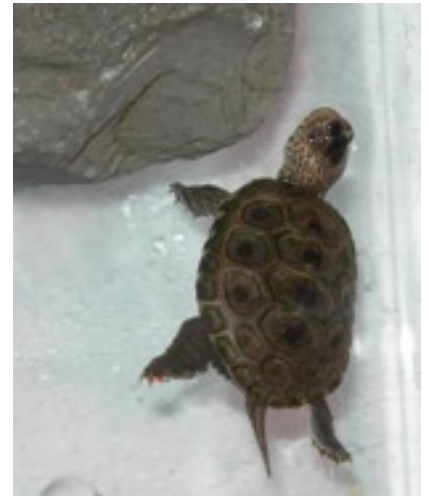
Once at the NMLC we have evaluated the cooter with a complete physical exam, bacterial and fungal (including dermatophyte) testing of shell scrapings, blood work (iStat and CBC), cytology, and radiographs. The exam found that the white discoloration is superficial to the keratin layer (like a dermatophyte) and there is healthy shell underneath. Wet preps of the scrapings show no protozoa or monogenes, and cultures are pending. Radiographs did have a surprise finding of a left sided, foreign body with a metallic density and the shape of an ordinary staple, that's right the little cooter ate a staple. While the sharp point has the potential to perforate the intestine and cause a fatal peritonitis, it is sometimes amazing what can pass through the intestinal track of animals. Surgical intervention is risky and not considered necessary at this time, but this too may change as this is a potentially life threatening condition. We will attempt to bulk up the diet with fibrous plant material and push the staple through. This may take weeks or more and we will radiograph Catch-22 once a week and if she shows clinical signs that could be related to complications from the object.





The diamondback head starts, not to be out done, also passed their pre-release exams. Little number 8 weighted 8.8g and almost doubled in weight, was is still dwarfed by the bruisers like '5' and '7'. Except for the habit of #8 to sleep on the PCV shelter like Snoopy on his doghouse they all show appropriate predator avoidance and know a good clam when they smell one. Photo identification images have been taken, these little ones are on the small side and may or may not

be scute notch prior to release.



Under the Microscope:

Bah Hum Back and Beaked Whale Blues

Dr. David Rotstein, a veterinary pathology with NOAA, has recently asked me to look at some parasites from some high profile cetacean strandings.

First was Humpback whale stranding from New York. The parasites were from the kidney, and while only fragments were submitted, there was the posterior of an adult female worm that allowed identification as *Crassicauda boopis*. This is a well established parasitic relationship and the infection is capable of causing significant damage to the kidney, however most mammals hav quite a bit of reserve renal function and at this time I can not correlate the standing with the parasite.

Beaked whales are the 'third' cetacean group. We have the well known and studied toothed whales (Odotocete) which includes giants like the sperm whale to the relatively diminutive harbor porpoise. The baleen whales (Mysticetes) who filter out some of the smallest but most abundant of all sea critters, krill, which they use to grown into the largest animal that even lived on earth, the blue whale. That leaves the remaining group, the beaked whales, rare and exotic beaked whales tend to gather excitement and experts very time they strand, and a case from Maryland was no exception.



Weighing in at a platry 827kg a Gervais' beaked whale (*Mesoplodon europaeus*) was examined and found to have *Anisakis* nematodes in the stomach, and infection with the two common cestode merocercoids *Phyllobothrium delphini* [sic] and *Monorygma grimaldii* [sic]



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