

Rounds

Animal Health
Department
Medical Rounds

"medicine for all"



NATIONAL
MARINE
L I F E
CENTER
Caring for Stranded Marine Animals

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.

August 12, 2009

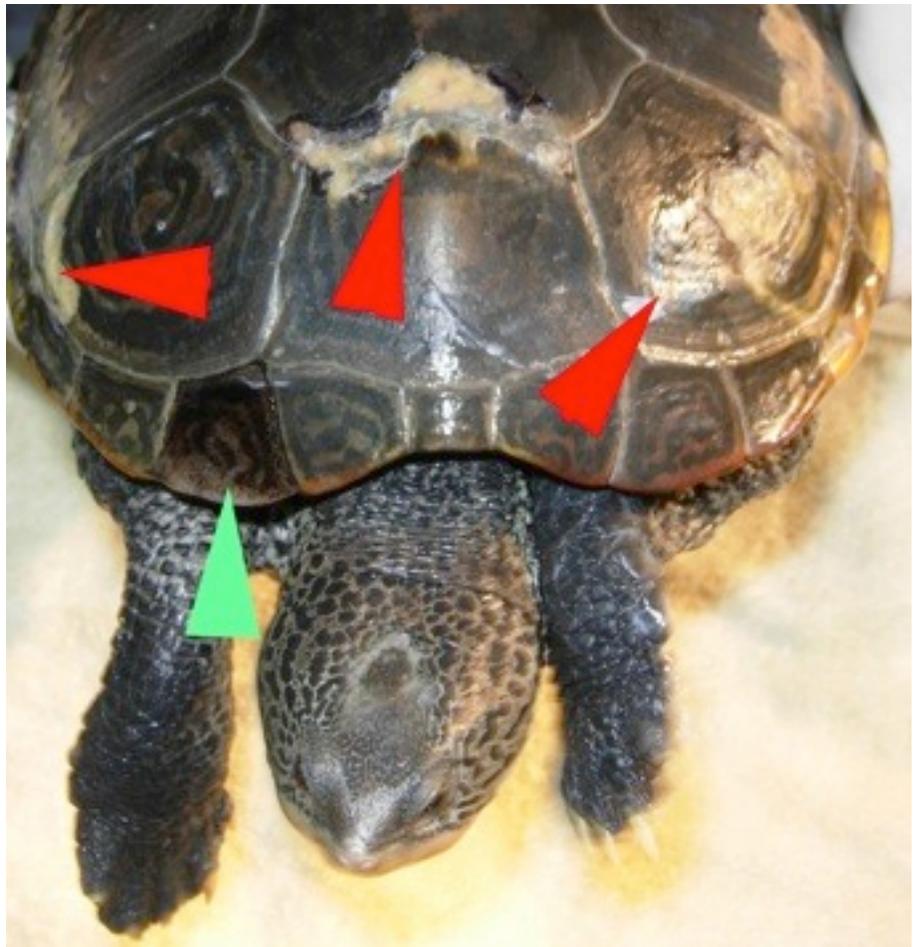
Rounds Notes

17: 42-44 (2009)

Headlines News:

Scutedattle outa here
so what's the scutel-butt (ok
I'll stop)

Patty continues to lose scutes, some are abnormal and connective tissue is uncovered with some bleeding (red arrows) and some are normal shedding with healthy epidermis and mature keratin coverings underneath (green arrow). The plastron is less effected but in the areas were the keratin has bubbled and cracked, some dermal bone is exposed. A second debridement was preformed last week similar to the first procedure and these are minor procedures, should not cause too much discomfort and appear to be well tolerated with the combination of buprenx® and local anesthetic.



Water quality must be maintained with any aquatic turtle, but the exposed bone and shell lesions up the stakes and contact me if there is any trace of ammonia.

We are continuing to cover the areas with SSD (mandatory before basking).

Patty's weight may have dipped bit so we'll go back to daily feeding, and supplement each meal with 2 drops of cod liver oil.

Sea Turtles: Green sea turtle dies on Martha's Vineyard



A juvenile, but herbivorous, green sea turtle was found stranded dead on the Vineyard. The report to the New England Aquarium came from the Felix Neck Mass Audubon staff, and I transported the turtle to the WHOI marine animal necropsy facility for evaluation by NMLC staff. The major findings were a cloacal prolapse, clear free abdominal fluid, and perforation of the small intestine with what appears to be plant material. The gall bladder was distended, which is common if an animal is anorexic but this turtle had a stomach full of plants (and some plastic garbage bag pieces although this did not cause obstruction).

The gall bladder could also not be expressed until the gall bladder was opened at the neck, indicating an extra hepatic gall bladder obstruction. While not grossly visible, parasitic migration is one (of many) causes for gall bladder obstruction. No stones or parasites were found in the gall bladder (bummer). Tissues were collected for provisional histopathology review by Dr. Stacy at the University of Florida, through the New England Aquarium, and we'll keep you posted. While the tissues were distinct at the necropsy some autolysis had already occurred and many hinder our efforts to understand the death of this turtle.



This also confirms that the small sea turtles are back up in our neck of the woods for the seasonal influx of sea turtles, however, it's the eflux that worries me.

Terrapins, Cooters, and Turtles, oh my . . . #198 separated MBD

Cooter #198 was separated from the bale, and given his own little home so we can keep a better eye on his weight. It was noticed that 198 was not eating as well as the other cooters and had lost a little weight. Inspection of the records found some fluctuations in his weight and he was always the poor doer (of the poor doers). My tolerance for the weight loss is 10% of his max weight, and every day he is below this weight we will tube feed 198. We started with a mixture of Reptile ringers solution with soaked reptomin® sticks, and we may need to add some protein.

Today his caudal plastron feels soft for the first time and the dreaded process of metabolic bone disease is already advanced. Really we should be calling this nutritional secondary hyperparathyroidism and the prognosis is not good.

A blood / hemolymph sample found a boarder-line glucose level and the reptile ringers (1 part



LRS, 2 parts 0.45% dextrose in 0.45% saline) has some sugar and should help acute hypoglycemia, provide some electrolytes, and assist with keeping hydration levels adequate. I also suspect metabolic alkaosis and bone depletion to keep the serum calcium levels up. No organ system is unaffected by this serious metabolic condition and reversal can be very difficult.

What we need to remember is that of the 50% of collected eggs it sounds like over 90% of these animals are grown to size over 85mm SCL and released.

Survivability without the head-start program is close to 0%, so the outliers of the head-starts (particularly those that are held back, like this whole group) are already at great risk of problems.

What this also tells me is that we need to get the five cooters that have reached the 85mm SCL goal back to the wild STAT. Since their shells have all healed up nicely there is nothing holding them back. Let's get them the sunlight they need and the varied diet they have evolved to eat. Their best chance is quick trip to the pond.



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