Turtle Patrol Heaven

This essay relates the experiences of the USFWS volunteer turtle patrollers on Matagorda Island during the week of June 4-8, 2007. That week was a banner one for locating the nests of Kemp's Ridley sea turtles on the Texas coast. Between thirty and forty nests were found, four of them on Matagorda Island and three on the peninsula. As of the end of that week, at least 118 nests have been found, up from a low of nine nests in 1997, and already ahead of the record of 102 in all of 2006.

"Andy, drop that turtle and come get this other one before she gets to the water!"

Donna McKinney shouted hysterically as she held the radio mic preparing to call Chad Stinson, the head biologist at Aransas/Matagorda Island National Wildlife Refuge. We needed to ask him what to do with the juvenile Green turtle we had just found stranded in the seaweed. I looked up, expecting to see another stranded Green, and had to blink a couple of times to believe my eyes. There,



crawling determinedly toward the surf, was an adult Kemp's, apparently just off her nest. I quickly placed the little Green in a corral of seaweed and ran to intercept the Kemp's while Donna composed herself to complete the call to Aransas base, now with more news for Chad.

Donna and I, volunteers for this duty, had just resumed patrolling after checking



the corralled nest at the 15 mile marker when we saw the tracks of the juvenile Green at about mile 15.2. We were near the water, on the smooth, damp sand of the forebeach when we spotted the Green's tracks, which looked like they were made by a child's toy bulldozer and not at all like an adult Kemp's. The flipper marks were very closely spaced and the width of the tracks about like the width of a wide truck

tire. Later we found more juveniles smaller than this one and their tracks were, of course, narrower still, more like an automobile tire track

But back to the Kemp's that we were struggling to restrain...

After completing her call, Donna began marking the tracks and nest site as I continued to discourage mama from her trip back to sea. About the time Donna finished her task, Kris Kirkwood and Sandra Gay, the other volunteer team on the beach that day, arrived to help. We had met them at mile 14, less than an hour earlier, and stopped together for lunch and to compare notes. We had come up from the south, they were headed back from the north and, as luck would have it, had driven by this site probably no more than fifteen minutes before our female had crawled up from the surf. If we had all slept a little later that morning, Sandra and Kris would be telling this story!

With everyone helping we took all the necessary photographs and examined our



turtle for tags but found none. We tagged her front flipper with a metal tag, injected a PIT tag (passive internal transponder,) took a tissue sample for an ongoing genetic study, measured turtle and tracks, and then broke out the fencing to build her a corral and wait for Chad. The corral works well, although the turtle must still be monitored closely to assure she doesn't get a flipper or beak caught or injured on the wire. I found an old, triangular channel marker of half inch plywood that we placed over the top of the corral and the

turtle was not only cooler, she seemed to calm somewhat and not work as hard to get out. We also kept a wet towel on her back and frequently poured seawater over her. She still didn't like it much, but she was okay. We were okay, too, relieved of the backbreaking task of trying to hold an animated tractor determined to get back to the sea.

Chad finally arrived and gave the word to release the turtle. I'm almost positive she looked briefly back and muttered "Jackasses!!" from the surf when she finally

reached it. Has anyone else observed that behavior?

With his usual consummate skill, Chad probed to find the nest cavity and soon had the location marked. This Kemp's, like most, had dug a bell-jar-shaped nest with a narrow neck extending a few inches down to a wider egg cavity. She had filled it with sand and rocked a few times on the top to pack it. The nest area,



about three feet across, had to be probed to find the exact location of the eggs. This careful process, not an attempt to reach the eggs themselves, results in finding the loosely packed sand within the egg cavity.

We got the egg box, an HEB Styrofoam cooler, situated and Chad began clearing out the sand to extract the eggs. The eggs were to be carefully packed in the cooler after lining it with sand from the nest. In this they are transported to Padre Island National Seashore and incubated there in a facility under safe, controlled conditions, ensuring a high-percentage hatch rate. The baby turtles are then released on the beach at Padre where they scramble to the sea. Because of predation by coyotes, feral hogs, and sand-



dwelling ghost crabs, the hatch rate for nests left in situ on Matagorda Island is low. If we did that, rebuilding a healthy population of these highly endangered animals would be much slower, if it happened at all. Occasionally, however, if a nest is over one day old, it's best to leave the eggs in place. That's what happened at mile 15 and that nest is enclosed in a wire corral to keep out coyotes and hogs.

The extraction began. Donna marked down the count with each

"egg" announcement from Chad while I held the cover to shade the slowly filling cooler, tasks for which we both now are certified. Sandra Gay and I had found two nests earlier in the week, each with 112 eggs, and it wouldn't have surprised me if this one contained the same number—some kind of weird anomaly in the law of averages for Matagorda Island—but to my relief, there turned out to be 104. One of the eggs was abnormal, about the size of a marble instead of a ping-pong ball. I told Chad that one would probably hatch to be a red-eared slider, and he thanked me for sharing my biological acumen.

Now, you might think when we loaded Chad and Jeff, the refuge fire team guy who came to assist, along with the egg box and the juvenile green in the Kubota, the two-

seat ATV on which we patrol the beach, and I began driving this menagerie the six miles back to the access at mile 21 where they left their truck on Middle Road, the route back to the island headquarters and boat dock, that this pretty much ends the story. But you would be wrong if you think that.

Not five minutes after heading up the beach, I saw more juvenile turtle tracks. I pointed them out to



Chad, stopped the ATV, and we began searching along the tracks. In a minute I held a Green turtle and a minute later Chad had another. I forgot to mention that we had found a

dead juvenile Green somewhere in there. In fact I'm not sure I'm remembering correctly <u>all</u> the turtles we found. I think we ended up with three live Greens in milk crates when we made it back to the truck. You know how it is when you find so many turtles that you lose count, right?

Just as an aside, a long, two to three foot-high "levee" of sargassum seaweed ran along the waterline of the beach and the juvenile turtles, though still strong, seemed unable to climb over that to reach the surf. We saw several large sharks in the first gut off the beach and wondered if they were catching turtles. Chad says that even though the turtles appear strong and healthy, that they should be removed because they simply strand repeatedly when placed back in the surf. Either that or they become a shark's dinner, I figured.

Okay, this time if you think that's the end of the story, you're almost right. We didn't find any more turtles that day. However, Adolpho Cantu, the USFWS employee who ferries us back and forth to the island and stays with us to keep us out of trouble, had asked if we wanted to stay an extra day on the island, and since no authority figure had specifically said we couldn't do that, and since Donna had brought that delicious casserole that was only half gone, and since Sandra had enough bagged fruit and fancy cookies to feed Coxey's army, and since Kris wasn't quite out of fresh tomatoes, that's what we did. (I, myself, had a crust of bread and half a boiled egg, but had been practicing my pitiful, hang-dog look, and was confident I wouldn't go hungry.)

At about 8:30 the next morning, after the long run up Middle Road to get quickly (relatively speaking—it still takes an hour) to the north end of the island, Donna and I found another nest, number four for the week! This one was at mile 22.7 and was very low on the beach, obviously from the previous afternoon, and just above the old sargassum. In fact because it was so close to the sargassum and because the tide had been high during the night, there were almost no tracks. I spotted the disturbed sand of the nest only because we were driving very near and just inland of the thick wrack of seaweed. Most of the old Kubota tracks were considerably farther inland than that, and anyone driving there would have missed this nest. In fact anyone driving where we were who didn't have a turtle angel on his shoulder and who wasn't wearing his lucky shirt or who happened to blink at the wrong moment would have missed this nest. But the real reason we found it was due to the turtle patrol boot camp I endured under the eye of Ray Kirkwood, my experienced mentor.

"Get closer to the sargassum, down toward the water," Ray would growl at me as I patrolled with him two weeks before and we were forced high on the beach by tides and flotsam. I could see his logic—the closer you are to the water, the more likely you are to cross the tracks of a nesting turtle, some of whom nest fairly low on the beach. But, I was frustrated, and certainly would have turned the wheel of the Kubota over to this turtle-patrol-gunnery sergeant except for the fact that he had one arm in a sling and there was no way he could drive and hold on at the same time. So I drove the whole week, thinking often of the movie "Driving Miss Daisy" and bemoaning my fate. But like a Marine recruit, by the end of the training, I was ready. And like him, I grew to respect and appreciate my drill instructor. Thank you, Ray. I hope we patrol together again soon.

After marking the nest with sticks and day-glow tape, Donna and I continued patrolling while awaiting Chad. Back at mile 16 we came upon more juvenile tracks. This time I followed them to a ten inch long Hawksbill in the sargassum. Hawksbill turtles, the



most beautifully colored sea turtles, are rare on the Texas coast. This juvenile seemed in good shape and I could see why, in earlier times, people made jewelry from Hawksbill shells. Donna soon found another juvenile Green turtle. And then, as we watched Sandra and Kris approach from the south, we saw them stop on the beach and knew they had come across another.

So after Chad arrived and excavated our nest, in addition to

the 107 eggs he took back, there was a Hawksbill and two Greens heading for the rehab facility. We are very hopeful that all the juvenile turtles survive and are successfully returned to their home in the sea.

All right, this really is the end of the story. We drove the twenty miles back the headquarters, cleaned and fueled our Kubota, thanked Sandra and Kris who had arrived earlier for cleaning the small house in which we stay on the island, loaded all our gear on the boat, and Adolpho safely steered us back to the mainland.

Now you might assume I named this story because of all the luck we had finding nests, encountering the Kemp's, and saving stranded juveniles. Well, maybe. But don't forget I was the only male patroller that week with three gracious ladies who shared their food and never complained about my driving—well, not as far as I know, anyway.

That had a lot to do with it, too!

Andy Smith June 9, 2007 Rockport, Texas