

Atlantic Ridley Turtle Update

By Milford Fletcher

On August 16, 1982, Biologist Robert King of Padre Island NS completed the NPS phase of reintroduction of the Atlantic Ridley Sea turtle. A total of 2,017 eggs was received from Mexico on June 23. Of this number 1,563 turtles hatched (77.6%) which we felt was quite good considering the eggs sat in boxes for 5 days at the Mexican border owing to, shall we say, administrative mixup between the two countries.

Of this number, 1,524 were imprinted and transported to the National Marine Fisheries Laboratory at Galveston for the head-start program. Heavy surf caused the loss of 34 animals during the imprinting process. A great number of beach profiles and nest box temperatures were taken and these data will be of great value. Although the beach sand temperature has considerable effect on the sex of the turtles, it does not appear that metabolic temperature will be a significant factor.

Another interesting development is the work done by the National Marine Fisheries with grafting. It is extremely difficult to mark a turtle in such a way that the mark (or tag) is distinguishable after several years of immersion in sea water. In short, grafts are taken from the bottom of the animal (the plastron) and transferred to the animal's back. Since records can be maintained on which scute (scale) the graft was taken from and with the bottom scales being cream colored and the back ones black, it is quite conceivable that we now have a method of permanently marking the animal without flipper-tagging or other external devices. If this method works, we will have a method to uniquely identify any turtle which is found either dead or nesting and was part of the reintroduction project. This would provide us with a wealth of data on their movements, time to reach adulthood, nesting frequency, and many other facets of their life cycle and habits.

We are still ignorant of the factors which "imprint" turtles to return to the nesting beaches and may not have any meaningful answers for several years. Meanwhile, some wags have suggested that the adult turtles will return to the Laboratory at Galveston at maturity and attempt to mate with the green plastic buckets in which they spent their first year. Maybe.

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