

# FOREWORD

*Chelonian Conservation and Biology*, 2005, 4(4):759-760  
© 2005 by Chelonian Research Foundation

## Introduction to the Kemp's Ridley Focus Issue

PETER C.H. PRITCHARD<sup>1</sup> AND DAVID W. OWENS<sup>2</sup>

<sup>1</sup>*Chelonian Research Institute, 402 South Central Ave., Oviedo, Florida 32765 USA*

[E-mail: *ChelonianRI@aol.com*];

<sup>2</sup>*Grice Marine Laboratory, College of Charleston, 205 Fort Johnson Rd., Charleston, South Carolina 29412 USA [E-mail: owensd@cofc.edu]*

Many of the ridley papers in this issue are updated versions of reports presented at a mini-symposium on Kemp's ridleys at the 19th Annual Symposium on Sea Turtle Conservation and Biology, held in 1999 on South Padre Island, Texas, within the nesting range of the species and not far from Rancho Nuevo, Tamaulipas, the celebrated focal point of the species' mass nesting emergences. This mini-symposium was organized by René Márquez, Richard Byles, and David Owens. Several additional papers represent completely new contributions and bear witness to the expanding body of knowledge about this recovering, but still critically endangered, species.

Until recent decades, ridleys were virtually ignored by scientists, by travel writers and explorers, and even by public aquaria where green turtles, loggerheads, and hawksbills were routinely displayed, but ridleys rarely if ever. There was no deliberate exclusion policy at work; it just happened that way. The olive ridley (*Lepidochelys olivacea*), then and now, was probably the most numerous sea turtle species in the world, but both ridleys are rather small and plain-colored, and look rather like loggerheads at least when very small. And they do not nest on the idyllic, white-sand/turquoise water island beaches where green turtles and hawksbills come ashore.

But the writings of Archie Carr put ridleys in a new perspective. His brilliant 1956 book *The Windward Road*—still compulsory reading for sea turtle initiates—explored the enigmatic “riddle of the ridley.” The ridley was quite common in Florida, but was never seen nesting nor even was it ever found with developing eggs. The book created an atmosphere of suspense, a “read-the-next-episode” excitement that left the reader demanding answers, waiting for information on what on earth was going on.

Archie took his time, but the answers were brought to the public in his 1967 book *So Excellent a Fishe*. By then, the essentials of the mystery were solved. Kemp's ridleys nested in Tamaulipas, on the Gulf coast of Mexico, mostly near the little village of Rancho Nuevo. But they didn't just nest there, they nested by broad daylight, and they didn't just come up a few at a time, they came in hard-to-predict *arribadas*, thousands at a time. Somehow the various *arribadas* of the olive ridley world, scattered through remote parts of the east Pacific, south Atlantic, and north-

ern Indian Oceans, had escaped discovery, and the diurnal (and thus very spectacular) *arribada* of Kemp's ridley was thus all the more amazing when it came to world attention in 1963. It was the first ever seen.

But the information spigot dripped slowly in those days. The 1963 *arribada* announcement reflected a discovery—and a film—actually made 16 years earlier, in 1947, and it soon became clear that the phenomenon itself had passed into history. Ridleys still came ashore at Rancho Nuevo, but they dribbled in a few at a time, and while the crews of the beach patrols started by the Mexicans in 1965 still referred to “*arribada* days,” you could only make this determination towards the end of the day, by adding up everyone's tally of nests saved from coyotes and *hueveros* (egg poachers), and you found that several dozen or even a few hundred turtles had nested. But this was from dawn to dusk, and over many miles of beach, and you would have been lucky to see even two or three turtles at a time. There was nothing “spectacular” about these depleted *arribadas*.

The fate of the ridleys had parallels to the collapse of America's most famous extinct species, the Passenger Pigeon. Once the most abundant bird in the nation, Passenger Pigeons also had the habit of forming mass nesting aggregations, although they weren't called *arribadas* at the time. The birds didn't just nest in enormous flocks that covered hundreds of square miles—they all laid their single egg *on the same day*—an activity that meets the definition of *arribada*.

And, because of their bizarrely concentrated nesting habits, both species proved to be extraordinarily vulnerable. The Passenger Pigeon disappeared altogether, the last one dying in captivity in 1914. Kemp's ridley, too, was stressed to the point of collapse by years of industrial-scale egg collection that spared few nests. The recruitment failure, combined with heavy trawler catch of adults in the western Gulf and of juveniles in the eastern Gulf and in US Atlantic waters, brought the species down to just a few hundred females by the mid-1980s. Today it remains the most critically endangered sea turtle species in the world.

During those years when the ridley seemed in danger of complete disappearance, I (PCHP) spent many months on the nesting beach at Rancho Nuevo. I was there during the seasons of 1968, 1970, 1973, driving my Land Rover up

and down the beach transporting the armed Mexican marines on turtle duty to where they needed to be. In later years (1978, 1979, and 1980) we brought a small aircraft to the beach, for tracking turtles at sea, checking the beach for nests, and moving eggs to Texas for head-starting. We had many adventures, some of which are described in Pamela Phillips' excellent book *The Great Ridley Rescue*.

The joint Mexico–USA bi-national effort (a governmental/non-governmental partnership) to improve the status of the Kemp's ridley is really unprecedented. The effort to save the ridley has had several fronts but two appear to have had the greatest impact. Beginning in the mid-1960s the Mexican government, with later assistance from private and public groups, began an intense program to protect the nesting females at Rancho Nuevo. Despite intensifying beach protection efforts every spring for the next 20 years the numbers of nesters continued to decline. It was not until the 1980s, when trawling mortality was recognized as the single most devastating continuing problem for ridleys, that a strategy was developed to allow increased recruitment into the population. This strategy was the implementation of Turtle Excluder Devices (TEDs) on shrimp trawlers. Also instituted in 1978 was an intensive head-starting program, transporting two thousand eggs

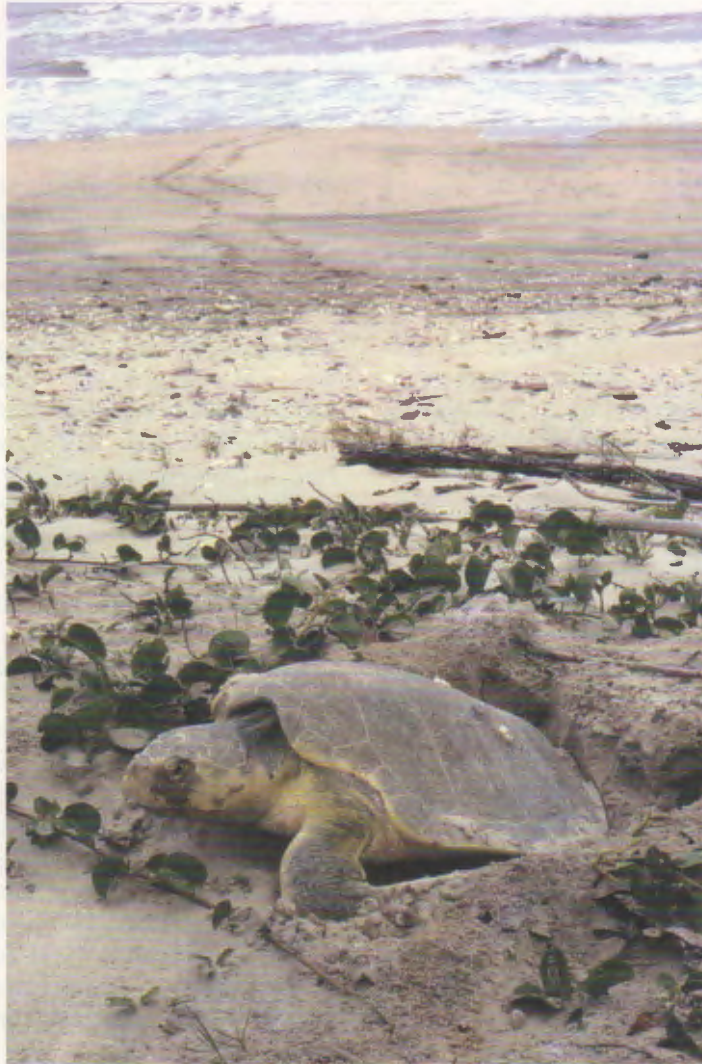
each season to Texas for hatching and rearing for a year in captivity prior to release in US waters. How successful this third component of the conservation strategy has been remains unclear; but PCHP believes it may have been the critical step. Regardless of which of the three strategies was

most responsible for success, the result is what mattered: ridley populations slowly began to recover.

As a result of these and other conservation endeavors, including the bi-national effort, the status of the Kemp's ridley has improved significantly. Down-listing from endangered status may be possible in the years to come. Even though the head-starting component was always carefully identified as an "experiment," the overall program was not a classically-designed, hypothesis-testing experiment in the strict meaning of the term, because the bi-national team took many conservation initiatives at the same time, while "science" usually insists that the variables be changed one at a time. The bi-national team undertook beach patrols, hatcheries, head-starting, TED requirements and legislation, protected areas, and so on, all more or less at the same time. And today we can happily report that the species, according to the index of numbers of nesting females and of clutches laid each season in Tamaulipas (as well as Veracruz and Texas), has been progressively gaining ground for a couple of decades, and there is a hint that real *arribadas* (as opposed to "good nesting days") are coming back.

So the science may have not have been perfect—we still do not know which was the key step that brought about the

progressive recovery of the species—but the conservation was excellent. Species can be saved, if people and agencies coordinate their activities and, above all, move swiftly beyond the planning stage into well-directed corrective action.



Diurnal nesting by a solitary Kemp's ridley on a windy day on the Gulf shores of Tamaulipas, Mexico. The species' recovery from the brink of extinction has been accomplished by laudable bi-national efforts by Mexican and USA governmental and non-governmental organizations and individuals working together over the last four decades. Photo by PCHP.