

# Marine Turtle Newsletter

## Comment on Tim Cahill's Article "The Shame of Escobilla"

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Several points struck me as I read this article. It is uncommonly well-written; Tim Cahill uses the English language with skill and panache. It is factually accurate; the author describes what he saw with his own eyes, or when reporting what people said, he identifies his sources. And it is a frankly emotional document, in which the author's disgust with what he saw is presented in full and sometimes lurid detail. It is a document that all sea turtle conservationists should read carefully, and make up their own minds about, because the sea turtle harvest in Pacific Mexico is far larger-in fact, orders of magnitude larger-than the harvest of any other country in the world.

I visited Puerto Angel and the turtle processing plant and captive culture tanks in November 1977, and spoke at length with Jose Tanus Sucar, the local boss for the PIOSA turtle operation. Sucar answered all my questions, and allowed me to go out one morning with a capture boat, and to see the slaughter and processing operation as well as the laboratory and turtle tanks. We started off with radically different philosophies regarding wildlife, of course; several certificates on the wall of Tanus' office at the local hotel showed that he was an avid sport hunter, so that killing was his pleasure as well as his business. My philosophy is opposite; one should kill only with reluctance, and only when necessary. I found the sight of beautiful female ridleys, fresh from the sea, being bashed in with iron bars and deftly eviscerated, one after the other, five hundred or more per day, a disgusting and demoralizing sight, and I found the idea of creatures being butchered in this way when they were gathering to lay their eggs totally unacceptable, both emotionally and biologically. Every single turtle harvested while I was at Puerto Angel was a female full of shelled eggs, gathered for a major arribada; but, as Cahill's article pointed out, the arribada was late and I do not know yet if it ever took place; with the turtles in the area being reduced by four or five thousand per week, most of the colony may have been conveyed to the slaughterhouse.

Why does Mexico allow this operation to take place? It must be understood that the Mexican turtle program is basically a commercially-oriented one; while Mexico has commendably placed the highly endangered Kemp's ridley on the totally protected list for ten years or more, elsewhere the policy is to harvest the adult turtles in the largest numbers that the populations can support, both to provide meat for Mexican consumption and to provide leather for the export trade (principally to Japan, France, and Spain). I find myself in basic disagreement with this policy, which is also in opposition to the stated IUCN recommendations on sea turtle harvesting; sea turtles should not be used for international commerce, but should be considered as a resource of local value only; moreover, the adult turtles should not be harvested, since much experience has shown that this is the surest way to decimate or destroy a population. Rather, a proportion of the eggs should be set aside for human consumption, and the remainder offered protection and allowed to hatch. The most logical human exploitation of the ridleys in Pacific Mexico then would be to allow harvesting of the eggs from the first arribada, or up to a certain date, each season (these being the eggs that would be liable to destruction by later turtles nesting in the same place), and to protect the adults completely.

The Oaxaca operation is based on the assumption that, by placing eggs in a hatchery, the harvest of adult turtles will be justified and counter-balanced. Not only is there no evidence to suggest that this is the case, but the experience with Kemp's ridley on the Gulf coast would suggest that the recuperative power of a ridley population is so poor that recovery is insignificant even if the nesting beach is completely protected, unless even the accidental catch of adults by trawlers can somehow be eliminated. The huge populations of olive ridleys in

the East Pacific doubtless grew to such high levels over an enormous period of time, so the present harvest is akin to mining a non-renewable resource; I am convinced that the population will collapse within a few more seasons, and that that collapse will be, to all intents and purposes, irreversible.

I questioned Dr. Jorge Carranza, Director of the Mexican Departamento de Pesca, closely when we met recently during a meeting in Miami. He provided some insight into why such huge quotas of ridleys were permitted in Oaxaca, and why the demand to allow harvesting during the breeding season for the first time had been approved. Coastal Oaxaca is a long way from Mexico City, and there is no real possibility of fielding a large crew of federal enforcement men in this remote area. Consequently, if PIOSA had not been allowed to have a quota as high as, or nearly as high as, it requested, such a harvest would simply have taken place anyway, with no real possibility of control. By granting one company a monopoly of purchase all turtles caught by the local cooperatives, it was hoped that the legitimate cooperatives and the PIOSA field men would act as unofficial enforcement agents, ensuring that no one else would dare get in on the act. This interpretation may reflect pragmatic reality, but also makes it clear that the quotas are set by commercial pressure rather than by any biological insight into what the populations can stand.

José Tanus Sucar, as I mentioned earlier, allowed me to see all aspects of the turtle operation, but was obviously particularly keen that I should see the lab and turtle raising facility, in which PIOSA had invested several million pesos. At the time of my visit (November 19, 1977), the tanks were still dry, and although fair numbers of turtles were hatching in the styrofoam boxes in the hatchery area (the hatching rate of the eggs from slaughtered females, I was told, was about 37%), no turtles were being maintained at the facility. Sucar explained to me that the tanks had been filled for the day of the inauguration of the facility, and emptied immediately afterwards, as Cahill observed; this was because the plumbing system had run into a problem. Even though the water was taken from a deep pit dug right in the beach, the water was less than half-strength sea water. Consequently it had been necessary to redesign the intake system and place the intake pipe actually in the sea, in a rocky area where it was hoped there would not be too much sand taken in to damage the pump. The inauguration, however, had been set for October 10 well in advance, and consequently it had been necessary to have some turtles in the tanks just for show. It is, incidentally, of interest that the largest tank, for mature turtles, had an artificial beach, and that, of forty female ridleys confined here for a few days for the inauguration, four had nested on the beach and that many of the eggs had hatched. However, I do not know if the facility is yet in proper operation.

It is worth asking whether the captive turtle facility is likely to do any good. Certainly, it is better to incubate eggs from slaughtered turtles than to throw them away or eat them, but the hatchery was only a small part of the facility. I personally do not recommend keeping turtles for some weeks after hatching before releasing them. It may disadvantage them directly, by causing them to be released in a less than vigorous condition, or with the infantile swimming frenzy passed so that they are liable to be swept back up on the beach; or it may short-circuit their imprinting mechanism (if this is indeed the mechanism by which they later locate a nesting beach), so that they will not become functional members of the breeding population. Therefore, while I will not pre-judge any purely scientific discoveries that may emanate from the rearing facility, I do not believe that it has any detectable conservation value, and may actually be doing harm, partly by disadvantaging the hatchlings released, partly by persuading the authorities that the turtle raising operation justifies a higher harvesting quota for the adults.

Incidentally, the opening of the turtle raising facility was reported-with approval and praise-in the October-November 1977 issue of *Técnica Pesquera*, the major Mexican fishing technology journal. Clearly, the opening of the facility was considered a major event, with both the State Governor and the head of the Departamento de Pesca in attendance and making speeches. Ironically, the facility was named after an enforcement man, Daniel Leon Guevera, who was murdered in the course of his duty while cracking down on a major turtle egg smuggling operation-I say ironically because the turtle egg smugglers were in fact obtaining material benefits from the turtle resource in what most biologists would consider to be the recommended way, while the facility that now bears his name is linked to the operation that may ultimately cause the extermination of the Oaxaca ridley population.

If the turtle population does soon show a precipitous decline, as I feel it will, PIOSA, the cooperatives, and the Departamento de Pesca will undoubtedly be placed in quite a quandary, since they will realize for the first time that the population cannot stand the pressure to which it is being subjected. With such a massive investment of

money in boats, freezing plants, buildings, and equipment, as well as a growing dependence of the people of Puerto Angel and neighboring villages on the turtle harvest for their employment, it will be difficult to reduce the scale of operations without major economic dislocation; yet to continue with full-scale slaughter as the populations visibly decline will surely strike even the most greedy and unthinking exploiters as a sure prescription for the end of both the turtles and the industry.