UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERV
SEFC, Panama City Laboratory
3500 Delwood Beach Road
Panama City, FL 32407-7499

July 13, 1983 F/SEC5:LHO:rb

TO: F/1A - Carmen J. Blondin

THRU: F/SEC - Richard J. Berry
F/SEC5 - Eugene L. Nakamura

FROM: F/SEC5 - Larry H. Ogren

SUBJ: Trip Report--Travel to Colombia, S.A., June 7-18, 1983

Purpose

To provide assistance to Colombia in conducting an aerial survey of sea turtle nesting activity along the Caribbean coast. This is part of the overall objective to obtain a current assessment of the status of Colombia's sea turtle population(s) which will form a basis for the National Report for the Western Atlantic Turtle Symposium, July 18-22, 1983, San Jose, Costa Rica.

Planning the Survey

Arrangements had been made earlier this year with the National Representative to WATS in Bogota, Dr. Jorge Hernandez, to conduct an aerial survey in June, the best month to observe sea turtle nesting activity for most species in this area. Dr. Hernandez had obtained official approval for the Colombian Air Force (FAC) to fly the survey for us. A pre-survey meeting in Bogota was deemed unnecessary--we were to meet in Barranquilla and conduct the flights from the FAC base located there.

In the event the military could not provide an aircraft and other assistance was not available to me, I made preparations to complete the aerial survey independently. Jorge Picon, of the USFWS, was to accompany me and a charter aircraft would be used to make the survey.

Results

Attempts to obtain a military aircraft for the survey failed. The Colombian Air Force agreed to fly us at their earliest convenience, but could not give us a date. We went ahead with our own plans after deciding not to wait any longer on FAC. Negotiations to fly the coast with private pilots and air charters in Santa Marta and Barranquilla were unsuccessful. Government clearance was apparently necessary for certain areas, such as the Guajira Peninsula. We moved our now "independent" operation to Cartagena, and through the help of the INDERENA fisheries lab's staff, especially Dr. Fernando Duque, we were able to successfully complete our objectives. We surveyed the entire coastline from Panama to Venezuela by aircraft and an area of about 25-30 miles radius north and south of Cartagena by boat.

Information on extent and utilization of beaches by sea turtles was obtained as well as a current assessment of sea turtle distribution and abundance in the coastal waters and islands through interviews with fishermen. A preliminary or draft National Report was prepared on the status of sea turtles in Colombia. Nesting has decreased greatly and the only significant beach remaining is a small leatherback rookery near the Panamanian border. However, foraging populations of green turtles and some resident hawksbills are frequently encountered in coastal waters. They support a clandestine fisheries for the local sale and consumption of meat and export trade of tortoise shell. A narrative account of this trip is attached.

cc:
F/SECx4 - H. Kumpf
F/SECx4 - F. Berry

Narrative Report

Barranquilla, 8 June

- Reported to INDERENA's regional office in Barranquilla. Requested assistance from the regional director, Dr. Ricardo Zambrano, to establish contact with the National Representative to WATS (Dr. Jorge Hernandez) in Botoga. Apparently, changes within the division of wildlife had taken place with regards to organizational hierarchy. We learned that the new National Representative to WATS was the recently appointed chief of the wildlife and fisheries division, Sr. Carlos Cruz. In a telephone conversation with him we were informed that he was responsible for all WATS related activities. Dr. Fernando Duque, INDERENA, in Cartagena, had been instructed to collaborate with us on the survey. Mr. Ricardo Alvarez, INVEMAR, in Santa Marta was coordinating the military flight and would participate in the survey also. Both of these marine biologists had assisted us in previous visits to Colombia (1980, 1981) and were also involved in the 1983 survey planning earlier this year.

- The telephone lines to Santa Marta were out of order, however; communication with Alvarez on the status of the military flight was not possible. Telephoned Fernando Duque in Cartagena to advise him of the situation.

Santa Marta, 9-11 June

- Telephone service to Santa Marta still out--took bus to Santa Marta in A.M. to meet with Ricardo Alvarez and find out about flight plans and survey schedule.

- Went to the marine lab at Punta de Betin in Santa Marta. Here we learned that this section of the port was without power, water, or telephones. However, Alvarez had taken the initiative and talked with the air force commander responsible for our flight and made preliminary arrangements for us to fly with FAC. Our instructions from the military were to stand by. Other possible arrangements to fly the coast with private aircraft were also being explored. An aquaintance of Dr. Jorge Barreto, the lab director, a Captain Lopez, had agreed to fly the survey for us in return for the use of the laboratory's marine railway to repair his vessel. Accordingly, we returned to Barranquilla to collect our baggage and make Santa Marta our operating base.

- Friday and Saturday were spent on standby status awaiting word from the military. We also inquired about other aircraft or charter services that might be available in Santa Marta or Barranquilla. In the latter cases, the private pilots were concerned about getting official military clearance to fly over certain sections of the country, such as the Guajira Peninsula. The southern leg to Panama also proved to be a problem to small aircraft because of the lack of re-fueling stops (extra gas would have to be carried in the plane).

- While on standby status Friday we went to an aquarium in the neighboring town of Rodadero. The owner, Francisco Ospina, was very cordial and allowed

us to inspect his collection of ten sea turtles (six hawksbills, two green turtles, and two loggerheads). They had all been captured locally--most were juveniles/subadults. He allowed us to tag and release two of the hawksbills, which was most generous of him. He explained his interest in conservation of marine life and expressed a desire to headstart hatchling turtles.

- On Saturday we visited a small fishing village at Taganga, just north of Santa Marta. Talked with fisherman about turtles--not commonly caught in their fishing activities--and inspected their gear (seines, gill nets) and dugouts. Some of the small dugouts were rigged with gasoline lanterns for night "jig fishing" for jacks (Trachurus sp.). Three Colombian flag shrimpers were anchored in the bay. Numerous large cargo canoes, with inboard engines, were rafted together just off the beach.

- With no firm date set for flying with the military and Captain Lopez's postponement of his availability (and tenuous commitment to fly us), we decided to go to Cartagena in the interim and conduct interview surveys of coastal villages reported to fish for turtles and survey Islas del Rosario. Dr. Fernando Duque made arrangements to obtain a small lab vessel for this purpose. We provided the fuel. Ricardo Alvarez was to continue his liaison with the military, and/or the alternative Captain Lopez, or a private charter. Also, he was to obtain the necessary paperwork for clearance from the military for the Guarija overflight for a private charter.

Cartagena, 12-17 June

- Took bus to Cartagena on Sunday and met with Fernando Duque of INDERENA. Scheduled a survey of Islas del Rosario and neighboring areas for Monday and a trip to Punta Canoas and Isla Cascajo, north of Cartagena on Tuesday. We also asked Duque to inquire about an aircraft for surveying the entire coast in the event Alvarez continues to have problems getting an aircraft.

- On Monday we left the marine lab (INDERENA) at Boca Grande by boat and surveyed the coast south to Isla Baru and Isla del Rosario, a total trip distance of ca. 60 miles. We interviewed fishermen at Isla Baru and Isla Grande concerning sea turtle distribution and abundance. Last year about 15 turtles had nested on Isla Baru (Playa Blanca), but for most of the area little or no nesting occurred--too much human traffic. However, greens, loggerheads, and hawksbills are seen and captured in the surrounding waters. In April of this year a fisherman netted large green turtles and loggerheads, and a few hawksbills off Tierra Bomba on Sequete Bank in six fathoms of water. He sold them for about $200 (U.S.) each. Other inhabitants of the islands explained how they catch turtles near Isla Tesoro by sneaking up on them underwater and grabbing their flippers. The turtles (green) are feeding on the extensive pastures of turtle grass, Thalassia, that are widely distributed in this area. Also, we were told that the small coastal trading vessels from the San Blas Islands are always in the market for hawksbill shell to buy and then sell in Panama. Isla Tesoro, the only remaining uninhabited island in the archipelago may host a few nesting turtles they say, but temporary fishing encampments were present on this island.

- Many of the fishermen of this area fish with dynamite over the reef, or use dynamite to drive fish into their nets set along beaches. This is deplored by the government (and illegal), but the practice is still widespread. We heard blasting on our trip south of Santa Marta at Rodadero last week. Many of the fishermen are amputees; some multiple--but they continue

to use explosives. One third of the fishermen on Isla Baru are said to have suffered some loss of limb or appendage.

- The decline of sea turtles in this region is probably due to all these perturbations involving not only directed take, but dynamiting and the spread of coastal settlements and people, and the seasonal fishing encampments on uninhabited beaches.

- On Tuesday we headed north from the marine lab to Punta Canoas and Isla Cascajo, a 50 mile trip. We interviewed the fishermen at the fishing village of Punta de Canoas and observed the setting of their gill nets for tarpon, snook and sierra (Spanish mackerel) just off the beach. Counted 14 or more large meshed turtle nets set perpendicular to the shore in 1½ to 3 fathoms of water. These nets were set seaward of the fish gill nets and more towards the point. The village has about 200 such nets. Some of the nets (30 meters each) were tied together to form long 90 meter panels and they extended from the surface to the bottom, suspended by sticks/corks and sunk by stone weights.

- Two turtles weighing about 85-100 pounds each were captured that morning at Punta Canoas. One was a green turtle and the other a loggerhead; both were tied up and transported alive to Boquilla, a coastal town just north of Cartagena, to be sold.

- The nets are left to soak and are checked for turtles periodically. Damaged nets are replaced as necessary--logs, sharks and dolphins cause most of the problems. Leatherback sea turtles, although not commonly caught, are considered a nuisance and are routinely killed and discarded (as are dolphins). August is the best fishing month, but the nets are fished all during the "rainy season."

- A survey of Isla Cascago revealed remains of five turtles --could be from seasons past. Duque saw a destroyed nest here in 1980. Island now connected to mainland by a sand spit.

- During the course of our interviews with local people, including Edward Lasser, Fernando Duque Tobon, Jaime Baquero Sanchez--all biologists from Cartagena, we received additional information on the artisanal fishery for turtles in Colombia. We were given two tags from green sea turtles tagged in Torguguero, Costa Rica, and captured over a year ago 50 miles south of Cartagena near Islas de San Bernardo. Historically the San Bernardo archipelago was the site of an important turtle fishery in the early 1900s. Later, in the 1950s, intensive fishing for lobsters and conchs severely depleted this resource, also.

- It became apparent that the military aircraft would not become available within the next few days. Accordingly, we negotiated a charter flight for the entire coast with the Cartagena based Patrulla Aeronaval, a naval reserve unit. We were able to obtain the services of a competent pilot, with a naval escort and a long-range, high-wing aircraft. No military clearances would be necessary and the pilot and aircraft were ready to fly at our convenience and at any time.

- We contacted Ricardo Alvarez in Santa Marta--no word from FAC regarding a military flight. Therefore, the decision was made to conduct the survey by chartering the Cartagena based naval reserve unit to fly the survey for us. Fernando Duque and Edward Lasser (formerly with the Peace Corps on a INDERENA project) would accompany us.

- On Wednesday, after a briefing with the pilot, we flew the north leg of the survey from Cartagena to the Venezuelan border and return. Flying conditions were excellent and the entire coastline was covered to within a few miles of the border town of Castilletes. We confirmed Dr. Reinhard Kaufman's earlier prediction that the Alta Guajira Peninsula is unsuitable for nesting--or at least does not support any significant nesting. In fact we observed only one turtle track about 12 miles SW of Riohacha. The most important nesting beaches formerly were found between Santa Marta and Riohacha. More specifically, the high energy beaches utilized by four species of turtles 25-30 years ago were found between the mouth of the Rio Piedras to about 2 miles east of the Rio Don Diego (15 miles of beach), which included the Buritaca loggerhead reserve of the early 1970s. The other important beach adjacent to this area was an 18 mile stretch between the Rio Palomino and the village of Dibulla. No tracks were observed along these beaches during this survey.. Two dead turtles were seen stranded on the beach south of Cabo de la Vela; one seen swimming in surf in same general area. Notes were made of significant settlements, salt works, port construction and dredging, erosional areas. Human presence was evident in all areas, including solitary individuals walking beaches in the most remote areas. Fishing village s were numerous as were small encampments with the ubiquitous dugout hauled up on the beach. The flight took six hours--we landed in Cartagena at 1300 hrs.

- On Thursday we completed the second half of the flight plan. Again, the weather over the coast was excellent. Some thunder storms were present, but all were inland of the beaches. We flew south of Cartagena along the coast and west across the Golfo Uraba to a point just north of the Rio Atrato, then north to the Panamanian border. Good nesting beaches were scattered all along this coastal transect except where they were interspersed by erosional shorelines, mangrove swamps and low deltaic plains, or rocky headlands. However, no nesting activity was observed until we reached the southern most points, Punta Caribana and Punta Arenas. The beaches looked good here and we did observe three turtle tracks, possibly made by green turtles. The Golfo Uraba lacked suitable beaches except for the western shore north of the Rio Atrato delta. Here, at the small village of Acandi, we found abundant signs of turtle nesting on a small beach about 2½ miles long, Playas de Acandi, immediately in front of the village. Approximately 18 fresh nests were counted--all obviously made by the leatherback. As we circled the beaches we observed two turtles in the water swimming, but they were not leatherbacks. This beach, and a longer beach adjacent to this, La Playona (7 miles long), have been known to host the leatherback for a number of years. INDERENA reported on this nesting assemblage in 1976, with the season occurring between March and July. It has been reported that the nesting population numbers about 100 females per season. Some killing and consumption of the nesting leatherbacks occurred in the past. However, many of the people that ate the flesh complained of skin disorders and other allergic responses. Females are no longer killed, but the eggs are collected and eaten. Conservation measures are being discussed for this leatherback rookery--a film for TV has recently been produced. Public education is one of the first steps necessary to get broad support for any conservation effort.

- Again, as observed in the northern region, human occupation of the littoral zone is evident along most of the coast south and west to the last point, Punta Arenas, at Golfo Uraba. Fishing villages and encampments, small villages, farms, cocals and a few large towns connected to the interior by roads were very numerous. The coastal area around Golfo Uraba and the Choco district, and the northern part of the Grajira Peninsula were the least settled areas. The ubiquitous squatters, with their rude temporary encampments, were a common feature to most every stretch of beach along the coast, however.

- In Cartagena, a visit to the local fish market, called the Bazurto, revealed that a dealer in turtle meat and products processed (butchered) several hundred turtles (<1,000) over the past year. They were mostly green and hawksbill; probably some loggerhead, too. He purchased them alive from the local fishermen and pays them $1.50 (U.S.) a pound for the dressed meat; then sells it retail for $2.07 (U.S.) a pound. Dressed turtle meat will include skin and bones (but not shell/skull). The average weight of meat so dressed per turtle is 55 pounds. This is a clandestine market, as sea turtles are protected by law in Colombia. Tortoise shell is bought and sold locally and exported to Panama (probably destined for European and Japanese markets).

- After completing the flights we met with the laboratory director of the INDERENA facility at Boca Grande, Cartagena, Dr. Adolfo Baron. We briefed him on the results of the survey and thanked him for his cooperation and help in providing us the necessary support to complete our mission. We expressed our appreciation to his staff member Dr. Duque and hoped that he might be identified as the sea turtle coordinator for INDERENA. Dr. Baron said that he would relay an account of our activities and preliminary results to the INDERENA office headquarters in Bogota. He apologized for all the difficulty we encountered early in the trip in obtaining the necessary government services to do the survey.

- On Friday, we departed Cartagena--enroute to Miami, Florida.