

SEA TURTLES - GUAM & CNMI
G. BALAZS

GUAM TURTLE HISTORY

LAWS and ENFORCEMENT

As a U.S. Territory, Guam enforces federal and local laws restricting the harvest and transport of any marine turtles and/or turtle products. Local enforcement is taken care of by our conservation officers (C.O.s) who are also deputized U. S. Fish and Wildlife Agents. Encounters with poachers have all been with boaters hoping to spear turtles and the C.O.s monitor these areas during peak turtle poaching times. Turtles also could be easily poached during nesting, but because we did not have much information about nesting habits or areas there was little chance of encountering such incidents. When turtle poachers are convicted (locally), all gear and vehicles (car, boat) are confiscated and fines and/or penalties are levied. This deters but does not stop all poaching.

We also try to keep the general public informed about all our laws and have found our best tools for enforcement are phone tips about illegal activities. We have encountered many poaching problems with immigrants, fishing crews and tourists, but this situation may not be unique to Guam. These problems stem from the influx of Micronesians (i.e., Palauans) and other non-English speaking people that are accustomed to eating turtle legally. There is a large population of H-2 workers (temporary workers from Korea, Taiwan, etc.) and a large number of crew members foreign longline vessels and purse seine vessels (from Korea, Japan, Taiwan) on Guam. The language problem and the lack of understanding or knowledge of regulations has caused the majority of the problems. There have been instances of foreign fishing crews capturing turtles and bringing them into Guam's Port. Harvest of turtles through by-catch probably occurs within our Exclusive Economic Zone (EEZ). This is even harder to enforce than in our near-shore waters because only one U. S. Coast Guard vessel is available for Guam.

IMPORTANCE OF SEA TURTLES TO LOCAL POPULATION

Historically, harvest of sea turtles eggs on Guam was more common prior to World War II. Turtles were harvested legally on Guam prior to August 1978 when the Green Sea Turtle was listed as threatened under the Endangered Species Act. The Hawksbill Sea Turtle has been listed as endangered since 1970. Reports of turtle harvest include one local fisherman catching 80 turtles over an eighteen month period (1967-68) with the largest caught estimated at 450 lbs.

The local people traditionally had turtle meat at fiestas (gatherings for weddings, funerals, christenings) and we have heard reports that many of the southern villages still have "under the counter" turtle meat available. We have also received a call requesting turtle meat for a pregnant Chamorro (reference to local population) women with cravings. It was even suggested that by not satisfying the craving for the turtle meat, she might lose the baby. It is apparent that with activities and calls like this, that the illegal use and harvest on Guam is still a problem.

The majority of turtles harvested have been greens and this is attributed primarily to relative abundance of species in Guam's waters as compared to other turtles. All sizes of turtles have been harvested (from 15 to 450 lbs.) but the average size of the turtles taken seems to be around 60 lbs. Although the taking of these turtle is frowned upon, at least the targeted turtles are not the large egg laying females and this is attributed to the infrequency of larger individuals and difficulty in harvesting larger individuals.

Incidents of Turtle Poaching

October 18, 1989, three hawksbill turtles confiscated from Taiwanese purse seiner.

Dec. 14, 1990 two individuals arrested with five (5) green turtles (*Chelonia mydas*) that they intended on selling for fiestas (speared).

Turtles that have been recorded from Guam include greens and hawksbills (*Eretmochelys imbricata*). There have been infrequent sightings of leatherbacks (*Dermochelys coriacea*) in the waters of Guam. Pritchard (pers. obser.) reported that the olive ridley (*Lepidochelys olivacea*) has been sighted near Yap and one animal (stuffed and for sale in a store) was apparently collected near a Northern Mariana Island (Saipan). There are no records of olive ridleys or loggerheads (*Caretta caretta*) for Guam.

AERIAL SURVEYS

A Fisheries Biologist, conducts aerial surveys twice a month to identify fishermen and fishing areas, but incidental observations of turtles are also recorded. The plane usually flies between at an altitude of 300 and 500 ft and with our clear tropical seas turtle sightings are common place. This survey was not designed for turtle surveys and therefore the information is not always collected under ideal conditions. The data collected includes turtle number, type and location seen. Turtles are identified to species when possible but this is often not possible. I have included a map of Guam with regions used during these surveys. I have also included a list of turtles and their locations.

The turtles that have been seen during the aerial surveys are green, hawksbills and leatherbacks. The percentage of turtles seen during our aerial surveys (October 1989 to April 1991) are 65.8% green, 13.2% hawksbill, 2.6% leatherbacks and 18.4% unidentified. Previous aerials have been done and reported in *Biology and Conservation of Sea Turtles* (1981, editor Karen Bjorndal). When comparing total numbers from aerial observations with two flights per month from 1975-79 versus 1989-91, the numbers seen are 783 turtles in 41 months (19 per month) and 76 turtles in 18 months (4 per month), respectively. These averages suggest that the turtle population has declined. There are many variables which could be contributing to the variability in the overall numbers and until the effects of these parameter can be determined we do not feel comfortable using this information as an abundance survey.

NESTING SITES

We have recorded nesting sites from areas around Guam in the past (Cocos Island, Sella Bay, Tarague, Ritidian). Even though this in no way indicates all nesting activity, the specific information about dig sites should give you an indication of nesting areas on Guam (refer to map). The digs observed by our office include the following:

- 1) March 1975-3 nests south of Ipan Beach (one nest had 108 eggs).
- 2) June 1976- 6 digs sighted at Sella Bay (southwest coast of Guam).
- 3) 1983
 - a. April 25, 1 dig at Tagachang Beach
 - b. May-2 digs seen at Togcha.
 - c. April- 1 nest at Tarague.
 - d. August- 1 nest at Cocos Island (hatchlings seen Sept. 15 after 45 days).
- 4) 1984
 - a. May- 4 hatchlings were found in Inarajan Bay.
 - b. June to July- 9 nests (3 of 9 identified as one hawksbill, 2 green turtle nests) sighted between Uruno and Tarague, one nest at Tarague hatched July 15.
- 5) May to June 1986- 3 digs at Naval Facility (Ritidian).
- 6) July 1990- 21 digs sited within 1/2 to 3/4 miles at southern portion of Uruno Beach, 7 turtles observed nesting (one turtle observed laying one true nest after 5 false digs).

Green Sea Turtle Nesting 1991

- May 27, located one nest at Nomna Bay, looked to be several days old, guessed it to be laid May 25.
Expected Hatch July 26
- May 28, two digs at Turtle Cove
Expected Hatch July 29
- May 29, one nest, tracks observed May 30 and looked like laid night before, several hundred yards before EOD range at Andersen Air Force Base, enclosed nest with re-bar and wire for pig exclusion.
Expected hatch July 30,
need to dig up by August 10
- May 29, one set of turtle tracks East of Tarague Channel, did not make a dig. Large tracks, had to be a Green based on size and fin crawl. Also observed considerable tracks on the beach. You agreed to address the vehicle traffic with base staff.
- On June 27, 1991 staff arranged to monitor two sections of beach, between Uruno and Ritidian and at Andersen between Tarague and Pati Point. The staff camped on the beach and selected this night because of the full moon. No turtles were actually encountered and the tide did not seem high enough to be suitable. The tide also did not relate to that charted for the day (much lower). The Andersen group encountered two spearfishermen, three gill net fishermen, and a lone individual on the beach (barefoot and without any implements) during separate events. The spearfishermen and lone individual were encountered in the early morning hours, approximately 2 AM in a restricted area. This further supports the need for the development of a volunteer conservation officer group to monitor this area. Two new digs were located in the Tarague area upon arrival during a daylight inspection of the beach.
- The first dig was immediately next to the May 29 dig, it looked fresh and if you use a 14 day rhythm this nest would have been laid June 26 on the previous night.
Expected Hatch August 28
- The second nest was located at the end of the beach vegetation line along the West end of the opening for the EOD range. These tracks looked older, maybe a week or so, which would make it close to June 19
Expected Hatch August 21
- The following morning I conducted an aerial survey and could clearly identify the turtle tracks from the air. This seems to be the most efficient method to survey the island, at least initially until nesting areas have been established.
- July 10, a third dig was made at the same location as the two adjacent digs several hundred yards from the to the EOD range.
Expected Hatch September 10
- July 15, another dig between the dig at the EOD range and triple dig location
Expected Hatch September 15
- July 27, observed 200 hatchlings emerge from two nests at 5.05 AM at Turtle Cove, did not observe any predation. Unusual because at this same site the previous year observed heavy crab predation.
- July 29, nest at Nomna Bay already had hatched

July 30, while walking an area in Apra Harbor looking for possible nesting sites for hawksbill seaturtles a possible nest was located at the southern most extreme of Sumay Cove. There were no tracks, merely a depression resembling a turtle nest dig.

August 9 because no hatchlings or tracks were observed from the May 29 dig. You, Cindy Shubert, Lillian Mariano and myself visited the nest and dug holes and found no eggs. Believe nest to be a false nest. I will return and use a shovel to further determine this site is not a nest.

August 9 while going to the dig to determine if the site had eggs, we discovered another digging event at the middle dig (EOD) which now means there are two digs adjacent to one another at this site. Tracks looked several days old (3) which would make this an August 6 laying.

Expected Hatch October 13, 1991

September 19 to date one nest has hatched at Andersen (nest three). Five of the six digs were false (nest 1, 2, 4, 5 and 6). On August 29 at nest three 118 egg shells were discovered and 4 unhatched eggs. These were preserved at DAWR.

October 5. in a spot check to attempt to confirm if the site at sumay cove was a nest, by sheer luck 14 baby hawksbill turtles were observed leaving the nest. The egg shells were counted and a total of 87 hatchling were expected to have emerged. No eggs were found unhatched. There was also no evidence of predation.

1992

February 29, two small green sea turtles oiled, see attached incident report for details

See attached map "Andersen Air Force Base Green Sea Turtles Nesting Sites"

Additional Turtle Info

The Green Sea Turtles can be expected to lay as many as 7 clutches of eggs in successive 14 days intervals over a several month season. They will return to the same beach each time if possible. They can be influenced by lights and conditions on the beach while searching for a nest site but once they start laying eggs they are not easily disturbed. Based on Richardson's research that sea turtles are persistent nesters and will keep returning to a beach until they can lay their eggs, even if disturbed by humans. Dr. Richardson demonstrated a probing technique which can be used to locate the eggs without damaging them. This is important so false nests can be eliminated. He also made it quite clear that no lunar rhythm has been established for any sea turtle nesting and that it seemed unlikely but not to rule it out. They will however tend to select the high tide on their first shoreline attempt during each 14 day rhythm, particularly in difficult entry areas. Indications are that the 14 day nesting rhythm is pretty accurate within an egg laying season but these turtles will skip long periods of time between egg laying seasons (4-7 years). Another important component of the turtle's behavior which he pointed out was that those which nest on Guam could be living and foraging anywhere; meaning that turtle abundance around Guam is not indicative of nesting potential. This would contradict the hypothesis presented by Mike Molina (former employee in our Office) in his turtle report in which he thought that the peaks in abundance may be related to nesting.

This information makes the nesting areas even more critical because the number of turtles originally expected has been reduced by the repeat nesting of the same turtles. Based on the above information, there have been nine digs made which represents 4 or 5 turtles. For

this reason it will also become important to try and tag these turtles to confirm numbers of nesting turtles. It is also possible that digs have been overlooked by targeting surveys during lunar phases and this will have to be taken into consideration. It may also be wise to develop a regular aerial survey to monitor nesting now that lunar cycles may not be a target. Using the plane for surveys will require that old tracks be erased so to not be recounted and that a time-table be developed to age tracks. He also assured us that it is extremely rare for a turtles to dig up its eggs from a previous clutch while laying a new clutch even though nesting will occur in the same general location.

Another possible concern raised is the use of 4-wheel drive vehicles on the known nesting beaches. He stated that the ruts created by the large heavy vehicles can prevent newborn hatchlings from getting to the water. The ruts generally run parallel to the water and therefore once the turtle is stuck in one they may have to crawl a long distance before escaping. This is not known to be a problem on Guam as of yet but it should be addressed; particularly in the EOD area where security has to survey the beach before using the range. The present use of an all terrain vehicle (ATV) with balloon tires to survey the beach before use of the range is fine because it does not make deep ruts. This should be the the only vehicle type approved for use on the beach in this area. Another parameter which should be addressed now that digs are being located, is to go back after hatching and survey hatch success. This is also extremely important for nests which do not hatch in the event that the nest was impacted preventing the turtles from escaping. He thought that 10 days past the expected incubation was appropriate. Other components which need consideration are the pressures from pigs and crabs (*Cardisoma carnifex*).

ONGOING SEA TURTLE RESEARCH

Starting in May of 1991 DAWR began specifically collecting information pertaining to sea turtle on and around Guam even though incidental information has been accumulated over a. In addition to monitoring nesting females and digs, "pig-proofing" nest sites and recording aerial observations, we are involved in a tag and release program with George Balazs of Hawaii Institute of Marine Biology. To date, we have tagged 14 turtles (see Table 1.)with one tag return from Yap.

No work has been done in this area on Guam there are identified seagrass beds around the island and one fairly extensive area in Cocos Lagoon on the southern portion of the island. Turtles are commonly encountered in the lagoon and it is expected that this area is a feeding area. Hawksbills can also be seen routinely entering the back waters of Apra Harbor to forage for sponges. This event can usually be observed if several visits are made during a rising tide. Green's are also common in Apra Harbor but I have not witnessed them feeding but expect they also forage in this area.

Agents Threatening Sea Turtles on Guam

I feel that habitat destruction followed by harvest are the most threatening agents to sea turtles on Guam. Incidental catch does occur (illegal fishing in EEZ and accidental gillnet capture along certain beaches) but is not as dangerous to the population as the first two. Habitat destruction has been occurring mainly due to construction and development. In 1990, Guam had over 740,000 tourists. With the number expected to increase, the number of hotels and other beachfront developments have affected the nesting sites of our turtles. This is also a function of insufficient information about the turtle activities around Guam which would allow this to be an issue during the review process. On the northern portion of Guam, where the majority of nesting takes place, we have a military base that has limited access and development. Several of the landowners, in the Uruno area, are in the process of trying to get their land developed. This will put some of the last nesting sites in danger and could have an additional major impact of the turtle population if not included in the development scheme. Another effect of the development is sedimentation which has damaged our coral reefs. This could have serious effects on the food sources for various

turtles. With an increasing human population and a need for more housing, I see greater threats to turtle habitat than we have now. We have not encountered any turtles with tumors but as I am sure you know Hawaii has found such turtles. This could become a problem on Guam if as some expect this problem is linked to development.

Harvest is the second major threat to the turtles on Guam. This includes illegal harvest by fishermen along with harvest by predators on nests (especially feral dogs and pigs). We do not have much of a problem with predation of hatchlings by birds but there have been observations of crabs harvesting as much as 20% of a hatch (estimated 40 out of 200). We hope to eventually halt the illegal harvest of turtles (eggs, juveniles and adults), but we may never stop the harvest of the nests by the pigs. Some of the nests we find we have "pig proofed" but we never find all the nests. Hopefully, we will be able to have a positive affect on the population with the small measures our office is taking with respects to the nest sites. There is also a large amount of longline fishing for tuna done just outside Guam's EEZ and this is expected to also pose a threat to the turtles. There are also neighboring countries which do not prohibit turtle harvest like Palau and the Philippines which may also be impacting overall turtle numbers. Naturally, there has also been a few reports of shark predation, tigers on Green sea turtles and we had a leatherback which was brought in by a fishermen still alive, which had two fins bitten off by sharks. We could not save the turtle (see incident report).

Gerald Davis
Fisheries Supervisor

GDavis



Commonwealth of the Northern Mariana Islands
Office of the Governor

Saipan, Mariana Islands 96950

FOR OFFICIAL USE
CABLE ADDRESS
GOV. NMI SAIPAN
REPLY TO:

DEPT. or ACTIVITY

July 27, 1984

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Ernest Kosaka, Project Leader
Environmental Services
Fish and Wildlife Service
300 Ala Moana Blvd.
P.O. Box 50167
Honolulu, Hawaii 96850

Dear Ernie:

This responds to your letter of July 12, 1984. It is apparent from reading your letter that you had not received my June 29, 1984 letter when you wrote your July 12, 1984 letter.

I will not be attending the avian disease workshop. ;I have informed Thane that he will be representing the Division. It would be preferable if the workshop can be held during October 1984.

On another subject matter, the Conservation Officers counted 11 turtle nests at Wing Beach from April-June 1984. Unfortunately three (3) of the nests were dug up by persons unknown.

A fisherman reported to David in June of a turtle nesting at Unai Dankulo (on southern Saipan facing Tinian). Again, this nest was dug up. But, someone called in to the office to report that he had found six hatchling turtles from, presumably, the same nest and wanted to turn it over to the Division. These six juvenile turtles were picked up last Monday, July 23, 1984, and I will have it released soon.

On July 13, 1984, an individual was arrested for illegal taking and possession of a green turtle. I was in Rota when this happened and the turtle was released without being weighed, measured etc. This case is being processed and I will forward it to the AG's Office for prosecution.

Sincerely,

Rufo J. Lujan
Rufo J. Lujan
Chief of Fish and Wildlife





UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southwest Region
501 West Ocean Boulevard, Suite 4200
Long Beach, California 90802-4213

PACIFIC ISLANDS AREA OFFICE
2570 DOLE STREET
HONOLULU, HAWAII 96822-2396

October 16, 1998

Senator Thomas P. Villagomez
11th Northern Marianas Commonwealth Legislature
P.O. Box 129
Saipan, MP 96950

Dear Senator Villagomez:

This responds to your March 30, 1998 letter requesting a "Traditional Take" permit under the U.S. Endangered Species Act of 1973 (ESA), as amended, to allow the directed harvest of up to thirty (30) green sea turtles (*Chelonia mydas*) per year in the Commonwealth of the Northern Mariana Islands (CNMI) for human consumption at six major fiestas. Please accept my apologies for our delay in responding to your correspondence.

Your request for a "Traditional Take" permit is similar to the August 29, 1994, request that was made by the Western Pacific Regional Fishery Management Council (WPRFMC) to the Director of the National Marine Fisheries Service (NMFS) Office of Protected Resources (copy of letter enclosed). In that letter, Ms. Kitty Simonds requested that NMFS undertake a review of the provisions of the ESA and, if possible, allow a limited take quota of green sea turtles for traditional purposes in the CNMI. NMFS responded to Ms. Simonds' request in a letter dated November 2, 1994 (copy enclosed). In our response, we informed Ms. Simonds that the information available on the current status of the green sea turtle in the Pacific, combined with the absence of any new information regarding the necessity for traditional take, did not warrant an exception under the ESA. Your March 30, 1998, letter does not provide new information on the status of the green sea turtle in the CNMI or on the necessity for traditional take.

The Endangered Species Act allows permits to be issued under certain circumstances for the directed take of endangered or threatened animals (16 U.S.C. Section 1539(a)(1)(A)). In general, however, directed take permits are issued only for scientific purposes or to enhance the propagation or survival of the affected species. It does not appear that the basis of your request ("Traditional Take" to allow local customs and traditions to be honored) would qualify for a permit.

Should you wish to submit a permit application, please be advised that under a 1977 Memorandum of Understanding between the U.S. Department of Commerce and the U.S. Department of the Interior, the jurisdiction over all listed species of sea turtles, including green sea turtles, is shared between NMFS and the U. S. Fish and Wildlife Service (USFWS).



For any permit application, however, the USFWS serves as the central clearinghouse and they will forward a request to NMFS if the requested actions fall under the jurisdiction of NMFS. For your reference, the USFWS contact address to which applications may be sent is:

U. S. Fish and Wildlife Service, Portland Oregon
911 Northeast 11th Avenue
Eastside Federal Complex
Portland, Oregon 97232-4181

Should you decide to pursue the issuance of a permit under the ESA for the harvest of up to 30 green sea turtles per year for human consumption, you will need to show that this proposed harvest will enhance the survival of the species and is consistent with the purposes of the ESA (16 U.S.C. § 1539 (a) (1) (A), 50 CFR § 17.32, § 17.42 (b), 50 CFR § 227.72, § 220) and submit the application to the USFWS.

To pursue a section 4(d) special rule for the threatened green sea turtle that would allow for the requested harvest, you will need to submit a petition for rulemaking to NMFS or the USFWS under the Administrative Procedure Act (APA) 5 U.S.C. 553. This latter option is not a request for a permit, but is, rather, a request that NMFS change its rules to allow the harvest. To justify a 4(d) rule, NMFS and the USFWS must be able to find that the proposed harvest would be necessary and advisable to provide for the conservation of the species. Under the ESA, "conservation" means the use of all methods and procedures which are necessary to bring an endangered or threatened species to the point where the protection provided by the ESA is no longer necessary (16 U.S.C. 1532 (3)).

The type of process you would follow (to make a permit application to the USFWS or a request for a special rule from NMFS) depends upon the circumstances of the take, although it may be necessary under some circumstances to apply to both the USFWS and NMFS. After we learn more about the request you are making, we will be better able to identify the appropriate process. For your reference, however, the address for NMFS to which a request may be submitted is:

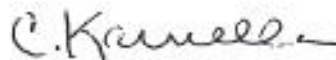
Office of Protected Resources
National Marine Fisheries Service
Room 13342, SSMC3
1315 East-West Highway
Silver Spring, MD 20910-3282

As stated in the November 2, 1994, letter from NMFS to Ms. Kitty Simonds, a finding to justify either a permit or a 4(d) rule cannot be made based upon the information currently available. Since the Services require sufficient information to legally and scientifically justify a directed harvest via permit and/or special rule, we recommend that the following information be submitted by the applicant/petitioner to NMFS and the USFWS:

1. The distribution and status of the green sea turtle in the CNMI, including information on nesting areas and important foraging sites, and how the species could withstand the requested level of take
2. Information regarding the genetic identity of green sea turtles in the CNMI, including the portion of the population that would be subject to direct harvest, and how the harvest of these individuals will impact the nesting populations to which they belong
3. The probable indirect effects and cumulative effects of allowing a directed harvest
4. Information on how nesting beaches and foraging areas are currently protected and how such protection will ensure the conservation and recovery of the species should a directed harvest be authorized
5. Information on how the harvest of green sea turtles would further the conservation of the species and enhance the likelihood that this species may be removed from the protection of the ESA
6. Information on conservation measures that the CNMI would undertake to offset the level of take being requested

I understand that the CNMI Division of Fish and Wildlife is interested in hosting a workshop on Saipan in November to discuss this issue further with representatives of NMFS and the USFWS. I hope this letter serves to clarify some of the information the Federal agencies would need to consider in any future permit application or request for a special rule. We plan to attend the workshop to answer any questions that you or other interested individuals may have on this subject.

Sincerely,



Charles Karnella
Administrator
Pacific Islands Area Office

Enclosures

cc: CNMI-DFW
USFWS-Honolulu
F/PR
GCSW
GCF
WPRFMC
SWR
SWC - M. Laurs



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Silver Spring, Maryland 20910

NOV 2 1994

1 14

Ms. Kitty Simonds
Executive Director
Western Pacific Regional Fishery
Management Council
1164 Bishop Street
Honolulu, Hawaii 96813

Dear Ms. Simonds:

Thank you for your letter requesting that the Office of Protected Resources review the regulations concerning taking of sea turtles for subsistence purposes. Beginning in 1983, the National Marine Fisheries Service (NMFS) conducted a comprehensive review of the issue of subsistence take in the Trust Territories of the Pacific Islands (TTPI). The findings of this review, outlined in a Decision Memorandum and published as a Final Notice in the Federal Register (January 3, 1985) clearly concluded that exceptions to the subsistence regulations were not warranted at that time. The recommendations further concluded that the take exception for the Northern Mariana Islands should be allowed to expire with the dissolution of the TTPI.

Subsequent to your letter of inquiry, NMFS reviewed the 1983-1985 record, including a contracted report entitled "A Review of Information on the Subsistence Use of Green and Hawksbill Sea Turtles on Islands Under United States Jurisdiction in the Western Pacific Ocean". NMFS is aware of no new information to suggest that the conclusions of these reviews, relative to the necessity for subsistence take in the Northern Mariana Islands, are no longer valid.

NMFS has also consulted the draft recovery plan for the U.S. Pacific Population of the Green Turtle which contains the most current biological information relative to the population status of this species in the U.S. Pacific. Overall, the survival status of the green turtle throughout the insular Pacific region has likely continued to decline due to directed harvest (legal and illegal) and habitat degradation. Further concern is warranted due to the increasing scope and magnitude of the debilitating and often fatal fibropapilloma disease and the incidental capture of green turtles in longline fisheries of the Pacific region. These cumulative threats, combined with the absence of new information regarding the necessity for subsistence take, indicate that an exception to the regulations, as requested, is not currently warranted.



If you have further questions, or if you are aware of any new, relevant information, please do not hesitate to contact me.

Sincerely,

A handwritten signature in cursive script, appearing to read "Wm. W. Fox, Jr.", written in dark ink.

William W. Fox, Jr., Ph.D.
Director
Office of Protected Resources



The Senate
Eleventh Northern Marianas Commonwealth Legislature

P.O. Box 129, Saipan MP 96950

RECEIVED

98 APR -6 1998

WESPAC

THOMAS P. VILLAGOMEZ
Senator (Kiyu)

March 30, 1998

Ms. Kitty Simonds
Western Pacific Fishery Mgmt. Council
1164 Bishop Street, Suite 1405
Honolulu, HI 96813

Dear Ms. Simonds:

As a member of the Senate of the Northern Mariana Islands, I am in full support of the intent of the Federal Endangered Species Act, which provides for the protection and conservation of various endangered species of fish and wildlife. The provisions of this Endangered Species Law provide for programs to ensure that future generations will be able to enjoy these species for their ecological, educational, historical, and scientific value, among others.

The green sea turtle is one of these species covered by the Endangered Species Act and is found here in the Northern Mariana Islands. While I endorse the purposes of the law, I find that there should be a balance between species protection and the survival of the customs and traditions of the Chamorro and Carolinian people. For this reason, I am requesting for a Traditional Take permit, to allow a limited exemption to the prohibition on the taking of green sea turtles.

Six major fiestas are observed annually in the Commonwealth of the Northern Mariana Islands (CNMI). These fiestas are of great importance to the indigenous Chamorro and Carolinian people. The green sea turtle is one of the main dishes traditionally served during these ceremonies. I am therefore requesting for a Traditional Take permit for the limited taking of sea turtles so that the local customs and traditions can be honored. A permit to take five sea turtles per fiesta is requested, for a total annual taking of thirty green sea turtles. The dates and locations of the fiestas are as follows:

1. May 4 - San Jose Fiesta, Tinian
2. May 5 - San Jose Fiesta, Saipan
3. May 12 - San Isidro Fiesta, Saipan
4. Oct. 5 & 6 - San Francisco de Borja Fiesta, Rota
5. Oct. 6 - Nuestra Senora delos Remedios Fiesta, Saipan
6. Nov. 24 - Kristo Rai Fiesta, Saipan.

Ms. Kitty Simonds
March 30, 1998
Page 2

Although, the population of green sea turtles are not as abundant as they once were they are still plentiful here in the Northern Marianas. The issuance of a permit granting the CNMI a limited exemption to take a small number of sea turtles would not appreciably reduce the sea turtle population in the CNMI, and at the same time it would ensure continued practice and preservation of the customs and traditions of the Chamorro and Carolinian people.

Si Yu'us Ma'asi and I look forward to your most favorable response upon this request.

Sincerely,



Sen. Thomas P. Villagomez

DRAFT
DRAFT

4/24/97

F/SWO11:SF

MEMORANDUM FOR: Rolland A. Schmitten
Assistant Administrator for Fisheries

FROM: William T. Hogarth
Acting Regional Administrator

SUBJECT: Authorizing Ceremonial Take of Turtles

As you know, the Government of the Commonwealth of the Northern Mariana Islands (CNMI) has expressed interest in allowing a limited directed take of sea turtles for ceremonial purposes. While at the meeting of the Western Pacific Fishery Management Council (Council) in November, Hilda Siaz-Soltero met with Don Woodworth, an attorney representing the CNMI on some matters, to discuss this issue. It was agreed that she would write to Ben Sablan, Secretary of the CNMI Department of Natural Resources, to indicate the kind of information that would be needed to make a determination as to any such allowable take.

My staff then began drafting a letter, which was subsequently directed to the Office of Protected Resources (F/PR) for consideration. Since then, there has been considerable discussion between Region and F/PR staff and NOAA General Counsel and it is obvious that there is a fundamental policy issue that needs to be resolved before a letter can be sent to Mr. Sablan that would be clear and consistent with the requirements of the Endangered Species Act (ESA).

ESA Requirements

Section 4(d) of the ESA may provide the mechanism for allowing a ceremonial take. Under this section, the National Marine Fisheries Service (NMFS) could conduct a rulemaking that could authorize a take as part of a comprehensive program to protect and promote the recovery of the species involved. A directed take could not be authorized without such a rulemaking process.

The record for the rulemaking would have to demonstrate clearly that there is in place a comprehensive sea turtle conservation program that is realistic and enforceable, with the commitment of resources to carry it out, and that the ultimate result is increased protection of sea turtles and a net reduction in mortality from directed and incidental takes.

Potential to Allow Directed Take

The NMFS has recently completed draft recovery plans for endangered and threatened species of sea turtles in the Pacific. These recovery plans describe the nature of past and current threats to sea turtle populations and identify measures that are needed, and the areas where they are needed, to eliminate or minimize these threats. The recovery plans also generally identify agencies or governments that would have lead responsibility for carrying out certain tasks to implement these measures. The recovery plans note, among other things, that the directed take of nesting sea turtles and their eggs is a primary threat to Pacific sea turtle populations, and that eliminating this threat is required if populations are to recover. However, the recovery plans do not provide information on the current estimated direct or incidental take and mortality of sea turtles on beaches or in waters near the CNMI, though they do suggest that the level of nesting of any species in the CNMI is very low.

It follows that, if the CNMI wants to request allowance for a ceremonial take, the CNMI must submit a request that demonstrates there is a comprehensive sea turtle conservation program in place in the CNMI to protect and promote the recovery of sea turtles. This program should clearly tie together the kinds of tasks and activities recommended in the recovery plan with a coordinated schedule for carrying out those activities and the identification of responsible parties in the CNMI for those activities. The program would consider the need for measures to protect turtles on nesting beaches and prevent directed take of nesting turtles and eggs, to protect the quality and safety of those beaches, to protect turtles in their marine habitat, and to ensure adequate public education and awareness of the need to protect sea turtles for their long-term recovery. The program should include a monitoring element that would periodically report on the progress being made in carrying out the program, including methods to measure performance and significance. There also should be a clear commitment for enforcement of any restrictions included in the conservation

program. Finally, the CNMI should indicate the extent to which the CNMI already has implemented measures that could be incorporated into the comprehensive program for sea turtle conservation.

In addition, it would be very helpful for the CNMI to provide us with a history of the traditional, cultural or ceremonial use of sea turtles in the CNMI. A description of the number and types of ceremonies or functions at which turtles were used, the manner of use, the species involved and whether it matters if they were adult or sub-adult, and the significance of the turtle use in any special ceremony is needed to understand the cultural implications of the current prohibition of directed takes.

NMFS Policy Issue

Based on the best scientific information available, it is not clear that NMFS should allow any directed take, even if it is our reasoned conclusion that the net effect of the comprehensive sea turtle conservation program in the CNMI would be a net reduction in mortality. The current state of sea turtle populations for species found in the CNMI is very poor. While NMFS may not be able to prevent all incidental take due to limited resources in the area, NMFS may not want to allow any directed take that is clearly preventable. NMFS does not authorize directed takes in any other circumstances and we could be seriously criticized for authorizing directed take where the only use is ceremonial. The new Inter-American Convention for the Protection and Conservation of Sea Turtles commits signatory members to prohibit the intentional take of sea turtles except for subsistence purposes. There is, however, no were evidence of a subsistence need in the CNMI. Allowing a directed take in the CNMI for ceremonial purposes would be inconsistent with that Convention. On the other hand, the Marine Fisheries Advisory Committee has recommended that we seriously consider the CNMI situation and given the limited resources available to us in that area, it could be in our interest to enlist the CNMI in carrying out a comprehensive sea turtle protection program. If we were to simply declare that we will not consider a request, our chances of cooperation and assistance could be severely reduced.

Nonetheless, at the very least, NMFS should require very substantial proof that the Government of the CNMI has both the regulatory authority and the enforcement and management resources to carry out a solid sea turtle recovery program. Any

allowance of directed take under the ESA should be for very limited purposes and could be approved only if the CNMI demonstrates clearly that there would be overall conservation gains.

Recommendation

I recommend that the letter to Mr. Sablan be sent by you rather than the Southwest Regional Administrator. The letter (draft attached) should indicate that NMFS could authorize a directed take under very limited circumstances (to be described in the letter), and that a rulemaking would be required. At this time, NMFS does not believe there is a basis for such a rulemaking given the finding in the recovery plans that directed taking of nesting turtles and eggs constitute a primary threat to recovery of sea turtles in the area of the CNMI. However, if the CNMI wants to pursue this further, the CNMI should present information about sea turtle conservation efforts now underway, further actions that would be taken by the CNMI, and the reasons why the CNMI believes there would be a net reduction in the total mortality of sea turtles because this program is in effect. It would be the burden of the CNMI to prove that this program would more than offset the level of directed take authorized. Your letter would not promise to conduct the rulemaking but would indicate that the rulemaking would not be pursued if the CNMI cannot meet the burden of proof.

cc:

F/PR - Diaz-Soltero
F/PR - Schroeder
F/SWC - Tillman
F/SWC2 - Laurs
F/SWC2 - Balazs
F/SWO2 - Nitta

DRAFT

Mr. Benigno M. Sablan
Secretary, Department of
Natural Resources
Commonwealth of the Northern
Mariana Islands
Capitol Hill
Saipan, MP 96950

Dear Mr. Sablan:

While at the meeting of the Western Pacific Fishery Management Council (Council) in November, Hilda Diaz-Soltero, Southwest Regional Administrator, National Marine Fisheries Service (NMFS), had an opportunity to meet with Don Woodworth to discuss the possibility of allowing a take of sea turtles for cultural use in the Commonwealth of the Northern Mariana Islands (CNMI). It was agreed that she would write to you to indicate the kind of information that would be needed to make a determination as to any such allowable take. However, because this is a matter of national policy, we have agreed that I should write instead.

Section 4(d) of the Endangered Species Act (ESA) may provide the mechanism for allowing a ceremonial take of sea turtles. Under this section, NMFS could conduct a rulemaking that could authorize a take as part of a comprehensive program to protect and promote the recovery of the species involved. A directed take could not be authorized without such a rulemaking process. The record for the rulemaking would have to demonstrate clearly that there is in place an active, comprehensive program that is realistic and enforceable, with the commitment of resources to carry it out.

At this time, there is insufficient information to proceed with a rulemaking. NMFS has recently completed draft recovery plans for endangered and threatened species of sea turtles in the Pacific. These recovery plans describe the nature of past and current threats to sea turtle populations and identify measures that are needed, and the areas where they are needed, to eliminate or minimize these threats. The recovery plans point out that the directed take of nesting sea turtles and

eggs constitute a primary threat to the recovery of sea turtle populations. The recovery plans also generally identify agencies or governments that would have lead responsibility for carrying out certain tasks to implement these measures. Therefore, it is not appropriate at this time to proceed with a rulemaking that would allow a directed take of turtles.

However, if the CNMI would like NMFS to reconsider this position and initiate rulemaking to authorize a directed take, then the CNMI must provide information that demonstrates to NMFS that there is a comprehensive program in place in the CNMI to protect and promote the recovery of sea turtles. This program should clearly tie together the kinds of tasks and activities recommended in the recovery plan with a coordinated schedule for carrying out those activities and the identification of responsible parties in the CNMI for those activities. The program would consider the need for measures to protect turtles on nesting beaches, to protect the quality and safety of those beaches, to protect turtles in their marine habitat, and to ensure adequate public education and awareness of the need to protect sea turtles for their long-term recovery. The program should include a monitoring element that would periodically report on the progress being made in carrying out the program, including methods to measure performance and significance. The criteria for de-listing would provide a basis for developing these measurement methods. There also should be a clear commitment for enforcement of any restrictions included in the conservation program. It would also be helpful to update the information in the recovery plan concerning the extent to which the CNMI already has implemented measures that could be incorporated into the comprehensive program for sea turtle conservation. The legal basis for your protection programs should be described with copies of relevant statutes and regulations, along with the anticipated budget to carry it out. If we were to proceed with rulemaking, this information will be published in the Federal Register for public review and comment.

In addition, it would be very helpful for the CNMI to provide us with a history of the traditional, cultural or ceremonial use of sea turtles in the CNMI. A description of the number and types of ceremonies or functions at which turtles were used, the manner of use, the species involved and whether it matters if they were adult or sub-adult, and the significance of the turtle use in any special ceremony is needed to understand the cultural implications of the current prohibition of directed takes. As you can understand, any allowance of take

under the ESA will be for very limited purposes and could be approved only if the conservation program of the CNMI demonstrates that there would be overall conservation gains.

I will seriously consider a request that provides this information. I know it is very important that NMFS and the CNMI work together to protect and promote the recovery of sea turtles because our respective agencies have limited resources to carry out protection programs. However, please note that I am not committing to the rulemaking process. That will depend on the information you provide.

I hope this letter is helpful, and I look forward to hearing from you.

Sincerely,

Rolland A. Schmitten
Assistant Administrator for
Fisheries

cc:

F/SWO1 - R. McInnis
F/SWO3 - C. Wingert
GCSW - J. Feder
F/PR - B. Schroeder
D. Woodworth

Mechanism of sea turtles being hooked during longline fishing and its implications for injury and mortality: a brief analysis.

The capture of pelagic sea turtles during longline fishing is of increasing concern worldwide to conservationists and fishery managers. Many if not most of the turtles caught in this manner are still alive when brought on deck. However, the fishing line has often been reported extending well down the esophagus, with no hook visible. The usual practice is to cut the line as close to the mouth as possible and immediately release the turtle overboard. Although physically active when let go, the ultimate fate of these turtles, with the imbedded hook somewhere in the upper gastrointestinal (GI) tract, is unknown. Hard shelled sea turtles (Cheloniidae) are rugged individuals that can tenaciously cling to life after sustaining considerable internal and external damage from various sources. Injured, diseased, pollution-impacted, and debris entangled sea turtles have been known to remain alive for months prior to expiring.

Swallowing of the baited hook deep into the esophagus or stomach is hypothesized in this short essay as being the most probable manner of capture by longline, or any other fishery involving hook and line. Unpublished studies (F. White of Scripps) relating to esophageal pressure of sea turtles during the intake of food have shown that swallowing is facilitated by a powerful "hydraulic pump." When the esophagus relaxes, seawater along with the selected food is taken into the mouth and propelled down the esophagus. Once there, it is retained by esophageal papillae that are present in all species of sea turtles. Several forceful pumping cycles move the food along the esophagus into the stomach. Following each ingestion of seawater and food, a strong contraction of the esophagus expels the excess water. The result is separation of food from seawater. In the case of baited hooks, the "food" will usually be sucked in well past the horny structures of the mouth before the hook sets itself into soft tissue of the GI tract.

Perforation resulting from the hook's penetration could be expected to eventually result in both chemical and bacterial peritonitis and septicemia. However, another factor of potentially greater significance almost certainly comes into play. Once hooked, the turtle would struggle when reaching the limit of the attached line. The resulting stress on the GI tract would produce a damaging condition known as intussusception, or invagination (telescoping) of one segment of the GI tract into the other. Even greater stress would be expected to result when the longline is reeled in and any hooked turtle is dragged along through the water column and hoisted aboard. In addition to direct GI tract damage, all of the adjacent vital organs would be placed under stress that could result in hemorrhage.

Research on the above factors, as well as others, is clearly needed in order to adequately understand what happens to a sea turtle hooked by longline. At present there is sufficient cause for concern from a straightforward deductive logical appraisal of the situation, based on the limited information available. Research of this entire topic will be difficult in the laboratory due to the likely inappropriate nature of experimentally subjecting turtles to being hooked. Perhaps the most acceptable strategy would be to collect turtles actually captured by commercial longliners. They could then be clinically treated by veterinarians, while at the same time ongoing studies of damages involved. The logistics of collecting the turtles would not be easy, but nevertheless is within the realm of possibility.

Fred N. White
P.O.Box 633
Fredericksburg, TX
78624

tel: (210) 997-7223

George Balazs
Nat'l. Marine Fisheries Service
Southwest Fisheries Science Center
Honolulu Laboratory
2570 Dole St.
Honolulu, Hawaii 96822-2396

May 10, 1993

Dear George,

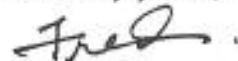
Thank you very much for your call and the reprints regarding the relationship of longline fishing and ingestion of baited hooks by marine turtles. I was especially impressed by the large annual captures (> 20,000) per yr. due to Spanish longline fisheries in the Western Mediterranean. The Aguilar, et al paper indicates a mortality of 20-30% (= approx. 5,000 deaths/yr). Do you have any feeling for the number of turtles caught on longlines world-wide?

I suspect that the "hydraulic pump" mechanism which I observed may be implicated in many of the deaths associated with longline fishing. It takes only a few "pump cycles" to propel a bolus from mouth to stomach. I can imagine that a hook attached to a longline on one end and a turtle gastrointestinal tract at the other could do great and potentially fatal damage.

Your call, and my reading of the materials which you sent, have given me the resolve to place the publication of these observations on the front burner. I hope to have a manuscript by early July, if not sooner. I will send you a draft and invite your comments, especially in reference to the longline problem as it relates to the hydrolics of deglutition.

With thanks for the nudge re: formalizing the observations on sea turtle swallowing.

Sincerely yours,



Fred N. White



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southwest Fisheries Science Center Honolulu Laboratory
2570 Dole St. • Honolulu, Hawaii 96822-2396
(808)943-1221 • Fax: (808)943-1290

May 18, 1994

F/SWC2:skk

Dr. Michael G. Hadfield
Univ. of Hawaii at Manoa
Dept. of Zoology
2538 The Mall
Edmondson Hall 152
Honolulu, Hawaii 96822

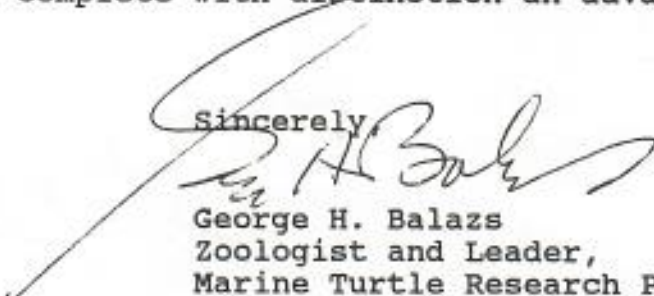
Dear Dr. Hadfield,

I am writing on behalf of Steven P. Kolinski, an applicant for graduate studies in your department. I have known Steve for approximately four years, particularly through his role as Principal Researcher and Project Director of the Yap State Marine Turtle Research Program in the Federated States of Micronesia.

During this time I have had the opportunity to provide advice and support regarding Steve's work, and to follow the progress of his achievements. Steve has surpassed my expectations with regard to what could reasonably be achieved in marine turtle research within Yap State of Micronesia. Through his work with marine turtles, he has shown himself to be a very careful, competent, dedicated, and capable individual. His accomplishments within the traditional islands of Yap State required understanding and respect for local island means, etiquettes and traditions, for which I believe patience and perseverance were a necessity. He now carries with him invaluable experience in many of the facets of establishing and conducting research projects in ecology, including grant writing, planning and preparing for field work, extended field work/data collection, data analysis and writing. The venue of his work has undoubtedly provided him with many practical experiences and a direction which should enhance his pursuit of an advanced academic degree.

I take great pleasure in recommending Steven Kolinski for admittance to the Zoology Graduate Program, and further for specialized studies in the Ecology, Evolution and Conservation Biology Graduate Program. I have full confidence in Steve's ability to endure and complete with distinction an advanced degree program.

Sincerely,


George H. Balazs
Zoologist and Leader,
Marine Turtle Research Program



Chronology of Federal Government and Related Actions
Regulating the Taking of Green Sea Turtles
in the State of Hawaii

- December 28, 1973 Proposed listing by the Fish and Wildlife Service of the green and loggerhead sea turtles as endangered species under the Endangered Species Conservation Act of 1969.
- December 28, 1973 Endangered Species Act of 1973, which superseded the Endangered Species Conservation Act of 1969, was enacted into law.
- April 23, 1974 F. Wayne King, Director of Conservation and environmental Education for the New York Zoological Society, submitted a formal petition under the new law--the Endangered Species Act of 1973--to list the green sea turtle as an endangered species and the loggerhead and Pacific ridley sea turtles as threatened species.
- May, 1974 The State of Hawaii, through the Department of Land and Natural Resources, promulgated Fish and Game Regulation 36 which prohibited any taking of leatherback and hawksbill turtles and permitted very limited and controlled harvesting of the green sea turtle for home use only.
- July 3, 1974 A preliminary in-house NMFS review of the status of green, loggerhead, and Pacific ridley sea turtles was completed.
- August 8, 1974 Letters were sent to the Governors of the States, Territories, Possessions, and the Commonwealth of Puerto Rico, where green, loggerhead, and Pacific ridley sea turtles are resident, announcing a NMFS/FWS status review of these species and requesting views.
- August 16, 1974 Initiation of a formal review by NMFS/FWS of the status of green, loggerhead, and Pacific ridley sea turtles was announced in the Federal Register.
- May 20, 1975 NMFS/FWS determination to propose listing green, loggerhead, and Pacific ridley sea turtles as threatened was published in the Federal Register. Regulations proposed by NMFS/FWS to conserve and manage these three species of sea turtles as threatened were also published.
- July 17, 1975 A letter was sent by Governor George Ariyoshi to the Director of the U.S. Fish and Wildlife Service to present the State of Hawaii's position on the proposed Federal rule-making (as above). This letter noted that the State did not consider the Hawaiian population of green sea turtle threatened to the degree requiring a complete mora-

torium on its taking. The letter noted the existence of a State regulation restricting the harvest of green sea turtles and strongly recommended "...that the Hawaiian population of Green Sea Turtle be excluded from the proposed list of threatened fish and wildlife on the basis that the State of Hawaii through its best effort is currently managing the population through continuous research and enforcement which provide protection as well as permit controlled harvesting that is so important to the traditional life-style of our people."

- August 20, 1974 -- Notice was published in the Federal Register of the Department of Commerce/National Oceanic and Atmospheric Administration/NMFS decision to prepare an environmental impact statement and to hold a public hearing on: the proposal to list green, loggerhead, and Pacific ridley sea turtles as threatened; the proposed protective regulations for these species; and the draft environmental impact statement.
- November 14, 1974 Notice was published in the Federal Register postponing the Department of Commerce/National Oceanic and Atmospheric Administration/NMFS public hearing from December 3, 1975, to February 25, 1976.
- February 6, 1976 Notice was published in the Federal Register inviting the public to submit written comments until March 22, 1976.
- February 25-26, 1976 Public hearing was held in Washington, D.C., on the proposed listing of three species of sea turtles discussed here.
- March 19, 1976 Notice by the Council on Environmental Quality was published in the Federal Register extending the public comment period until April 5, 1976.
- April 1, 1976 A letter was sent by Governor George Ariyoshi to Sidney Galler, Deputy Assistant Secretary for Environmental Affairs, in response to Mr. Galler's request for comments on the Draft Environmental Impact Statement on the proposed regulation. The Governor strongly endorsed an alternative which would have allowed subsistence fishing in areas of traditional sea turtle fisheries.
- June 16, 1976 NMFS/FWS proposed regulations to treat green, loggerhead, and Pacific ridley sea turtles as threatened under the "similarity of appearance" provision were published in the Federal Register. Upon final regulations on the proposal of May 20, 1975, becoming effective, these proposed regulations will be withdrawn, or if promulgated in final, rescinded.

- July 22, 1976 Carleton S. Jones, Counsel for Cayman Turtle Farm, Ltd., requested that a public hearing be held on the proposed regulations treating these three species of sea turtles as threatened under the "similarity of appearance" provision of the Endangered Species Act of 1973.
- October 15, 1976 Denial of the hearing requested by Carleton S. Jones (as above) was published by the Department of the Interior in the Federal Register.
- July 18, 1977 A Memorandum of Understanding (MOU) concerning jurisdiction of sea turtles between NMFS and FWS was signed. This MOU establishes sole agency jurisdiction of sea turtles with the NMFS while the turtles are in the water, and with FWS while the turtles are on land. The MOU also documented NMFS/FWS agreement to list green, loggerhead, and Pacific ridley sea turtles as threatened species.
- February 28, 1978 The Environmental Defense Fund submitted a request to reopen the public comment period in light of the long time that had elapsed since publication of proposed regulations and to submit newly acquired evidence and related data.
- March 27, 1978 NMFS and FWS announced in the Federal Register that the public comment period was reopened until April 17, 1978. Suggestions by a number of parties to extend this comment period were denied because of the need to expedite the listing. Comments were received from Governors Ricardo Bordallo of Guam, George Ariyoshi of Hawaii, and John Haydon of American Samoa, among others. Governor Bordallo supported listing the loggerhead and Pacific ridley as threatened but recommended limited harvesting of green sea turtles be allowed. Governor Ariyoshi opposed prohibiting incidental catch in "areas, of substantial breeding and feeding" unless "substantial" was clarified since the waters of the entire Hawaiian Archipelago are feeding areas for the green sea turtle. Governor Ariyoshi also supported an exemption for subsistence fishing of the Hawaiian green sea turtle population. Governor Haydon supported the listing of the loggerhead and Pacific ridley, but expressed concern about listing the green since it would deprive many people of a means of living and food.
- July 28, 1978 NMFS and FWS published in the Federal Register final regulations to list and protect green sea turtle populations as a "threatened species". The listing acknowledged that "Hawaii referenced State regulations that permit the taking of green turtles only in excess of 36-inch carapace length for home consumption. In the State's opinion, such protection was adequately protecting the population. However, NMFS and FWS have concern over increased takings

and sale of turtle shell and other products to tourists in Hawaii. For these reasons and because there are alternative food sources available in Hawaii, no exception is allowed for taking green sea turtles in that area." (This rationale apparently overlooked the fact that, since May 1974, Hawaii's Division of Fish and Game Regulation 36 had prohibited commercial taking from State waters of green sea turtles for sale or offer for sale in whole or part or products thereof.)

September 6, 1978

NMFS/FWS Final Rulemaking listing and protecting populations of green sea turtles as a threatened species became effective, superceding State of Hawaii Fish and Game Regulation 36. The Federal regulation prohibited the taking of green sea turtles for traditional home consumption.

Chronology of Federal Government and Related
Actions Concerning the Request to Transfer Green Sea
Turtles to Fishponds at Kalahaipuaa, Puako, Hawaii Island

- November 12, 1981 A letter was sent by Alika Cooper, manager of the Kalahaipuaa fishpond complex, to Doyle Gates of the National Marine Fisheries Service Western Area Programs Office (Honolulu) asking that previous requests to transfer green sea turtles to the ponds be acted on. This letter noted that the use of turtles to control seaweed growth in fishponds is a traditional Hawaii aquaculture practice. The letter also questioned why subsistence taking of turtle is not permitted in Hawaii, while it is in the Trust Territory of the Pacific Islands.
- December 8, 1981 A letter was sent by Alan Ford, Southwest Regional Director of NMFS, to Alika Cooper to respond to questions raised about the subsistence taking of green sea turtles. The letter noted that no information substantiating the need for a subsistence take was submitted by the State of Hawaii or native Hawaiian groups during the regulatory review process prior to the listing and protection of the Hawaii green sea turtle population as a "threatened species".
- December 21, 1981 A letter was sent by Kenji Ego, Director of the State of Hawaii Division of Aquatic Resources to the NMFS Southwest Regional Director. This letter took strong exception to Mr. Ford's statement in his December 8, 1981 letter that the State of Hawaii failed to submit information to support an exception from the Federal prohibition of taking green sea turtles in Hawaiian waters. Mr. Ego cited 3 letters to Federal officials in which Governor Ariyoshi strongly supported continued management of the green sea turtle through a State regulation which allowed controlled non-commercial harvest for traditional subsistence use and required the submission of harvest data through a permit system. Mr. Ego noted that Mr. Ford's letter of December 8, 1981 had failed to respond to Alika Cooper's request to use turtles to enhance fishpond aquaculture operations.
- January 5, 1982 A letter sent by Alika Cooper to the NMFS Southwest Regional Director reiterated the need for action on his request to transfer turtles to the Kalahaipuaa fishponds for seaweed control.
- January 21, 1982 A letter was sent by Alan Ford informing Alika Cooper that the NMFS will propose to the U.S. Fish and Wildlife Service that the administrative record be reopened to consider the issue of subsistence taking of green sea turtles

in Hawaii, Guam, Northern Mariana Islands, and the Trust Territory of the Pacific Islands. The letter suggests that a working group of Federal officials and island government representatives hold public meetings and consultations as the basis for recommending appropriate action on the subsistence taking issue. The letter asked for Cooper's patience but no mention was made of the status of the request to use turtles to control seaweeds in the Kalahuipuaa fishponds.

August 15, 1982

A letter was sent by Alika Cooper to the Western Pacific Fishery Management Council complaining that no action has been taken by the NMFS on his request to transfer turtles into the Kalahuipuaa ponds for seaweed control.

August 19, 1982

Letters were sent by Alika Cooper to Governor Ariyoshi and the 4 members of the Hawaii Congressional delegation concerning the lack of action on his request to NMFS.

September 7, 1982

A letter was sent by Alan Ford, NMFS Southwest Regional Director, to Alika Cooper informing him that it is illegal to possess green sea turtles taken or imported in violation of the Endangered Species Act. The letter advised that, if the five turtles in the Kalahuipuaa pond-complex were taken before the date of listing as a threatened species, "...then it would be appropriate for you to document that fact in order to avoid any future law enforcement problems."

September 22, 1982

A letter was sent by Governor Ariyoshi to Alika Cooper noting the State's support of controlled subsistence taking of green sea turtles and expressing willingness to participate in a working group with Federal officials to review this issue.

September 27, 1982

A letter was sent to the NMFS Southwest Regional Director (Alan Ford) by Rep. Daniel Akaka inquiring about the delay in responding to Alika Cooper's request.

October 8, 1982

A letter was sent to Rep. Akaka by Alan Ford concerning progress in conducting a status review of the green sea turtle population in the central and western Pacific. The letter reported that the NMFS was awaiting a response from the U.S. Fish and Wildlife Service regarding their participation in the status review. Pending a response from FWS, the NMFS had initiated an in-house review of the subsistence taking issue.

November 1, 1982

Alika Cooper forwarded to Alan Ford copies of letters from Hawaiian organizations concerning the turtle issue. The Cooper letter noted several benefits from having turtles in the Kalahuipuaa fishponds, especially the control of

seaweed blooms. Turtles enter these ponds over the rock wall when ocean conditions are rough or during extra high tides. The turtles presently in the ponds were there when Alike Cooper & Sons began managing the pond complex in 1981. They have probably been there for many years. The turtles are moved from area to area within the complex to control seaweed growth.

October 6, 1983

A letter was sent by Alike Cooper to Gary Smith, Deputy Southwest Regional Director of NMFS reiterating his long-standing request to transfer more turtles into the Kalahuipuaa pond complex from the ocean. The 5 turtles already there are an inadequate number to control seaweed blooms which are stimulated by nutrient-rich groundwater from an upland golf course. The letter also mentioned the need to transfer turtles to 3-4 acres of family fishponds at Keaukaha which have been overgrown by California grass but are being put back into production.

Testimony: Department of Land and Natural Resources
State of Hawaii

Public Meeting - Review of Regulations Concerning the Taking of
Sea Turtles for Subsistence Purposes

U.S. Department of Commerce, NOAA
National Marine Fisheries Service

May 18, 1983
7:00 p.m.

Prince Kuhio Federal Building
Honolulu, Hawaii

We wish to begin by reassuring the National Marine Fisheries Service that the State of Hawaii steadfastly appreciates the intrinsic value of our native population of Hawaiian green sea turtles. We stand resolved that our honu shall persist, and that future generations shall share the seas with them as we do today.

We are confident that the people of Hawaii will maintain this common conviction. Based on this determination we must now work to build a consensus regarding how best to manage our renewable sea turtle resource at a sustainable level.

It would simplify the present effort if everyone concerned would keep clearly in mind some of the things we are not seeking:

- we are not seeking to use Hawaiian sea turtles for commercial purposes;
- we are not proposing the taking of turtle eggs, juveniles or immature turtles;
- we are not advocating that our honu be hunted with spears or harpoons, or entangled in nets to drown; and finally
- we are not attempting to rescind the special protection afforded to green sea turtles under Federal status as a threatened species.

Rather, we are simply requesting consideration of an "exemption," for taking fully mature turtles on a strictly non-commercial basis, to be used only for immediate family consumption as is presently allowed residents in the Trust Territory of the Pacific Islands.

The basis of the State's request for this consideration is two-fold: there are indications that our honu are more plentiful today than may have been believed at the time of their listing as a threatened species; and that there already exists a mechanism to monitor and control such taking under a State system that was in operation for four years and which can be restored readily if exemption is granted.

Regarding the increase in the sea turtle stock, local fishermen and divers have related to us that green sea turtles are more frequently encountered in our waters since the listing in 1978. On the Island of Molokai, one of our Aquatic Resources biologists has been assisting the local staff of the National Marine Fisheries Service by collecting data on sea turtles caught incidentally to a commercial net-fishing operation. While the data are preliminary, during the 22 days that he accompanied the commercial fishermen between May, 1982, and April, 1983, 85 honu were measured, tagged and released. Also during this period, many other turtles too large to handle were simply released from the nets untagged, or were released by the fisherman because our biologist could not be present to tag them. Of those tagged and released, only four have been recaptured. In the absence of any determination of sea turtle counts, we suggest the National Marine Fisheries Service evaluate the data collected from the study to derive estimates of sea turtles around our main Hawaiian Islands.

The Federal regulations establishing the prohibition on taking of sea turtles in Hawaii declared that "the National Marine Fisheries Service and the U.S. Fish and Wildlife Service will proceed to obtain data on the extent of subsistence fishing and the status of populations affected by that activity."¹ The only report on the status of the turtle population Statewide has been a synopsis compiled in 1979 and published in 1980.² As to the effects of subsistence taking in Hawaii before the prohibition, and in the Trust Territories where subsistence taking is still allowed, the State has learned nothing. Therefore, as we are able to relate only to our experiences and contribution to the federal research project, we looked to these meetings as an opportunity to hear what has been accomplished by the Federal agencies.

Regarding the earlier-mentioned system of managing the sea turtles, the State established in 1974 "Fish and Game Regulation 36," when Hawaiian green sea turtles were unprotected by Federal regulations. The State took action to address the concern of a growing commercial harvest of sea turtles for restaurant and curio sales³. At that time, despite the existing commercial take, testimony was presented by a researcher that our Hawaiian population was "the largest remaining colony of green sea turtles left in the United States."⁴ Nevertheless, to protect the Hawaiian honu resource, the State's Regulation 36 banned commercial taking.

Regulation 36 allowed the taking of honu for home consumption—with measures to protect the young and the reproductive capacity of the stock. The only information available to us regarding size at maturity is that females with shells 81 cm long have laid eggs, and that roughly seven percent of the turtles are this size on the grounds where they feed.⁵ Regulation 36 permitted the taking only of turtles with shells longer than 36", which is slightly more than 91 cm. Also, Regulation 36 prohibited the taking of turtles with nets to prevent drowning of undersize turtles. Each person wishing to take turtles for home consumption was required to secure a permit and to file monthly reports of taking activities, thus providing the means with which the number of permittees and amount taken were monitored.

During the four year interval, 35 permittees reported taking a total of 88 honu or roughly an average of 22 turtles annually. We remain unconvinced that an annual taking of that number was significant to the sea turtle stock. Regulation 36 was preempted four years later in 1978 by the present Federal regulations.

In closing, it must be emphasized again that we are working from the basis of common understanding. We are resolved that our honu, the Hawaiian population of green sea turtles, must be protected effectively and managed wisely. We should all agree that government restrictions contrary to the public interest should be discarded. In this spirit we wish to express our support for the controlled subsistence use of green sea turtles from Hawaiian waters.

Thank you for this opportunity to tender our views.

1. 43 FR 32806.
2. Balazs, George H. 1980. Synopsis of biological data on the green turtle in the Hawaiian Islands. NOAA-TM-NFIS-SWFC-7; National Marine Fisheries Service, Southwest Fisheries Center.
3. Balazs, George H. 1975. Testimony...concerning Senate Bill 548 which relates to a green sea turtle resource management study. Typewritten manuscript, unpublished.
4. Balazs, George H. 1973. Testimony...concerning Regulation 36 which relates to the protection of marine turtles in Hawaiian waters. Typewritten manuscript, unpublished.

SENATE RESOLUTION

REQUESTING THE HAWAII CONGRESSIONAL DELEGATION TO REQUEST THE U.S. DEPARTMENTS OF NATIONAL MARINE FISHERIES SERVICE AND FISH AND WILDLIFE SERVICE, BY APRIL 6, 1984, TO ALLOW THE TAKING OF GREEN SEA TURTLES AROUND THE HAWAIIAN ISLANDS FOR DAILY SUBSISTENCE PURPOSES ONLY.

WHEREAS, on July 28, 1978, the U.S. National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (FWS) classified the green sea turtle "chelonis mydas" as a "threatened species"; and

WHEREAS, the green sea turtle has inhabited the Pacific Ocean around the Hawaiian Islands for centuries and the green sea turtle has been used by the Hawaiians in their daily food supply; and

WHEREAS, since 1978 Hawaiians, who had in the past used the green sea turtle in their daily food supply, were prevented from continuing this practice; and

WHEREAS, the NMFS and the WFS have exempted the Trust Territory and allowed the taking of the green sea turtles around their islands for daily subsistence purposes only; and

WHEREAS, the exemption for the Trust Territory was based on past native practices, the same premise which Governor Ariyoshi used in 1981 in requesting the same exemption for Hawaii; and

WHEREAS, Hawaii was not successful in obtaining this exemption in 1978 and is now requesting this exemption again; and

WHEREAS, native rights have been also recognized in respect to the taking of endangered whale species by the Eskimos for their daily food supply; and

WHEREAS, Hawaiian native rights in respect to the taking of the green sea turtle for daily subsistence purposes should be recognized with equal weight with those recognized native rights of the inhabitants of the Trust Territory and the Eskimos; and

WHEREAS, when the green sea turtle was placed on the threatened species list, no comprehensive studies were available to document the specific need for classifying the green sea turtle in this category; and

WHEREAS, since 1978 Congress has amended the provisions for changing the status of species listed on the Endangered or Threatened Species Lists by imposing a burden of proof on any individual(s) requesting a change; and

WHEREAS, prior to classifying the green sea turtle as a threatened species, neither NMFS nor WPS provided any documentation proving the need to protect the green sea turtle around the Hawaiian Islands, but rather based this classification on the green sea turtle populations in the western Pacific; and

WHEREAS, the U.S. Government has never undertaken a study of the green sea turtle population around the Hawaiian Islands and has no future plans for a study; and

WHEREAS, in order for anyone to request an exemption from the total ban of taking the green sea turtle for daily subsistence purposes only, that person must show documentation of the green sea turtle population although the U.S. Government was not required to show such for its classification of threatened species; and

WHEREAS, an economic hardship would be imposed on any individual undertaking such a population study since it would be the first study done on the green sea turtle population around the Hawaiian Islands; and

WHEREAS, all requests for removing, changing, or affecting the status of species presently classified must be submitted by April 6, 1984 to the U.S. Fish and Wildlife Service, after which time no changes may be made until 5 years hence; now, therefore

BE IT RESOLVED by the Senate of the Twelfth Legislature of the State of Hawaii, Regular Session of 1984, that the Hawaii Congressional Delegation is requested to seek approval of the U.S. National Marine Fisheries Service and the U.S. Fish and Wildlife Service by April 6, 1984 to allow the taking of green sea turtles, around the Hawaiian Islands, for daily subsistence purposes only; and

BE IT FURTHER RESOLVED, that certified copies of this resolution be transmitted to the Hawaii Congressional Delegation, the U.S. National Marine Fisheries Service and the U.S. Fish and Wildlife Service.

Dale Kawana
Gene & Marie
Milt Uott
Barry Caputo
Ralph Phillips
Joseph Y. Ueama

OFFERED BY: *Eric S. Carpenter*
Shua Fernando Kelly
James Ahi
W. Bullard

(To be made one and seven copies)

THE SENATE

TWELFTH LEGISLATURE, 1984

STATE OF HAWAII

S.C.R. NO. 77

SENATE CONCURRENT RESOLUTION

REQUESTING THE HAWAII CONGRESSIONAL DELEGATION TO REQUEST THE U.S. DEPARTMENTS OF NATIONAL MARINE FISHERIES SERVICE AND FISH AND WILDLIFE SERVICE, BY APRIL 1, 1984, TO ALLOW THE TAKING OF GREEN SEA TURTLES AROUND THE HAWAIIAN ISLANDS FOR DAILY SUBSISTENCE PURPOSES ONLY.

WHEREAS, on July 28, 1978, the U.S. National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (FWS) classified the green sea turtle "chelonis mydas" as a "threatened species"; and

WHEREAS, the green sea turtle has inhabited the Pacific Ocean around the Hawaiian Islands for centuries and the green sea turtle has been used by the Hawaiians in their daily food supply; and

WHEREAS, since 1978 Hawaiians, who had in the past used the green sea turtle in their daily food supply, were prevented from continuing this practice; and

WHEREAS, the NMFS and the WFS have exempted the Trust Territory and allowed the taking of the green sea turtles around their islands for daily subsistence purposes only; and

WHEREAS, the exemption for the Trust Territory was based on past native practices, the same premise which Governor Ariyoshi used in 1981 in requesting the same exemption for Hawaii; and

WHEREAS, Hawaii was not successful in obtaining this exemption in 1978 and is now requesting this exemption again; and

WHEREAS, native rights have been also recognized in respect to the taking of endangered whale species by the Eskimos for their daily food supply; and

WHEREAS, Hawaiian native rights in respect to the taking of the green sea turtle for daily subsistence purposes should be recognized with equal weight with those recognized native rights of the inhabitants of the Trust Territory and the Eskimos; and

WHEREAS, when the green sea turtle was placed on the threatened species list, no comprehensive studies were available to document the specific need for classifying the green sea turtle in this category; and

WHEREAS, since 1978 Congress has amended the provisions for changing the status of species listed on the Endangered or Threatened Species Lists by imposing a burden of proof on any individual(s) requesting a change; and

WHEREAS, prior to classifying the green sea turtle as a threatened species, neither NMFS nor WFS provided any documentation proving the need to protect the green sea turtle around the Hawaiian Islands, but rather based this classification on the green sea turtle populations in the western Pacific; and

WHEREAS, the U.S. Government has never undertaken a study of the green sea turtle population around the Hawaiian Islands and has no future plans for a study; and

WHEREAS, in order for anyone to request an exemption from the total ban of taking the green sea turtle for daily subsistence purposes only, that person must show documentation of the green sea turtle population although the U.S. Government was not required to show such for its classification of threatened species; and

WHEREAS, an economic hardship would be imposed on any individual undertaking such a population study since it would be the first study done on the green sea turtle population around the Hawaiian Islands; and

WHEREAS, all requests for removing, changing, or affecting the status of species presently classified must be submitted by April 6, 1984 to the U.S. Fish and Wildlife Service, after which time no changes may be made until 5 years hence; now, therefore,

BE IT RESOLVED by the Senate of the Twelfth Legislature of the State of Hawaii, Regular Session of 1984, the House of Representatives concurring, that the Hawaii Congressional Delegation is requested to seek approval of the U.S. National Marine Fisheries Service and the U.S. Fish and Wildlife Service by April 6, 1984 to allow the taking of green sea turtles, around the Hawaiian Islands, for daily subsistence purposes only; and

BE IT FURTHER RESOLVED that certified copies of this Concurrent Resolution be transmitted to the Hawaii Congressional Delegation, the U.S. National Marine Fisheries Service and the U.S. Fish and Wildlife Service.

OFFERED BY: Walter J. Carpenter

Lehua Fernandez Sully

James Ahi

Gene & Mabel
Milt Holt
Charles Tognoli

Ben Cayetano

W. Bessy Jones

Ralph Hiji

Deke Kawana

Sam Muijoh

Crested L. Udane

MAR 30 1984

Capitol Calendar

Today is the 49th day of the current 60-day legislative session.

Committee hearings are as follows:

HOUSE

Tomorrow

9 a.m. — Transportation Committee hearing on resolutions relating to establishing a state port authority, relocating Mid Pacific Airlines from the Honolulu Airport's main terminal to the interisland terminal and requiring use of seat belts. House Conference Room 310.

9 a.m. — Health, and Higher Education committees joint hearing on a resolution dealing with the Western Consortium for Health Professionals. To follow, Health, and Education committees joint hearing on a resolution dealing with school attendance of children with head lice. To follow, Health Committee hearing on resolutions relating to teen-age suicide, helicopter emergency service on the Big Island, including the Volcano community in the current Puna health survey, reviewing the emergency medical service system and recognizing May as Better Hearing and Speech Month. House Conference Room 314.

1:30 p.m. — Education Committee hearing on resolutions dealing with the education of Niibau children, greater insurance coverage for state school bus drivers, the Department of Education's "Equality of Course Offerings" report and Ka'u High School's need for a new vocational-technical building. House Conference Room 310.

1:30 p.m. — Energy, Ecology and Environmental Protection, and Agriculture committees joint hearing on resolutions dealing with a state pesticide superfund. To follow, Energy, Ecology and Environmental Protection, Health, and Water, Land and Hawaiian Affairs committees joint hearing on resolutions relating to pesticide and water quality. To follow, Energy, Ecology and Environmental Protection, and Health committees joint hearing on resolutions dealing with hazardous wastes and health risks of pesticides and other related chemicals. To follow, Energy, Ecology and Environmental Protection Committee hearing on resolutions relating to pesticide contamination levels in

water, pesticide use by the military, EDB contamination in Waipahu wells, pesticide contamination statewide and abolishing chemical, biological and radiological weapons. House Conference Room 416.

Friday

9 a.m. — Employment Opportunities and Labor Relations Committee hearing on a resolution requesting a study of employment. House Conference Room 416.

SENATE

Tomorrow

1:30 p.m. — Economic Development, and Agriculture committees joint hearing on a resolution dealing with the beekeeping industry in South Kohala. To follow, Economic Development Committee confirmation hearing on the appointments of Warren E. Akiona to the Hawaii Fisheries Coordinating Council and Fred I. Kamemoto and James A. Brock to the Natural Reserves System Commission; also on resolutions relating to developing submerged lands, green sea turtles, national marine sanctuary for humpback whales in Hawaiian waters, nuclear waste disposal in the Pacific Basin, state conservational lands functional plans and state energy functional plans. Senate Conference Room 3.

3 p.m. — Human Resources Committee confirmation hearing on the appointments of Carolina Boland and Barbara Adams to the Board of Social Services and Housing; Glenn T. Minami, John Roger Campbell, Robert M. Monden, Jean H. Miyahira, Patricia K. Osgood and Roy K. Fujimoto to the Advisory Commission on Manpower and Full Employment; Leonard E. Mason, Carol K. Ward and Shizuko Muksida to the Policy Advisory Board for Elderly Affairs; and Fred L. Blair, Gene J. Dumarán and David M. Nakada to the Advisory Council for Children and Youth. To follow, hearing on resolutions dealing with the report on the final compensation plan and its costs and the state Prepaid Health Care Act. Senate Conference Room 6.

3:30 p.m. — Transportation Committee hearing on resolutions relating to the relocation of Mid Pacific Airlines from Honolulu Airport's main terminal to the interisland terminal and yacht charter operations at Kewalo Basin. Senate Conference Room 3.

JOINT HOUSE-SENATE

Friday

2 p.m. — House Finance, and Senate Ways and Means committees joint hearing on the proposed supplemental state budget and the relationship of revenue sharing funds to the entire budget. House Conference Room 310.

Anoai Kealoha - - Ladies and Gentlemen of the 12th Legislature.

My name is Alika Kailianu Charles Cooper. I am here testifying on behalf of Senate Concurrent Resolution No. 77 and Senate Resolution 85, requesting the Hawaii Congressional Delegation to request the U. S. Departments of National Marine Fisheries Service and the Fish and Wildlife Service, by April 1, 1984, to allow the taking of Green Sea Turtles around the Hawaiian Islands for daily subsistence purposes only.

My family has always used turtles for subsistence, cleaning of fishponds, medicine and other traditional Hawaiian uses.

My family, up until 1942 had and managed over 220 acres of prime fishponds in the Pearl River, Aiea area, through Waiau until just before Waipio.

Turtles were always used to eat and clean the obnoxious limu(seaweed) that the finfish couldn't control. The turtle also stirred the bottom of the fishpond. This in turn promotes better diatom growth, as well as other plant and animal organisms that are essential for fish pond culture. Also, turtle waste (kukai) is good direct feed for the organisms mentioned above.

The Hawaiian system of raising of fish in the local fishponds is not to feed the fish directly, but to feed the food that the mullet and awa feed on. The turtle is an integral part of the intricate fish pond system.

Alika Cooper and Sons, Incorporated, now manages the Kalshuipuaa Fishpond Complex at Kawaihae, Hawaii. Presently, we have five or six turtles in the pond. Since 1981, I have made repeated requests to the National Marine Fisheries for scientific permits to do research as well as permission to keep turtles in the ponds to control the obnoxious weeds.

All I get from the bureaucrats is shuffling paper, no action, and a lot of talk. I am thoroughly disgusted with all of their bureaucratic excuses. The taking and keeping of turtles are part of our aboriginal rights. Traditionally, my family ate turtle several times a week. It was a necessary part of our weekly diet. The turtle has no fat in the meat, the fat is layered between the shell and the meat. It is very high in protein. Since 1978 when the Federal Government stopped everyone (except those exemptions in the Trust Territory) from taking turtles, my family has been prevented from eating what I consider the best source of protein. I believe our health has suffered.

I would like to see the turtle taken off the threatened species list so that the native Hawaiian can again eat turtle, use it for other traditional uses, religious, medicinal as well as to clean fishponds. A precedence has already been set by other native Americans. It should also be granted to the native Hawaiians without question.

I'd like to thank those of you who signed these resolutions. Those of you who didn't, I ask that you please respect Hawaiian aboriginal rights, our culture, our land and ocean Konohikis. These rights will be addressed some day. Let us begin now.

Aloha A Nui Loa Kakou,

Alika Cooper, Alika Cooper and Sons, Inc.
163 Kaiulani Street, Hilo, Hawaii 96720

MICRONESIAN MARITIME AUTHORITY
P.O. BOX D: KOLONIA, PONAPE
EASTERN CAROLINE ISLANDS. 96941

March 7, 1984

Mr. George Balazs
c/o National Marine Fisheries Service
Box 3830
Honolulu, Hawaii 96812

Dear George

Here's one for you. The attached notices on hunting seasons, bag limits, etc. from the latest edition to the "American family". When they start selling licenses to hunt green turtles. I would assume that the "subsistence" aspects are diminished somewhat, not to mention the availability of food stamps to insure adequate protein in the diet...

I can hardly wait for next week's article, which should show us to preserve turtle meat by smoking.

Sincerely,



Mike A. McCoy
Executive Director,
Micronesia Maritime Authority

cc; Mike Gawel

Hunting seasons, bag limits, and types of licenses

The following are the bag limits and season limits as well as the dates of the seasons for the hunting of game.

Species	Bag Limit	Season Limit	Season
Sambar Deer	1	1	9/1 — 12/31
Wild Pig (Babauin Halum Tano)	2	6	9/1 — 12/31
Wild Goat (Ciban Halum Tano)	3	9	9/1 — 12/31
Philippine Turtle Dove (Paluman Apu)	10	40	7/1 — 7/31
White Throated Ground Dove (Apaka, Kotbata, Fachi)	2	6	7/1 — 7/31
Coconut Crab (Ayuyu)	10	50*	9/1 — 11/30
Land Crab (Panglao Tano)	No limit	No limit	4/1 — 6/30
			10/1 — 12/31
Wild Chicken (Manog Halum Tano)	4	12	7/1 — 7/31
Marianas Fruit Dove (Totut)	3	9	7/1 — 7/31
Starling (Sali)	10	40	7/1 — 7/31
Monitor Lizard (Hilitai)	No limit	No Limit	Open
Green Turtle (Hagan Betde)	1	1	9/1 — 11/30

Species not mentioned above are either illegal to harvest or need a special permit. For information concerning any of these species, contact the Division of Fish and Wildlife at 9729.

The taking of certain species of fish and game require a license. The following information lists the type of licenses and fees for the taking of fish and game.

Type of License	Fee
1. Scientific Research	\$ 10.00



VOLLEYBALL

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4. Net
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 - B. Non Commercial
5. Resident Hunting
 - A. Each Species
 - B. All Species
6. Non Resident
 - A. Each Species
 - B. All Species
7. Coral (Afuk)
8. Green Turtle
9. Fish Weir
10. Precious Coral Harvesting License



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	500.00

Prepared by: Calistro M. Falig, Public Information Intern (Biologist).
Next week: How to build a Smoker.



**VEHICLE
SAFETY
INSPECTION**



**and 10% DISCOUNT
ON GENUINE
NISSAN/FORD PARTS**

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MARINE RESOURCES MANAGEMENT DIVISION
P.O. Box 251
Yap, FM 96943
Federated States of Micronesia

16 January 1992

Dear George,

This is one long overdue letter! It was great to have finally met with you and I want to thank you for all that you've done concerning my visit in Honolulu. The time spent with you in the field and in your office, as well as the contacts you set up for me, was well worth it. Overall, I feel the training I received will be most beneficial to our program here in Yap.

I'd also like to thank you for the correspondences you sent concerning Mr. Alan Davis of Chuuk. I felt inspired to open up a line of communication with him, let him know the route we've taken, and share a couple ideas about a possible program with him. I've enclosed a copy of the letter sent.

With this letter you'll also find a copy of a hatchling data sheet. A few months ago we had a sail boat come through with an approximately one year old juvenile green turtle pet. They realized they wouldn't be able to keep it for much longer, so I asked them if they would be willing to let me tag it before its release. The lady consented and this turtle is now named E802 (LFF)/E803 (RFF). The lady was quite attached to the turtle and requested that if the tags were ever recovered we notify her at the address written on the bottom of the data sheet. They told me the turtle was given to them by some locals on Suvarrow Atoll and that it was brought over from Fiji, possibly as an egg. I didn't realize they had this type of project going on down there.

I've just finished preparing our Outer Islands Turtle Project Phase IV, 1993 Yap State Development Budget. The budget includes keeping me on for an extra year. Hopefully, if approved, it will give me a little more time to wrap things up before I head back to school. We still have a long way to go with this project, and this year has already proven to be a busy one.

Once again I'd like to thank you for the time spent on Oahu. Wishing you the best of this new year!

Best Regards,

Steve Kolinski

Steven P. Kolinski

KB

MARINE RESOURCES MANAGEMENT DIVISION
P.O. Box 251
Yap, FM 96943
Federated States of Micronesia

16 January 1992

Mr. Alan Davis
Box BN
Chuuk
East Caroline Islands
FM 96942

Dear Mr. Davis,

I have been informed of your efforts to seek advice and information concerning the development of a turtle hatchery (hatcheries) as part of the Jr. High Schools Marine Science Program. I thought I'd try to open a line of correspondence with you as we appear to have similar goals (conservation of turtles in the F.S.M.).

Yap State Marine Resources Management Division has been involved with turtle work for the past two, going on three years. We began with a tagging and hatchery program on the islands of Olimarao and Falipiy, at Olimarao Atoll. People of the neighboring islands (Elato, Lamotrek and Satawal) were very supportive of our hatchery project because, in theory, it sounded like a reasonable way to help maintain, or even increase the area's turtle stocks. We didn't relocate any eggs, preferring rather to fence off the nests and collect the hatchlings when they came up. We raised around 400 hatchlings in an enclosed plastic mesh cage, tagged 200 and released them all in the open ocean.

Following the course set by many others in the world, we have removed the hatchery projects from our program. Some of the reasons for this can be better described in the three papers which I have enclosed. Overall, we felt that further interference (implementing a highly questionable practice) with the natural life-cycle of turtles was not the answer to our or the turtles' problems. Rather, we have decided to focus our resources on getting people to reduce and better manage their current practices of interference. Our present means for doing this involves three very interrelated projects: continual tagging and research; the creation of a turtle education/extension program and; the development of realistic management recommendations which will be provided to traditional leaders and the government.

Most people recognize that there has been a gradual decline in the number of turtles within the Yap State region. What we want them to ask themselves is why? Our tagging efforts alone have brought many to rethink about this. Whenever we go out in the field to tag and measure turtles, people on the nearby inhabited islands start telling turtle stories. I get swamped with them when I return to one of these islands. It's important that we get people talking, especially when the elder folks come around to telling about how things used to be.

Many older people here believe that their turtle resources began decreasing when island communities started moving away from their traditional regulations and methods of harvest. Tradition plays an

incredibly important role in the formulation of our management recommendations. One thing you might consider doing is to have the kids create a questionnaire which identifies the traditional role of turtles within their communities, and then have them interview some of the older people within their families. Questions regarding harvest methods, transport methods, clan or family rights and regulations, taboos, places where turtles could and can be found, turtle life history, and how things have changed for better or for worse will undoubtedly get people talking. Most important, the kids will gain an understanding of their traditional ways and may become aware of the impact that change has brought to their turtle resources and to their lives.

Another consideration involves tying this together with whatever educational materials you receive. It might be possible to have the kids research some of the life history information that has come from years of studies, so that they can create some of their own management plans for turtles based on both western and traditional knowledge. This type of project could actually be applied to any resource, and I believe would be beneficial for both our future leaders and future resources.

Whatever route you decide to take, please feel free to call on us anytime for ideas or information we may be able to share.

Best Regards,

Steven P. Kolinski
PCV, MRMD

Enclosures

cc: G. Belong



MARINE RESOURCES MANAGEMENT DIVISION

DEPARTMENT OF RESOURCES & DEVELOPMENT
YAP STATE GOVERNMENT
Post Office Box 251, Colonia, Yap, FM 96943

TAG: X-551

TAG RETURN/SIGHTING INFORMATION
(for turtles tagged and/or sighted and/or recaptured in Yap State)

1. Species: Hawksbill Sex: UNKNOWN

2. Tag(s):	Prefix #	Prefix #	Prefix #
	<u>X 525</u>	<u>X 551</u>	_____
Return Address	<u>HIMB</u>	<u>HIMB</u>	_____
for Tags:	<u>UNIVERSITY</u>	<u>UNIVERSITY</u>	_____
	<u>HAWAII 96744</u>	<u>HAWAII 96744</u>	_____

Tagging Site Information

3. Reference Data Sheets: A 23 (7A)

4. Date Turtle was Tagged: 08/04/90.

5. Location Where Turtle was Initially Caught and Tagged (be specific as possible): UNDER
A BIG CORAL, AT FIRST CHANNEL CLOSE TO YALPIY ISLAND, OLIMARAO
ATOLL, YAP STATE, FEDERATED STATES OF MICRONESIA.

6. General Activity of Turtle at Tagging Site: SLEEPING

7. Date Turtle was Last Seen at Tagging Site: 08/04/90.

8. Was Lesion Tissue Observed on the Turtle (circle one): YES / (NO) / UNKNOWN.

9. Comments: TURTLE WAS LISTED AS A SUBADULT

Sighting/Recapture Information

10. Reference Data Sheets: NONE

11. Date Turtle was Sighted/Recaptured: 08/04/90.

12. Location Where Turtle was Sighted/Recaptured (be specific as possible): UNDER A CORAL,
IN SHALLOW WATER OVER REEF, CLOSE TO OLIMARAO ISLAND, OLIMARAO
ATOLL, YAP STATE, FEDERATED STATES OF MICRONESIA.

13. General Activity of Turtle at Sighting/Recapture Site: SLEEPING

14. Was Lesion Tissue Observed on the Turtle at this Site:
(circle one) YES / (NO) / UNKNOWN.

15. Number of Years/Days Between #7 and #11: Years 2 Days —.
16. Approximate Distance Between #5 and #12: 2 (km) miles (circle one).
17. Method Used to Capture Turtle: caught by hand.
17. Disposition of the Turtle (check one) Killed: Date 08/04/92
 Released: Date —/—/—
 Unknown.
18. Were the Tags Returned (circle one): (YES) / NO.
19. Tags Returned: Prefix # X 551 Prefix # _____ Prefix # _____
20. Tags Applied and Remaining on Released Turtle:
 Prefix # _____ Prefix # _____ Prefix # _____
21. Has a Questionnaire Been Sent to the Respondent?: (YES) / NO Date: 11/9/92.
 (or has the respondent been interviewed)
22. Has the Questionnaire Been Returned to MRMD? (YES) / NO
23. Name and Address of Tag Respondent: DEWI MALIHAL
P.O. BOX 668
COLONIA
YAP IS. 96943 F.S.M.
24. Comments: TAG X-555 MISSING, NOT ON TURTLE AT TIME OF
RECAPTURE. UNKNOWN WHETHER MALE OR FEMALE.

PLEASE ATTACH COPIES OF ALL RELATED MATERIALS TO THIS FORM.

Please send copies of all collected information to:

1. George Balazs, National Marine Fisheries Service, Southwest Fisheries Center, Honolulu Laboratory, 2570 Dole Street, Honolulu Hawaii, 96822-2396;
2. Addrienne Farago, South Pacific Regional Environmental Programme (SPREP), P.O. Box 240, Apia, Western Samoa;
3. Return address written on the tag if other than SPC/SPREP or HIMB University, Hawaii.

Please file copies of the information in:

1. Corresponding Turtle Data Sheet Folder attached to the original data sheet;
2. Corresponding Turtle Summary Book following the first summary data sheet for the turtle;
3. Tag Return File.

Data sheet #: ~~A76~~

Tag #	
New	X-525
	X-551
Old	

YAP STATE TURTLE PROJECT
NON-NESTING TURTLESDate: 8 / 4 / 90 Time: 00:15
12:15 am/pmLocation: At First channel close to FalipyDepth: 15 ft (5M) Substrate: _____Surface water condition: calm / moderate / roughTide level: low / med. / high Tide phase: spring / neapTurtle activity: Sleeping under a big coralSpecies: green / hawksbill / other: _____Age/sex: juvenile / sub-adult / adult (male) / adult (female)

	carapace	
	curved	straight
length (cm)	40	
width (cm)	31	

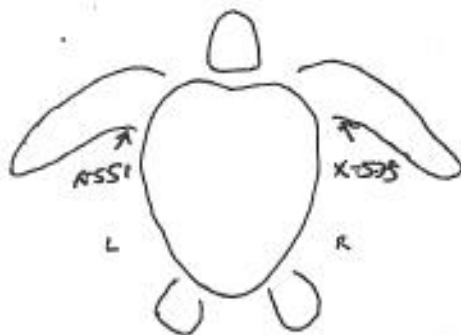
Weight: _____ lb/kg

Tail length (cm)
from plastron: 6
from carapace: _____
from vent: 2Evidence of previous tags: yes / no

Commensals: N/A

barnacles - Chelonobia...0
- burrowing...0
other - _____0

Damage: N/A

carapace.....0
LFF.....0
RFF.....0
LHF.....0
RHF.....0
tail.....0
head.....0Comments: Caught by hand under a big coral, very calm water while spear fishing.

Recorders:

Measured by	Vince
Recorded by	Vince

THINGS TO DO TODAY

DATE	COMPLETED
1 (Turtle) ^{Tag} Description	<input type="checkbox"/>
2 (a) Hand shell	<input type="checkbox"/>
3 Length. 60.5 cm	<input type="checkbox"/>
4 Caught on (Limarau)	<input type="checkbox"/>
5 Date: 8/04/92	<input type="checkbox"/>
6	<input type="checkbox"/>
7 Lamotok guy caught it:	<input type="checkbox"/>
8 Name of person: Paul Malumal	<input type="checkbox"/>
9	<input type="checkbox"/>
10	<input type="checkbox"/>
11	<input type="checkbox"/>
12	<input type="checkbox"/>

We hope you can provide us with further information about the turtle by answering the questions below. Such information will help us in establishing education and management programs for our region.

Please return to: Marine Resources Management Division
P.O. Box 251
Colonia
Yap State, FSM 96943
Federated States of Micronesia

To Be Filled by MRMD:

1. Species: HAWKSBILL Sex: UNKNOWN
2. Tags Returned: Prefix # X SSI Prefix # _____ Prefix # _____
Address: HING _____
UNIVERSITY _____
HAWAII 96744 _____

To Be Filled by Respondent:

3. What date was the turtle caught?: 4 August 1992
4. Where was the turtle caught (please name closest island or land mark, city or state, and country?):
Alimasao Island, Alimasao Atoll, Yap State, Federated States of Micronesia
5. Was the turtle (circle one)...
- a. captured on land;
 - b. captured in shallow water over a reef;
 - c. captured in shallow water over seagrass;
 - d. captured in a lagoon;
 - e. captured in a channel;
 - f. captured on an outside reef slope;
 - g. captured in deep water just beyond a reef edge;
 - h. captured in the deep ocean.
6. What was the turtle doing before being captured (circle one)?:
- a. sleeping;
 - b. swimming;
 - c. feeding;
 - d. mating;
 - e. nesting;
 - f. other (please explain) _____

7. How did you catch the turtle?: By hand.
8. The turtle was (check one)...Killed: Date 4 August 1993
...Released: Date _____
.....Other: (please explain) _____
9. If released, were there tags still remaining on the turtle (circle one): YES / NO.
10. Tags remaining on a released turtle:
Prefix # Prefix # Prefix #

11. Were any tumors/lesions observed on the turtle: YES / / UNKNOWN.
12. How often do people see turtles in your area?: Almonas uninhabited, fairly often
13. What types of turtles do they see?: Green and Hawksbills
14. Are turtles used by the local people (circle one)?: / NO.
15. How do people use the turtles?: food, shell money, jewelry
16. What are the turtles generally doing before people catch them?: nesting, swimming, mating, etc.
17. Do you know of any other tagged turtles in your area?: NO.

Thank you for your assistance in answering these questions. Please feel free to write with any questions you may have.