

HAWAIIAN ISLANDS NATIONAL WILDLIFE REFUGE

PLANNING UPDATE



No. 7

February 1987



MASTER PLAN/EIS COMPLETED

The Final Master Plan/Environmental Impact Statement for the Hawaiian Islands National Wildlife Refuge (HINWR) was completed last July. The Record of Decision adopting the Preferred Alternative as the most suitable management option was published in the Federal Register on October 9, 1986.

The Fish and Wildlife Service (FWS) will continue the distribution of PLANNING UPDATES such as this one to appraise concerned organizations and individuals of significant developments related to planning and operations for the HINWR.

CHANGE PROPOSED FOR TERN ISLAND OPERATION

The subject of this PLANNING UPDATE is a proposed change in the mode of operation for the Tern Island facility at French Frigate Shoals. The change is dictated by funding constraints resulting from the need to reduce the Federal budget deficit, specifically a 15% reduction in Fiscal Year 1987 funding for the Hawaiian and Pacific Islands National Wildlife Refuge Complex. Simply stated, there are insufficient funds to continue the year-round occupation and maintenance of the Tern Island facility and discharge the other responsibilities of the Complex.

The new proposal calls for reducing the continuously staffed, year-round operation of the full facility to a seasonally staffed, field camp operation, under which most of the facilities transferred to the FWS by the U.S. Coast Guard, will be abandoned. The change will eliminate costs associated with maintaining facilities (i.e. electrical generating system, fresh water catchment and delivery system, refrigeration system, buildings, runway, seawall, tractor, etc.) and allow all funds to be used directly for conservation and management of wildlife resources and habitat.

Biologists from the FWS and other agencies such as the National Marine Fisheries Service will establish long term field camps for ten months each year (February-November) to continue research and population monitoring efforts during critical reproductive periods. Limited entry policies relating to vessel traffic and permittee access will continue to be enforced and supervised by on-site personnel.

Ongoing effort to monitor the Hawaiian monk seal population and pup production throughout French Frigate Shoals will continue, but at a slightly reduced level because of the two-month winter hiatus. The green sea turtle population and hatching production will be monitored as before throughout the entire reproductive season (April-November). Seabird population monitoring efforts involving studies of population size and breeding chronology, reproductive success, chick growth and food habits will continue at nearly undiminished levels. Direct assistance to basking seals and nesting and hatching turtles trapped behind the seawall or by vegetation and coral debris will be provided as needed during the ten-month period. The operational change, therefore, is unlikely to have significant negative impacts on wildlife.

The change will result in a savings of approximately \$100,000 during the transitional year (FY 1987) and \$150,000 each year thereafter. A portion of this savings will be used to implement high priority management strategies included within the Preferred Alternative of the Master Plan such as: regulating and monitoring nearshore vessel traffic, conducting biannual aerial photo surveys, and conducting comparative population monitoring studies on Midway and Kure.

COMMENTS

The proposed change is subject to compliance with Section 7 of the Endangered Species Act and final review by the FWS before implementation, which is planned for Spring 1987. Public and outside agency comments are welcome and should be directed to the Refuge Manager at the following address:

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UNITED STATES DEPARTMENT OF THE INTERIOR
Fish and Wildlife Service
Hawaiian Islands National Wildlife Refuge
300 Ala Moana Boulevard, Room 5302
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George Balazs
National Marine Fisheries
Service
P.O. Box 3830
Honolulu, HI 96812

TO:

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HAWAIIAN ISLANDS

NATIONAL WILDLIFE REFUGE

MASTER PLAN/ENVIRONMENTAL IMPACT STATEMENT

Abstract

Proposed is a management plan for the Hawaiian Islands National Wildlife Refuge. The plan places primary emphasis on protecting and enhancing refuge wildlife resources, particularly threatened and endangered species. The plan would also accommodate limited forms of public use such as wildlife interpretation and environmental education. Additionally the plan would support various compatible public and economic uses throughout the Northwestern Hawaiian Islands archipelago (e.g. commercial fishing outside the refuge boundary). Five alternatives were considered, each composed of different mixes of conservation and public use strategies. The proposed action is a hybrid that would optimally satisfy all refuge objectives.

It is the opinion of the U.S. Fish and Wildlife Service, following a January 10, 1985 internal consultation under Section 7 of the Endangered Species Act of 1973, that adoption and implementation of any of the alternatives considered would promote conservation of the six species of endangered or threatened wildlife addressed in this document. Furthermore, on April 8, 1986 the National Marine Fisheries Service (NMFS) completed a separate biological consultation under Section 7 of the Endangered Species Act (NMFS shares responsibility for the management of threatened green sea turtle and endangered Hawaiian monk seal populations with the U.S. Fish and Wildlife Service) and has concluded that implementation of the revised, final Master Plan/EIS Preferred Alternative is not likely to jeopardize the continued existence of the Hawaiian monk seal or the Hawaiian green sea turtle.

Any further remarks or requests for additional information should be directed to:

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808-546-5608

Department of the Interior
U.S. Fish and Wildlife Service Region One

Other Public Uses:

20) Regulate and monitor nearshore vessel traffic:

Same as PA Strategy #1

21) Cooperate/assist in the installation of a mooring buoy outside the HINWR boundary at French Frigate Shoals:

Same as RPA Strategy #16

G. Relationship of Tern Island to HINWR Management

The Tern Island station plays an integral part in the achievement of wildlife resource objectives in the HINWR. Many of the strategies discussed above could not be feasibly implemented without a FWS presence at Tern Island. The discussion which follows establishes the extent to which attainment of objectives is dependent upon the continued operation of the Tern Island facility. In addition, a Tern Island "abandonment" scenario has been developed. Abandonment is considered a possible management option in light of continuously escalating operations and maintenance (O & M) costs associated with the Tern Island station. Tightening budgetary constraints require that the FWS take a critical look at all field operations, assessing trade-offs in the event of a severe cutback in funding. The abandonment option focuses on trade-offs that would need to be made if Tern Island were abandoned. (Because an abandonment option would be possible under all alternatives except for the NO ACTION ALTERNATIVE, the option is discussed once and not repeated in each of the alternatives.)

Description of the Tern Island Facility and Operation

Dredging for construction of the Tern Island runway began in August 1942. A 12,000' ship channel was dredged to 20' deep and an 8,000' seaplane landing area was cleared of coral heads. Approximately 660,000 cubic yards of dredged coral fill was placed behind a partial rim of steel sheet piling to "create" a new island 3,100' by 350'. This project increased the original island from approximately 11 acres to 37 acres in size. The total project, including construction of buildings and fuel tanks, cost approximately two million dollars.

A Naval Air Facility was commissioned on Tern Island on March 17, 1943. The station was placed in caretaker status one month after the war ended in September 1945 and was decommissioned in June 1946. After some additional construction on Tern Island, the Coast Guard LORAN facility from East Island was moved to Tern Island and became operational in 1952. Repairs were made to the seawall in 1959 and to station buildings in 1964. A major storm in December 1969 required helicopter evacuation of

station personnel and subsequent rebuilding of living quarters and generator building in 1972 at a cost of nearly \$1,215,000. The Coast Guard LORAN station was decommissioned on June 30, 1979, at which time the FWS occupied the facility.

Four major buildings are now present on Tern Island: a) shop and equipment storage building; b) generator building; c) living quarters; and d) boathouse. Two smaller buildings house the fresh water pumps and gasoline drums. Five 27,000 gallon diesel fuel tanks are on the island, with two of these in use. The roofs of the major buildings provide water catchment capability. Redwood water tanks are used for fresh water and salt water storage. Power is generated by two 17.5 kw Onan generators, operated on alternate days. Caterpillar 250 kw generators, used for the LORAN station, are operated intermittently. Communication is by single sideband radios with the Honolulu office and by VHF radio with vessels in nearby waters. Logistic support of the station is provided by contracted aircraft (twin engine Beechcraft), chartered fishing boats, volunteer fishermen and the Coast Guard. Vehicles on the island include a Case tractor with backhoe and a Dodge truck. Boston whalers with outboard motors are used for research and management studies within the atoll.



Tern Island.

Present staffing includes two assistant refuge managers resident on the island for 10 months of the year on a rotational schedule. A biological

technician based in the Honolulu Office provides support for the facility and rotates onto the island for approximately four months of the year. Additional FWS biologists, management personnel and volunteers spend varying lengths of time on the island. Staff time on Tern Island is devoted to station maintenance and operations, biological studies and support of research work underway by other station visitors.

Operation of the HINWR with Tern Island

Vulnerable/Endemic Species

Continuance of the biological field station on Tern Island would permit the FWS to fully satisfy high priority wildlife objectives for vulnerable and endemic species. Year-round monitoring of endangered monk seals from the Tern Island base has facilitated studies of productivity, age/sex composition of the population, population recruitment, intra-atoll movement and re-population of Tern Island--all of which have added to overall understanding of seal populations, their breeding habits and habitat requirements. For example, detailed monitoring of the seal population at French Frigate Shoals (FFS) since the departure of the Coast Guard in 1979 has shown a steady increase in seal use of Tern Island. The increase is attributable to the decline in human activities on Tern. However, there is still no evidence to show that the total seal population is increasing. Rather, what appears to be the case is that seals are returning to Tern Island in preference to other islands in FFS. Because seal activity is centered on FFS, the presence of a permanently-manned station at Tern is expected to greatly facilitate efforts to recover this endangered species. Further monitoring will be needed to show whether successful pupping takes place on Tern Island. (Several aborted attempts at pupping have been recently documented.) Production and maintenance objectives for the monk seal call for maintaining existing populations at FFS, Necker and Nihoa Islands, while recovering populations at Laysan, Lisianski, Pearl and Hermes Reef to mid-century levels. The research, monitoring and protective actions implied by these objectives make a field support base on Tern Island indispensable if objectives for the monk seal are to be satisfied.

Like the monk seal, the majority of the threatened green sea turtle population also occurs at FFS. Over 90% of the remaining Hawaiian population nests on East and Whaleskate Islands at FFS. The geographic location of the Tern Island facility makes it ideal for studying turtles. The field station has greatly facilitated studies of reproduction, growth and turtle habitat requirements. Research on the turtle has been primarily conducted by non-FWS personnel, but again, the availability of a support base on Tern Island has been instrumental in expanding understanding of this species. Maintaining and increasing nesting populations at various locations throughout the archipelago, as stated in the objectives for this species in Section V, will require

continual monitoring and research efforts. Such efforts can best be facilitated by perpetuation of the Tern Island station.

Endemic Terrestrial Species

The central location of the Tern Island station at a midpoint in the archipelago also facilitates attainment of objective for all endemic terrestrial species, including four endangered landbirds--Laysan finch, Laysan duck, Nihoa finch and Nihoa millerbird. The objective covering these species calls for prevention of ecological disturbances on Laysan, Nihoa and Necker Islands and maintenance of natural diversity. The most serious threat to these species (and to endemic terrestrial biota in general) is the inadvertent introduction of exotic species. Predators such as rats and carnivorous ants can destroy populations of endangered birds and native invertebrates. Exotic weeds can seriously alter the habitats of these animals while displacing rare native plants (Conant, et.al, 1983). The presence of a permanent manned station on Tern Island has had a deterrent effect on illegal island landings, which are a potential source for introduction of exotics. Obviously, however, the FWS does not now have (and does not anticipate ever having) sufficient resources to patrol the entire archipelago for illegal entries. The station also facilitates rapid response to accidental groundings in the archipelago, another source of exotic organisms.

Perhaps the greatest beneficial impact of the Tern Island station is the rapid response capability which the station offers in the event of an emergency or other incident where exotics could be introduced. Communication facilities on Tern make possible a speedy response to accidental groundings, oil spills, spills of hazardous chemicals or other incidents with potential for adversely impacting the unique terrestrial biota of the NWHI. The recent (February 5, 1985) grounding and sinking of the fishing vessel, CAROLYN K within the lagoon at French Frigate Shoals is a case in point. Refuge personnel at Tern Island rescued the crewmen and provided radio communication and coordination between the sinking vessel, the U.S. Coast Guard and Refuge officials in Honolulu in an effort to minimize the adverse impacts of the event. Tern Island personnel and facilities also made possible the rapid response of the salvage operation which patched the hull, refloated the vessel and towed it out of the lagoon and back to Honolulu eight days later. Had the Tern Island station not existed, human lives and wildlife populations would have been endangered. The vessel would likely have broken up in the lagoon with the consequent spill of 1,000 gallons of diesel fuel.

Seabirds

Seabird research and monitoring studies, a necessary component of FWS objectives for marine bird production and maintenance, are similarly facilitated by the Tern Island base. The detailed studies on seabird

reproductive biology, food habits, flight patterns, vision, growth rates and bio-energetics conducted during the Tripartite effort could not have been accomplished without the extensive equipment and supplies made available by having a base of operations on Tern Island. The opportunity to study FFS seabird populations year-round, at a location midpoint in the archipelago, provides important benefits to the FWS' overall seabird management program. Together with seabird data collected on the main Hawaiian Islands and data from the vast seabird colonies on Midway and Kure, seabird research at FFS provides important comparative data. FWS staff and volunteers have monitored the repopulation of Tern Island by seabirds since 1979 with the departure of the Coast Guard. The result has been new information on the effects of human activity on seabirds.

Research Studies

The objective for research studies perhaps exhibits the greatest dependency on the continued existence of the field station at Tern Island. The station is vital to the FWS objective to gather scientific data on refuge resources and the environmental impacts of public use. Operation of the FWS research facility at Tern Island has facilitated the implementation of a broad, multi-disciplinary research program involving representatives of several agencies and organizations. Recent or ongoing studies have addressed reef ecology and productivity, reef trophics, algae, ciguatera, lobster reproductive biology, geology and reef growth patterns, turtles, seals and seabirds. Although some work directly associated with the Tripartite project will not continue at Tern Island, several studies are anticipated to continue and new studies are planned. As an example, deep water submersible studies of bottomfish and mineral resources were conducted in September 1984.

Tern Island also provides an essential support base for research conducted throughout the archipelago. Tern has been a frequent stopover site for research vessels enroute to other locations in the NWHI. Aircraft transport to Tern Island has made possible the transfer of personnel and supplies, improving the productivity and variety of studies possible on vessel-supported research cruises. Tern Island personnel have also facilitated these projects by repairing both research equipment and support vessels in need of assistance. Studies involving remote sensing by twin-engine aircraft continue to be totally dependent on Tern Island for refueling. Refuge staff at Tern also provide radio communication support for field camps on more western islands that are unable to communicate effectively with Honolulu.

Public Use

Fulfillment of the public use objectives are equally dependent on the existence of a manned station on Tern Island. Opportunities for on-site environmental education, interpretation and photography will be greatly

facilitated by the availability of housing, utilities and water, even though most visits will likely not exceed two or three days. The airstrip is a critical feature, without which it would be difficult, if not impossible to conduct any form of on-site public interpretive and/or educational program.

Other Public Uses

An obvious benefit of the Tern Island station is the support it currently provides for the NWHI commercial fishing industry, one of the compatible public uses identified in this Master Plan/EIS. Parts and supplies are regularly transported on FWS aircraft to fishing vessels at FFS. Fishing crew rotations have also occurred on a space-available basis. Refuge staff, using station equipment, have assisted in several vessel repair operations. Radio support is provided to fishermen to facilitate communication with co-workers and suppliers. Additional support (storage of equipment, recreational opportunity, provision of fuel and ice, etc.) has been proposed in the past and has been considered in this planning process. (Because National Marine Fisheries Service has concluded in an August 14, 1985 Biological Opinion that such additional support would likely jeopardize the continued existence of the Hawaiian monk seal and Hawaiian population of the green sea turtle, this strategy, though considered in the RESOURCE UTILIZATION ALTERNATIVE, was not adopted by the FWS as a part of its PREFERRED ALTERNATIVE.

Management Actions

Since occupation of Tern Island by the FWS has occurred only recently, the data being accumulated are considered essential baseline information necessary to relate changes in future resource status. The FWS plays an important part in facilitating management actions carried out at FFS by cooperating closely with the National Marine Fisheries Service. Personnel stationed at Tern Island participate in year-round population monitoring activities and monthly aerial population surveys. The monk seal "Headstart" program was aided by FWS personnel and equipment at Tern Island. Refuge personnel were critical to efficient completion of a translocation program for aggressive male monk seals. Tern Island facilities and personnel are important to the green sea turtle program as well. The presence and law enforcement capabilities of personnel at Tern Island are vital for maintaining undisturbed nesting and basking areas for 90% of the green sea turtle population. Seabird baseline data collection and population monitoring activities are currently being carried out by FWS personnel at Tern Island. Management actions are limited to encouraging propagation of selected vegetative types for nesting habitat, reducing disturbance by limiting unwarranted visits, and public relations efforts with commercial fishermen. The future is unclear in regard to what management actions will be carried out following baseline data collection, but it is quite clear that the

future of the HINWR and Tern Island holds the promise of increased potential for disturbance of this fragile environment when expanded commercial fishing opportunities and new undersea mining interests are developed. The data collected now and in the immediate future will be extremely important when the FWS is faced with decisions that will affect the well-being of fish and wildlife in the NWHI.

Other Benefits of Tern Island Station

The above discussion directly links the Tern Island station to the attainment of specific categories of Refuge objectives. There are also indirect links which are equally critical to meeting objectives. They include the following:

- 1) Enforcement of Regulations - A manned station on Tern Island greatly enhances FWS capability to control illegal access to islands and atoll waters at FFS. Additionally, FWS personnel on Tern monitor the activities of all authorized personnel (researchers) to ensure that all regulations specified in special use permits are rigorously adhered to. Strict enforcement has reduced potential conflicts between research activities and critical populations of monk seals and turtles. This proved to be particularly important during the height of the Tripartite studies at FFS, when research activity on the island was at an intensive level. It was, in fact, this capability of monitoring on-going work that made it possible to accommodate such a variety of studies with little or no adverse impact.
- 2) Oil or Chemical Spills - Implementation of an effective response to an oil or chemical spill is dependent upon the rapid deployment of appropriate equipment and trained personnel. The Tern Island station provides capability to support such an operation that would not be possible if the station was abandoned. The station played an integral role in support of the salvage and post spill study after the ANANGEL LIBERTY grounding in 1980 through air and boat support, living quarters and radio communication. An immediate and effective response is particularly important at FFS where principal NWHI populations of monk seals and green sea turtles are found. The FWS oil spill contingency plan will require a manned station on Tern.
- 3) Accidental Groundings - Four vessels (three fishing boats and one freighter) have grounded at French Frigate Shoals since 1980. Tern Island refuge staff played an instrumental role in the salvage and/or rescue operation in each case. Radio communications and a rapid response to the situation prevented or substantially reduce potentially harmful effects to seals, turtles and other wildlife forms.
- 4) Rescue and Emergency Response Capability - There is no well-documented record of the historical use of the Tern Island airstrip for emergency evacuation of vessel crewmen. There were at least two

documented cases during Coast Guard occupation when injured crew from fishing vessels were taken to Honolulu. Others were treated by medical corpsmen at the LORAN station. Since FWS occupation in 1979, there have been three emergency evacuation flights involving vessel crewmen and one involving a FWS volunteer. With increasing numbers of fishermen, researchers and visitors associated with interpretive/educational excursions the need for emergency evacuation (and emergency medical treatment capability) will become increasingly important.

Costs of Operating Tern Island

As documented above, the Tern Island station performs critical functions in the attainment of objectives which span virtually all the objective categories identified in Section V of this document. However, those functions are not executed without significant costs to the FWS. Costs associated with the operation of the Tern Island station currently run on the order of \$150,000 per year, which covers staffing, logistical support and supplies. This represents about 50% of the total (\$305,000) O&M for the HINWR. Under the PREFERRED ALTERNATIVE, it is estimated that total refuge O&M costs would perhaps double. Assuming that Tern Island O&M remains more-or-less a fixed proportion of the total, Tern Island costs can also be expected to double to around \$300,000.

In addition to O&M costs, major rehabilitation of the seawall will be required in the near future. The seawall, which is composed of steel sheet piling, has deteriorated over the years from constant wave action and exposure. Options for rehabilitation of the seawall are currently under study. Other major rehabilitation projects for which costs have not yet been developed include the boat hoist, caterpillar generators, fuel tanks and runway. Costs are estimated to range between two and four million dollars--spread over the expected 20-year lifetime of the facilities.

Some of these costs might be defrayed if station management, operations and funding responsibility were shared with other agencies or organizations with interests in the NWHI. National Marine Fisheries Service, in particular, could play a greater role in this project, due to its expanding responsibilities for implementation of monk seal and turtle studies and management actions. The State of Hawaii, with its shared responsibility for fisheries and wildlife management, could also play a more involved role at Tern Island. The fishing industry could also share in the operation of the facility beyond the present level of support, in view of the existing and anticipated role that the station plays in support of fishery development.

It is clear that all these parties, and others less directly, benefit substantially from the continued operation of the station. Whether or not the benefits they derive, and the management responsibilities they share with the FWS, warrant greater administrative and financial

involvement is a matter for future discussion and negotiation. However, as part of the HINWR, activities at Tern Island will be dictated by the outcome of the Master Planning process and budgetary/staffing constraints, regardless of the degree of shared involvement by other agencies and organizations.

Operation of the HINWR without Tern Island

Vulnerable Species

In the event that severe budgetary cutbacks were to force abandonment of the Tern Island station, serious shortfalls could be expected with respect to each of the objectives discussed above. Principal shortfalls foreseen are as follows:

1) Vulnerable/Endemic Species - Research, monitoring and protective actions required to meet production and maintenance objectives for the monk seal could not be fully implemented under an abandonment option. Year-round monitoring of the seal population at FFS would not be possible and therefore any adverse changes to the population would not be quickly detectable. Additionally, inability to monitor the population year-round would result in voids in mortality and survivorship data. Research and monitoring teams would be unable to record this data during the winter months when sea conditions can make vessel landings extremely hazardous. Because the substantial majority of the seal population is found at FFS, recovery team personnel would likely continue to monitor the population at Tern Island during those months of the year when weather conditions were favorable to vessel landings. This would require more boat charters and extended field camps on Tern. Whether such measures would be sufficient to take corrective actions to halt factors adversely impacting the population is uncertain. What is certain is that without year-round monitoring, the risk to the population associated with a catastrophic event is increased and consequently the likelihood of satisfying stated production and maintenance objectives for this species declines.

The same line of reasoning applies to the threatened sea turtle population. Year-round monitoring permits an immediate response to potential inimical factors which might otherwise have devastating effects on the population. In the absence of aircraft, small boat support, lab facilities, electrical power, maintenance equipment, etc., some high priority research tasks for turtles, would be impacted. To the extent that such research contributes to our understanding of turtle growth, reproduction and habitat requirements, FWS objectives for increasing nesting populations would be negatively impacted. Field camps and vessel support could provide a partial substitute for present station facilities, but without efficient land-based facilities and support, studies such as turtle tracking studies, that require the use of elaborate radio equipment, would be difficult, if not impossible to

implement. Again, the voids that would be created in baseline population data would hinder development of effective management techniques and consequently impact our ability to reach stated objectives for the turtle.

Endemic Terrestrial Species

Without a manned station on Tern, FWS capability to prevent potential ecological disturbances on Laysan, Nihoa and Necker Islands would be seriously impaired. In the absence of any deterrent or response capability, illegal entries and accidental groundings would present a larger potential risk for introduction of harmful exotics to the Refuge. Consequently, recovery of the four endangered landbirds could be further jeopardized and unique endemic terrestrial forms be adversely impacted.

Seabirds

Under a Tern Island abandonment scenario, the comparative data on seabirds made possible by year-round monitoring would not be available, or at least not available to the same extent as at present. Comparative data on seabird populations from either end of the archipelago, and from a location near a midpoint in the archipelago have shed new light on population dynamics, reproductive patterns, migrational movements, etc. However, since available data would indicate that all seabird populations are in a healthy state (with the exception of the sensitive sooty storm-petrel), abandonment of Tern would likely not have any direct adverse impact on seabird populations. What would be affected is FWS capability to conduct research and monitor those populations for potential impacts associated with human activities.

Research Studies

Research and ecological monitoring are means to an end rather than an end in and of themselves. The multi-disciplinary research program in the NWHI and the extensive wildlife monitoring efforts of the FWS ultimately support objectives to either maintain or increase populations of key wildlife species. Without the Tern Island station, research and monitoring efforts would undoubtedly need to be scaled back. FWS and other agencies involved in research in the NWHI would likely seek other means for carrying on the critical research work, but what is and is not critical would depend on the availability of resources (dollars and staff) for conducting the research. The high cost involved in chartering vessels and conducting extended field camps could result in significant reductions in research over current levels. The precise impacts of such reductions on threatened and endangered species is uncertain; however, without basic research to clarify habitat requirements, reproductive cycles, intra-atoll movements, etc., FWS would be at a clear disadvantage in formulating effective management strategies to effect recovery of these species.

Public Use

Proposed visitation to Tern Island for photography, journalism and art (P/J/A) activities would not occur if the station was abandoned, except as space and funding allowed access via chartered vessels supporting field monitoring programs. The total effect would be that the vast majority of P/J/A activities including nature tours and environmental education programs proposed for Tern, would not be possible under this scenario. Unpredictable weather and wave conditions, landing safety hazards, long inter-island distances and conflicts of human activity on undisturbed HINWR islands would, together, prevent opportunities for nature tour/environmental education at HINWR locations other than Tern Island.

Commercial Fishing

Without the Tern Island station, FWS would be unable to provide any logistical support to the commercial fishing industry. However, this would likely not be a serious impediment to the development of commercial fishing in the NWHI, because the State's current proposal calls for a mothership operation that could function independently of any land-based facilities. While the mothership and catcher vessels could always encounter mechanical problems that might require transport of spare parts, these problems presumably would be taken into account beforehand by the fishing crews. Thus, if Tern Island were abandoned, the fishing industry would be forced to provide for its own needs with respect to vessel repair, medical evacuations and other emergency situations that might develop on the fishing grounds. (The reciprocal arrangement that currently exists between FWS and the fishing industry is of benefit to both parties. Fishermen assist the FWS in transporting supplies, equipment and personnel between Honolulu and Tern Island; FWS assists with radio communication, emergency equipment repair, transport of crews and spare parts as space allows aboard contract air carriers, etc.)

Costs Considerations Associated with Tern Island Abandonment

As noted above, abandoning Tern Island would not imply total elimination of costs associated with activities that Tern Island currently supports. Rather, the FWS would need to fall back to some basic level of monitoring and research that would, at a minimum, prevent extinction of threatened and endangered species. What this minimum would mean in terms of costs for charter vessels, field camps, etc., has not been calculated. However, if charter vessels and extended field camps were used to provide the same level of research and monitoring currently supported by Tern Island, costs for these "substitutes" are estimated to be significantly higher than the costs now incurred for the operation of Tern Island.

Other Implications of Station Abandonment

An argument can be made that reduced human activity within French Frigate Shoals resulting from abandonment of the Tern Island station would have beneficial effects on fish and wildlife populations. Management actions and research studies designed to assist in recovery of listed species or to maintain populations of other species are, in themselves, potentially disturbing to wildlife and habitat in the HINWR. Clearly, the risk of transplanted exotic plants, the disturbance to seals and turtles and the disruption of breeding seabird colonies all increase as the level of research on HINWR islands increases. Measures can and are being taken to minimize this effect, but it cannot be eliminated.

The dramatic repopulation of Tern Island by monk seals lends credence to the argument that human activities on hauling beaches has a significant effect on seal behavior. We can only speculate on whether or not this repopulation would have occurred at an even more dramatic rate had the station been abandoned when the Coast Guard left in 1979. Abandonment of the station at this point would only very gradually result in additional beach sites becoming available to seals and turtles. Expansion of seabird colonies onto the runway would also be gradual. It should be noted that virtually all, if not all, of the recent expansion of seabird and seal utilization of Tern Island is the result of movement from other islets at FFS. Whether or not the recolonization of Tern Island will ultimately result in increased total wildlife populations at FFS remains to be seen.

Conclusion

While the above analysis has identified the trade-offs associated with abandoning Tern Island, the clear "bottom line" in this discussion is the realization that human activities of all types in the HINWR must be rigorously evaluated to ensure that the benefits of that activity are compatible with refuge purposes and outweigh actual or potential adverse impacts. The integral role that the Tern Island station will play in the implementation of key strategies, in the judgement of the FWS, will outweigh the potentially adverse impacts that permanent human presence and associated research will have on fish and wildlife resources. Benefits associated with Tern Island include facilitating recovery efforts for the endangered monk seal and the threatened green sea turtle; continuing research/monitoring efforts on breeding seabirds; facilitating studies of unique floral and faunal forms; facilitating archaeological and/or historical surveys; providing increased opportunities for wildlife interpretation/education; and providing logistical support for commercial fishing.

However, if high priority objectives for listed species are achieved in the near future, the benefits and costs associated with the Tern Island

station operation would likely not favor its continuation. In this regard, considering that at this point in time and for at least the next five years, accomplishment of several high priority Refuge objectives is contingent on Tern Island, it is appropriate to continue operating Tern Island and pursue needed O&M and rehabilitation actions on Tern, including repair of the sheetpile seawall.

Comprehensive evaluation of the FWS' operation of Tern Island should occur in five years (and likely every subsequent five years of operation) to determine the appropriate FWS management role at Tern Island. Based on the outcome of the evaluation, appropriate management actions and Master Plan/EIS modifications would be made.

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Any further remarks or requests for additional information should be directed to:

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Hawaiian Islands NWR
300 Ala Moana Blvd., Room 5302
P. O. Box 50167
Honolulu, HI 96850
808-546-5608

Department of the Interior
U.S. Fish and Wildlife Service Region One

F. Related Plans and Proposals

1. Endangered Species Recovery Plans

The Endangered Species Act of 1973, as amended, directs responsible federal agencies to develop recovery plans for federally listed species. The intent of recovery planning is to chart a path that will result in sufficient population recovery or removal of limiting factors to justify downlisting or delisting of species. The responsible agency may determine whether or not appointment of a recovery team is needed for plan preparation. To date, recovery plans for HINWR species have been finalized for the Hawaiian monk seal and Laysan duck. A plan for the three endemic passerine bird species (Nihoa finch, Nihoa millerbird, Laysan finch) was completed and approved on October 4, 1984. Recovery planning for the green sea turtle is scheduled to begin during fiscal year 1985.



"Endangered" Hawaiian monk seal (*Monachus schauinslandi*). An endemic seal whose population has declined by 50% over the last 25 years.

a) Hawaiian Monk Seal: The plan for this species, finalized in March 1983, was prepared by the National Marine Fisheries Service. A recovery

team of 12 members, representing various agencies and organizations, assisted in plan preparation. The objectives of the specific activities outlined in the plan are to:

- i) Identify and, where possible, mitigate the natural factors causing or contributing to the decreased survival and productivity of monk seals;
- ii) Characterize the marine and terrestrial habitat requirements of the monk seal, including use patterns and feeding habits;
- iii) Assess the monk seal population and monitor population trends;
- iv) Document and, where possible, mitigate the direct and indirect effects of human activities on monk seals;
- v) Implement appropriate management actions leading to conservation and recovery of the species; and
- vi) Develop an educational program to foster greater conservation efforts among the users of the Northwestern Hawaiian Islands and the public.

The Recovery Plan outlines FWS involvement by recommending "overlay" National Wildlife Refuge status for Midway Atoll; enforcement of regulations in Title 50, CFR, that relate to management of NWRs, including the HINWR; issuance and enforcement of refuge Special Use Permits for all activities within the HINWR; development of a response plan for dealing with oil and other hazardous substance spills in the HINWR; and cooperation in population monitoring of monk seals. The FWS is currently conducting activities on Tern Island that are in direct support of at least four of the six stated objectives.

b) Laysan Duck: The plan for this species was finalized in December 1982. The major recovery strategies outlined by the recovery team include:

- i) Maintain legislative and regulatory protection of Laysan Island.
- ii) Manage the Laysan duck population and habitat, including exotic pest control, as needed, maintenance of captive flocks and continued studies of ecological requirements.
- iii) Promote public awareness of the Laysan duck population and its habitat.

The Recovery Plan outlines FWS involvement by designation as lead agency in all management activities involving the Laysan duck, including such

actions as erecting snow fences to stabilize shifting sands which may encroach on the fresh water habitat of the duck and preventing disturbance by limiting entry and access to the islands.

c) HINWR Passerine Birds: This plan for three HINWR land bird species has been reviewed by various agencies and revisions are nearly complete. The final draft directs the following major actions:

- i) Prevent unauthorized entry to Laysan and Nihoa Islands.
- ii) Prevent the establishment of exotic organisms.
- iii) Prevent the outbreak of avian disease.
- iv) Monitor populations and habitat.
- v) Establish additional populations to provide a buffer against catastrophic declines in the natural populations.

The Recovery Plan outlines FWS involvement by designation as lead agency in all management activities involving the Nihoa millerbird, Nihoa finch, and Laysan finch, including such actions as preventing disturbance by limiting entry and access to the islands and transplanting birds to islands that were historically inhabited by the species.

d) Green Sea Turtle: No recovery plan has been prepared for the green sea turtle. Recovery planning is scheduled for fiscal year 1985. The focus of recovery efforts will be the protection and enhancement of nesting habitat.

2. Critical Habitat Proposals

The Endangered Species Act of 1973, as amended, further provides for the formal designation of specific habitat areas determined to be "critical" to the recovery and survival of federally listed species. Formal designation of critical habitat would officially and specifically delineate those areas that constitute needed habitat. Federal agencies involved in some action in the "critical habitat" would be required to comply with the Endangered Species Act Section 7 requirements.

A proposal to designate critical habitat for the green sea turtle was prepared in 1978 but is not currently under active consideration. Critical habitat was proposed for the monk seal by NMFS in 1978 and in a second draft in 1980. The proposal included three boundary options and hearings were held to obtain public input into the consideration of these options. Considerable opposition to the critical habitat proposal was raised because of the potential adverse effect such designation might have on the development of commercial fisheries in the NWHI. In a Supplemental Draft Environmental Impact Statement distributed by NMFS in

December 1984, critical habitat was repropoed to include all beach areas, lagoon waters, and ocean waters out to a depth of 10 fathoms around Kure Atoll, Midway Islands, (except Sand Island), Pearl and Hermes Reef, Lisianski Island, Laysan Island, Gardner Pinnacles, French Frigate Shoals, Necker Island, and Nihoa Island. This proposal is opposed by most of the members of the Monk Seal Recovery Team which has recommended designation of monk seal critical habitat to include selected beach habitats and waters to the 20-fathom isobath in the NWHI. Critical habitat has not been formally proposed for any land bird species in the HINWR.

There is considerable debate regarding whether or not critical habitat designation, for any species, would result in additional regulatory authority not presently provided by the portion of Section 7 prohibiting actions of federal agencies which "jeopardize the continued existence" of listed species. It would address actions which "destroy or adversely modify critical habitat", but, presumably, these actions would constitute "jeopardy" as well. Critical habitat designation would insure that adverse modifications to habitat were prohibited, whether or not jeopardy was demonstrated. In the case of the HINWR, where all activities within the efrage require Special Use Permits, the issuing of the permit would be a "federal action" as defined by the Act and would be subject to Section 7.

3. State Fishery Development Plan

This plan was prepared by the Hawaii Department of Land and Natural Resources (DLNR) in 1979 to increase the productivity of Hawaii's fishing industry in terms of landings, value and employment. The plan focused on those commercial fisheries showing the greatest potential net economic benefits. Estimates of fishery resource potential in the Hawaiian Islands region ranged from 74 million to 117.5 million pounds.

Relevance to HINWR issues was demonstrated by the projection that essentially all of the potential for expanded bottomfish, lobster, shrimp, akule and opelu fisheries was found within the Northwestern Hawaiian Islands. Of particular significance was strong recommendation in the plan that shore-based fishery support facilities be developed at both Midway and Tern Islands.

4. Other State Proposals for Tern Island/French Frigate Shoals

Interest in utilization of facilities at Tern Island for fishery support stems back to the period immediately following World War II, when a limited fishery for bait species, akule and turtles utilized the runway for fish transport. Recreational fishing was also considered at this time. No authorized fishing has occurred within French Frigate Shoals since 1959. In response to increasing pressure to permit fishery support at Tern Island, former Interior Secretary Cecil Andrus committed

the FWS in February 1979 to take no action at Tern that would preclude the possibility of its future use as a fishery support facility until Tripartite studies were completed.

By letter of December 1979, the State of Hawaii formally requested permission to initiate a test project using Tern Island as a fishery support station and also proposed to initiate a test fishery for bait species within French Frigate Shoals. Meetings were held to review the proposals. Endangered Species Act, Section 7 consultations were conducted by NMFS and FWS. A March 1981 biological opinion issued by NMFS concluded that the support facility would jeopardize the monk seal and green sea turtle. The opinion proposed that as a reasonable and prudent alternative to a fishery support facility on Tern Island, the feasibility of a mothership operation be explored. The proposed alternative to the baitfish test fishery was a limited visual survey and a net experiment. The FWS biological opinion concurred with the NMFS opinion.

As a result of the NMFS/FWS response to the proposal, then State Senator Wadsworth Yee made a formal request to then Interior Undersecretary Donald Hodel for a "return" of the Tern Island facility to the State and for use of the Island as a fishery support station. Undersecretary Hodel committed the FWS to further evaluate a shared use option for Tern, but after one meeting to discuss this option, the State was asked by Undersecretary Hodel to prepare a detailed proposal. The State then developed an alternate plan. Senator Yee announced a "mothership" option in February 1983 and both FWS and NMFS reviewed the proposal shortly thereafter. After review, the proposal was finalized by the State Division of Aquatic Resources in November 1983 and published in May 1984 under the title: "A Proposal to Establish a Fishery Support Operation at French Frigate Shoals, Northwestern Hawaiian Islands." French Frigate Shoals is designated as the preferred site for the support facility because 1) it lies near the geographic center of the fisheries it would service; 2) the reef is large enough to provide some shelter during heavy weather; 3) there is emergency access to facilities at Tern Island; and 4) access to Tern Island is available for gear storage and recreation.

The recent proposal is based upon the concept of a moored mothership within French Frigate Shoals that would service a fleet of 10 catcher vessels during a 70-100 day fishing season. This multi-species fishery would harvest a variety of resources including pelagic fish, bottomfish, spiny lobster and other species. Most of the catch would be stored frozen aboard the mothership for later transshipment to Honolulu. The mothership would also provide fuel, supplies and provisions. The proposal suggested that Tern Island be used for short-term recreation, emergency evacuations and temporary storage of some fishing gear.

This proposal, like any other public use considered for the HINWR, requires thorough assessment concerning compatibility with refuge objectives. Within this Master Plan/EIS compatibility is addressed in the conflict analysis described in Section V.D. Conflict and the absence of conflict (i.e. compatibility) is documented for each wildlife species and proposed use of the Refuge in the Output Summaries which are included in the Technical Appendix (under separate cover).

5. FWS Planning for Tern Island Operation

Upon notification by the Coast Guard in 1978 of intent to decommission the LORAN station at Tern Island, the FWS initiated planning for operation of the facility. In March 1979, Manta Corporation was contracted by the FWS to evaluate various short-term management options for the station. The data gathering phase of the study involved more than 45 separate interviews with interested parties and/or knowledgeable individuals, a review of pertinent published and unpublished documents and a field survey. Based, in part, on the information presented in the draft report of this study, the FWS manned the facility in July 1979 and has maintained continual presence since that date. The operational aspects of the station were considered further during an in-house planning exercise completed in June 1981.

The TERN ISLAND STUDY revealed a wide diversity of opinions among interested agencies, organizations and individuals with respect to the long-term management of Tern Island. Concern was expressed among representatives of conservation organizations and others that FWS "presence" should be maintained at French Frigate Shoals, yet all activities, including research, should be limited to avoid adverse impacts on wildlife. Strong opinions were also voiced by representatives of state agencies and the fishing industry that Tern Island could provide valuable logistical support for commercial use of NWHI fishery resources.

6. Hawaii Wildlife Plan

This plan, approved in 1983, was prepared by the Division of Forestry and Wildlife, Department of Land and Natural Resources. The plan "is intended to provide an integrated strategy towards solving the most critical wildlife problems." The geographical scope is statewide, with an emphasis on state-owned or controlled lands. Recommended actions are proposed in three separate categories: species plans, general plans and special plans.

This plan addresses issues of significance to the HINWR in several areas. Seabird colony protection and monitoring is a high priority objective. Captive propagation of the Laysan duck, and possible introduction to other islands, are suggested as viable management tools to recover the species. The threat of introduced rats at Laysan is also noted. In the "general" plan section, high priority is directed at the

TYPISTS! TYPISTS! TYPISTS!

We need your nimble fingers to help create each month's 'Elepaio. Come type in cool Manoa Valley on an IBM correcting selectric typewriter, whatever hours suit you. Get a preview of each month's issue! Simply call Carol at 988-6921 to volunteer.

LEEWARD ISLANDS RESOLUTION

A joint resolution of the Survival Service Commission (SSC) and the Commission on National Parks and Protected Areas (CNPPA) passed at their meeting in San Jose, Costa Rica, 12-17 March 1979, is presented below. Both Commissions are part of the International Union for the Conservation of Nature (IUCN). This resolution should be of interest to 'Elepaio readers.

George Balazs

HAWAIIAN ISLANDS

RECOGNIZING that the small oceanic islands and atolls which comprise the Northwestern Hawaiian Islands constitute critical breeding and feeding areas for the endemic monk seal, numerous species of seabirds, three endemic land birds, and a population of green turtles;

RECALLING that most of these areas were declared a bird sanctuary in 1909 by the President of the United States, with the areas later being designated as the Hawaiian Islands National Wildlife Refuge;

REALIZING that the ecosystems of such oceanic island areas are particularly vulnerable to degradation and species extinction as a result of human intrusion;

BEING AWARE that consideration is presently being given to the development of various commercial fisheries in waters close to the Hawaiian Islands;

THEREFORE, BE IT RESOLVED that the joint meeting of the CNPPA/SSC request the Director General of the IUCN to transmit to the U.S. Fish and Wildlife Service, the National Marine Fisheries Service and the State of Hawaii an expression of support that the breeding and feeding areas of the wildlife species of the Northwestern Hawaiian Islands continue to be maintained in an undisturbed and protected state.

THANKS! THANKS! THANKS!

Along with this plea for new typists we want to issue a special thanks to Cissie Koenig, who has contributed hours and hours of her time to produce pages and pages of error-free typing over the last couple of years. We miss you, Cissie! But we wish you well in Colorado too.

Another friend of this typewriter is Marilyn Milberger, who helped immensely, both typing and pasting up. We hope she will be returning in the fall, but in case she doesn't, we'll say "Thanks!" right now.

PUBLICATIONS OF THE SOCIETY

HAWAII'S BIRDS by the Society (1978). This is the best field guide to our birds, and includes colored illustrations of all native and well-established exotic species. \$3.25 plus postage: 48¢ (surface mail) or 67¢ (air). Hawaii residents only: add 13¢ for tax.

FIELD CHECKLIST OF BIRDS OF HAWAII by R. L. Pyle (1976). A pocket-size field card listing 125 species found in Hawaii with space for notes of field trips.
(Postpaid) \$.25
(ten or more, 10¢ per copy)

GUIDE TO HAWAIIAN BIRDING by members of the Society and edited by C.J. Ralph (1977). Where to go and some idea of what you are likely to see. For the islands of Kauai, Oahu, Lanai, Molokai, Maui and Hawaii.
(Postpaid) \$ 1.00

PRELIMINARY LIST OF THE BIRDS OF HAWAII by R. L. Pyle (1977). An authoritative compilation of all species naturally occurring in Hawaii as well as those introduced by man which are currently established as viable populations. Gives each species' status.
(Postpaid) \$1.00

ENDANGERED WATERBIRDS OF THE HAWAIIAN ISLANDS by R. J. Shallenberger (1978). Hawaiian Stilt, Coot, Gallinule and Duck, each described in 2 pages of photos and text. Covers description, ecology, status, and distribution.
(Postpaid) \$.50

June 22, 1981

F/SWC2:GIB

TO: William Gilmartin, Leader, Marine Mammal and Endangered Species Investigation

FROM: George H. Balazs, Fishery Biologist

SUBJECT: Some conservative management ideas for the enhancement of the Hawaiian monk seals at French Frigate Shoals

My recent involvement in salvaging an abandoned monk seal pup on East Island has prompted me to consolidate in writing some management ideas for your consideration. The following represents these thoughts.

1. At French Frigate Shoals, monk seals are known to occasionally a) abandon a pup well before weaning age, b) have a pup leave its biological mother and receive maternal care with another mother and pup, and c) have a fully weaned and healthy pup receive maternal care with another mother and pup. As examples, two early-weaned pups were recorded on East Island one week prior to our arrival in June of 1980, and two pups nursed by one mother were present on Whale-Skate in June of 1980, and on East in March and June of 1981.

In the case of (a) of the above, a pup in this condition is clearly doomed and lost to the population. If a mother can be found that has experienced the recent mortality of a pup, the abandoned pup could be transported to her in an adoption attempt. If no such mother is available, or if adoption is not successful, then efforts should be made to raise the pup in captivity, either in Hawaii or on the mainland, for eventual return to the wild.

In the cases of (b) and (c), if left on their own, either one or both of the pups could be expected to be significantly underweight when weaned. Removing one of the pups to captivity, or to an adoptive mother, would therefore enhance the survival of both individuals. If the pair includes a previously-weaned gray pup, this individual could be transported and released on another island within French Frigate Shoals. Presumably it would not immediately find its way back to the receptive mother.

2. In June of both 1980 and 1981 I have found severed pieces of small-diameter intestines at East Island that almost certainly originated from young monk seals. I have concluded that this is the result of shark attack, particularly in view of the fact that amputated and mutilated flippers and tails of green turtles are seen each year. Tiger sharks are reported to be abundant at French Frigate Shoals, but it would appear that relatively few individuals develop a feeding pattern that brings them close to the islands where seals, turtles, and albatrosses breed. It therefore may be possible to selectively eliminate these "rogue" sharks by setting a few baited hooks at key locations.

Admittedly there is some speculation in this hypothesis. However, it could be tested with a minimum of effort and expense and, if correct, would serve as a valuable management aid.

French Frigate Shoals is an ideal location for trying to enhance, in a conservative manner, the endangered monk seal and threatened green turtle. It is the major breeding site for both species, as well as a National Wildlife Refuge with resident biologists, relatively easy access to the various islets, and frequent air transportation to Honolulu. We should consider doing more at this location while such advantages still exist.

GHB:ey
cc: Balazs
HL

May 13, 1981

F/SWC2:GHB

TO: Bill Gilmartin

FROM: George H. Balazs

SUBJECT: Ocean dumping of radioactive waste materials in the vicinity of the
Northwestern Hawaiian Islands

This subject has recently come to my attention through an EPA report prepared in November 1980 for the Committee on Merchant Marine and Fisheries, U.S. House of Representatives. The available information shows that during 1959-60 seven containers were dumped by the Military Sea Transport Service at 34°58'N, 174°52'W, approximately 300 miles north of Pearl and Hermes Reef. The report states that the depth of disposal was 5,490 m. The wastes are listed as "by-product materials" with an activity of 14 Ci at the time of packaging. The specific isotopic content is not stated, although such data may exist somewhere in military records. "By-product materials" are defined in the report as wastes that contain isotopes such as cobalt-60, strontium-90, iron-55, tritium, and cesium-137. The report further states that waste materials were generally either packaged in special containers which were then placed in concrete-filled steel drums, or mixed directly in concrete which were in turn placed in the steel drums. At a 900- to 1,700-m dump site in the Farallon Islands off California, approximately 25% of these drums were found to have imploded.

The agency and location where the waste material originated are not listed in the report. The proximity of Midway to the dumping area suggests this site as a possible origin.

bc: Balazs
HL

GHB:ihc



United States Department of the Interior

FISH AND WILDLIFE SERVICE

300 ALA MOANA BOULEVARD
P. O. BOX 50167
HONOLULU, HAWAII 96850

IN REPLY REFER TO:

JUN 9 1982

Mr. Richard S. Shomura
Director, SW Fisheries Lab
National Marine Fisheries Service
Honolulu, Hi 96812

Dear Richard:

We are trying to improve our dealing with others. Performance requirements for our top staff include an element on effective relations with other agencies and organizations. In the past we have received only volunteered comments and informal responses. We need to get better observations -- something of greater substance -- so decided to solicit written responses. We are trying this approach to help evaluate my performance and are contacting several others in the Pacific Islands with the same request.

If you are willing to provide your evaluation of me and/or my staff, there are several ways you could do it:

1. Constructive criticism -- point out ways we need to improve.
2. Tell us what we've done wrong or right.
3. Rate specific things like:

Communications - are you kept informed on Fish and Wildlife Service actions, work? Do you have enough routine contact with the Area Administrator and/or his staff?

Responsiveness - Do you get prompt answers, decisions?

Cooperation - Do you get help when our organizations/agencies are in agreement? Do you find a willingness to consider and amicably try to clarify and resolve conflicts in agency positions?

At any rate, your opinion on how I am and this office are doing would be helpful. Your response will be kept confidential. However, if you see fit, I would appreciate receiving a copy of your response. We hope to use the information in a constructive way to improve our performance. In addition, based on your reaction, we may use the approach in our performance appraisal process.

As a second, although closely associated topic, we would also appreciate your considered evaluation of the need for maintaining The Office of the Area Administrator at Honolulu. There are compelling reasons - current regional reorganization resulting from announced mainland area office closures (by October 1, 1982),



Save Energy and You Serve America!

and reduced budgets - to reconsider the desirability of maintaining the Honolulu Area Office. Your views on the value of a Fish and Wildlife Service area office for the Pacific Islands to your organization would be helpful to our decision process.

If the Pacific Islands Area Office were closed, authorities would be transferred to the Regional Office. Current field station staff and operations at Honolulu would continue to function basically as they have whereas the Area Administrator functions would become the responsibility of the Assistant Regional Directors in Portland, Oregon. Two schematics are enclosed to illustrate the current and alternative organizations.

Please direct your response to my supervisor:

Richard J. Myshak
Regional Director
U.S. Fish & Wildlife Service
Lloyd 500 Bldg. Suite 1692
500 N.E. Multnomah Street
Portland, OR 97232

Sincerely,

Dale T. Coggeshall
lyme Dale T. Coggeshall
Pacific Islands Administrator

Enclosure

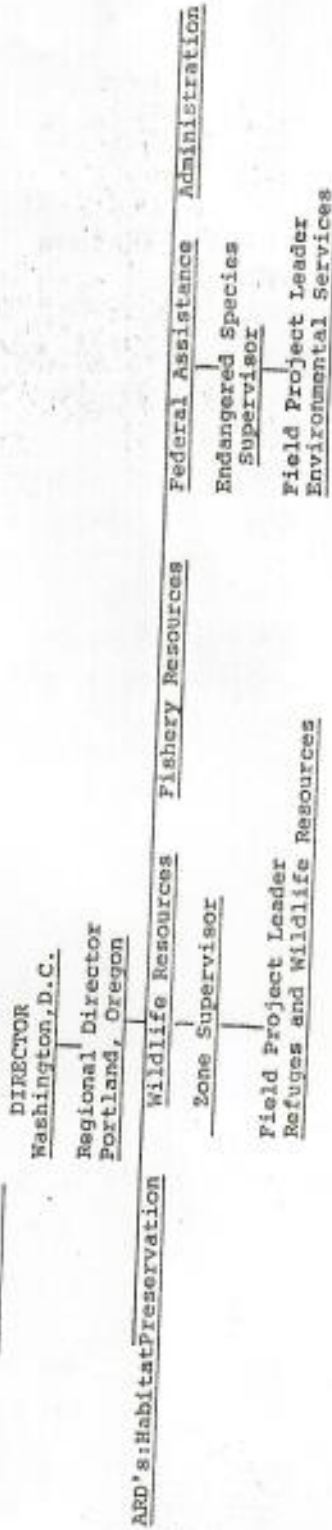
cc: RD, Portland, Or

U.S. FISH AND WILDLIFE SERVICE
Pacific Islands Area
June 1982

EXISTING ORGANIZATION



ALTERNATIVE ORGANIZATION



George H. Balazs
NOAA, NMFS SWFSC
Honolulu Laboratory
2570 Dole St
Honolulu, HI 96822-2396

Aloha George,

It was good to hear from you the other day, I'm sure many memories were relived during your short stay at FFS. There have been many changes since I've been there three years ago, mainly the Corps of Engineers repair to the seawall. Is the infamous Mt. Balazs still on East Island?, I know this is a sore spot. I thought American Divers were subcontracted by Corps of Engineers to remove the rubble (thus USFWS was holding true to their agreement), then there was some scuttlebutt that maybe it should remain because it was apparently being used by Bulwer's Petrels.

Oh well I,m sure you are not surprised. Satellite telemetry should prove to be real interesting, hope they don't rub off their beacons on coral ledges, I'm sure the "beacons" are not cheap. It's interesting to hear the number of nesters to be above 300. If the turtles are on their 3-4 year migratory pattern then those numbers make sense. I can imagine how busy the turtles must have been during July.

Well George, as usual my life is always taking new directions. When I finally feel that my chances are good at acquiring a permanent position as a biologist, plans go awry. As I mentioned before, Henry felt that I should handle the Shark Control Program for the State. I initially was honored that I was chosen, however, as I began with probing questions for what Henry had in mind I became disenchanted. I completely support a limited shark control program while simultaneously conducting or funding studies on shark behavior and population estimates. The available funds are a meager 150,000 which probably will be exhausted in less than one year. The funds were to be spent solely on shark control. I was also told that the project was not necessarily going to implement the recommendations of the Shark Task Force. This begs the question....Then why establish a Task Force. This was the direction or lack of that I received near the end of June. The project at this time was not discussed in any detail. Since then Henry could have completely changed direction and decided to consider the Task Force recommendations.

At the time I was already considering the move to Japan (which fell through), the offer to teach for LCC & HCC on a full-time basis, as well as being self employed with the graphics business. As you know I decided self employment was the way to go and I regret not doing it sooner. I am lucky to have gotten a glimpse into Federal & State agencies, but to be honest I am disappointed and somewhat angry at how DAR is run. I left the office on very good terms and was sure not to burn bridges. They understand my desire for self employment and teaching.

On a positive note, my wife and I travelled to Japan. It was outstanding; I'd love to live there despite the expense & crowds. Now my wife tells me that her company is going to make a second offer to move us there. Sounds as bad as the government's promises for conversion from temporary to permanent positions. I'll take it seriously only when I see it in writing. In the meantime I am pursuing the new direction I have carved for myself and hope this is the last twist.

I hope the budgetary ax did not swing too low for the Honolulu Lab. I heard the MMES division was endangered. Do you still have a general operating budget?

The reason for writing was to pass on my brochure to you. Feel free to pass the extra brochures on to others. This should prove that this was not a spurious endeavor, and I guess I may get some business too! Notice that my prices have dropped. Any future work will be performed at the new rates while maintaining the same amount of credit. Put simply, NMFS will get more for their (our) money. I received the extension notice on Saturday 8/15. As mentioned before, the invoice was dated 7/2 (to indicate delivery before the due date on the P.O.) but actually mailed approx. 3-4 weeks ago. Hope this didn't complicate things for you.

I should be receiving my film recorder in a few days, this will allow me a turnaround time of 1-2 days and cut out the "middle man".

Mahalo George, you are a friend as well as a client, I trust you will keep my personal opinion confidential and between the two of us. Write when you find time.

Sincerely,

T. Michael Moser



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southwest Fisheries Center Honolulu Laboratory
2570 Dole St. • Honolulu, Hawaii 96822-2396

February 12, 1987

F/SWC2

MEMORANDUM FOR: F/SWR1 - Doyle E. Gates
FROM: F/SWC2 *William S. Schmitt*
Richard S. Snomura
SUBJECT: Comments on Tern Island Biological Opinion

Thank you for the opportunity to comment on the draft Biological Opinion on the FWS plan to significantly reduce its presence and destroy certain facilities at Tern Island.

We agree with your "jeopardy" opinion and believe our comments will help strengthen your arguments. Bill Gilmartin and George Balazs have made comments on the attached draft. Many of these are editorial in nature. Questions and comments of more significance follow:

1. The paragraph ending at the top of page 4 should state that there has been a dramatic change in seal use of Tern I. since the Coast Guard left the island. Occasional sightings of one to a few seals on the beach have changed to a mean daily count of near 100 seals, a peak count of over 180. This has been a result of the restrictions on beach access enforced by Tern I. FWS personnel.
2. The majority of turtle nesting activity is at East and Whale-Skate Islands (page 7), however, it seems appropriate to the Opinion to add that nesting activity on Tern I. appears to have increased in recent years.
3. Add to the discussion on basking activity on page 8 that there has been an increase in turtle basking activity on Tern I. (Sheeky, in Elepaio). Like Nos. 1 and 2 above, the activity follows FWS enforcement of beach access restrictions on Tern I.
4. Turtle "critical habitat" has been proposed for land areas at FFS by the FWS, published in the Federal Register, but never acted on. Correct the statement on page 9 which states it has not been proposed.
5. At the bottom of page 9 a discussion begins on the economics of the proposed reduction in Tern I. operations, is this appropriate for a "biological opinion"?
6. If the costs of maintaining the facilities is allowed in this economic discussion, then shouldn't the offer of free labor and equipment by the Navy Construction Battalion be mentioned at the top of page 10 to keep things in proper perspective. This was mentioned by Dick Wass at the recent Turtle Recovery Team meeting.



7. The very recently approved Refuge Master Plan should be more fully addressed in the first full paragraph on page 10, especially the "key" role that Tern I. and the runway were to play in the Plan. We find it surprising that the Master Plan is not even listed as a reference document in this Opinion.
8. The last sentence on page 10, ending on page 11, indicates that certain equipment and other items "not worth returning to Honolulu" will be buried against the seawall. While this has occurred in the past, it should be stopped immediately. The seawall is breaking up, as everyone agrees, and this trash can trap and kill seals and turtles. A seal pup was found dead at East I. last summer, probably the result of drowning, entangled in telephone cable left by the Coast Guard at East I. We suggest this makes this trash worth returning to Honolulu.
9. The NMFS Honolulu Laboratory biologists have not worked on a plan with the FWS to arrange continuous occupation of Tern I. for 10 months (page 11). In fact, with our year-to-year, add-on funding uncertainties we cannot predict whether we will be able to get one biologist to FFS in 1988 for any length of time for population monitoring or other research. There is also the implication here that the "biologists" presence will allow "enforcement of limited entry." The NMFS biologists will not be FWS enforcement agents!
10. On page 12, line 3, the draft Opinion states that Option 1 "would maximize recovery efforts." If you mean this to be the best of the three options, then rewrite the statement. We believe none of these options will "maximize" seal or turtle recovery efforts at FFS.
11. Also on page 12, you mention the "Biological objectives of the Master Plan relating to Tern Island would be met under this option." Are these objectives met if a seal or turtle becomes trapped in the seawall in December or January?
12. The last paragraph on page 12 is confusing. Your term "recovery efforts" should be defined to better follow this discussion. When NMFS biologists are at FFS, Tern I. will be "monitored" at least as frequently by census as it is now monitored by FWS, every four days.
13. Within the section "Assessment of Impacts" you should mention that peak seal hauling on Tern I. occurs during the winter months, therefore, a higher probability of entrapment during those months. Also, loss of the runway will hinder or preclude access to FFS at certain times which will hinder or preclude implementation of both monk seal and turtle recovery work.

14. Disposal of "trash" on Tern I. is mentioned again on page 17. The draft Sea Turtle Recovery Plan states that all buried rubbish on Tern I. should be removed for the long-term safety of turtles. While not mentioned in the seal recovery plan, this action would certainly be in their best interest also. Obviously, no more trash should be buried on the island.

15. "Conclusions": Add turtles to the jeopardy opinion. The loss of enforcement presence and potential for seawall entrapment affect both species similarly if adult turtles are lost.

16. "Reasonable and Prudent Alternatives", item 2: Add to the last sentence "... of listed species, in accordance with the recently approved Master Plan for operation of the Refuge."

Would you please send us a copy of the draft opinion you forward to the Region and a copy of the final version that will be sent to the FWS.

United States Senate

ROOM 722, HART SENATE OFFICE BUILDING
WASHINGTON D. C.
(202) 224-3934

April 10, 1987

Mr. L. R. Balazs
992-A Awaawaanoa Place
Honolulu, Hawaii 96825

Dear Mr. Balazs:

I wish to acknowledge receipt of your recent communication regarding the expansion of the Kilauea Wildlife Refuge.

As you may already be aware, there are two parcels involved with this project. The present Kilauea Point Refuge consists of 31 acres. There is also a 101-acre shoreline parcel owned by Crater Hill Properties and the 37-acre parcel of Mokolea Point owned by Oceanic Vistas Consortium.

I have been working with Kauai County officials as well as the County Council to enable the Crater Hill developer to turn over the shoreline property to private management. Presently, the County is working with the developer to refine the Crater Hill Subdivision conditions and further extensions have been granted by the County. In its current negotiations, the County has been unsuccessful in its efforts to enforce an informal agreement with the developer to turn this shoreline property over to private management. The Nature Conservancy was in the process of negotiating this management agreement with the developer; however, it has recently made an internal decision to withdraw from this negotiation. I understand that the County has renewed its efforts on this issue.

While these negotiations were being conducted, the Trust for Public Lands was also conducting negotiations with the Oceanic Vistas Consortium to acquire the 37-acre Mokolea Point parcel. The current appraisal conducted by Trust for Public Land is \$1.5 million. The appraisal came too late for me to have the necessary funds included in the FY 1986 Urgent Supplemental Appropriations or the FY 1987 Continuing Appropriations bill. Recently, I received word from the Fish and Wildlife Service that its informal appraisal is considerably less than the Trust for Public Lands' appraisal. Further, the Fish and Wildlife Service does not consider the acquisition of Crater Hill or Mokolea Point as a priority or part of its mission to protect endangered species.

There are many concerns that need to be resolved before Congress can act in this matter: (1) The developer of the Crater Hill

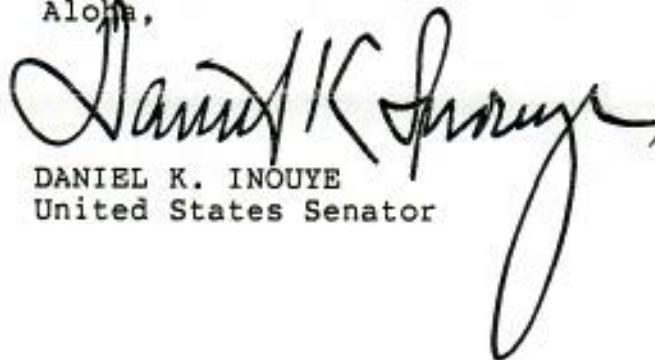
Mr. L. R. Balazs
April 10, 1987
Page 2

Properties must make a formal agreement to turn the shoreline property over to private management. I cannot justify using federal funds to acquire this property when I firmly believe that the developer should work with the Fish and Wildlife Service to complete the improvements of this area and to turn this over to management. (2) The County or Trust for Public Land should work with the developer of Mokolea Point to negotiate an appropriate appraisal for this property. Also, acquisition of Mokolea Point hinges on the management of the 101-acre shoreline property. (3) Fish and Wildlife Service must have at least the 37-acre parcel on its priority list for acquisition to justify federal funding. A further concern of the Service is that the expansion of the refuge along with any significant increase in public use would force the Service to divert staff from current endangered species priorities.

I wish to assure you that I will continue to do all that I can to work towards the extension of this refuge and agree with you that this area should be made part of the refuge because this area has the highest concentration of sea birds and offers unparalleled opportunities to view Hawaii's unique water birds. I have met with JoAnn Yukimura of the Kauai County Council and will continue to work with her to have these current concerns resolved so that the current refuge may indeed be expanded to include the coastal shoreline and Mokolea Point.

Should you have any further questions on this matter, please do not hesitate to contact me.

Aloha,

A handwritten signature in black ink, appearing to read "Daniel K. Inouye". The signature is fluid and cursive, with a large loop at the end of the last name.

DANIEL K. INOUE
United States Senator

DKI/pmb

Charlene Dyer
P. O. Box 68
Kilauea, Hi
96754

Dear George:

This afternoon I'll be speaking to Island School first and second graders about flora and fauna they might encounter during their visit to the lighthouse next Monday. Some of the "handouts" that we distribute are a little too sophisticated for five to seven year olds. The dot to dot and turtle maze that you sent are really helpful tools in this project. I even used the dot to dot with some preschoolers.....They loved it and asked many questions about turtles after they had worked on the handout. Stimulating the child's curiosity is the name of the game. Thank you for the materials.

It was a little awkward attempting to talk with you via Alexander Gramh whilst working in the visitor center....I did check the volunteer bulletin board which displayed the issues of the Fish and Wildlife news that mentioned the Point as being one of five finalists under consideration for the Pride in America Award. I also read my second correspondence from Pat Saiki....But I have been unable to find out whether or not we actually won.....Bert didn't have any new info either but we're still working on it....And yes it should be publicized and it could be a major feather to flaunt for the cause of a Mokulea purchase.

So far...the only thing that's happening with Pride in America week is that the Refuge is having an open house on Sunday May 17th.... Dan called concerning that this am.

I'll let you know if we hear anything new from our expanding sources. Thank you for your active interest. I still think there is a way.

Muchas Gracias, Señor....

Charlene Dyer

SPARK M. MATSUNAGA
HAWAII

WASHINGTON OFFICE:
109 HART BUILDING
WASHINGTON D. C. 20510

HONOLULU OFFICE:
3104 PRINCE KUHIO BUILDING
HONOLULU, HAWAII 96850

United States Senate

WASHINGTON, D.C. 20510

May 18, 1987

CHIEF DEPUTY
DEMOCRATIC WHIP

MEMBER:

COMMITTEE ON FINANCE

COMMITTEE ON LABOR AND
HUMAN RESOURCES

COMMITTEE ON
VETERANS' AFFAIRS

Mr. and Mrs. George Balazs, and Family
992-A Awaawaanoa Place
Honolulu, Hawaii 96825

Dear Friends:


Thank you for your letter in which you urged that the Federal Government acquire Crater Hill and Mokolea Point and extend the federal Kilauea Wildlife Refuge. I fully agree that the extension of the Wildlife Refuge would provide increased protection for the seabirds which inhabit the area, and would provide as well an enhanced experience for the growing number of visitors to the wildlife refuge.

You will be pleased to learn that I have introduced legislation authorizing the acquisition of Crater Hill and Mokolea Point for the wildlife refuge. My bill also authorizes the Fish and Wildlife Service to build and maintain a fence to protect the wild seabirds and trails for visitor access.

I am enclosing a copy of my bill along with a copy of my Senate floor statement when the measure was introduced. I am very pleased about the strong support which the people of Kauai have expressed, and you may be sure that I will make every effort to obtain favorable congressional action on my bill.

Aloha and best wishes.

Sincerely,


Spark Matsunaga
U. S. Senator

Enclosure: Congressional Record, 100th Congress,
1st Session, dtd. 5/12/87



United States
of America

Congressional Record

From The Office Of
SPARK MATSUNAGA
U. S. Senator

PROCEEDINGS AND DEBATES OF THE 100th CONGRESS, FIRST SESSION

Vol. 133

WASHINGTON, TUESDAY, MAY 12, 1987

No. 76

Senate

(Legislative day of Tuesday, April 21, 1987)

By Mr. MATSUNAGA:

S. 1193. A bill to add additional lands to the Kilauea Point Wildlife Refuge on Kauai, HI; to the Committee on Environment and Public Works.

KILAUEA POINT WILDLIFE REFUGE EXTENSION

Mr. MATSUNAGA. Mr. President, I am today introducing legislation which would authorize the Secretary of the Interior to acquire two parcels of property on the Hawaiian Island of Kauai for inclusion in the existing Kilauea Point Wildlife Refuge. My bill has been in the conceptual stage since last summer and I am pleased to report that it now has the support of nearly every individual who lives on my native island of Kauai. In the last six weeks alone, I have received some 250 letters supporting this proposal to extend the highly popular wildlife refuge.

Kilauea Point Wildlife Refuge is located on the north shore of the Island of Kauai, on a 31-acre site formerly occupied by the U.S. Coast Guard. A lighthouse was built there in the early 1900's. In 1974, the U.S. Fish and Wildlife Service leased vacant Coast Guard facilities for use as a wildlife administrative site so that the Hanalei and Huleia National Wildlife Refuges on Kauai could be monitored. In 1978, the Coast Guard vacated the site entirely, but continued to lease its facilities to the Fish and Wildlife Service until 1985, when the property was transferred to the Fish and Wildlife Service. The old lighthouse was designated a national historic landmark in

1979.

The wildlife refuge and surrounding area is the habitat of at least six species of seabirds, and sightings of dolphins, whales, sea turtles and monk seals offshore are not unusual. Always popular with residents of Kauai, the wildlife refuge has, in recent years, become a favorite destination of visitors from the Continental United States, Canada, Japan, and Europe. While still under the management of the Coast Guard, in the early 1970's, Kilauea Point was visited by about 150 people a day. The number of visitors increased to 250 per day after the Fish and Wildlife Service made modest improvements aimed at enhancing observation and photography of the wild seabirds in 1974. In 1979 and 1980, interpretive displays were installed by the Fish and Wildlife Service, one of the former Coast Guard buildings was converted to a simple visitor center, a small parking lot was built, and a walking trail was established. Between 1980 and the present day, the number of visitors to the wildlife refuge increased to over 1,000 per day. More than 350,000 people visited Kilauea Point in 1985.

Because the three-person professional staff of the Fish and Wildlife Service at Kilauea Point was hard pressed to handle the rapidly increasing number of visitors, a corps of about 100 dedicated volunteers was assembled and trained to help interpret the wildlife, natural and geological history of the area, and the cultural value of Kilauea Point to members of the gen-

eral public. These volunteers have greatly enhanced the visitors' appreciation of the Kilauea Point Wildlife Refuge and, I might add, have made it possible for the Fish and Wildlife Service to extend the hours during which the refuge is open to the public without adding to its staff. This is but one example of the love that the people of Kauai have for the wildlife refuge.

Nevertheless, the explosive growth in the number of visitors to the refuge and the continuing development of the surrounding area have endangered the wild seabirds and their nests. My bill would enhance the protection of the wildlife in the refuge by authorizing the Federal Government to purchase two adjacent parcels of property: Crater Hill, comprising approximately 101.1 acres, and Mokolea Point, comprising about 37.6 acres. It further authorizes the Fish and Wildlife Service to build and maintain a protective fence and foot trails for use by visitors.

Mr. President, in conclusion, I wish to commend the Fish and Wildlife Service and the U.S. Department of the Interior for their tireless efforts over the years to protect the sea birds at Kilauea Point, and to make it possible for visitors to the refuge to have a truly unique and unforgettable experience. In my opinion, the extension of the wildlife refuge is overdue by several years, and I hope that my bill will be given expeditious consideration.

I ask unanimous consent that the text of the bill be printed in the RECORD.

There being no objection, the bill was ordered to be printed in the RECORD, as follows:

S. 1193

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. ADDITIONAL LANDS.

(a) AUTHORIZATION.—The Secretary of the Interior is authorized to acquire certain additional lands adjacent to the Kilauea Point Wildlife Refuge on Kauai, Hawaii, which shall become part of the Kilauea Point

Wildlife Refuge upon acquisition by the Secretary.

(b) DESCRIPTION OF LANDS.—The lands to be acquired pursuant to subsection (a) are—

- (1) Crater Hill, comprising approximately 101.1 acres; and
- (2) Mokolea Point, comprising 37.6 acres.

SEC. 2. CONSTRUCTION OF ACCESS FOOT PATH

Upon acquisition of the lands described in section 1, the Secretary of the Interior shall construct and maintain a fence and access foot trails through such lands in order to provide wildlife protection and public access to such lands. Any trails constructed pursuant to this section shall be constructed in a manner consistent with preserving the wild and scenic beauty of the wildlife refuge.

SEC. 3. AUTHORIZATION OF FUNDING.

There is hereby authorized to be appropriated to the Secretary of the Interior \$8,000,000 to be used to acquire lands and construct trails pursuant to the provisions of this Act.

DANIEL K. AKAKA
SECOND DISTRICT HAWAII

COMMITTEE:
APPROPRIATIONS
SUBCOMMITTEES:
AGRICULTURE,
RURAL DEVELOPMENT
TREASURY,
POSTAL SERVICE
TOURISM CAUCUS
SPACE CAUCUS
COCHAIRMAN

Congress of the United States
House of Representatives
Washington, DC 20515
May 27, 1987

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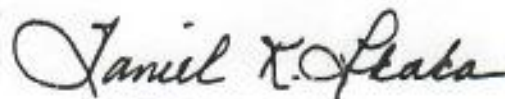
Dear Friends:

This is in response to your correspondence concerning the expansion of Kilauea Point National Wildlife Refuge.

On April 29, I testified before the House Interior Appropriations Subcommittee requesting \$1.5 million to expand the current 31-acre refuge. I want to point out that this is the initial stage of a lengthy budget process where there will be numerous projects competing for limited funding. Last year, for instance, only 23 land acquisition projects were approved for the entire country. However, I certainly agree with you that the area represents a wildlife, scenic and geological resource unmatched anywhere else in the State and will continue to work for the protection of this unique area.

Thank you for your correspondence. Please do not hesitate to contact me whenever I may be of service.

Aloha pumehana,



DANIEL K. AKAKA
Member of Congress

DKA:lkb

Isle wildlife projects get Senate funds

United Press International

A U.S. Senate subcommittee has agreed to expand the Kilauea Point Wildlife Refuge on Kauai, according to Sen. Daniel Inouye.

The Appropriations subcommittee on the interior decided to provide \$1.7 million to buy 36-acre Mokoia Point. The refuge has the highest concentration of native seabirds in the major Hawaiian islands.

The subcommittee also set aside \$4 million to acquire land on the Big Island to preserve the habitat of Hawaii forest birds at the Kilauea-Keaouhou Wildlife Refuge.

Also funded was \$1 million for expansion of Haleakala National Park on Maui to complete fences designed to keep wild pigs out.

Other projects approved by the panel were:

- \$750,000 more in the operating budget for Hawaii's wildlife refuges, including 24-hour operation of the Tern Island wildlife station.

- \$250,000 to help control pigs and for other improvements at Volcanoes National Park.

- \$100,000 for research by the U.S. Fish and Wildlife Service into methods of controlling infestation of brown tree snakes

on Guam — and keeping them out of Hawaii.

- \$500,000 for research into methanol as a fuel.

In another matter, the department has assured Inouye and the subcommittee that it will not issue leases for Pacific Ocean mining rights for at least another year.

Inouye said the one-year delay would allow time to resolve legal issues of concern to the state while allowing environmental impact studies to proceed.

In addition, Inouye said, the subcommittee decided to direct the department to work with

the state in promulgating rules affecting ocean seabed mining off the Hawaiian Islands.

The panel also set aside \$1.2 million to operate an ocean minerals research center at the University of Hawaii Manoa campus. Another \$4 million to build the center are included in a separate bill.

Inouye said Thursday he would ask for the one-year delay in the regulatory process which may lead to mining of the ocean seabed near Hawaii. He said he wanted to make sure that the state has an adequate role in the decisions affecting coastal air and water quality.

Monday, April 12, 1982 Honolulu Star-Bulletin

Tern Island Could Become Fisheries Base

By Helen Altonn
Star-Bulletin Writer

U.S. Interior Under Secretary Donald P. Hodel has suggested several means of accommodating Hawaii's desires to use Tern Island for a fisheries station without a legal fight between the state and federal governments.

In a recent letter to State Sen. Wadsworth Yee, Hodel said he would be glad to consider a cooperative agreement between the Interior Department and Hawaii for joint use of the island, about 600 miles northwest of Oahu.

Yee, who has pressed Hawaii's case for use of Tern Island as a state legislator and chairman of the Western Pacific Regional Fishery Council, said Hodel's letter is very encouraging after the Interior Department's previous unbending position on the issue.

An earlier proposal submitted by the state Board of Land and Natural Resources for a fisheries station on Tern was rejected because the National Marine Fisheries Service said the activities would jeopardize Hawaiian monk seals and green sea turtles in the area.

HOWEVER, HODEL suggested that a cooperative agreement would be one way of providing for fishery support at Tern Island without litigation, which "could be extremely costly and time-consuming."

He asked that the state provide a more detailed proposal on what it wants to do at Tern Island and French Frigate Shoals.

Land Chairman Susumu Ono said, "We will follow up and expand the original proposal in hopes that we can get a favorable decision."

Hodel asked for specific information on the type of aircraft that would be using the runway, frequency of flights, safeguards in transfer of fuel, dredging that might be required and the state's budget estimates for the station.

He asked for "assurance that the state is prepared to provide full economic assistance to the endeavor throughout the term of the cooperative agreement."

HODEL NOTED that activities already are under way in Hawaii to help resolve conflicts over the use of Tern Island through the Tripartite Cooperative Agreement between the state, the Fish and Wildlife Service and the National Marine Fisheries Service.

Research has been conducted under the five-year agreement to assess resources of the Northwestern Hawaiian Islands and it is nearly completed.

Although analysis of the data and reports may take another year, Hodel said the preliminary results are available for use by an inter-agency team recently established to develop a plan for future use of Tern Island that considers both wildlife and economic interests.

"Perhaps your concern for fishery support at Tern Island can be satisfactorily handled in this recently initiated planning effort," Hodel said.

GOV. GEORGE ARIYOSHI has supported Yee's efforts to obtain fisheries use of the 57-acre Tern Island, now being controlled by the U.S. Fish and Wildlife Service for wildlife conservation.

Ariyoshi also has the state attorney general's office working on broad questions of federal-state jurisdiction for lands and waters in the Hawaiian Archipelago, stretching 1,523 miles across the Pacific from the Big Island to Kure.

Hodel said his office also is reviewing reports on legal claims of Hawaii and the federal government to Tern Island and to waters and submerged lands of the northwestern Hawaiian Islands.

He said the Secretary of Interior's authority is restricted on matters regarding transfer of lands in the National Wildlife Refuge System, of which Tern Island is a part.

But he said the legislation does not prevent cooperation in management of refuge resources and "the legislative history clearly indicates that cooperation is even desirable to avoid costly and unnecessary duplication of expertise in management of refuge resources."

Fisheries Official Says State Should Demand Control of Tern

By Helen Albion
Star-Bulletin Writer

The state should "reelily assert itself" to take control of Tern Island from the federal government, says Wadsworth Yes, chairman of the Western Pacific Regional Fishery Council.

Tern and other areas of the Hawaiian Archipelago have been managed in a state-federal jurisdictional dispute.

Yes said he believes "the state government for return of Tern Island because there are sufficient facts to show that it belongs to the state and not the Department of the Interior. And moreover, if the Department of Interior should abandon the Tern Island site.

The Interior Department's Fish and Wildlife Service is considering vacating its Tern station as one way of meeting increased costs of refuge management with a shrinking budget. Refuge managers then would camp out on the island periodically to carry out their responsibilities.

TERN ISLAND is in the City and County of Honolulu and the Hawaiian Islands National Wildlife Refuge. It comprises about 21 acres of a total 65 acres in French Frigate Shoals, 500 miles northwest of Oahu.

The Coast Guard previously

occupied the island for a CORAS (Coastal Resources Assessment System) facility and to permit the Territorial Department of Agriculture in 1973 the Coast Guard left the island and turned it over to the Interior Department.

Yes, a former Republican state senator, and the state Department of Land and Natural Resources (DLNR) have tried for about five years to get shared use of Tern with the Interior Department for fisheries report.

"It would enhance the fishing activities in the Northwestern Hawaiian Islands if the state took over and operated Tern Island as an emergency base for birds in that area," Yes said.

"It also could be a tremendous point of seafood products from Tern Island to Honolulu, and a place where people could fly into Tern Island for recreation apart from fishing on condition that they do not disturb the wildlife.

"We're all concerned about the preservation of the wildlife, the monk seal and green sea turtles," Yes said.

DEPUTY STATE ATTORNEY General Johnson Wong, who handles legal work involving state land issues, said the state "may have to" file a lawsuit to get Tern Island back.

The state maintains that state land no longer used by the federal government "should be

returned to us," he said. "But the federal government is always trying to jockey games."

Wong cited Fort Armstrong as a "classic example." The land was set aside to the federal government for a public health building, which is no longer in use, but instead of returning the land to the state, the federal government wants to use the area for a parking lot for the federal building, he said.

He said "the same logic" is being applied to Tern Island. That is, if one federal agency doesn't require a particular site, it is made available to another federal agency.

"We say, 'You can have a suit, but don't do it to our land,'" Wong said.

THE STATE submitted a proposal several years ago to the Interior Department for a fishing operation at French Frigate Shoals. It involves use of a mother ship anchored off Tern Island to support a small fleet of catcher vessels.

Action was deferred on the request while a new master plan was being prepared for the wildlife refuge.

"The plan does show the state's proposal as one alternative," said state Deputy Land Director Edgar Harrison, "if the fishing industry would want to move ahead to implement the plan by having a mother ship out there, it can do so."

"To us, it's a pretty nice thing

because this is what we were preaching and proposing for a long time," said Henry Sakuda, director of the land department's Aquatic Resources Division.

However, he said, any fishing operation would require consultation with the national fisheries and wildlife services because the master plan establishes the Northwestern Hawaiian Islands as a critical habitat for monk seals.

He said there is a mooring buoy just outside the refuge boundary at French Frigate Shoals and fishing activity is growing for lobsters and bottom fish. "Two primary fisheries are coming back to Hawaii."

U.S. Deficit Humbles Even Animals

Tern Island Monk Seals, Green Sea Turtles Must Pay Too

By Helen Alton
Star-States Writer

The U.S. Fish and Wildlife Service is considering abandoning its only permanently manned station in the Northwestern Hawaiian Islands because of money problems.

The Tern Island station serves as a support base for research throughout the Hawaiian Islands National Wildlife Refuge.

The island, 500 miles northwest of Oahu in French Frigate Shoals, is a habitat for Hawaiian monk seals, green sea turtles and other endangered species.

Two assistant refuge managers live on Tern Island. A biological technician based in Honolulu provides support for the facility and rotates part of the year on the island.

A masterplan recently completed for the refuge says the station "plays an integral part in the achievement of wildlife resource objectives."

However, it says, an "abandonment scenario" has been developed as an option because of

"continuously escalating operations and maintenance costs" and "lightening budgetary constraints."

Allan Marmelstein, the service's Pacific Islands administrator, stressed that "no decisions have been made."

HE ALSO SAID, "We're not talking about walking away from Tern Island but considering going from a year-around to a seasonal operation, in the same manner that we exercise our management responsibilities on other islands within the refuge."

Richard Shomura, director of the Honolulu Laboratory, National Marine Fisheries Service, said the station is "extremely valuable" from a research standpoint and he hopes it can be maintained.

"If it is abandoned, we would have to revert to the same system we have on other islands, to have in all of our things and establish camps," he said.

NMFS is responsible for studies and recovery of the endangered Hawaiian monk seal

population. There are more animals on French Frigate Shoals than any other islands, Shomura said, and it is also a major nesting area for endangered green sea turtles.

"In the best of all worlds, we might keep the station and improve it," Marmelstein said. "But we have no money at this point to manage everything, and everything is a priority. It comes to a point where we no longer can do more for less."

HE SAID IT COSTS about \$200,000 to \$250,000 a year to operate the Tern station out of a \$600,000 budget for the entire refuge system. The budget was reduced 5 percent last year and further cuts are expected, he said.

His office is responsible for remote wildlife refuges on Johnston Atoll, Jarvis Island, Baker Island, Howland Island and Ross Atoll, as well as the Hawaiian archipelago refuges.

"Our budget is very small considering what we manage," he said. "As the federal deficit

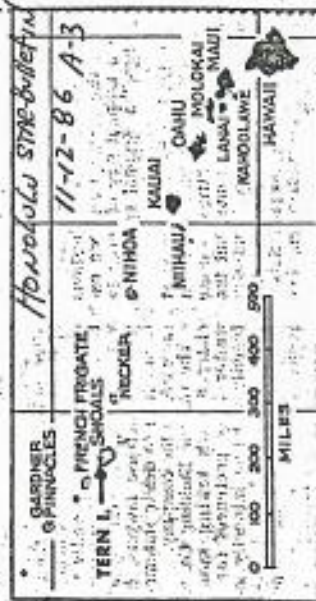
grows, we have to look for more efficient ways to spend money and save."

Marmelstein also noted that if the Tern station is maintained, "we are looking at some very long-range maintenance problems." He said the refuge managers already are spending "more and more time on maintenance and less on wildlife management."

He said the seawall hasn't been replaced since 1943 and it costs about \$5 million to rebuild it. This must be done every five or six years or big winter storms will wash away the runway, he said. If the runway isn't continuously maintained, "the birds move out on it," he said.

"We had two episodes where waves completely washed over the island the past winter. It took a week to clear the runway."

THE BUILDINGS must be re-roofed, at a cost of \$40,000 to \$50,000, and there are other maintenance problems involving the fuel tanks and generators.



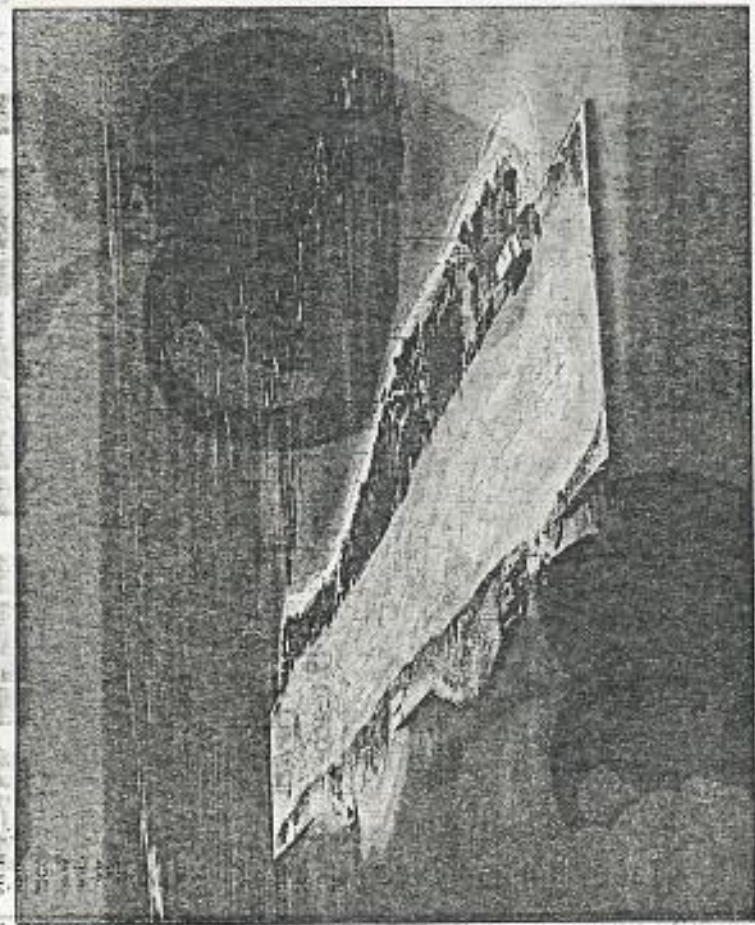
Star-States Map by Ray Hogen

Map shows location of Tern Island, of French Frigate Shoals, by poaching on the turtles, Shomura said.

He said the manned facility also has been "extremely helpful in emergency situations." He cited a number of instances where injured fishermen have been picked up at French Frigate Shoals.

The masterplan says "perhaps the greatest beneficial impact of the station is the capability of responding rapidly to accidental prouddings, oil spills, spills of hazardous chemicals," or other incidents with potential for adversely impacting the unique terrestrial biota of the Northwestern Hawaiian Islands."

U.S. may close down Tern Island operations



Airstrip takes up most of Tern Island.

Advertiser file photo

By Jan TenBruggencate
Advertiser Kaula Bureau

The U.S. Fish and Wildlife Service will decide within the next few months whether to shut down full-time operations at the 48-year-old station on remote Tern Island at French Frigate Shoals.

That decision, primarily a budgetary one, will mean abandoning the only airstrip in the 1,200 miles between Kaula and Midway. It will mean tearing down buildings and shipping out the generators, tractors and other equipment that have kept this little island going since the Navy built it in 1942.

Allan D. Marmelstein, Pacific Islands administrator of the Fish and Wildlife Service, said it would take a long-term commitment of extra operating funds and several major one-time maintenance jobs to keep the system going.

Those funds don't look like they're coming, given the federal financial environment, and the agency expects to convert Tern from a full-time station into a field camp. The change should cut costs in half, Marmelstein said.

The plan to close Tern's permanent station isn't final. It still needs the OK from the service's endangered species branch and from the National Marine Fisheries Service.

Many scientists are arguing that access to Tern is important for their own research, for ocean emergencies and many other reasons. But there also has been the argument that less human activity at Tern is better for the wildlife.

There has been talk of other agencies using Tern. One proposal calls for the island to become the homeport for the fishing industry in the Northwestern Hawaiian Islands.

"There is still the possibility that other people will want to use it, and we would be willing to entertain that, but I think the state and others realize that the amount of money needed to

maintain it is just too high," he said.

Any such use would have to meet the requirements of the Fish and Wildlife Service in protecting the wildlife of Tern and all of French Frigate Shoals, he said.

If nothing comes along, and regular maintenance is halted, the wildlife will take permanent control of the runway and the ocean will have unimpeded access to the shores.

It could mean the island will eventually shrink to near its original 11 acres from the 38 it had in 1942 when the Navy dredged a boat channel and seaplane landing area at French Frigate Shoals. The new, enlarged island, 3,100 feet by 350 feet, became a permanent aircraft carrier of sorts when a runway was built on it. It lay some 450 miles northwest of Kaula, nearly midway to Midway.

The Navy moved out at the end of the war, and the Coast Guard established a long range navigation station there in 1952. Waves breaking over the island in a December 1969 storm required evacuation of the crew there, but the Coast Guard in 1972 moved into new \$1.2 million quarters, only to move out for good in 1978.

The Fish and Wildlife Service moved quickly into the place, seeing it as a logical station for scientific research in the middle of the Northwestern Hawaiian Islands, most of which is under the service's jurisdiction as part of the Hawaiian Islands National Wildlife Refuge.

Of the six endangered or threatened species within the refuge, two produce young at French Frigate Shoals — the Hawaiian monk seal and the green sea turtle. The sand spits and islets of the shoal also are nesting sites for a stunning array of Pacific seabird life.

The Fish and Wildlife Service has generally kept at least two people on the island, sometimes with a volunteer or two. There are now three, including

Tern Island operations

the wife of one of the assistant refuge managers. Their supplies are flown in every five weeks. A tractor is used to clear the runway before each flight lands. The flights cost the service \$30,000 annually.

Marmelstein said the teams have been unable to do all the maintenance required at Tern. And each year they are doing less and less of the biological work for which they are there, and more maintenance.

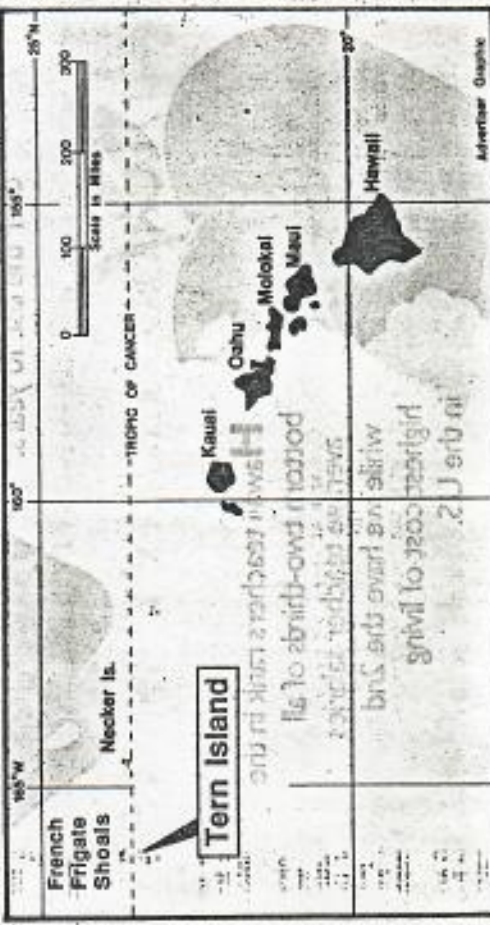
The facility at Tern is costing a third of Marmelstein's budget for the entire Pacific area, and the costs are rising while his budget is dropping. Several major projects are in the offing if the facility is to be kept up. Marmelstein estimated it would cost \$250,000 each year for two years to perform a range of maintenance jobs like re-roofing buildings.

Marmelstein's alternative is to take down buildings, ship out the big generators and freezers and the other equipment that keep the place going. Perhaps one tractor would be left to clear the runway for emergency flights until there's not enough runway left on which to land.

He would then operate Tern as a field camp. The water catchment system would be redesigned to work on gravity instead of power. Filtration systems would be manually operated. Crews could camp in the old concrete living quarters, but the roof would continue to leak and the metal window frames will eventually corrode away.

The scientific teams would be on station except in December and January, the months sea-birds aren't breeding, and when the island is in the most danger from storms.

Because of the time the permanent crews spend on maintenance, the scientists under the new system would get more scientific work done in 10 months than the permanent crew can in 12, Marmelstein said.



Advertiser Graphic



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southwest Fisheries Center
Honolulu Laboratory
P. O. Box 3830
Honolulu, Hawaii 96812

April 1, 1985

F/SWC2

To: F/SWR1 - Doyle E. Gates

From: F/SWC2 - *Richard S. Shomura*

Subject: HINWR Master Plan, John Naughton's memo of 19 March

Bill Gilmartin and George Balazs reviewed the subject document paying particular attention to the proposed use of Tern Island as a fishery support and recreation base. They do not believe this activity, which is included in the Preferred Alternative of the Plan, is substantially different in potential impact on protected species than the activities contained in the proposal by the State of Hawaii to conduct a commercial baitfishing assessment at French Frigate Shoals and use Tern Island as a fishery support base. As you will recall, the NMFS, in its biological opinion on that issue in 1981, delivered a jeopardy opinion to the FWS (Terry L. Leitzell letter of 11 March 1981 to R. Kahler Martinson, FWS, Portland).

Bill and George believe that neither the potential impact nor the status of the endangered and threatened species has changed substantially enough to affect that 1981 Biological Opinion.

cc: F/SWC - I. Barrett

The Honolulu Advertiser

Monday, September 21, 1987 A-3

Isle wildlife projects get Senate funds

Also funded was \$1 million for expansion of Haleakala National Park on Maui to complete fences designed to keep wild pigs out. Other projects approved by the panel were:

- \$750,000 more in the operating budget for Hawaii's wildlife refuges, including 24-hour operation of the Tern Island wildlife station.
- \$250,000 to help control pigs and for other improvements at Volcanoes National Park.
- \$100,000 for research by the U.S. Fish and Wildlife Service into methods of controlling infestation of brown tree snakes

the state in promulgating rules affecting ocean seabed mining off the Hawaiian Islands.

The panel also set aside \$1.2 million to operate an ocean minerals research center at the University of Hawaii Manoa campus. Another \$4 million to build the center are included in a separate bill.

Inouye said Thursday he would ask for the one-year delay in the regulatory process which may lead to mining of the ocean seabed near Hawaii. He said he wanted to make sure that the state has an adequate role in the decisions affecting coastal air and water quality.

on Guam — and keeping them out of Hawaii.

• \$500,000 for research into research into methanol as a fuel.

In another matter, the department has assured Inouye and the subcommittee that it will not issue leases for Pacific Ocean mining rights for at least another year.

Inouye said the one-year delay would allow time to resolve legal issues of concern to the state while allowing environmental impact studies to proceed.

In addition, Inouye said, the subcommittee decided to direct the department to work with

U.S. Senate subcommittee has agreed to expand the Kilauwea Point Wildlife Refuge on Kauai, according to Sen. Daniel Inouye.

The Appropriations subcommittee on the interior decided to provide \$1.7 million to buy 36-acre Mokelea Point. The refuge has the highest concentration of native seabirds in the major Hawaiian islands.

The subcommittee also set aside \$4 million to acquire land on the Big Island to preserve the habitat of Hawaii forest birds at the Kilauea-Keaouh Wildlife Refuge.

Agencies come up with ways to keep Tern airfield open

By Jan TenBruggencate

Advertiser Kauai Bureau

The airfield on Tern Island at French Frigate Shoals will be kept open under an agreement between the U.S. Fish and Wildlife Service and the National Marine Fisheries Service.

A proposal to close the runway as a cost-saving measure attracted broad criticism from the scientific community. Tern is the only runway between Kauai and Midway, 1,200 miles covering most of the Northwestern Hawaiian Islands.

Most of those islands comprise a national wildlife refuge, and without Tern's runway, access would have to be entirely by boat. That would make more difficult the saving of young seals and the movement of researchers and enforcement personnel through the islands.

The Fish and Wildlife Service, whose budget groaned under the cost of keeping up the former Coast Guard station there, will convert it to a high-tech facility that will dramatically reduce fuel, repair and maintenance costs.

Jerry F. Leinecke, district

power new communications gear and refrigeration, a few lights and redesigned water delivery system.

The Tern Island facility's water is collected from rainfall on the roofs of buildings and from the surface of an old concrete tennis court. It is treated to make it drinkable.

Leinecke said the service is working with other government agencies to determine what kind of solar installation would work best in the salty air of Tern, what kinds of radios and energy-efficient refrigerators are best and how to set up the drinking water system. The service hopes to have contracts in place by September and to have work completed by the end of the year, he said.

There must be people on Tern Island for an aircraft to land there. That's because seabirds will nest on the runway area if allowed to, and debris collects on it. Before a plane lands, the crew uses a tractor to drag a beam across the runway to clear it.

Leinecke said the tractor and a small, three-wheeled run-

supervisor for refuges and wildlife in the Pacific Islands Office of the Fish and Wildlife Service, said the roughly \$125,000 in conversion costs should save \$40,000 to \$50,000 annually in maintenance costs.

The changes will also mean biologists assigned to Tern will be able to spend as much as 75 percent of their time on biology and 25 percent on maintenance. Under the existing setup, as much as 55 percent of their time is spent keeping the facility operating, he said.

Much of that time was spent maintaining the big power generators themselves, which run air conditioners, huge walk-in freezers, multiple radios and other gear. The facility at Tern was established for a dozen or so Coast Guard personnel, and so may be more than is needed for the two to four researchers on the island at any given time.

The conversion involves removing the big generators, and replacing them with a single, 3.5-kilowatt generator that would be used in emergencies. Regular, operational, power would come from a rooftop array of solar power cells. They'll be installed on a strengthened roof in the main Tern Island structure, a concrete building on piers that was designed to withstand the storm surf that sometimes washes over the island.

The solar system will run a humidifier to keep one room dry and salt-free. It will also

about 100 gallons of fuel will be kept on the island, along with the outboard motors needed for boats used to travel around the waters of French Frigate Shoals. They, with the emergency generator, will be the only users of fuel.

The dramatic decrease in fuel needs means a special fueling vessel won't be needed. Gas can be brought to the island in barrels by the Coast Guard, fishing and other resupply vessels that occasionally visit the island, he said. More convenience and less cost.

Members of the scientific community say they are relieved the Fish and Wildlife Service did not shut down the airport and the majority of the facility, though there is concern about whether the service will get the additional money it needs to make major improvements to the runway. The runway, built during World War II, is eroding as the ocean washes through the rusted iron plates that surround it.

"I'm really glad that they're keeping it open," said Sheila Conant, a University of Hawaii scientist who has done considerable study on the Northwestern Hawaiian Islands.

"It's good to have enforcement personnel and researchers there to make sure nobody's bothering" the Hawaiian monk seals, green sea turtles and seabirds that use the sandbars of French Frigate Shoals, she said.

Scientists get new lease on Tern Isle studies

By Helen Altomn
Star-Bulletin writer

A research station on Tern Island that wildlife scientists feared would be closed has received a batch of long-needed new equipment to keep it going, at least until nature intervenes.

New radios, a solar-energy system, tractor, boat and engines were shipped to the station last month by the U.S. Fish and Wildlife Service in Honolulu.

"The equipment has been installed and has improved the safety and livability of the island," said Allan Marmelstein, Pacific Islands administrator of the service. Tern Island is 500 miles northwest of Oahu in French Frigate Shoals. It is the only base for researchers in the Hawaiian Islands National Wildlife Refuge. The runway also is used to evacuate ill or injured fishermen from ships working in the northwestern waters.

THE SERVICE was considering

Radios, tractor, boat shipped to aid researchers

closing the year-round manned facility because of high maintenance costs and budgetary problems. With the help of Sen. Daniel Inouye, a \$200,000 appropriation was provided to maintain the station and make it more efficient, Marmelstein said.

But if the seawall falls apart or a storm wipes out the runway, "we're out," he said. "That could happen this year, or in 50 years." Marmelstein said the wildlife service is negotiating with the National Marine Fisheries Service for assistance in maintaining the station. NMFS scientists use the facilities for studies of endangered Hawaiian monk seals and green sea turtles.

George Boehlert, with the NMFS Honolulu Laboratory, said he has written a letter to the wildlife service suggesting that the agencies get together to discuss how they can help one another

for research efforts.

He said the laboratory's research ship Townsend Cromwell provides "significant assistance" by transporting people and equipment to Tern.

Tern Island was used by the U.S. Coast Guard for a navigation facility until 1979 when it was turned over to the Interior Department.

The research station is an outgrowth of a state-federal study of the Northwestern Hawaiian Islands' resources and fishery potential, Marmelstein said.

It was decided to keep the facility for wildlife studies, but there was never any appropriation for the operation, he said. "We did it by hook or by crook, within our budget."

HE SAID TWO new biologists recently were assigned to Tern for a two-year term, and it's hoped they will have time for research.

Up to now, biologists stationed

there "have been doing 110 percent maintenance," he said. "It was getting harder and harder to find biologists to do maintenance."

Other researchers also will benefit from the new equipment, said Stewart Fefer, manager of the Hawaiian Islands refuge.

The station was using old radios and boats that weren't reliable, and scientists had to be delayed or restricted from doing their research, he said. It seemed like their work was being hampered but it was for their safety, he said. "The new equipment will allow for more cordial relations."

Fefer said the equipment improves communications and will make the Tern operation less costly. In the past, the service constantly had to send tractor, radio and refrigerator technicians there to maintain the equipment, he said.

TWICE THIS YEAR, he said someone was flown in to work on the tractor, which is essential to keep the runway clear of grass and debris that washes over it in heavy rains. The island is no more than 10 feet above sea level.

Fefer said solar power will eliminate the need to deliver diesel fuel to Tern, which is expensive and dangerous to the wildlife preserve because of possible spills.

Improvements to the building to prevent leaking also are planned, Marmelstein said. However, he noted that the seawall that went up when the island was constructed by the Navy in World War II is eroding.

If it isn't replaced, the runway could be wiped out, putting an end to the station, he said. But a new seawall would cost about \$5 million and involve a lot of heavy equipment, people and disturbance to the wildlife habitat, he pointed out.

"What do we do? There is going to be lots of discussion. . . ."

February 25, 1992

F/SW033:ETN

Margo Stahl
U.S. Army Corps of Engineers
Honolulu Engineer District
Environmental Resources Branch
Fort Shafter, HI 96858

Dear Ms. Stahl:

This provides the combined comments of Bill Gilmartin, George Balazs, John Henderson, and Gene Nitta on the draft Tern Island Shore Protection Study. Unless otherwise attributed these comments reflect a consensus of the reviewers.

General

Of the options presented, a combination of Plan 1 and Plan 2 would be the preferred alternative. This would include replacing the sheet pile "pier - aircraft turn around" between Shell and Crab Beaches with revetment as well. In addition to preserving the topography to maintain the beaches this will also eliminate the entrapment hazard from eroding sheet pile.

Based on information in the text of document, we believe the stone revetment is the best option for construction material and type of structure.

We cannot evaluate the alternative plans which include the groins and breakwaters. The value of these appear to be related to the long term protection of the revetment, and require engineering analysis. The impact on the fronting reef structures should also be considered in the analysis.

For timing and phasing of the project we believe the work should continue, once initiated, until it is completed, keeping the total time of impact to the wildlife to a minimum. We believe this approach should reduce the overall project work time by eliminating extensive restaging activities each time work is resumed.

Any plans to accommodate large vessels (to 100') at the Tern Island dock will require more information. An analysis and justification needs to be incorporated into the assessment. If this requires significantly more dredging of sand and/or reef, then the justification for such vessels would have to be sufficiently high to support it. Plans for a small boat launching facility could also be incorporated into this assessment.

Specific:

1. Page 20, item (4) at bottom of page: Can the concrete blocks in the pile on East I be used as stones in the underlayer materials of the revetment?
2. Page 22, item a.: Will the stones at the crest of the revetment prevent turtle exit from top of the island? Stones will not be a problem for seals to negotiate.
3. Page 30, 1st paragraph: Concern about ciguatera is appropriate. Plan calls for monitoring level of the causative agent, *Gambierdiscus toxicus*, but select fish (including eels) species should also be monitored for the toxin. Because the organism and the toxin concentration in the fish probably varies seasonally, monitoring should be initiated soon, perhaps a year in advance of the construction, in order to understand the normal cycle.
4. Phasing: Depending upon time of year project commences, start so that you will be working in more sensitive areas (i.e. northeast side) when the birds are not nesting there. Thus, if work commences in mid-winter, start work on the NE side, and conversely, if starting during tern nesting season, start on NW the side.
5. The project will need to be monitored by the NMFS and appropriate briefings provided to construction personnel prior to departing for Tern Island.
6. Although difficult to quantify, the number of green turtles that forage along the north and west shores of Tern Island should be estimated and a survey of algal species present on the sheet pile should be completed prior to construction.

We appreciate the opportunity to provide comments at this early stage of the proposed project. Other impacts to Hawaiian monk seals and green turtles will need to be evaluated after the assessment undergoes further refinement.

Sincerely,

Eugene T. Nitta
Protected Species Program
Coordinator

cc: F/SWC2 - Gilmartin

bc: F/SWC2 - Balazs
F/SWC2 - Henderson

7/17/00 A4 starbulletin

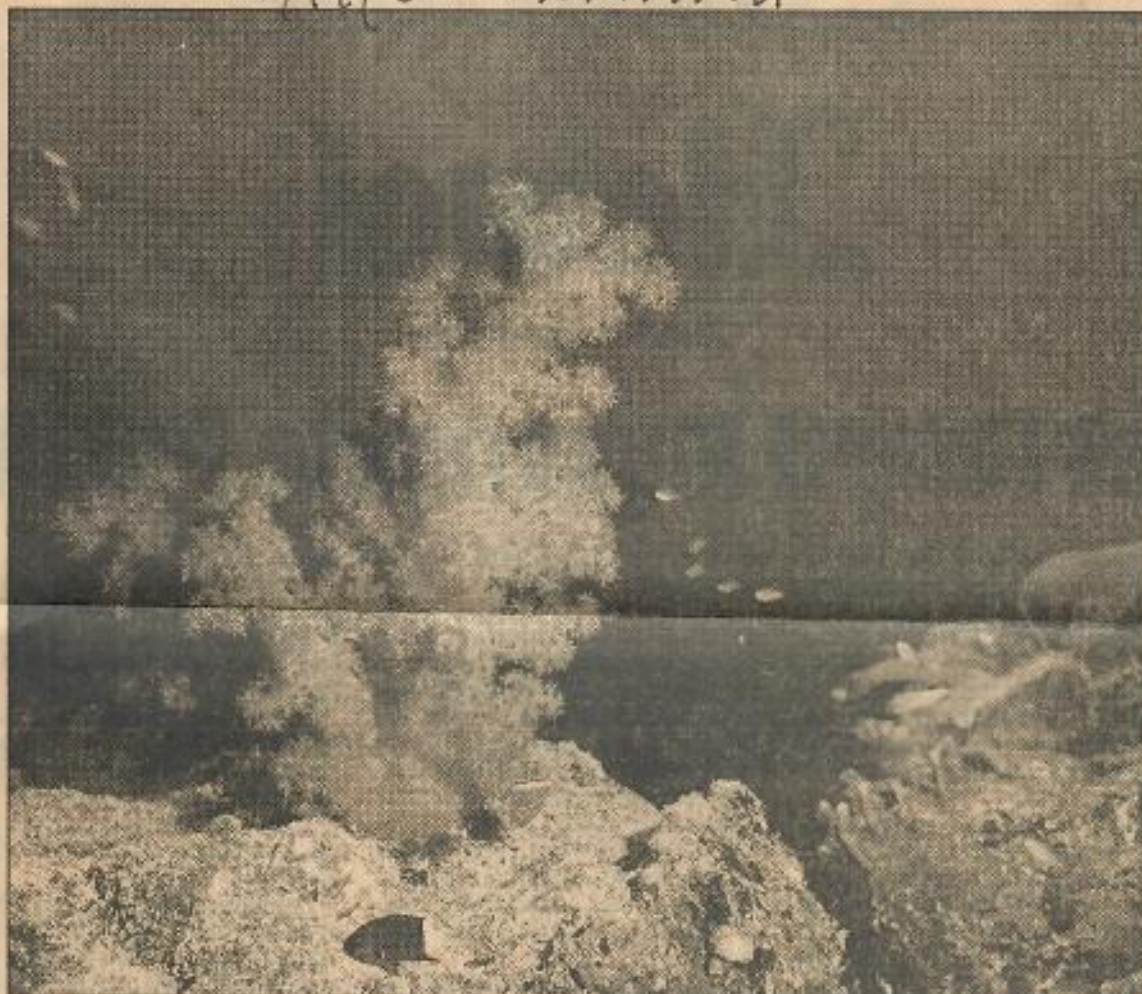


Photo courtesy of the National Oceanic and Atmospheric Administration/Linda Wade

A key deadline is near for coming up with ways to protect reef ecosystems in the northwest hawaiian islands. The ecosystems, like this one in Kiribati, are home to many animals not found anywhere else.

Race to save the reefs

Due date nears for protecting Northwest Hawaiian Island ecosystems

By HELEN ALTONN
Star-Bulletin

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percent of all coral reefs in the United States, is the first area designated by Clinton for protection under the Coral Reef Task Force plan.

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President set timetable

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Brainard said compromise will be necessary to protect the resources, environment and rights of fishing communities. "We will try to reach a balance. That will be built into the system, so it will not be so rigid that it can't be changed as we learn more."

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- Hawaiian monk seal
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- Nihoa millerbird
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THREATENED SPECIES

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Source: U.S. Fish & Wildlife Service-Pacific Islands

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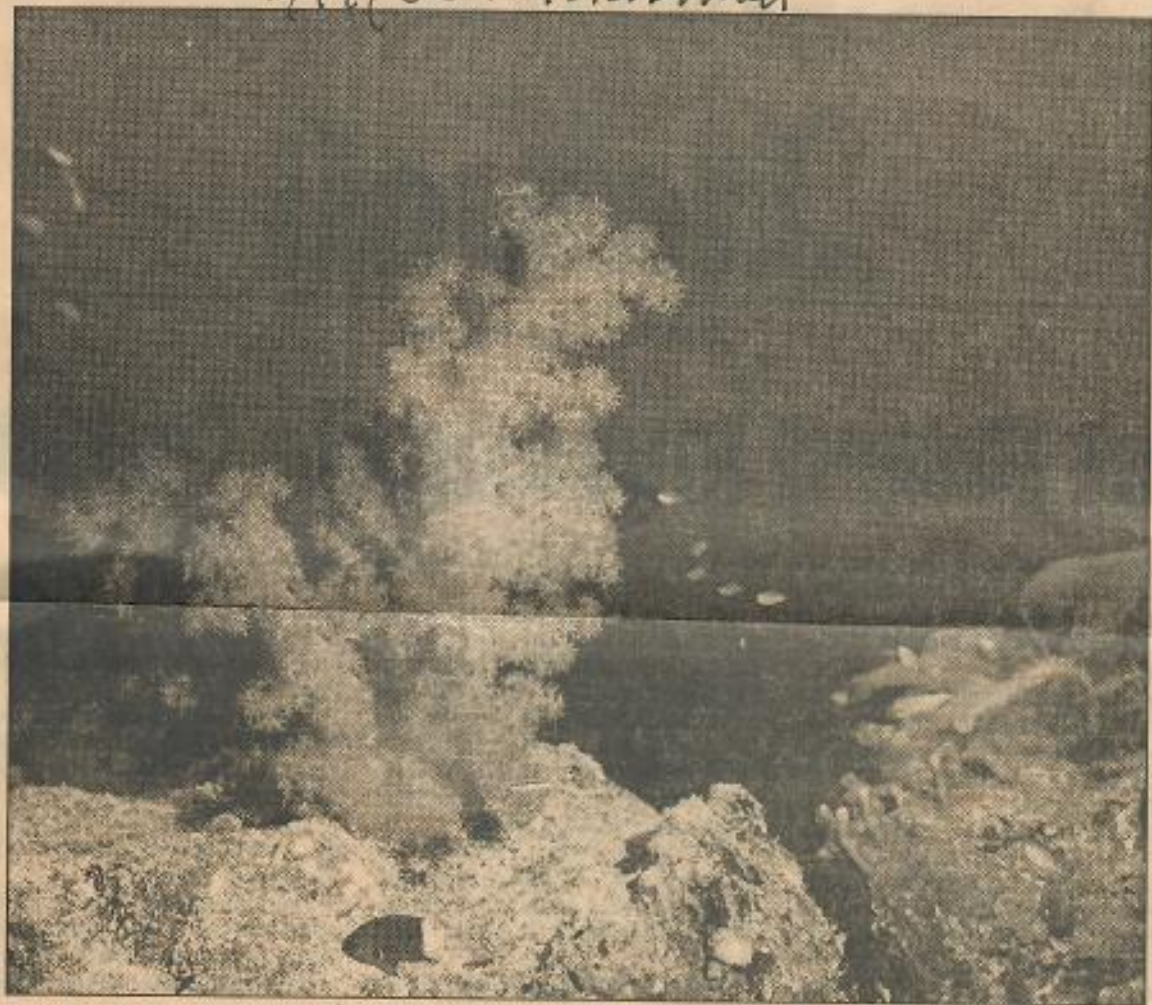


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Source: U.S. Fish & Wildlife Service-Pacific Islands



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southwest Fisheries Center Honolulu Laboratory
2570 Dole St. • Honolulu, Hawaii 96822-2396

May 1, 1990 F/SWC2:GHB

Mr. Jerry Leinecke
U.S. Fish and Wildlife Service
P.O. Box 50167
Honolulu, HI 96850

Dear Jerry,

As you may know, a few months ago I sent the enclosed letter to David Vogel with copies distributed to several potentially interested persons. Thus far, there has been no response from Mr. Vogel or anyone else. However, in looking over my distribution list, I see that I neglected to specifically send you a copy. I apologize for this oversight and error on my part.

Since a fair amount of time has now passed, I am wondering about the current status of the various recommendations made in Mr. Vogel's report. Has the principal recommendation regarding containment and management of Tern been accepted and in the process of implementation? What opportunities exist in the foreseeable future for removing the cement debris from East Island? What decisions, if any, have been made concerning Mr. Vogel's suggested name change for the refuge? What are your thoughts regarding the alternate idea of reverting to the place names that are accurate and specific for each location (i.e., French Frigate Shoals National Wildlife Refuge)?

Best regards.

Sincerely,

George H. Balazs
Zoologist

Enclosure



7/19/84
Draft

MEMORANDUM OF AGREEMENT
BETWEEN THE
NATIONAL MARINE FISHERIES SERVICE, SOUTHWEST REGION
AND THE
U.S. FISH AND WILDLIFE SERVICE
HAWAIIAN ISLANDS NATIONAL WILDLIFE REFUGE
REGARDING MANAGEMENT AND PROTECTION OF THE HAWAIIAN MONK SEAL
(Monachus schauinslandi) AND THE GREEN TURTLE (Chelonia mydas)

On this _____ day of _____, 1984, the Regional Director, Southwest Region, National Marine Fisheries Service (NMFS), and the Regional Director, Region 1, U.S. Fish and Wildlife Service (FWS),

Acting in pursuance of, or in furtherance of the purposes of the Endangered Species Act of 1973 (87 Stat. 884, Public Law 93-205) as amended, the Marine Mammal Protection Act of 1972 (86 Stat. 1027, Public Law 92-522) as amended, the regulations implementing the Acts, the National Wildlife Refuge System Administration Act of 1966 (80 Stat. 927, Public Law 89-669), as amended, Executive Order 1019, the "Memorandum of Understanding Between the U.S. Fish and Wildlife Service, United States Department of the Interior, and the National Marine Fisheries Service, National Oceanic and Atmospheric Administration, United States Department of Commerce Regarding Jurisdictional Responsibilities and Listing Procedures Under the Endangered Species Act of 1973," and "The Interim Memorandum of Understanding Between the Department of the Interior and the Department of Commerce, Pursuant to Subsection 11 (e) of the

Endangered Species Act," and,

RECOGNIZING: (1) That those portions of the Northwestern Hawaiian Islands (NWHI) in the Hawaiian Archipelago constituting the Hawaiian Islands National Wildlife Refuge (HINWR) include the principal habitat of the Hawaiian monk seal, an endangered species, and essentially all breeding habitat for the Hawaiian population of green turtles, a threatened species; (2) that because of their endangered and threatened status, the Hawaiian monk seal and the Hawaiian green turtle should be afforded, to the extent possible, protection from further depletion and disturbance; (3) that although the FWS has the responsibility for the protection and management of the HINWR, including all wildlife within the Refuge, NMFS shares in that responsibility for the protection and management of the Hawaiian monk seal by formal Agreement with FWS; (4) that the FWS and NMFS share management, research and enforcement responsibility for the green turtle by Agreement, and (5) that the NMFS and FWS share responsibility and authority to enforce the Endangered Species Act of 1973 and the Marine Mammal Protection Act of 1972, as it concerns the Hawaiian monk seal.

DO HEREBY AGREE that the following shall govern the protection and management of the Hawaiian monk seal and green turtle within the HINWR:

ARTICLE I: The National Marine Fisheries Service, Southwest Region, hereby agrees:

- (a) to review all research proposals and/or applications for Refuge Special Use Permits which FWS determines may affect the Hawaiian monk seal

- or green turtles in the HINWR and provide timely biological consultations and findings on such proposals pursuant to Section 7 of the Endangered Species Act;
- (b) to refer all requests NMFS receives for entry into the HINWR to the Refuge Manager, HINWR;
 - (c) to review and conduct Section 7 consultation on activities within the HINWR where FWS has determined the activity may affect monk seals or green turtles;
 - (d) in cooperation with the FWS, to aid in enforcement of HINWR regulations and other Federal statutes relating to activities within the HINWR and the protection of Refuge wildlife;
 - (e) to plan and implement programs, in cooperation with FWS, to promote the protection and recovery of the Hawaiian monk seal within the HINWR, pursuant to the Marine Mammal Protection Act of 1972, the Endangered Species Act of 1973, the Hawaiian Monk Seal Recovery Plan, and other applicable Federal statutes;
 - (f) to plan and implement programs in cooperation with FWS, to promote the protection and recovery of the Hawaiian population of green turtles within the HINWR, pursuant to Endangered Species Act of 1973, as amended, and other applicable Federal statutes;
 - (g) to provide descriptions of proposed NMFS activities within the HINWR, to the Refuge

Manager, HINWR, for review and issuance of Refuge Special Use Permits;

- (h) to submit NMFS proposals for activities which may affect green turtles on their terrestrial habitat to Endangered Species, Honolulu Area Office, for Section 7 review, pursuant to the Endangered Species Act of 1973;
- (i) to provide simultaneously to the Refuge Manager, HINWR, all applications for Marine Mammal Protection Act or Endangered Species Act permits;
- (j) to provide in a timely manner post-fieldwork reports, copies of correspondence regarding MMPA/ESA permits and copies of all relevant publications to the Refuge Manager, HINWR, resulting from work accomplished by NMFS on monk seals and turtles in the NWHI; and
- (k) to facilitate FWS field research and facilities operation by providing space, as available, on NMFS chartered vessels and aircraft for FWS researchers and supplies.

ARTICLE II: The U.S. Fish and Wildlife Service, hereby agrees:

- (a) to conduct timely Section 7 and permit application review of all proposed NMFS activities or other proposed activities referred to FWS by NMFS and to issue Refuge Special Use Permits for approved NMFS activities;
- (b) to provide NMFS, Southwest Region, Western Pacific Program Office, copies of all proposals for

research or other activities which FWS determines may affect monk seals or turtles and initiate Section 7 consultation, pursuant to the Endangered Species Act;

- (c) to provide NMFS with descriptions of proposed FWS activities within the HINWR which FWS determines may affect monk seals or green turtles;
- (d) to investigate all unauthorized activities regarding the Hawaiian monk seal and green turtle within the HINWR, and to refer all cases of illegal take, including harassment of green turtles at sea and of Hawaiian monk seals to the NMFS, Southwest Region, Western Pacific Program Office for appropriate action under the Endangered Species Act of 1973, and the MMPA of 1972 or other appropriate Federal statutes;
- (e) to plan and implement programs, in cooperation with NMFS, to promote the protection and recovery of the Hawaiian monk seal within the HINWR pursuant to the Marine Mammal Protection Act of 1972, the Endangered Species Act of 1973, the Hawaiian Monk Seal Recovery Plan, and other applicable Federal statutes in cooperation with the NMFS, Southwest Region;
- (f) to plan and implement programs, in cooperation with NMFS, to promote the protection and recovery of the Hawaiian population of green turtles within the HINWR pursuant to the Endangered species Act

- of 1973, and other applicable Federal statutes;
- (g) to provide NMFS copies of all post fieldwork reports and publications resulting from work accomplished by FWS on monk seals and turtles in the NWHI; and
 - (h) to facilitate approved NMFS research activities involving monk seals and turtles on the HINWR by providing use of space and equipment at Tern Island and space, as available, on FWS chartered boats and aircraft for NMFS researchers and supplies.

ARTICLE III: It is further understood and agreed:

- (a) that the primary purpose of this Agreement is for the protection and management of the Hawaiian monk seal and green turtle;
- (b) that, dependent upon mutual concurrence, the NMFS or FWS may enter in agreements with research organizations, scientific institutions, the State of Hawaii, or with other Federal agencies in carrying out their responsibilities under this Agreement; and
- (c) that NMFS and FWS shall coordinate and enter in separate sub-agreements, where appropriate, to facilitate mutually supportive research and management activities in the NWHI, including, but not necessarily limited to operation and use of Tern Island, vessel and aircraft charters, use of field equipment, scheduling and logistical

support, emergency contingency plans, and wildlife salvage and rescue operations.

This Agreement will remain in effect unless terminated upon 30 days prior written notice by either party or modified by mutual agreement.

U.S. Fish & Wildlife Service

National Marine Fisheries Service

Date

Date



United States Department of the Interior

**FISH AND WILDLIFE SERVICE
PACIFIC ISLANDS OFFICE**

P.O. BOX 50167
HONOLULU, HAWAII 96850

October 25, 1990

George H. Balazs, Zoologist
NOAA/NMFS
Southwest Fisheries Center, Honolulu Lab
2570 Dole Street
Honolulu, HI 96822-2396

Dear George,

Sorry about the delayed response to your 1 May letter. I hope the following will bring you up to date in regards to your questions and concerns.

1) Has the principal recommendation regarding containment and management of Tern been accepted and is it in the process of implementation?

I don't believe there has been any official correspondence in this regard from our regional office staff. On the other hand they have supported, through both funding and assistance, an effort to implement Vogel's recommendation. Apparently several behind the scenes conversations have taken place between the Marine Mammal Commission and the Director of the Fish and Wildlife Service. The Commission made its desires for continued operation of the Tern Island facility known during these discussions. As you likely also know the Monk Seal Recovery Team supports Vogel's Option 3.

Over the past year we worked closely with Rob Shallenberger to solicit funding sources for a project to stabilize Tern Island's shoreline. The enclosed Project Description was put together by this office and Rob to brief various support groups on our goals for French Frigate Shoals.

I believe that it was about the same time as the Marine Mammal Commission was discussing Tern Island with the Director of the FWS that the Director also had a conversation with the Secretary of Defense. Inspector Cheney offered the assistance of the military in supporting FWS programs. Shortly thereafter the word filtered down to the field level soliciting cooperative project proposals. We immediately identified Tern and East Islands through this process. I understood through Rob that our project was very high on the military's list to support.

As discussions continued at various levels we finally came to an impasse, because the people that would have to commit to supporting the project didn't feel that they had the level of detail they required to make that commitment. What was needed was a full blown engineering and feasibility study of the various options for shore stabilization etc. We have since been able to obtain money from the regional office to fund such a study.

Our next step was to request such an engineering study through the Army Corps of Engineers. Our request included engineering of all the areas covered in the attached Project Description. In the end the Corps estimate for all of this work exceeded our available funds. Since we felt that the shoreline

stabilization was the most important aspect of the project we were able to renegotiate to fully fund this part of the engineering study.

We began the field phase of this study in September when surveyors visited Tern to collect data. The Corps plans to visit for the final field phases sometime in the next 2 months. We expect a report addressing shore stabilization and possible channel rehabilitation measures 6 months from the end of the field phase of the project.

We also had a meeting with the Navy Construction Battalion, Pearl Harbor. They could be involved in the rehabilitation phase of the project.

That is basically how it stands at this point. Since Rob transferred to another Regional office and Al has also transferred, we have lost our higher level pusher on this and need to reestablish it. Right now though, our main goal is to finish the engineering phase.

2) What opportunities exist in the foreseeable future for removing the cement debris from East Island?

Even though the current engineering study does not include East Island, it is my intention to clean East at the same time as the shore stabilization project occurs. I feel confident that with the equipment that would be on hand at that time, East would be an easy side project.

3) What decisions, if any, have been made concerning Mr. Vogel's suggested name change for the Refuge?

No decisions have been made. I do not have this subject in my work planning for the current fiscal year. I believe that we at the Refuge level were glad to see such a recommendation for the reasons Vogel stated. My initial feelings are that Northwestern Hawaiian Islands National Wildlife Refuge would be the best way to go. My thinking is that at least that way people know where to look on the map when they see the name. We definitely need discussion on this and I appreciate your input.


I hope that this has answered your main questions. I think you can see that we have been proceeding along a path towards solution of the problems identified by Vogel's report. As always we don't have the resources to answer

George Balazs

3

them all at once. Please feel free to give a call if you need any clarification on the above. I will try to keep all of you (NMFS/MMES) apprised as we proceed.

Sincerely,



Duane K. McDermond
Refuge Manager
Pacific/Remote Island Refuges

PROJECT DESCRIPTION

Project: Shore Stabilization, Facility Rehabilitation and Debris Cleanup at Tern and East Islands, French Frigate Shoals

Background

Tern and East Islands are low, sandy islands within the coral atoll known as French Frigate Shoals (Figure 1). This atoll is located nearly 500 miles northwest of Honolulu, approximately midpoint in the Hawaiian archipelago (Figure 2). French Frigate Shoals is part of the Hawaiian Islands National Wildlife Refuge, administered by the Fish and Wildlife Service, U.S. Department of the Interior.

Tern Island is the largest island within the Shoals, with an area of approximately 34 acres. Originally an 11 acre islet, Tern was enlarged by the U.S. Navy through the placement of dredged fill behind a sheet piling seawall in 1942. Buildings, fuel tanks, other facilities and a runway were constructed to support Navy operations, which continued until 1946. In the mid-1940's, the U.S. Coast Guard established a LORAN (long range aid to navigation) station on East Island, an 11 acre islet 6 miles southeast of Tern. In 1952, the LORAN station was relocated to Tern Island, where it remained operational until it was decommissioned in 1979. Fish and Wildlife Service refuge staff have occupied the Tern Island station since the Coast Guard left. Support facilities and systems (electrical, water, sewer) have been modified to minimize costs.

French Frigate Shoals hosts a wide variety of fish and wildlife species, including nearly half the estimated population of endangered Hawaiian monk seals. At least 90 percent of the reproduction of threatened Hawaiian green sea turtles occurs at the Shoals, principally on East Island. The numerous islands also provide roosting and nesting habitat for more than 100,000 pairs of Hawaiian seabirds, representing 16 different species. The field station at Tern Island supports a wide array of research and management studies focused on the abundant fish and wildlife resources in the Shoals. In addition, Service presence at the station provides an important deterrent to illegal entry into the Refuge.

The Problem

The Tern Island station is situated in a hostile marine environment, where the battle with wind, waves, and corrosion takes a continuing toll. During the period of Coast Guard occupation, frequent repairs were made to the seawall and to various buildings. Damage caused by overtopping waves during a major winter storm in the mid-1970's led to the complete reconstruction of the barracks building. The Service has scaled back operations principally to support a reduced human population on the Island, but also because of the cost of facility upkeep. However, in order to remain operational and safe, virtually continual maintenance of some facilities (runway, fuel tanks, boat hoist, water system, solar power, etc.) is required.

Accelerating deterioration of the seawall presents the most critically serious threat to the continued operation of the Tern Island field station. More importantly, the loss of the seawall and consequent erosion of coral fill behind it represent a direct threat to Hawaiian monk seals and green sea turtles. The rusting wall, together with many tons of assorted debris used by the Coast Guard to retard the erosion of coral fill, now has created a serious entrapment hazard for monk seals and turtles. In addition, twenty underground fuel tanks, some still containing fuel, are vulnerable. If the seawall is fully breached, the runway will quickly become unusable. Further erosion will aggravate the entrapment hazard and result in the escape of stored fuel and other contaminants into the marine environment. The hazards associated with debris remaining on East Island, particularly concrete foundations, are not so readily apparent as those associated with Tern Island. However, this debris inhibits the full use of the island by nesting turtles and presents an entrapment hazard for both seals and turtles.

The Solution

Immediate closure of the Service field station and abandonment of facilities at French Frigate Shoals is not a viable solution to the problem. In fact, it is the presence of personnel on Tern Island that permits the release of animals which become entrapped. Continued operation of the field station also makes it possible to undertake research, management, and enforcement activities for the benefit of refuge fish and wildlife resources.

The Service proposes to stabilize the eroding shoreline, rehabilitate facilities necessary to support continued station operation, and begin the systematic dismantling and removal of surplus facilities and debris. Such an ambitious project will require the cooperation and commitment of several government agencies and the private sector. The proposed project is described below in several phases:

Phase I - Engineering and Environmental Studies

An important prerequisite to accurate cost estimation, scheduling, and environmental assessment for this project will be detailed engineering studies. These studies must address various scenarios for shore stabilization, channel dredging, demolition, construction, and debris removal and disposal. Because of the magnitude and nature of the project, additional environmental analysis will also be required. This could be accomplished through a supplement to the Master Plan/Environmental Impact Statement for the Hawaiian Islands National Wildlife Refuge.

Phase 2 - Channel and Basin Rehabilitation

It is likely that large vessels, including barges, will be required to transport construction materials and equipment to and from Tern Island and debris off of the island. The existing channel, turning basin, and mooring facilities will need to be upgraded.

Phase 3 - Facility and Infrastructure Rehabilitation

Rehabilitation of selected facilities will be necessary to support construction operations and to permit continued operation of the Service field station after the project has been completed. Emphasis will be placed on upgrade and installation of support systems that are minimally dependent upon fossil fuels and are low in maintenance requirements. Examples of projects to be completed in Phase 3 include:

- Barracks - Repair of roof and wall leaks
Replacement of corroded window units
Replacement of deteriorated plumbing
Upgrade of photovoltaic and solar hot water systems
- Water System - Upgrade of system to meet higher standards
Installation of new fresh water storage tanks
Repair of water catchment surfaces
- Sewer System - Renovation of salt water well
Replacement of salt water storage tank
Replacement of septic tank and drain field
- Outbuildings - Replacement of gasoline storage shed
Renovation of boat and tractor sheds
- Diesel Power - Movement of 17.5 kw generator to out building
Installation of diesel fuel tank and pipeline
- Boat Launch - Upgrade of boat hoist and dock facilities to accommodate larger work boats
- Runway - Grading/repair of runway surface
- Mooring - Installation of mooring buoy(s) in lagoon

Phase 4 - Shoreline Rehabilitation

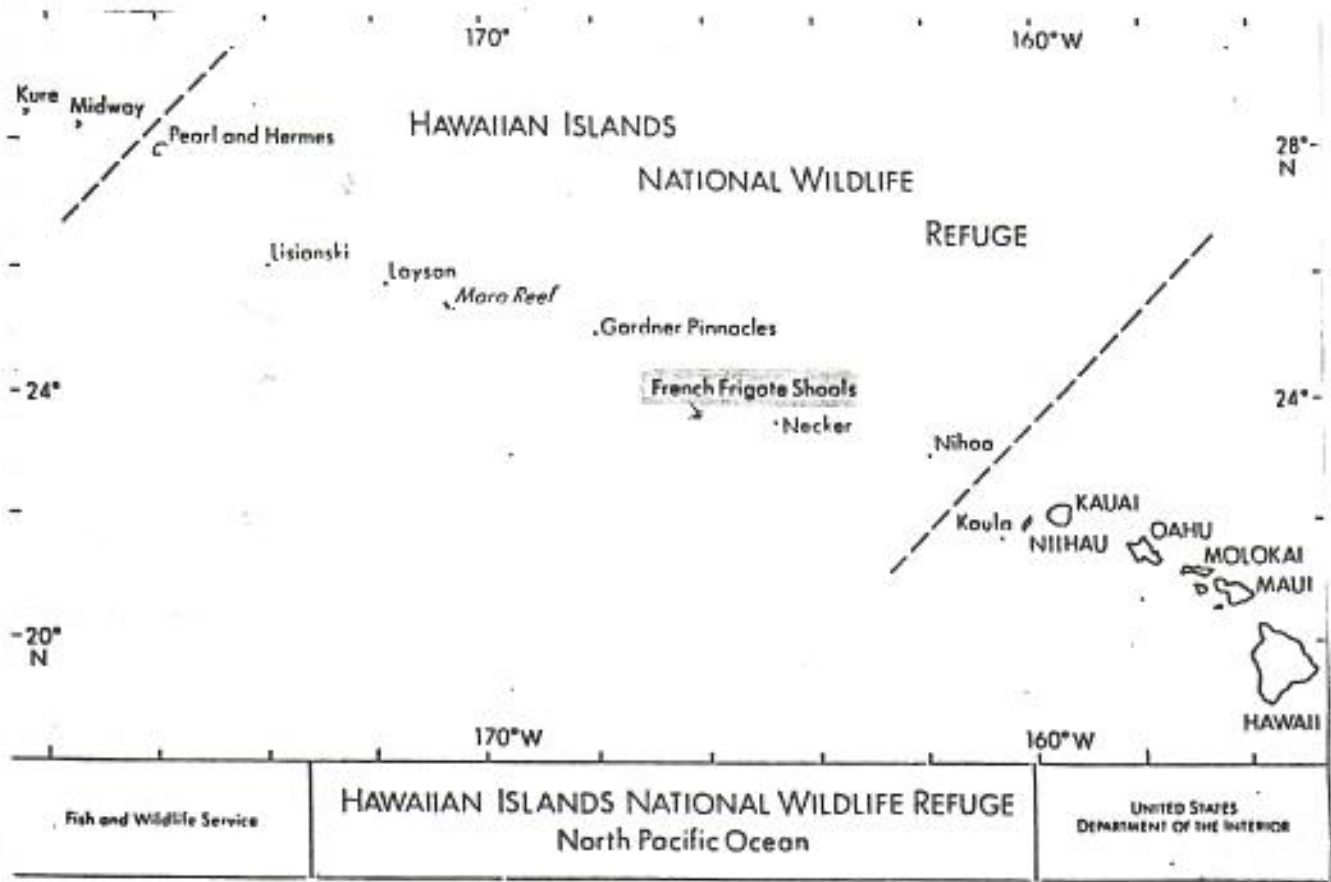
More than 3,500 feet of shoreline sheetpiling needs to be repaired or replaced. Extensive areas along the north shore of Tern Island are already breached. Alternatives for shore protection which have been discussed include sheetpiling, concrete revetment, precast structures (dolos), and stone placement. Factors to be considered include material cost/transport, equipment requirements, scheduling conflicts, entrapment hazards, etc. This phase of the project would also involve containment/removal of debris presently used as seawall backfill and replacement with suitable coral fill.

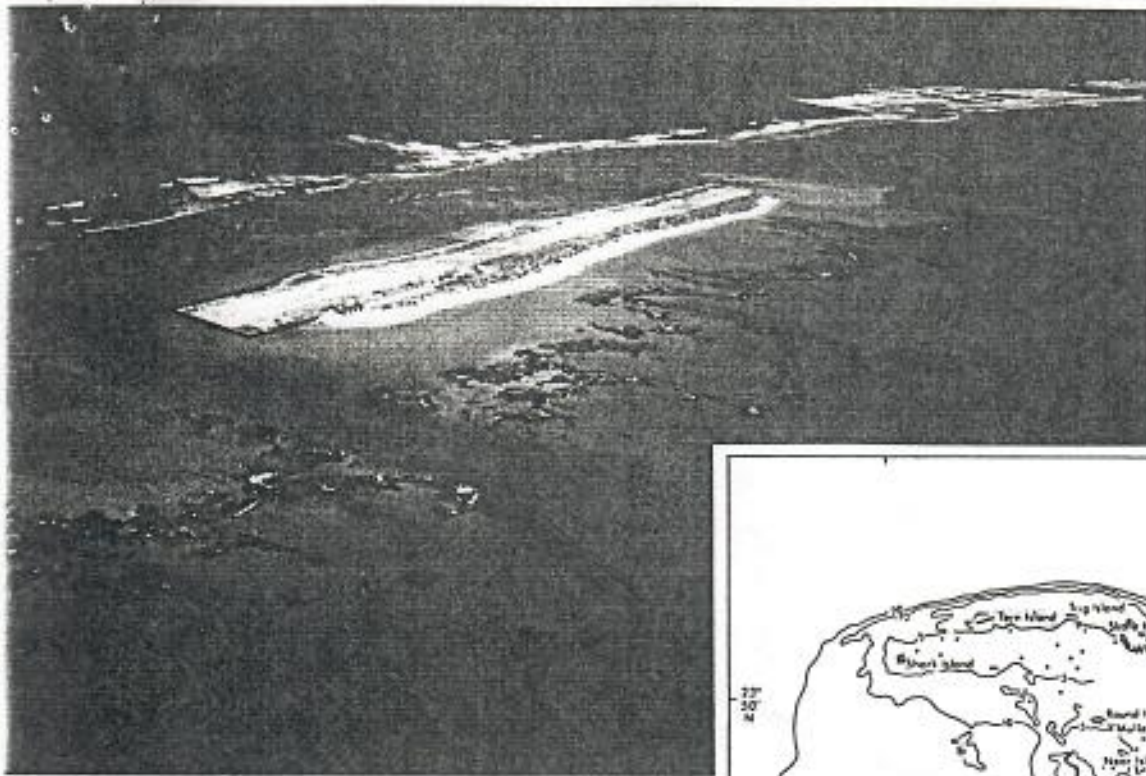
Phase 5 - Removal of Other Debris and Surplus Facilities

The Service has been unable to demolish and remove surplus facilities and debris on either Tern or East Islands because of inadequate funding, equipment, and logistical support. It would be timely and cost-effective to tie this effort into the shore stabilization project.

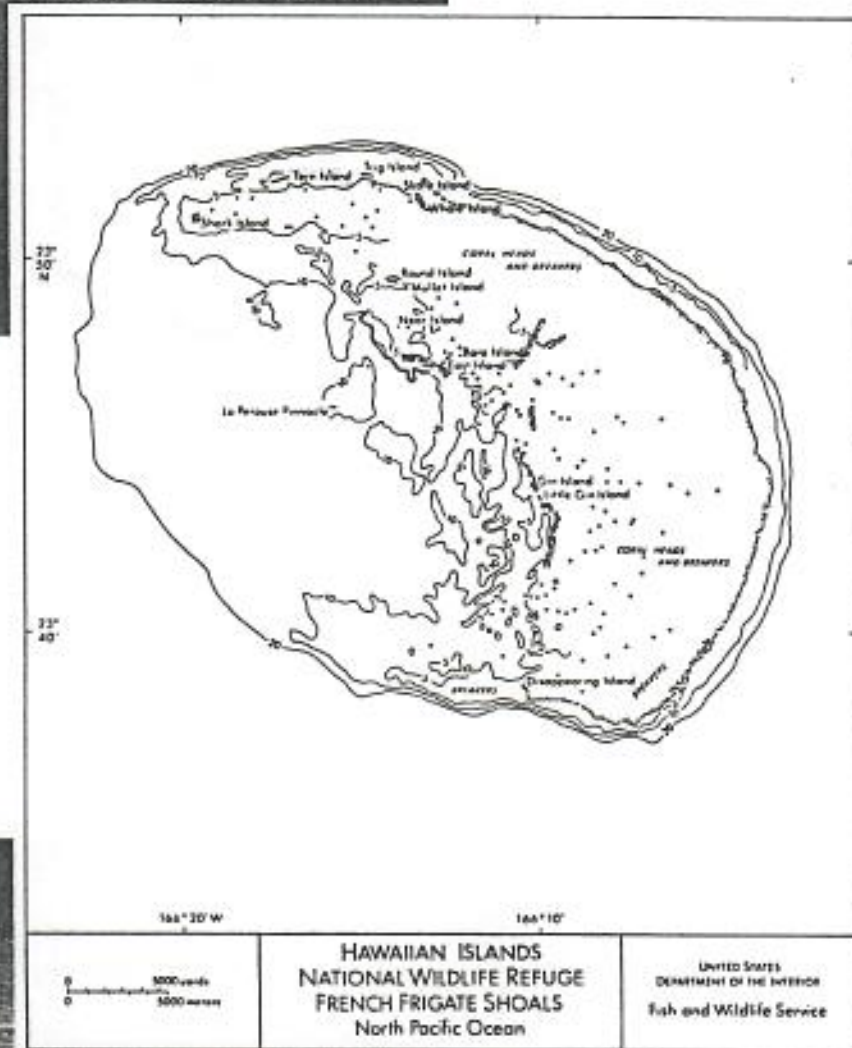


French Frigate Shoals

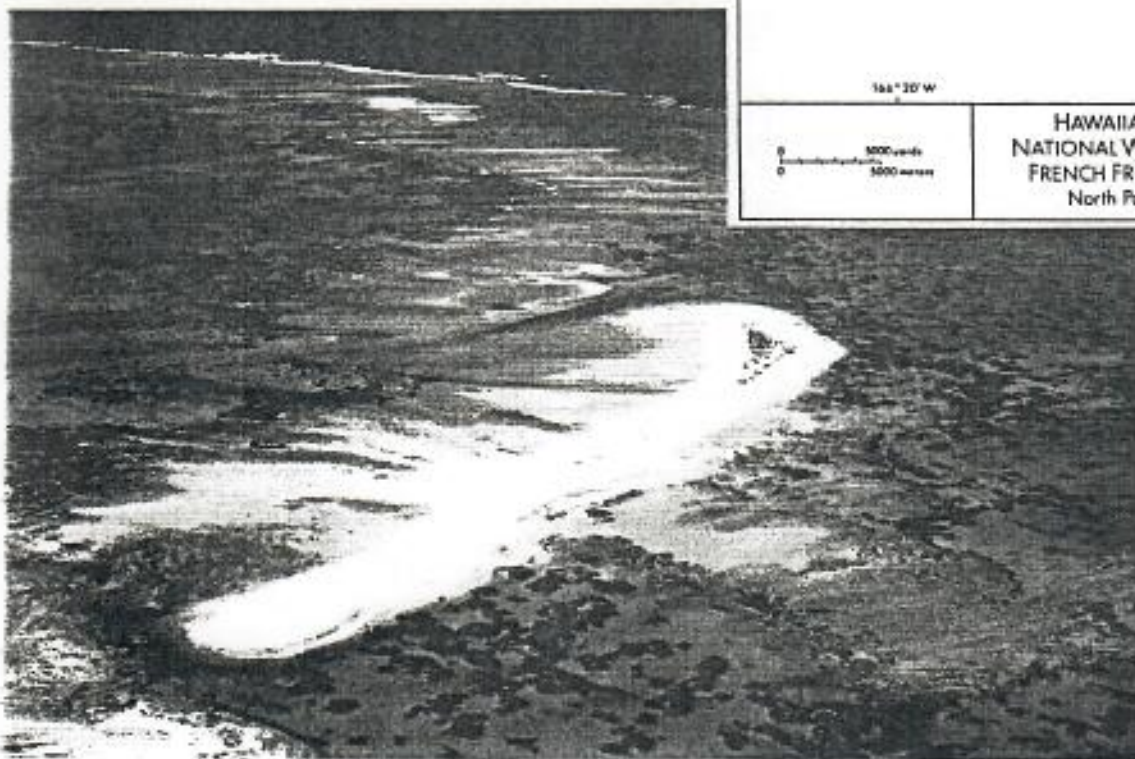




Tern Island

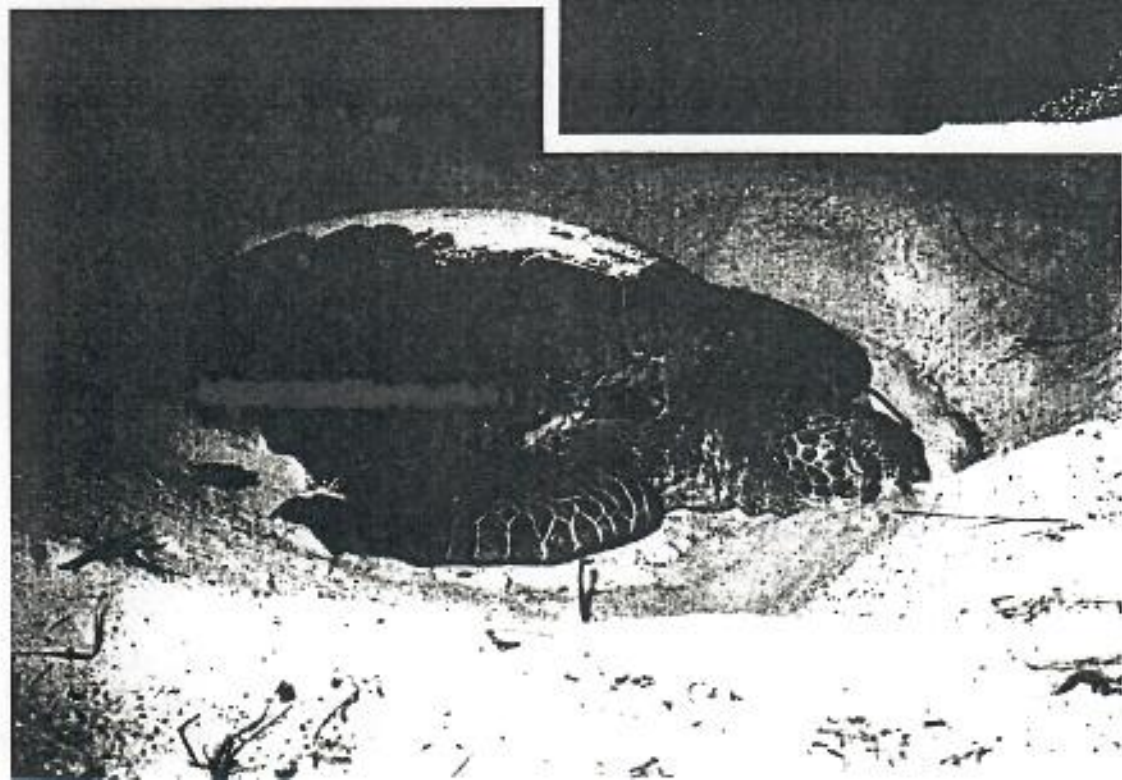
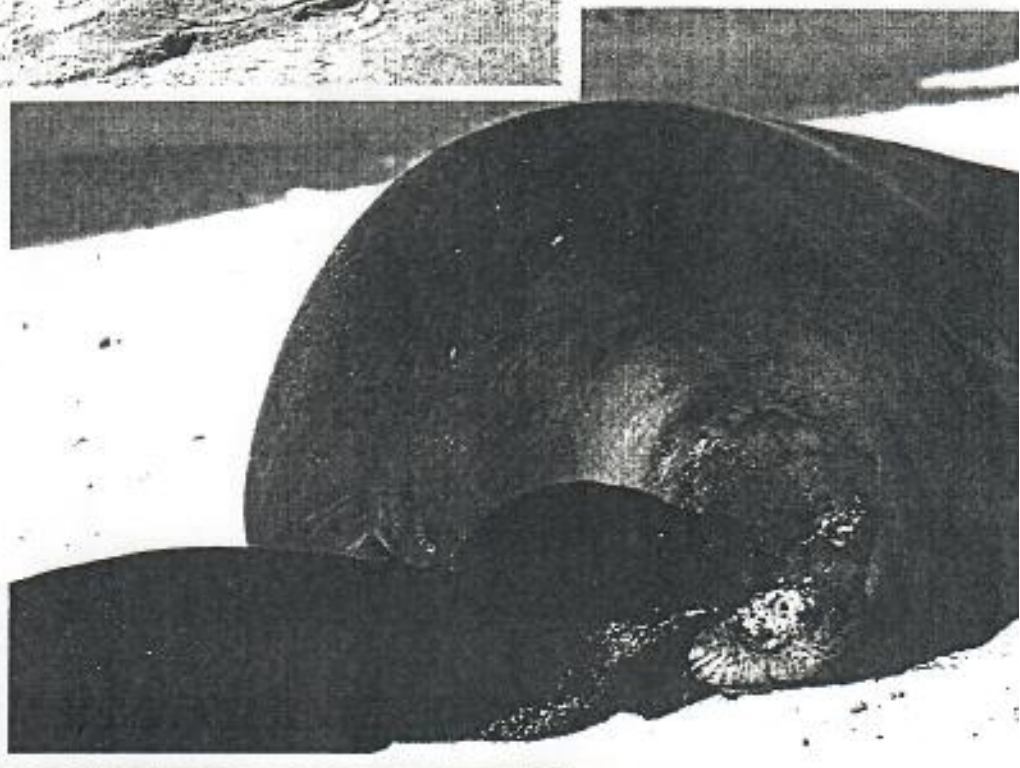


Whale - Skate Islands

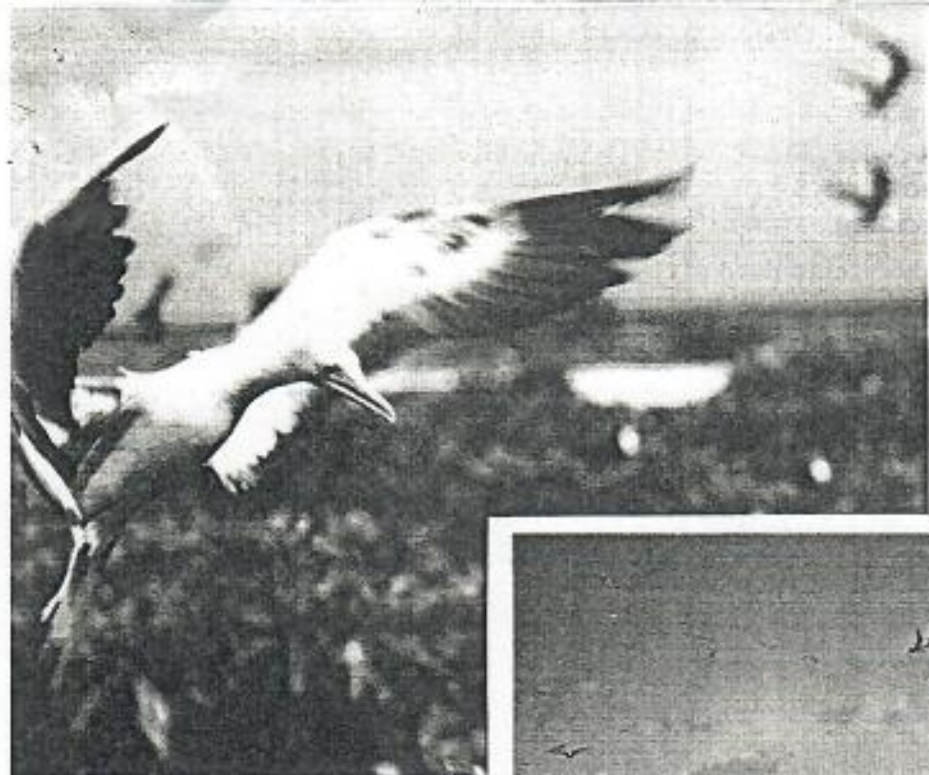




**Endangered
Hawaiian
monk seal**



**Threatened
green sea turtle**

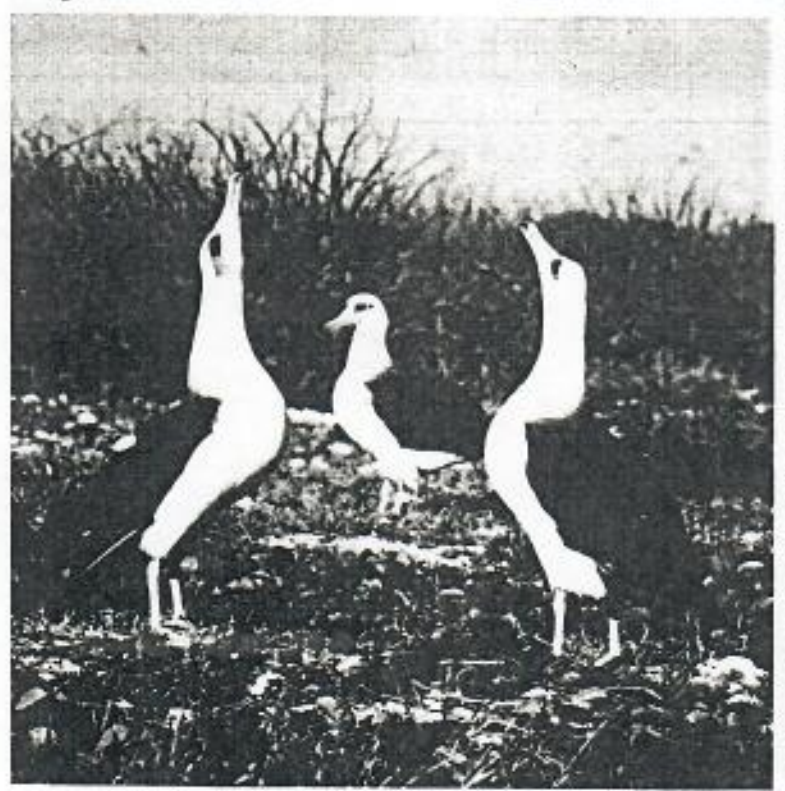


Red-footed booby

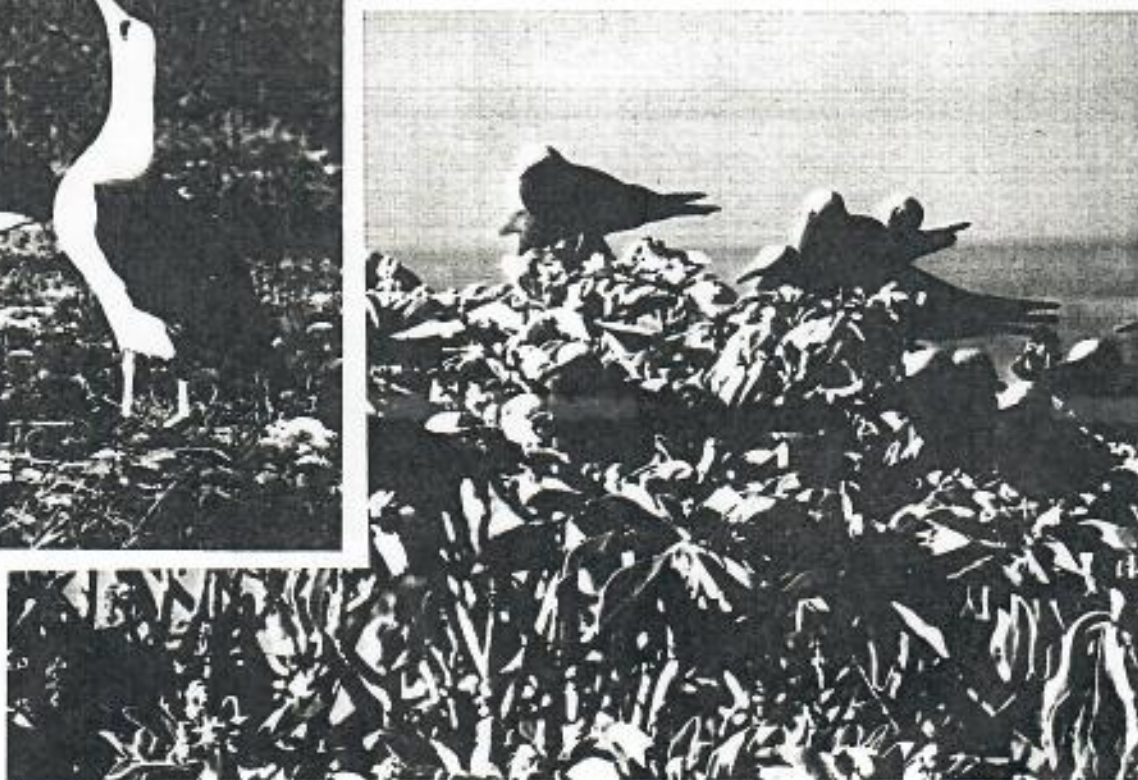


Sooty Terns

Laysan albatross



Black noddies



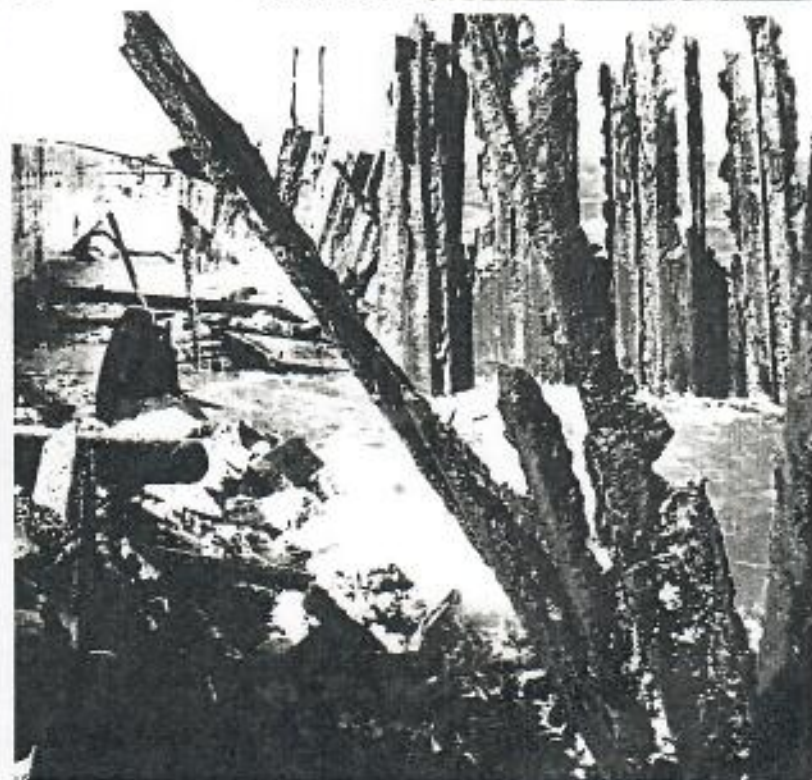
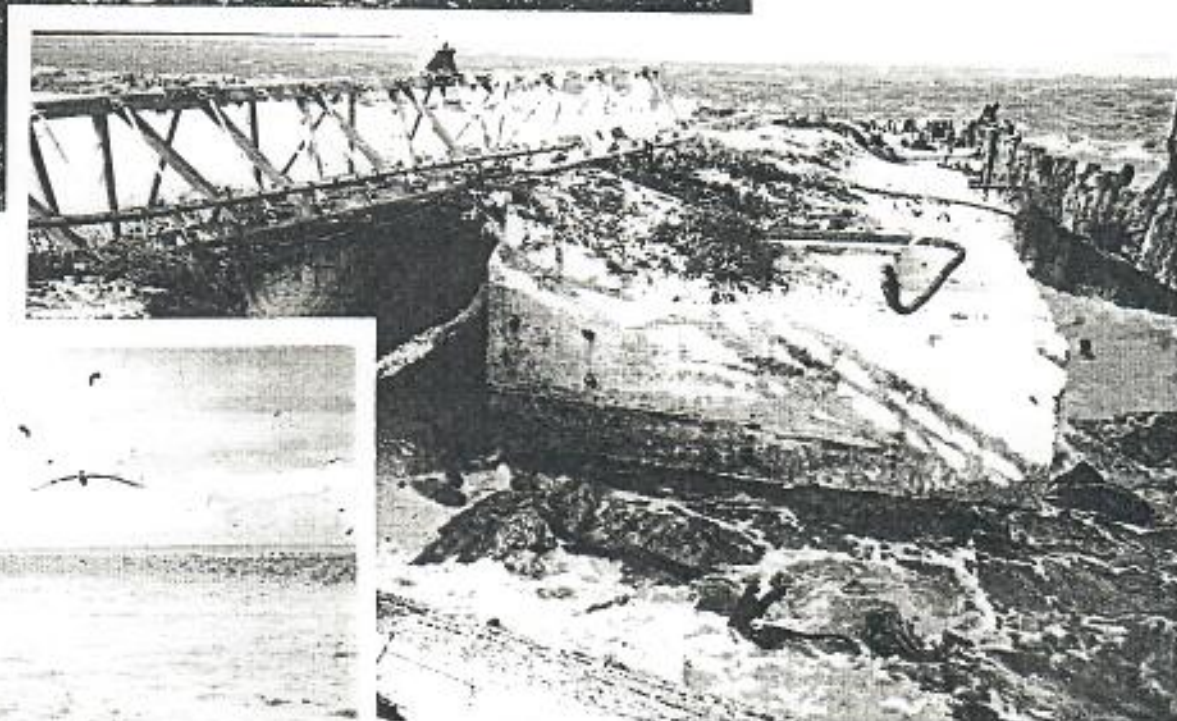


**Entrapment debris
for endangered
monk sea and
other wildlife**



**Seawall
entrapment hazard
for endangered
monk seal**

**Tern Island
runway and
seawall condition**





**Tern Island
facilities**

