



United States Department of the Interior

FISH AND WILDLIFE SERVICE
BUREAU OF SPORT FISHERIES AND WILDLIFE
WASHINGTON, D.C. 20240

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Surname Date

J.G. Hett	7/16
Eichhorn	7/16
Fielding	7/17
Guernsey	7/24

St. Clair 7/20

JUL 27 1973

In Reply Refer To:
FSF/RF

Memorandum

To : Legislative Counsel

Through: Assistant Secretary for Fish and Wildlife and Parks

From : ^{ACTING} Director, Bureau of Sport Fisheries and Wildlife

Subject: Wilderness Proposal - Hawaiian Islands National Wildlife Refuge

We have completed our wilderness field studies and held a public hearing on the Hawaiian Islands Refuge and recommend that 255,878 acres are suitable for wilderness designation. Attached for your review are the following:

- Synopsis w/public hearing analysis and brochure
- Legislation (draft)
- Letter from the Secretary of the Interior to the President (draft)
- Letter from the President to the President of the Senate/Speaker of the House (draft)
- Draft Environmental Statement

The Hawaiian Islands National Wildlife Refuge was established on February 3, 1909, by Executive Order 1019 as a "... preserve and breeding ground for native birds." The refuge, at the time of establishment consisted of Cure Island, Pearl and Hermes Reef, Lisianski Island, Laysan Island, Mary (Maro) Reef, Dowsetts Reef, Gardiner Island, Two Brothers Reef, French Frigate Shoals, Necker Island, Frost Shoal and Bird Island.

Comparatively little was known about the islands at the time the refuge was created, consequently the establishing order contained some inaccuracies. Two Brothers Reef doesn't exist; Frost Shoal is over 50 feet beneath the ocean surface at its shallowest point; and, although Dowsetts Reef is named it is actually part of Maro Reef. In addition, Cure Island was part of the refuge until 1952 when a secondary Navy withdrawal (Executive Order 7299) was terminated and the island reverted to the "... possession, use and control of the Territory of Hawaii."

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As a result, the present Hawaiian Islands Refuge consists of Pearl and Hermes Reef, Lisianski Island, Laysan Island, Maro Reef, Gardiner Island, French Frigate Shoals, Necker Island and Bird (Nihoa) Island.

The refuge islands are part of an island chain commonly referred to as the "Leewards" or "Northwestern Islands." Nihoa, the easternmost refuge island, and Pearl and Hermes Reef, the westernmost, are approximately 800 miles apart. Nihoa is about 150 miles west-northwest of Neihau, the last of the inhabited Hawaiian Islands.

Geologically, the islands are part of a chain of huge underwater peaks, marking the summits of submarine volcanoes. Nihoa is the largest and, geologically, the youngest of the refuge islands with a series of irregular, vertical cliffs, and lacking beaches and fringing reefs. Pearl and Hermes Reef, represents the geologically oldest island and is typical atoll. There are six islets which lie close to the well-defined part of the barrier reef. The reef encompasses some 95,000 acres with only 75 acres in emerged islets. The reef is literally alive and while the sea continually batters the reef, it is constantly renewed by vigorous coral growth.

The Hawaiian Islands represent one of the world's most interesting archipelagos as here, perhaps more than anywhere else on earth, is exemplified the role that isolation plays in the evolution of biological systems.

Isolation has created a unique web of life, but isolation has also set the stage for its demise. Island ecosystems are notoriously susceptible to disruption by outside influences, and the Hawaiian Islands are a case in point, for when Captain Cook came to Hawaii in 1778, there were 69 kinds of birds found nowhere else. Today, 25 exist no more, and 27 others are threatened with extinction.

The establishment of the Hawaiian Islands National Wildlife Refuge in 1909 was one of our nation's earliest attempts to save this unique resource. Some of the most remarkable sea bird nesting colonies on earth occur on the refuge. For eons such birds have converged on the islands from the vast Pacific to renew their kind. Since all cannot find space to nest at the same time, each species secures room at its appointed time.

In the fall, hundreds of thousands of albatross, which have been roaming the North Pacific from North America to Asia, begin returning to these tiny islands. Over 125,000 nesting pairs may be present on Laysan, and Southeast Island at Pearl and Hermes Reef may have over 50,000 crowded into its 32 acres.

In early spring, hordes of terns, petrels, shearwaters and other species begin arriving, and the islands become a bedlam of shrieking, swirling birds. Almost a million sooty terns may nest on Laysan, and many hundreds of thousands more on the other islands.

Several species of shearwaters and petrels dig nesting burrows on sandy islands or use cavities under rocks on such islands as Nihoa. Conservative estimates place peak daytime populations on Nihoa alone at half-a-million birds.

Since most of the birds spend daylight hours fishing at sea, the numbers present on the island at night are beyond guess.

Some 18 different sea birds nest on the refuge. The more notable include: Laysan and black-footed albatrosses, gray-backed and sooty terns, wedge-tailed and Christmas Island shearwaters, Bulwers and Bonian Island petrels, common and Hawaiian noddies, various kinds of boobies, frigate-birds and tropic-birds, and the small white fairy tern often considered the most beautiful sea bird of the Pacific.

Special interest centers on the remaining endemic birds. The entire world population of Laysan teal--about 100 birds--maintains a tenuous hold on existence on Laysan Island. The Laysan Finch is somewhat better off, with a population of about 8,000 on Laysan and Southeast Island in Pearl and Hermes Reef. The Nihoa finch and Nihoa millerbird are confined to Nihoa. About 700 millerbirds and about 3,000 finches survive today. Three other land birds were not so fortunate. All three were found only on Laysan and became extinct as a result of man's activities in the early 1900's. The Laysan millerbird was lost between 1911 and 1923 and the last of the flightless rails and beautiful red honeycreepers perished in a sandstorm in 1923.

Almost the entire world population of Hawaiian monk seal--about 1,000--is found on the refuge. This rare mammal breeds only on Laysan, Lisianski, Kure, Midway, Pearl, and Hermes Reef and French Frigate Shoals. Apart from porpoises occasionally seen in refuge waters, there are no other mammals present.

The green sea turtle was once common in waters off the main Hawaiian Islands. Exploitation drastically reduced their numbers both on the main islands and on the refuge. Today, French Frigate Shoals is the most important nesting area remaining in the Central Pacific.

Opportunities for recreation are very limited. The islands are remote and access is difficult. Numerous reefs and coral heads of some of the refuge units make near approaches by boat very hazardous. Surf, pounding against the steeper islands, such as Nihoa, makes landing dangerous.

Once on the island, care must be exercised to avoid stepping on nests and young birds or breaking through the roofs of underground burrows. Accidental introductions of pest plants or insects in clothing, shoes or equipment is a definite threat.

Public use is limited to scientific investigators engaged in authorized and carefully regulated research. The islands' unique biological systems and the undisturbed nature of the reefs and shoals offer great opportunities in this field. Interpretive and educational goals of the Refuge will be met at a future administrative complex planned for the Honolulu area.

Existing development is confined to East and Tern Islands in French Frigate Shoals. Several badly deteriorated metal quonset huts, antenna towers and other debris from the abandoned LORAN station remain on East Island. Removal would restore much of the island's original character.

Development on Tern Island during World War II permanently altered the island's character. A 12,000-foot channel, 200 feet wide and 20 feet deep was dredged to the island and a sea plane runway 8,000 feet long and 1,000 feet wide was cleared adjacent to the island. Dredged coral was dumped on the island to construct a 3,100-foot landing field. Today, the island looks much like a giant aircraft carrier.

Through a cooperative agreement, the U.S. Coast Guard operates a LORAN station on Tern Island. The runway and facilities remaining from World War II are used to maintain the manned station. Also, the U. S. Atomic Energy Commission was given permission to use Tern Island as a monitoring station for a three-year period beginning in 1969. Both facilities are carefully regulated to prevent disruption of the other islands or lagoon waters of the shoals.

With the exception of Tern Island, no future developments are planned on the refuge. On Tern Island, a simple but permanent research facility is planned for extended research by Bureau and cooperating scientists.

There is almost no economic use made of the refuge today. In the late 1800's and early 1900's the islands were exploited for guano deposits and the Japanese had a flourishing feather collecting industry until 1910 when 23 "plume hunters" were arrested with 259,000 bird wings in their possession.

After World War II, from 1946 until 1959, commercial fishing has been attempted intermittently. Results have not been successful enough to permit continued fishing in water overlying the refuge, and no fishing is being done at this time.

There are no known mineral deposits of significance on the refuge.

As a result of our study, we concluded that about 303,936 acres of the Hawaiian Islands Refuge meet the criteria for wilderness designation. About 267 acres on Tern Island and the adjacent ship channel were not recommended for such designation because of the irreversible, man-made changes on the island and adjacent waters.

A public hearing was held in Honolulu, Hawaii, on April 14, 1973, to solicit the public's views on our proposal. The hearing record remained open until May 14 for submission of written testimony. Nineteen statements were presented at the public hearing, 10 supported the proposal as presented, 7 proposed additions to our proposal, and 2 opposed the proposal in part. A representative for Governor John A. Burns expressed concurrence with the inclusion of the land masses above the ocean but questioned the inclusion of submerged lands because of the question of the refuge boundary. The Mayor for the City and County of Honolulu submitted a letter read at the hearing "...to add my full support for the proposal ..." A representative of the Tuna Boat Owners Association opposed inclusion of submerged lands on the basis that wilderness would prevent use of the fisheries resource. Those in favor of wilderness supported our proposal or asked that additional lands be added to wilderness.

Some 406 written testimonies were received into the hearing record. Senator Daniel K. Inouye "fully supported" inclusion of the refuge in the National Wilderness Preservation System. Congressman Spark Matsunaga, wrote to ... "express his complete support ... "for the proposal.

Seven Federal Departments or Agencies commented on the proposal, five took no position, one favored the proposal and one opposed, (Bureau of Land Management) with "mixed emotions." The National Weather Service took no position on the proposal but stated their desire to install remote sensing meteorological stations on several islands of the refuge.

A total of 35 letters were received from organizations, 29 supported the Bureau's proposal, three favored wilderness, but also wanted waters included, 2 opposed in total, and one opposed in part. The American Mining Congress and the Wyoming-Utah-Nevada Chapter of Outdoors Unlimited, Inc., were totally opposed.

Individuals sent 359 letters, of which 349 favored the Bureau proposal; 7 recommended, in addition, that waters be included, one opposed, and two stated no opinion.

A total of 425 statements were received for the record from all sources. Some 392 favored the proposal as presented by the Bureau; 17 favored the proposal with additions, 4 opposed the proposal; 4 opposed the proposal in part; and 8 took no position, or their position could not be determined.

Of the 4 opposed, one felt the Wilderness Act did not apply in this case; one felt refuge status alone provided sufficient protection; one was opposed until a mineral survey was made, and one opposed because he felt (erroneously) that it would prohibit commercial fishing.

All of the 4 opposed in part objected to the inclusion of submerged lands. All expressed support for the inclusion of the land areas in wilderness. The major theme for this opposition was concern for the development of a commercial fishery on overlying waters. The State of Hawaii objection, based on the lack of agreement as to refuge boundaries, has since been mollified with an agreement over the boundaries between the State and the Department of the Interior. The wilderness proposal, however, has not been changed with respect to the exclusion of waters from the wilderness. The State and the Bureau of Sport Fisheries and Wildlife will join in a cooperative agreement on future management of these waters. Wilderness, per se, will not eliminate the possibility of commercial fishing.

Of the 17 favoring additional area in the proposal, 10 wanted the overlying waters included in wilderness; 3 wanted the refuge boundary to extend to 3 miles from each island; 3 wanted Kure added to the refuge and wilderness, and one wanted parts of Kure and Midway added.

Since most of the waters of the refuge are probably navigable waters, they are not within the sole jurisdiction of the Bureau. These waters would be subject to activities that conflict with wilderness. Extension of the refuge boundary to 3 miles off-shore is not consistent with the objectives of the refuge. The status of Kure has apparently been resolved. Kure is controlled by the State of Hawaii. Midway is controlled by another agency of the Federal Government.

The only substantive question raised at the public hearing was that of the refuge boundary. In the absence of a definitive boundary prior to the public hearing, an arbitrary refuge boundary was used. The arbitrary boundary included both emergent and submerged lands within the 15-fathom contour of Nihoa; the 10-fathom contour of Necker, Gardner Pinnacles, Maro Reef, Laysan and Lisianski; and the barrier reefs of Pearl and Hermes Reef, and French Frigate Shoals. Since the public hearing, the State of Hawaii and the Department of the Interior have reached an agreement on a mutually acceptable refuge boundary. This boundary has also been adopted as the proposed wilderness boundary. Briefly, the boundary on each island is as follows:

Nihoa, Necker, Gardner Pinnacles, and Lisianski are distinct islands with no definable reef. The refuge on these islands extends to the line of mean lower low tide around the land masses.

On Laysan, the refuge encompasses the land mass and extends to the outer edge of the fringing reef, where it exists, to mean lower low tide.

On Maro Reef the refuge includes all lands, within an area defined by straight lines, from the outer edges of reef headland to reef headland. Points on the outer headlands are those at mean lower low tide. The configuration of the refuge is trapezoidal.

On French Frigate Shoals the boundary extends around the outer edge of the barrier reef, where it exists, along the line of mean lower low tide. Where the reef is indistinct, the boundary proceeds from point to point again at the line of mean lower low tide.

On Pearl and Hermes Reef, the boundary follows the outer edge of the barrier reef at mean lower low tide almost completely around the atoll.

The adjustment in refuge boundaries is reflected in the area encompassed in our recommendation. The following table shows a comparison of the acreages presented at the public hearing and those of this proposal:

Area Proposed for Wilderness

<u>Refuge Unit</u>	<u>At Public Hearing</u>	<u>Current Proposal</u> ^{1/}
Nihoa	800	175
Necker	580	55
French Frigate Shoals	107,505	105,833
Gardner Pinnacles	90	5
Maro Reef	44,893	52,000
Laysan Island	7,104	1,815
Lisianski Island	47,383	415
Pearl & Hermes Reef	95,581	95,580
TOTAL	303,936	255,878 ^{2/}

^{1/} Includes both emergent and submerged lands.

^{2/} The boundary of the proposed wilderness is identical with that of the refuge except for the omission of Tern Island and adjacent submerged lands in French Frigate Shoals.

In summary, we recommend that 255,878 acres of the Hawaiian National Wildlife Refuge be included in the National Wilderness Preservation System. There is massive public support for this action and it would serve to enhance the protection given to the very fragile, irreplaceable environment found on the refuge. The only significant question--that of the refuge boundary--seems to have been amicably resolved in negotiations between the Department and the State of Hawaii.

Your review and approval of legislative recommendations and supporting materials is a requirement of the legislative review process.

(Sgd) F. V. Schmidt

Attachments

I concur:

(sgd) Nathaniel P. Reed

JUL 27 1973

Assistant Secretary for Fish and Wildlife and Parks

Date

cc:

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FW

Assoc. Solicitor_Mr. Vaughn

SL

Directorate REading File

R. D. Portland, Jr.

FSF/RF:JGillett:cb 7/16/73