



Australia-Oceania:: United States Pacific Island Wildlife Refuges (territories of the US)

Introduction:: United States Pacific Island Wildlife Refuges

#### Background:

All of the following US Pacific island territories except Midway Atoll constitute the Pacific Remote Islands National Wildlife Refuge (NWR) Complex and as such are managed by the Fish and Wildlife Service of the US Department of the Interior. Midway Atoll NWR has been included in a Refuge Complex with the Hawaiian Islands NWR and also designated as part of Papahanaumokuakea Marine National Monument. These remote refuges are the most widespread collection of marine-and terrestrial-life protected areas on the planet under a single country's jurisdiction. They sustain many endemic species including corals, fish, shellfish, marine mammals, seabirds, water birds, land birds, insects, and vegetation not found elsewhere.

**Baker Island:** The US took possession of the island in 1857. Its guano deposits were mined by US and British companies during the second half of the 19th century. In 1935, a short-lived attempt at colonization began on this island but was disrupted by World War II and thereafter abandoned. The island was established as a NWR in 1974.

**Howland Island:** Discovered by the US early in the 19th century, the uninhabited atoll was officially claimed by the US in 1857. Both US and British companies mined for guano deposits until about 1890. In 1935, a short-lived attempt at colonization began on this island, similar to the effort on nearby Baker Island, but was disrupted by World War II and thereafter abandoned. The famed American aviatrix Amelia EARHART disappeared while seeking out Howland Island as a refueling stop during her 1937 round-the-world flight; Earhart Light, a day beacon near the middle of the west coast, was named in her memory. The island was established as a NWR in 1974.

**Jarvis Island:** First discovered by the British in 1821, the uninhabited island was annexed by the US in 1858 but abandoned in 1879 after tons of guano had been removed. The UK annexed the island in 1889 but never carried out plans for further exploitation. The US occupied and reclaimed the island in 1935. It was abandoned in 1942 during World War II. The island was established as a NWR in 1974.

**Johnston Atoll:** Both the US and the Kingdom of Hawaii annexed Johnston Atoll in 1858, but it was the US that mined the guano deposits until the late 1880s. Johnston and Sand Islands were designated wildlife refuges in 1926. The US Navy took over the atoll in 1934. Subsequently, the US Air Force assumed control in 1948. The site was used for high-altitude nuclear tests in the 1950s and 1960s. Until late in 2000 the atoll was maintained as a storage and disposal site for chemical

weapons. Munitions destruction, cleanup, and closure of the facility were completed by May 2005. The Fish and Wildlife Service and the US Air Force are currently discussing future management options; in the interim, Johnston Atoll and the three-mile Naval Defensive Sea around it remain under the jurisdiction and administrative control of the US Air Force.

**Kingman Reef:** The US annexed the reef in 1922. Its sheltered lagoon served as a way station for flying boats on Hawaii-to-American Samoa flights during the late 1930s. There are no terrestrial plants on the reef, which is frequently awash, but it does support abundant and diverse marine fauna and flora. In 2001, the waters surrounding the reef out to 12 nm were designated a US NWR.

Midway Islands: The US took formal possession of the islands in 1867. The laying of the trans-Pacific cable, which passed through the islands, brought the first residents in 1903. Between 1935 and 1947, Midway was used as a refueling stop for transpacific flights. The US naval victory over a Japanese fleet off Midway in 1942 was one of the turning points of World War II. The islands continued to serve as a naval station until closed in 1993. Today the islands are a NWR and are the site of the world's largest Laysan albatross colony.

Palmyra Atoll: The Kingdom of Hawaii claimed the atoll in 1862, and the US included it among the Hawaiian Islands when it annexed the archipelago in 1898. The Hawaii Statehood Act of 1959 did not include Palmyra Atoll, which is now partly privately owned by the Nature Conservancy with the rest owned by the Federal government and managed by the US Fish and Wildlife Service. These organizations are managing the atoll as a wildlife refuge. The lagoons and surrounding waters within the 12 nm US territorial seas were transferred to the US Fish and Wildlife Service and designated as a NWR in January 2001.

# Geography:: United States Pacific Island Wildlife Refuges

## Location:

Oceania

**Baker Island:** atoll in the North Pacific Ocean 1,830 nm (3,389 km) southwest of Honolulu, about half way between Hawaii and Australia

**Howland Island:** island in the North Pacific Ocean 1,815 nm (3,361 km) southwest of Honolulu, about half way between Hawaii and Australia

**Jarvis Island:** island in the South Pacific Ocean 1,305 nm (2,417 km) south of Honolulu, about half way between Hawaii and Cook Islands

**Johnston Atoll:** atoll in the North Pacific Ocean 717 nm (1,328 km) southwest of Honolulu, about one-third of the way from Hawaii to the Marshall Islands

**Kingman Reef:** reef in the North Pacific Ocean 930 nm (1,722 km) south of Honolulu, about half way between Hawaii and American Samoa

Midway Islands: atoll in the North Pacific Ocean 1,260 nm (2,334 km) northwest of Honolulu near the end of the Hawaiian Archipelago, about one-third of the way from Honolulu to Tokyo

**Palmyra Atoll:** atoll in the North Pacific Ocean 960 nm (1,778 km) south of Honolulu, about half way between Hawaii and American Samoa

### Geographic coordinates:

Baker Island: 0 13 N, 176 28 W Howland Island: 0 48 N, 176 38 W Jarvis Island: 0 23 S, 160 01 W Johnston Atoll: 16 45 N, 169 31 W Kingman Reef: 6 23 N, 162 25 W Midway Islands: 28 12 N, 177 22 W Palmyra Atoll: 5 53 N, 162 05 W

### Map references:

Oceania

#### Area:

total - 6,959.41 sq km; emergent land - 22.41 sq km; submerged - 6,937 sq km country comparison to the world: 239

Baker Island: total - 129.1 sq km; emergent land - 2.1 sq km; submerged - 127 sq km
Howland Island: total - 138.6 sq km; emergent land - 2.6 sq km; submerged - 136 sq km
Jarvis Island: total - 152 sq km; emergent land - 5 sq km; submerged - 147 sq km
Johnston Atoll: total - 276.6 sq km; emergent land - 2.6 sq km; submerged - 274 sq km
Kingman Reef: total - 1,958.01 sq km; emergent land - 0.01 sq km; submerged - 1,958 sq km
Midway Islands: total - 2,355.2 sq km; emergent land - 6.2 sq km; submerged - 2,349 sq km
Palmyra Atoll: total - 1,949.9 sq km; emergent land - 3.9 sq km; submerged - 1,946 sq km

# Area - comparative:

Baker Island: about two and a half times the size of The Mall in Washington, DC

**Howland Island:** about three times the size of The Mall in Washington, DC **Jarvis Island:** about eight times the size of The Mall in Washington, DC

Johnston Atoll: about four and a half times the size of The Mall in Washington, DC

Kingman Reef: a little more than one and a half times the size of The Mall in Washington, DC

Midway Islands: about nine times the size of The Mall in Washington, DC Palmyra Atoll: about 20 times the size of The Mall in Washington, DC

### Land boundaries:

none

#### Coastline:

Baker Island: 4.8 km Howland Island: 6.4 km Jarvis Island: 8 km Johnston Atoll: 34 km Kingman Reef: 3 km Midway Islands: 15 km Palmyra Atoll: 14.5 km

### Maritime claims:

territorial sea: 12 nm

exclusive economic zone: 200 nm

#### Climate:

Baker, Howland, and Jarvis Islands: equatorial; scant rainfall, constant wind, burning sun Johnston Atoll and Kingman Reef: tropical, but generally dry; consistent northeast trade winds with little seasonal temperature variation

Midway Islands: subtropical with cool, moist winters (December to February) and warm, dry summers (May to October); moderated by prevailing easterly winds; most of the 1,067 mm (42 in) of annual rainfall occurs during the winter

**Palmyra Atoll:** equatorial, hot; located within the low pressure area of the Intertropical Convergence Zone (ITCZ) where the northeast and southeast trade winds meet, it is extremely wet with between 4,000-5,000 mm (160-200 in) of rainfall each year

#### Terrain:

low and nearly level sandy coral islands with narrow fringing reefs that have developed at the top of submerged volcanic mountains, which in most cases rise steeply from the ocean floor

### **Elevation extremes:**

lowest point: Pacific Ocean 0 m

highest point: Baker Island, unnamed location - 8 m; Howland Island, unnamed location - 3 m; Jarvis Island, unnamed location - 7 m; Johnston Atoll, Sand Island - 10 m; Kingman Reef, unnamed location - less than 2 m; Midway Islands, unnamed location - 13 m; Palmyra Atoll, unnamed location - 3 m

#### Natural resources:

terrestrial and aquatic wildlife

### Land use:

arable land: 0%

**permanent crops:** 0% **other:** 100% (2011)

### Natural hazards:

Baker, Howland, and Jarvis Islands: the narrow fringing reef surrounding the island poses a maritime hazard

**Kingman Reef:** wet or awash most of the time, maximum elevation of less than 2 m makes Kingman Reef a maritime hazard

Midway Islands, Johnston, and Palmyra Atolls: NA

## **Environment - current issues:**

Baker, Howland, and Jarvis Islands, and Johnston Atoll: no natural freshwater resources

Kingman Reef: none

Midway Islands and Palmyra Atoll: NA

### Geography - note:

**Baker, Howland, and Jarvis Islands:** scattered vegetation consisting of grasses, prostrate vines, and low growing shrubs; primarily a nesting, roosting, and foraging habitat for seabirds, shorebirds, and marine wildlife; closed to the public

**Johnston Atoll:** Johnston Island and Sand Island are natural islands, which have been expanded by coral dredging; North Island (Akau) and East Island (Hikina) are manmade islands formed from coral dredging; the egg-shaped reef is 34 km in circumference; closed to the public

Kingman Reef: barren coral atoll with deep interior lagoon; closed to the public

Midway Islands: a coral atoll managed as a NWR and open to the public for wildlife-related recreation in the form of wildlife observation and photography

Palmyra Atoll: the high rainfall and resulting lush vegetation make the environment of this atoll unique among the US Pacific Island territories; supports a large undisturbed stand of Pisonia beach forest

# People and Society:: United States Pacific Island Wildlife Refuges

## Population:

no indigenous inhabitants

note: public entry is only by special-use permit from US Fish and Wildlife Service and generally restricted to scientists and educators; visited annually by US Fish and Wildlife Service **Johnston Atoll:** in previous years, an average of 1,100 US military and civilian contractor personnel were present; as of May 2005, all US government personnel had left the island **Midway Islands:** approximately 40 people make up the staff of US Fish and Wildlife Service and their services contractor living at the atoll

Palmyra Atoll: four to 20 Nature Conservancy, US Fish and Wildlife staff, and researchers

# Government:: United States Pacific Island Wildlife Refuges

## Country name:

conventional long form: none

**conventional short form:** Baker Island; Howland Island; Jarvis Island; Johnston Atoll; Kingman Reef; Midway Islands; Palmyra Atoll

# Dependency status:

unincorporated territories of the US; administered from Washington, DC by the Fish and Wildlife Service of the US Department of the Interior as part of the National Wildlife Refuge system

note on Palmyra Atoll: incorporated Territory of the US; partly privately owned and partly federally owned; administered from Washington, DC by the Fish and Wildlife Service of the US Department of the Interior; the Office of Insular Affairs of the US Department of the Interior continues to administer nine excluded areas comprising certain tidal and submerged lands within the 12 nm territorial sea or within the lagoon

### Legal system:

the laws of the US where applicable apply

### Diplomatic representation from the US:

none (territories of the US)

# Flag description:

the flag of the US is used

## Economy:: United States Pacific Island Wildlife Refuges

### Economy - overview:

no economic activity

### Transportation:: United States Pacific Island Wildlife Refuges

## Airports:

**Baker Island:** one abandoned World War II runway of 1,665 m covered with vegetation and unusable

**Howland Island:** airstrip constructed in 1937 for scheduled refueling stop on the round-the-world flight of Amelia EARHART and Fred NOONAN; the aviators left Lae, New Guinea, for Howland Island but were never seen again; the airstrip is no longer serviceable

Johnston Atoll: one closed and not maintained

**Kingman Reef:** lagoon was used as a halfway station between Hawaii and American Samoa by Pan American Airways for flying boats in 1937 and 1938

Midway Islands: 3 - one operational (2,377 m paved); no fuel for sale except emergencies

Palmyra Atoll: 1 - 1,846 m unpaved runway; privately owned (2013)

# Ports and terminals:

major seaport(s):

Baker, Howland, and Jarvis Islands, and Kingman Reef: none; offshore anchorage only

Johnston Atoll: Johnston Island Midway Islands: Sand Island Palmyra Atoll: West Lagoon

# Military:: United States Pacific Island Wildlife Refuges

# Military - note:

defense is the responsibility of the US

# Transnational Issues:: United States Pacific Island Wildlife Refuges

# Disputes - international:

none