

ROSE ATOLL FACT SHEET

Natural resources

Physical Setting

- Rose Atoll is located 240km east-south-east of Tutuila, American Samoa.

Geologic Structure

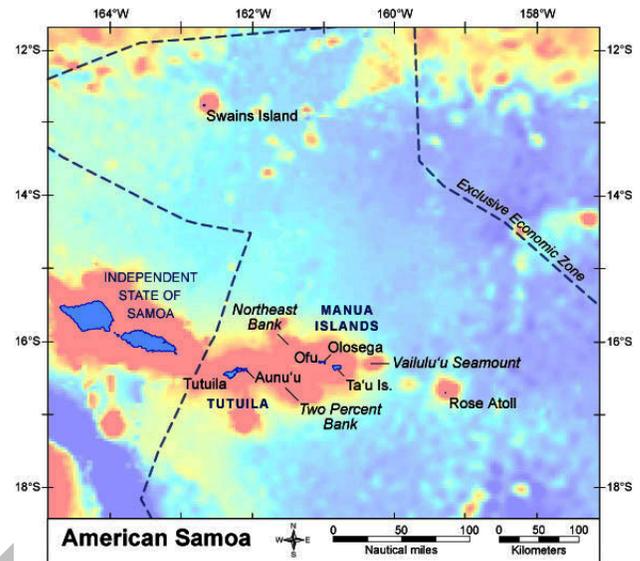
- Diamond shaped Rose Atoll, one of the smallest classic atolls in the world, was formed by the long-term accretion of carbonate reef building corals and crustose coralline algae built up on top of an ancient volcano.

Ecosystem Description

- Contains 113 species of stony corals, with shallow reefs that are dominated by crustose coralline algae (resulting in the pink hue of the fringing reef).

Biological Characteristics

- Provides isolated, undisturbed nesting grounds for threatened green and hawksbill turtles and has the largest number of nesting turtles in American Samoa.
- Supports 272 species of reef fish and more than 500 total species of fish.
- Supports largest remaining populations of Giant clam (*Tridacna maxima*) in Samoa, a globally depleted species heavily harvested on the populated islands elsewhere.
- Endangered humpback whales, pilot whales and the porpoise genus *Stenella* have all been spotted at Rose Atoll.
- There are 17 genera/functional groups of algae, with the *Caulerpa cupressoides*, a leafy green alga that is not found on any other American Samoan island.
- Provides habitat for 97% of American Samoan seabirds.
- Deep diving submersible dives in 2005 revealed many deep water species yet to be identified from photographs, including stalked crinoids and several deepwater fish.
- Several globally depleted fish species including sharks, Bumphead parrotfish, and Napoleon wrasses were reported in large



numbers a decade ago, although they have become rarer since that time.

Historical

- Rose Atoll was first seen by Westerners in 1722 and named in 1819 after French navigator Louis de Freycinet's wife.
- In the 1860s, a short-lived attempt was made by a German firm to establish a fishing station and coconut plantation.
- President Franklin Delano Roosevelt designated Rose a Naval Defense Area in 1941, but it was never used for that purpose, and in 1973 it was named Rose Atoll National Wildlife Refuge.

Cultural

- Known to Samoans, who have periodically visited over the past millennium, as "Motu O Manu" (literally meaning – "Island of seabirds").
- It is believed that Polynesians have harvested at Rose Atoll for millennia and several species, such as the giant clam were used for cultural celebrations and events.

Human use & current management

- The primary use of Rose Atoll over the past century has been as a scientific research base; however, fishing and use by yachters have also been reported.

**Information provided in this fact sheet is a summary of data collected through the interagency assessment process as of October 1, 2008*

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- It is a natural laboratory, given its small size, defined boundaries, largely pristine nature, and long history of observations; with 300 scientific papers written since 1900 describing its geology, geography, biology, meteorology and history.
- At present there are no fisheries occurring at Rose Atoll.
- Rose Atoll has been uninhabited since the 1860s and will remain so except for deployment of periodic FWS field camps to conduct biological monitoring studies and environmental restoration projects.
- Inventory and monitoring of associated coral reefs within the refuge occurs every 2 years as a collaborative effort between the Fish and Wildlife Service and the National Oceanic and Atmospheric Administration.
- This national wildlife refuge is closed to public access and recreational uses.
- The Rose Atoll National Wildlife Refuge is managed by the Department of the Interior and fishery resources within the Exclusive Economic Zone are managed by the Department of Commerce based on fishery management plans developed and recommended by the Western Pacific Fishery Management Council under the Magnuson-Stevens Act.

Key references

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- Coral Reefs of the USA (2008)
- Fishery Management Plan for Bottomfish and Seamount Groundfish of the Western Pacific Region, Fishery Management Plan for Pelagic Fisheries of the Western Pacific Region, Fishery Management Plan for Coral Reef Ecosystems of the Western Pacific Region 2001 and implementing regulations found at 50 CFR Part 665. Draft American Samoa Archipelago Fishery Ecosystem Plan (see www.wpcouncil.org)
- Map of Essential Fish Habitat Areas, visit www.nmfs.noaa.gov/habitat/habitatprotection/profile/westernpacificcouncil.htm
- For more on Species of Concern, link to http://www.fpir.noaa.gov/PRD/prd_species_of_concern.html
- For more on Green Turtles, link to http://www.nmfs.noaa.gov/pr/pdfs/recovery/turtle_green_pacific.pdf
- For more on Hawksbill turtles, link to http://www.nmfs.noaa.gov/pr/pdfs/species/hawksbill_5yearreview.pdf
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- Executive Order 8683- Establishing Naval Defensive Sea Areas Around and Naval Airspace Reservations Over the Islands of Rose, Tutuila, and Guam; Pacific Ocean See [EO 10341](#), April 8, 1952; [EO 8729](#), April 2, 1941; [EO 10341](#), April 8, 1952 at: <http://www.archives.gov/federal-register/executive-orders/1941.html>