

Educating Communities about Fishery Ecosystems through Traditional Lunar Calendars

About the Western Pacific Regional Fishery Management Council

In 1976, the US Congress through the Magnuson-Stevens Fishery Conservation and Management Act (MSA) established eight Regional Fishery Management Councils to manage the nation's fisheries in the US EEZ (generally 3-200 miles offshore). The Western Pacific Regional Fishery Management Council's jurisdiction includes the EEZ waters around the State of Hawaii; US Territories of American Samoa and Guam; the Commonwealth of the Northern Mariana Islands (CNMI); and the US Pacific remote island areas. This area of nearly 1.5 million square miles constitutes about half of the entire US EEZ. The Council prepares, monitors and amends management plans to support sustainable fisheries, mitigate interactions with protected species, and conserve marine habitat and ecosystems. The Council also fosters opportunities for indigenous island communities to participate in fishing and fishery resource management using their culture and traditional practices.



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The Traditional Lunar Calendar Project

In 2005, the Western Pacific Regional Fishery Management Council began moving from a species-based to an ecosystem-based approach to managing fisheries in the exclusive economic zone waters around the US Pacific Islands. To raise public awareness about the archipelago ecosystems of Hawaii, American Samoa and the Marianas, the Council in 2007 produced calendars based on the Hawaiian, Samoan, Chamorro and Refaluwasch traditional lunar months, moon phases and fishery-related traditional knowledge. The calendars featured the winning art of student poster contests organized by the Council in 2006 on the theme of archipelagic marine ecosystems.

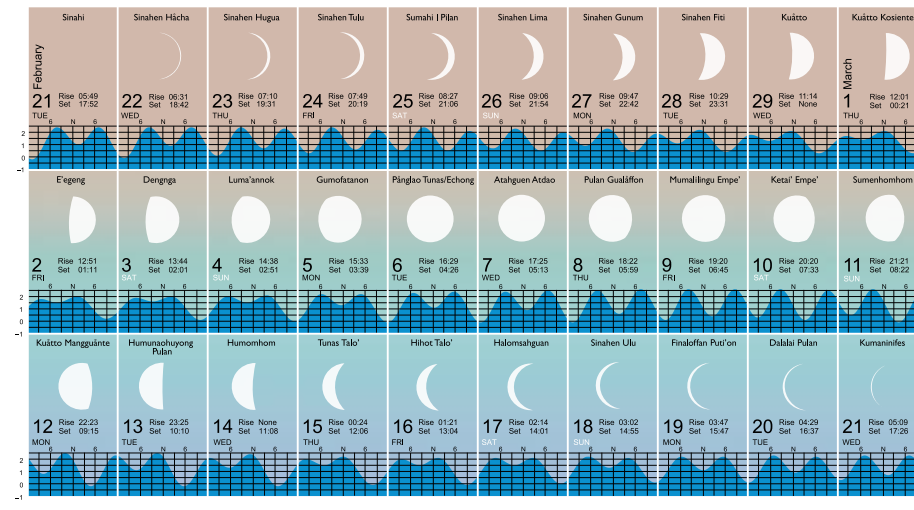
The calendars involved and appealed to many segments of the community in each island area. School administrators, teachers, students and their families, fishermen, natural resource managers, academics, researchers, traditional practitioners, businessmen, journalists and politicians all played roles in the development, publicity and celebration of the art contests and the calendars. Due to their popularity, the Council has continued to publish the calendars, which feature the art of local students on themes related to traditional knowledge and fishery ecosystems.



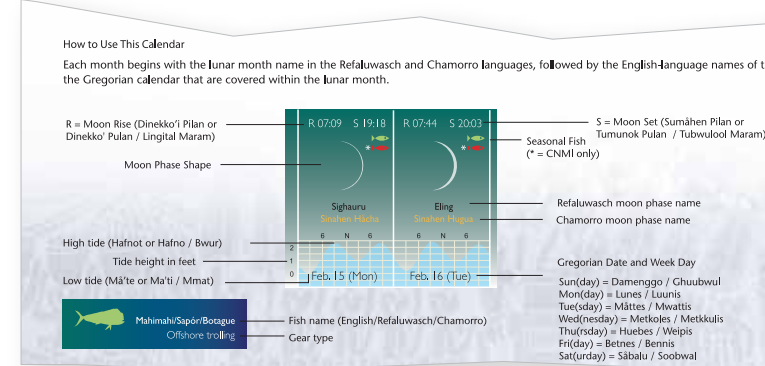
What Communities Want in a Traditional Lunar Calendar

The traditional lunar calendars have stimulated community conversation about traditional knowledge, including the spiritual beliefs related to it. Understanding of traditional lunar months, moon phases and their significance to indigenous communities in the US Pacific Islands have come through literature reviews, committees of experts and practitioners, workshops, interviews, focus groups and field research sponsored by the Western Pacific Regional Fishery Management Council. Two key points that have surfaced are to keep the calendars authentic and make them meaningful, especially for stewardship purposes. The Council and local partners will continue to improve the calendars as a tool to teach about and inform fisheries management.

- Recognition of district or island differences, such as dialects in the languages, names of the moon phases
- Fishing restrictions and spawning periods to help fishermen understand kapu
- Environmental dangers to the fish and their habitat
- Traditional names of fish at their various growth stages
- Short articles about fishing methods
- Relationship between fishing and farming
- Observer and/or notes pages
- A guide to explain the terms used in the calendar
- Promotion of the calendar in the media, schools and cultural festivals
- Information on stars
- Poetry
- Alternative versions and sizes for children, classrooms and fishermen
- Recipes and how to prepare fish



The Chamorro on Rota use names for only a few lunar phases, while the Chamorro on Guam have adopted names for all of the lunar phases, using terms modified from the related Carolinian culture



Section on how to use the calendar from the 2010 Mariana Archipelago Lunar Calendar

In 2008, the Council organized photo essay contests instead of poster art contests. Leana Peters of George Washington High School, Guam, photographed and wrote about her grandfather, Juan Benavente, a traditional talaya fisherman.



Acknowledgements

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Western knowledge on moon rise and set times have come from data from the US Naval Observatory at <http://aa.usno.navy.mil/>. Information on tides has come from Barry Smith, University of Guam retired, and from the NOAA data at <http://tidesandcurrents.noaa.gov/>.

Among the participants of the Pacific Islands Traditional Lunar Calendar Workshop were non-instrument master navigators, ethno-botanists and other expert practitioners from Satawal, Saipan, Palowat, Yap and Palau.



Guam now has an annual lunar calendar festival, one of the biggest community events on the island and a tourism attraction