

# *Eskaleraan Pulan Chamorro Refaluwasch Pápáil Maram*



January 31, 2025 - February 18, 2026



Western Pacific Regional  
Fishery Management Council  
WPCOUNCIL.ORG



# A Legacy Shaped by the Ocean

The fishing industry in the Mariana Islands is a testament to the region's rich cultural heritage and deep bond between its people and the ocean. For centuries, the Chamorro and Refaluwasch communities have relied on fishing as a primary source of sustenance, economic livelihood, and cultural identity. From traditional practices to more contemporary approaches, the fishing methods have evolved while remaining rooted in these cultures.



Above: While not much information remains from the pre-colony era on fishing boats in the Mariana Islands, non-native sources describe an active maritime trading culture.

Photo: WPRFMC

Right: Map of the Mariana Islands.

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

This history is not just about techniques and the catch—it encapsulates stories of community, resilience, and adaptation to changing ecological and economic conditions. As we explore the evolution of the fishing industry in the Mariana Islands, we uncover the narrative that has shaped both the landscape and the lives of those who call these islands home.

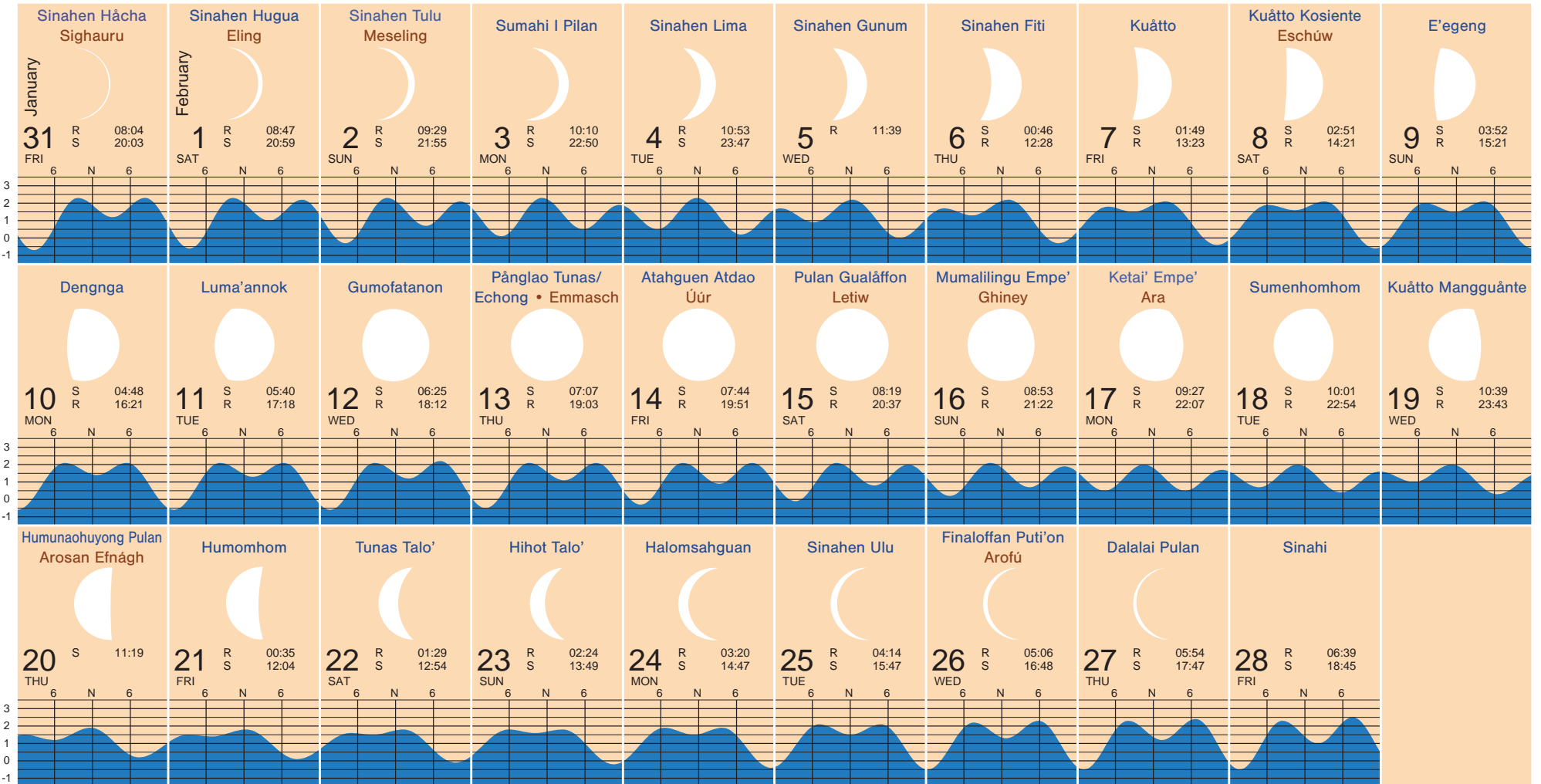
Chamorro

Refaluwasch

2025

# Ma'imo' Mááischigh

January 31 - February 28



MOON-RELATED OBSERVATIONS AND ACTIVITIES

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# *Fishing Under Japanese Colonial Rule*

In the 1920s, Japanese control of the Northern Mariana Islands under the League of Nations mandate brought Okinawan fishermen to the region. Supported by financial subsidies, they initiated a pole-and-line fishing method, influencing local economies. These early efforts laid the groundwork for more significant commercial ventures in the years to come.

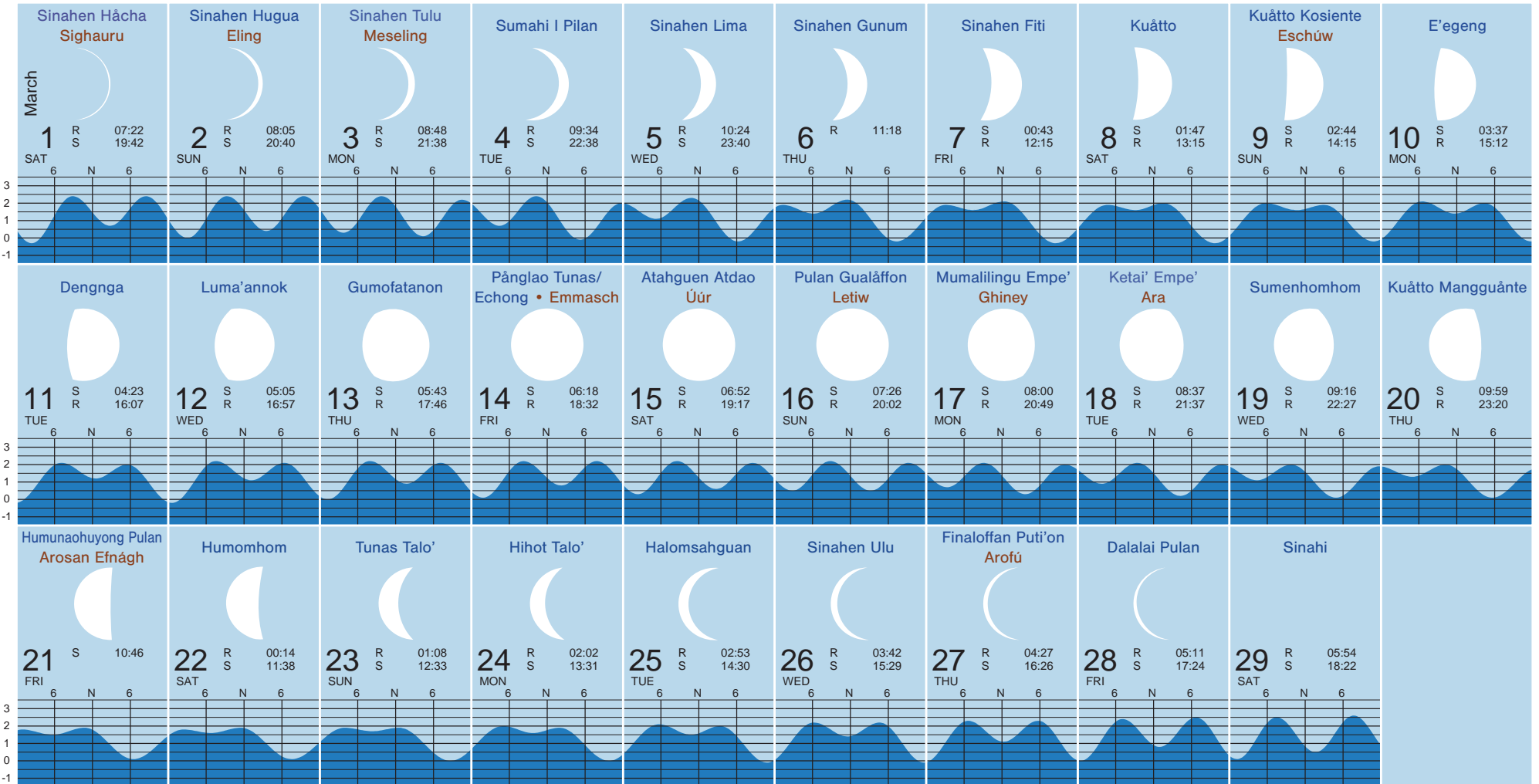


Photos: Northern Marianas Humanities Council  
Collection Navy Civil Affairs RG 38, No. 167 (above) /  
174 (left)

2025

March 1 - March 29

# Umatalaf Mááilap



MOON-RELATED OBSERVATIONS AND ACTIVITIES

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Japanese fishermen off Marpi, Saipan, harvesting anchovies as bait for pole-and-line fishing.

Photo: U.S. National Archives

## *Saipan's Tuna Fleet of the 1930s*

By the 1930s, Saipan's fishing fleet grew to include about a dozen pole-and-line fleet vessels, each approximately 60 feet long. The majority of their catch was skipjack tuna, baited using anchovies. Divers searched the coasts of Saipan and Tinian to locate baitfish. They then traveled 10 to 40 miles west and north of Saipan, heading to fishing grounds marked by bird piles. The tuna were processed into dried and smoked blocks called "shaved bonito" or *katsuobushi* in Japanese. Japanese wives shaved the blocks into soups or used them as garnish for vegetables.

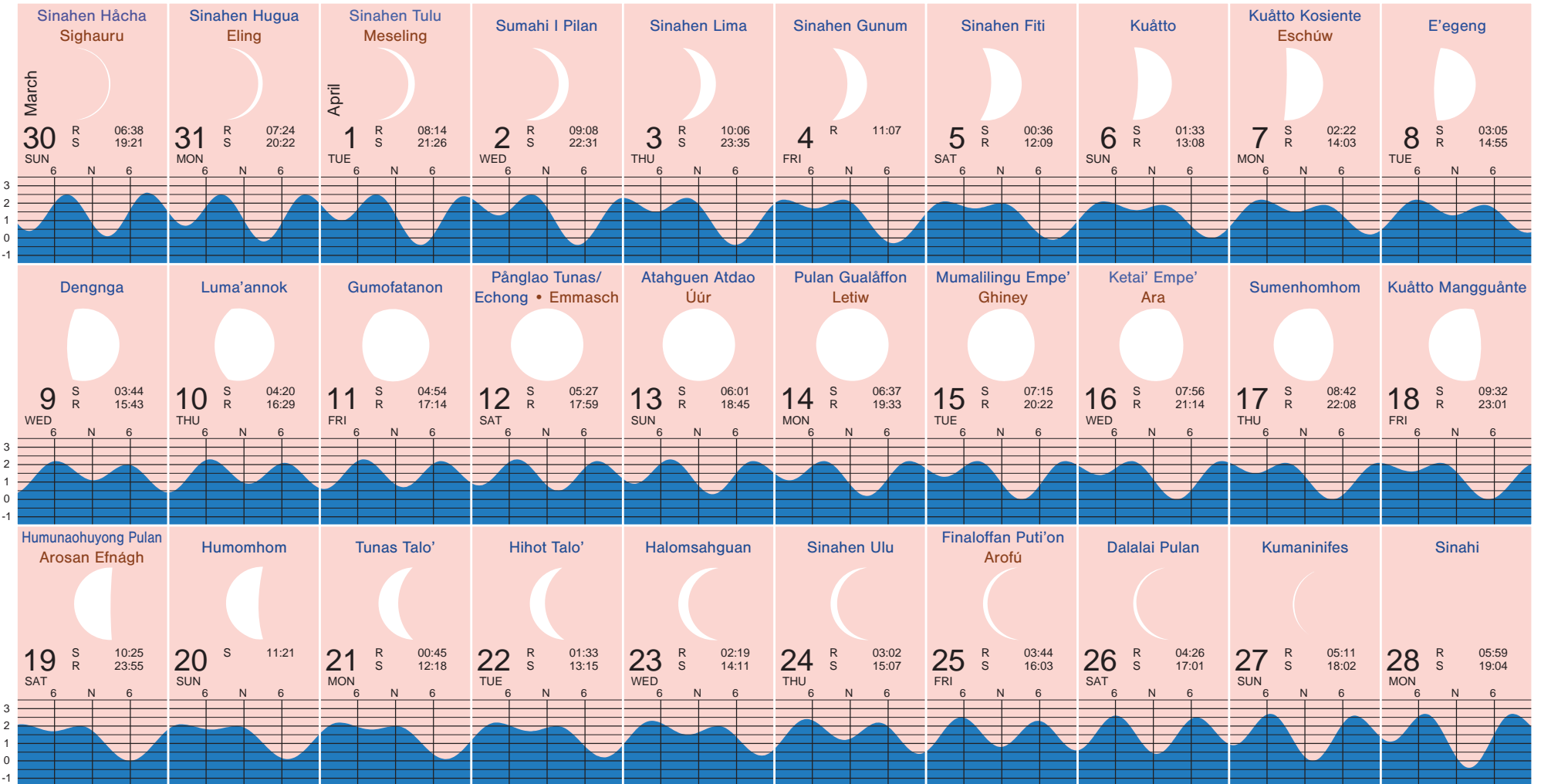


Fishermen casting for skipjack tuna.

2025

March 30 - April 28

# Lumuho' Sééta



MOON-RELATED OBSERVATIONS AND ACTIVITIES

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# *Rebuilding in the Wake of World War II*

The 1940s saw the destruction of Saipan's commercial fishing fleet during World War II bombings. After the war, the U.S. military rebuilt the industry to feed local and Japanese internment camp populations. The reconditioned fleet operated from the Military Fishing Base. Before Japanese nationals were repatriated, they trained Refaluwasch men in fishing practices, leading to the establishment of the Saipan Fishing Company. The cooperative operated from the Military Fishing Base with two restored pre-war Japanese fishing boats and two small naval landing crafts. The fish caught were sold locally and exported to Guam.



Inside and outside of the Saipan Fishing Company. The structure was located at the present day Garapan Fishing Base.

Workers salting fish.

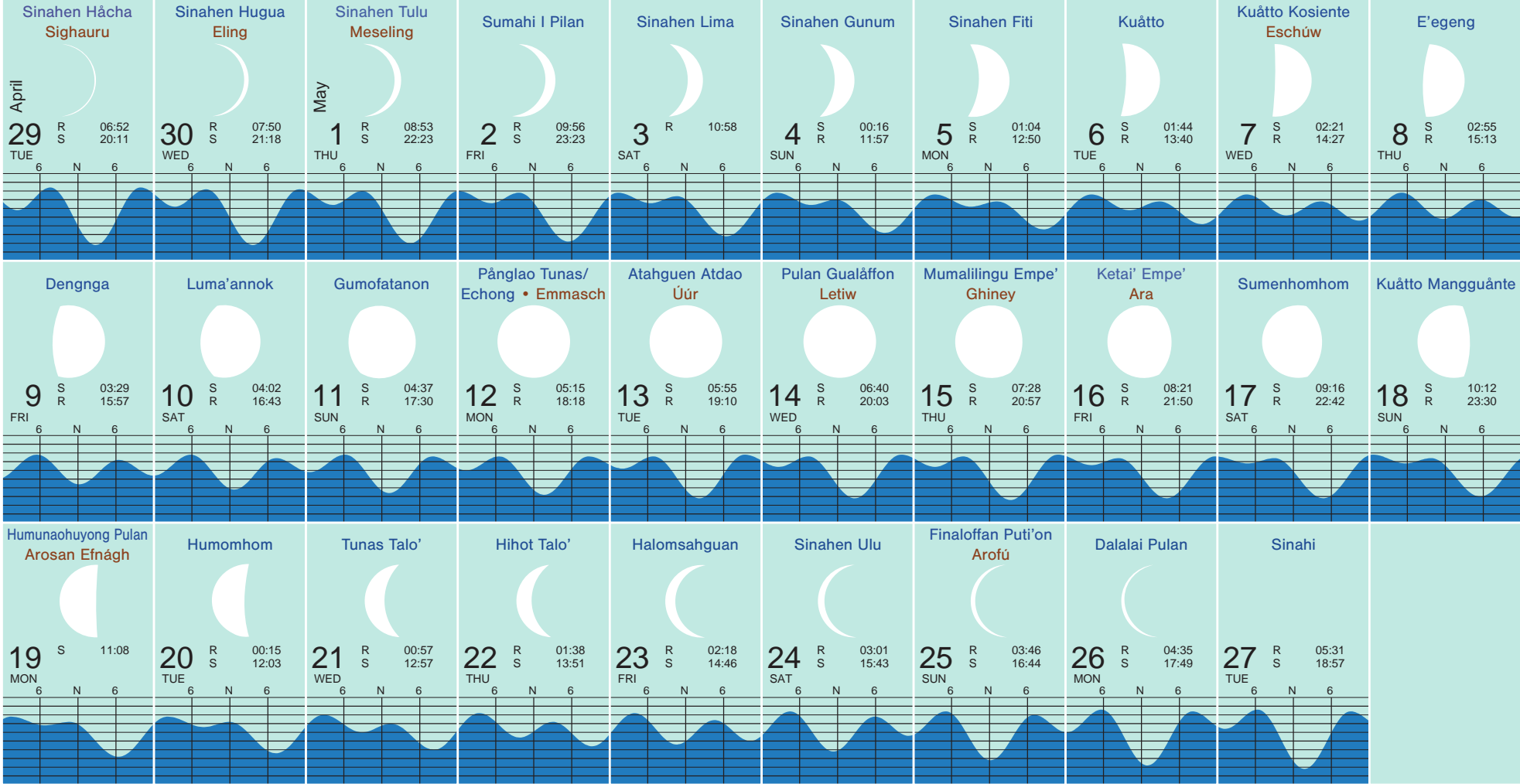
Photos: Northern Marianas Humanities Council Collection Navy Civil Affairs RG 38, No. 085 (top) / 179 (middle) / 083 (bottom)



2025

April 29 - May 27

# Makmãmao Ghúúw



MOON-RELATED OBSERVATIONS AND ACTIVITIES

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Photo: Navy Lt. James Caliva / U.S. DOD



Large tunas being readied for transshipment.

Photos: Port Authority of Guam

## *Apra Harbor: Guam's Gateway to the Global Fishing Industry*

Before the mid-20th century, Guam's economy was primarily centered on agriculture, with limited commercial fishing. After WWII, Guam's strategic significance as a military base grew, prompting upgrades to its infrastructure. The development of Apra Harbor into a deep-water port paved the way for expanded commercial opportunities, including transshipment. Fish are often transferred from smaller fishing boats to larger cargo ships, which then transport the fish to international markets.

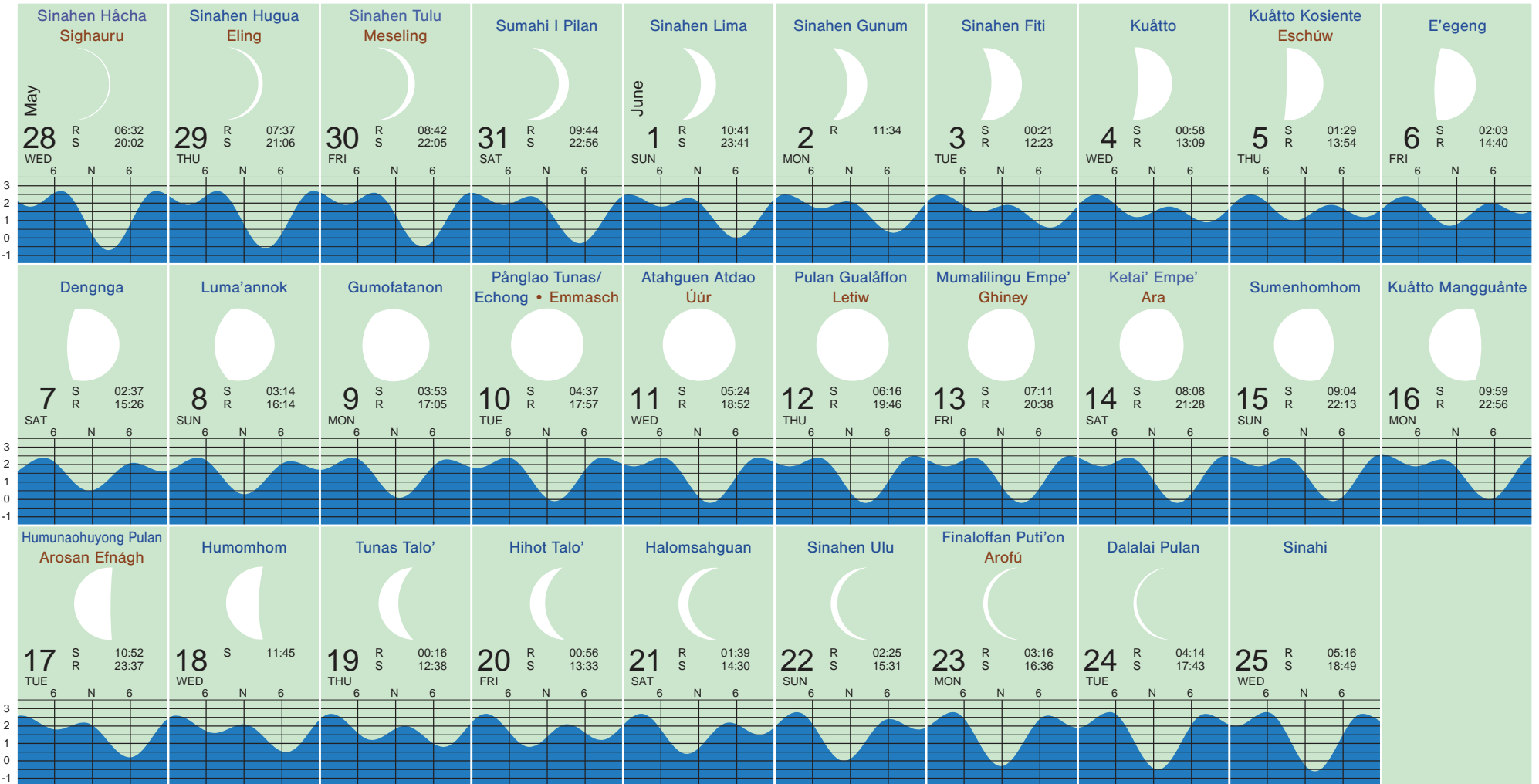
By the early 1980s and into the 1990s, fish transshipment through Guam emerged as a major economic driver. It created many jobs for local residents, boosted tax revenues, and generated significant port fees, all of which greatly benefited the island's economy.



2025

May 28 - June 25

# Mananaf Alimaté



MOON-RELATED OBSERVATIONS AND ACTIVITIES

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# *Ben-Ki: A Family Tradition of Sustainable Fishing*

In the 1970s, Vicente Mangloña Concepcion (Capt. Ben) became the first local to open a dive shop in the CNMI. He worked closely with the CNMI government, using his personal boat and equipment to conduct SCUBA and CPR certification training, as well as search and rescue missions. Capt. Ben supported his family through his dive shop—BC Dive Shop, later renamed Ben and Ki Water Sports—and by selling his catch. Long before regulations were introduced, he practiced sustainable fishing and shared these methods with divers he took out to get fish for the market. In 2022, his daughter, Marianne Concepcion Teregeyo, reopened Ben-Ki Store, a convenience store and fish market that had closed in 1996.



Captain Ben's Memorial at the Grotto, Saipan. Photo: WPRFMC



Ray Teregeyo and his two-year-old daughter pose for a photo in front of Ben-Ki Store in 2022, named after his maternal grandparents.

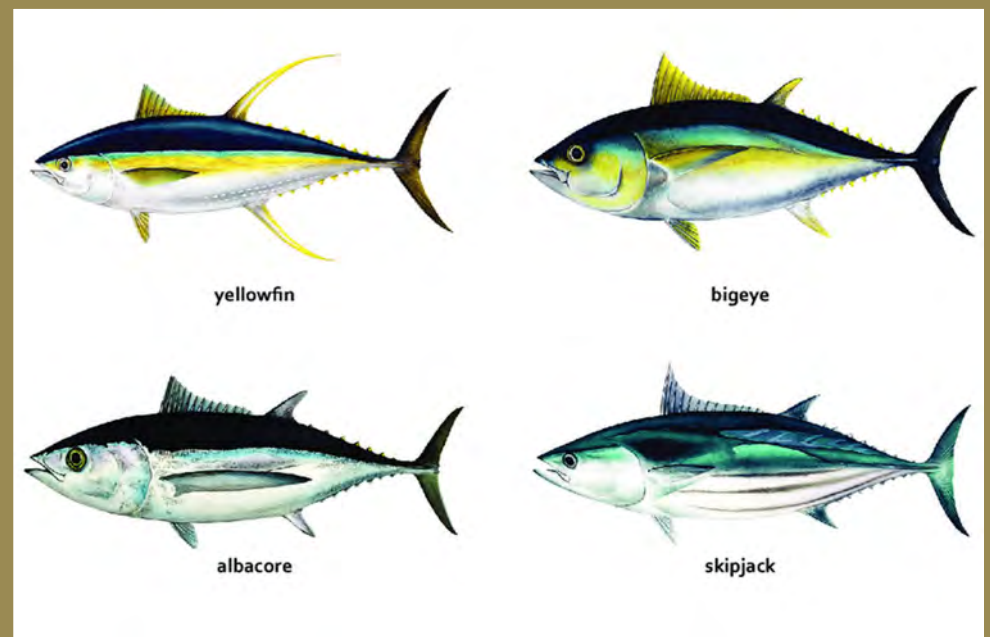
Photo: K-Andrea Evarose S. Limol







Diego and Vicky Benavente in front of Diego's Mart in Susupe, Saipan.  
Photo: Jesse Attao



The four main tuna species in the tropical and subtropical waters of the Western and Central Pacific Ocean.

Source: Allain, V., Pilling, G., Williams, P., Harley, S., Nicol, S., & Hampton, J. (2016). Overview of tuna fisheries, stock status and management framework in the Western and Central Pacific Ocean. doi:10.4000/books.pacific.423.

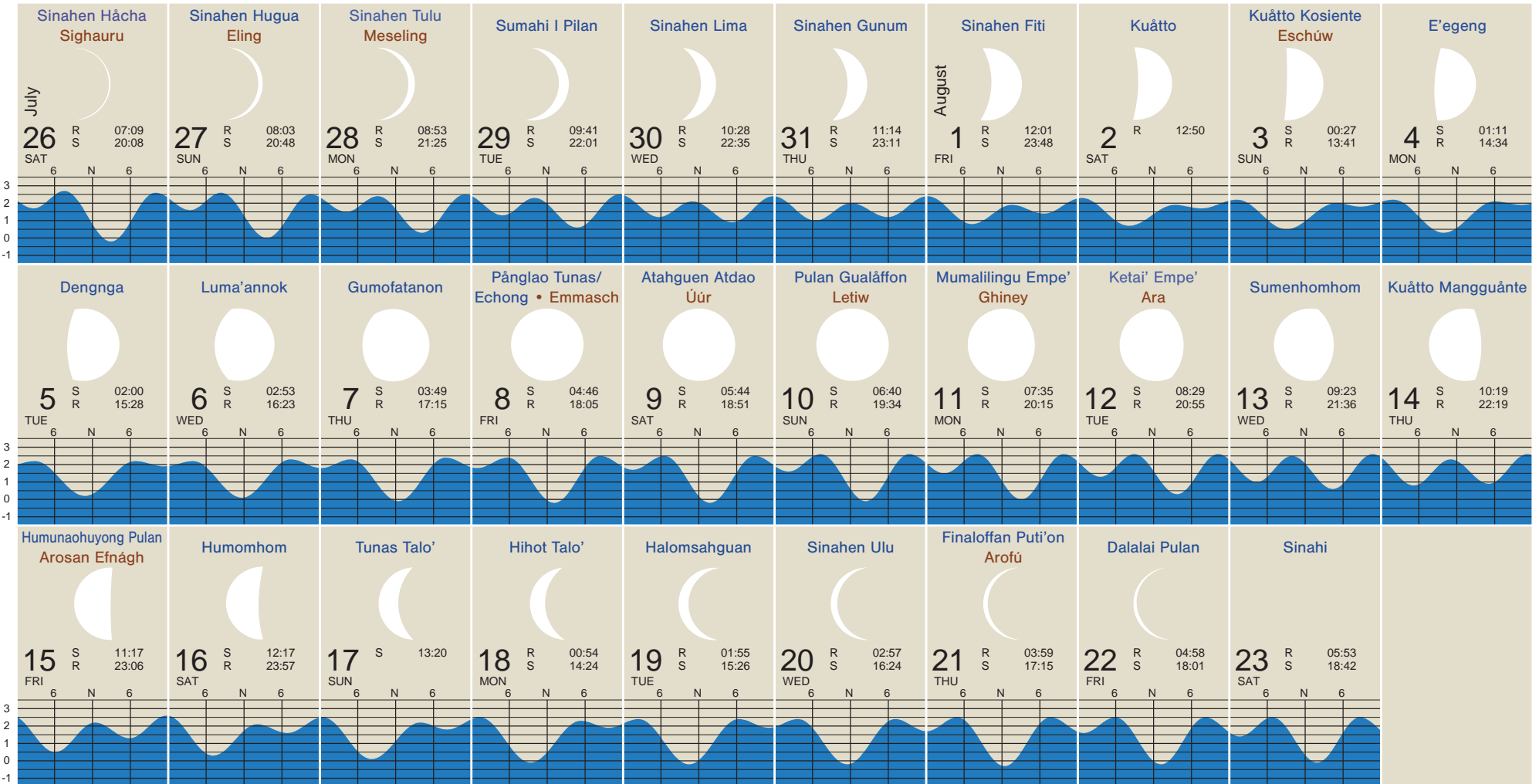
## *Tuna Fishing Revival and Community Impact*

Commercial tuna fishing re-emerged in the 1980s in the CNMI after a long hiatus, as the tourism industry boom began to drive the economy. Diego's Mart, owned by Diego Tenorio Benavente from 1983 to 2001, was the first indoor fish market in the CNMI. Their slogan, "Finest in Fresh Fish," became well-known in the community. As Vicky Iriarte Benavente, Diego's wife, noted, "The economy was strong until world events started to impact our island, like the Asian Financial Crisis, Bird Flu, and wars in the Middle East."

2025

July 26 - August 23

# Tenhos Wuun



MOON-RELATED OBSERVATIONS AND ACTIVITIES

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# *Tuna Transshipment in the Western Pacific*

In the 1980s, Guam's deep harbor attracted around 11 Asian fishing companies to homeport or transship catches from their purse seine and longline vessels. The purse seiners used helicopters to locate large schools of warm-water pelagic fishes like yellowfin, bigeye, and skipjack tuna. These vessels fished for weeks at a time, quickly freezing their catch onboard before returning to Apra Harbor.

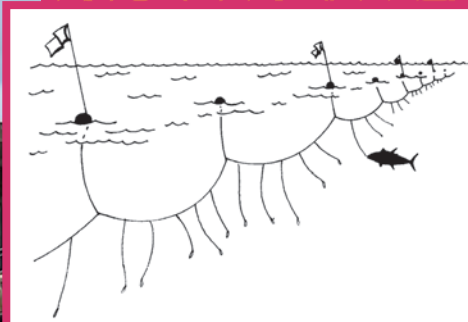
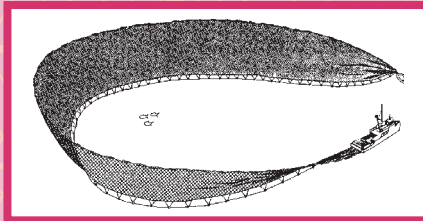
Tinian in the CNMI hosted a significant transshipment facility for skipjack tuna in the late 1980s and early 1990s, primarily serving the vessels of the Zuanich company fleet and Taiwanese purse seiners. However, by the mid-1990s, the facility was shut down, and the purse seine vessels shifted their operations, particularly to Papua New Guinea, where new tuna canneries were being established.

Source: Port Authority of Guam

A purse seine vessel with a helicopter to search for tuna. Purse seines are set up on the stern (back) of a large fishing boat while a smaller boat tows one end of the net that is dragged through the water like a curtain. Both boats work together to form a circle around schooling fish.

At the bottom of the net, the purse line is closed to ensure that no fish escape.

Photo: Dan Sea Asia



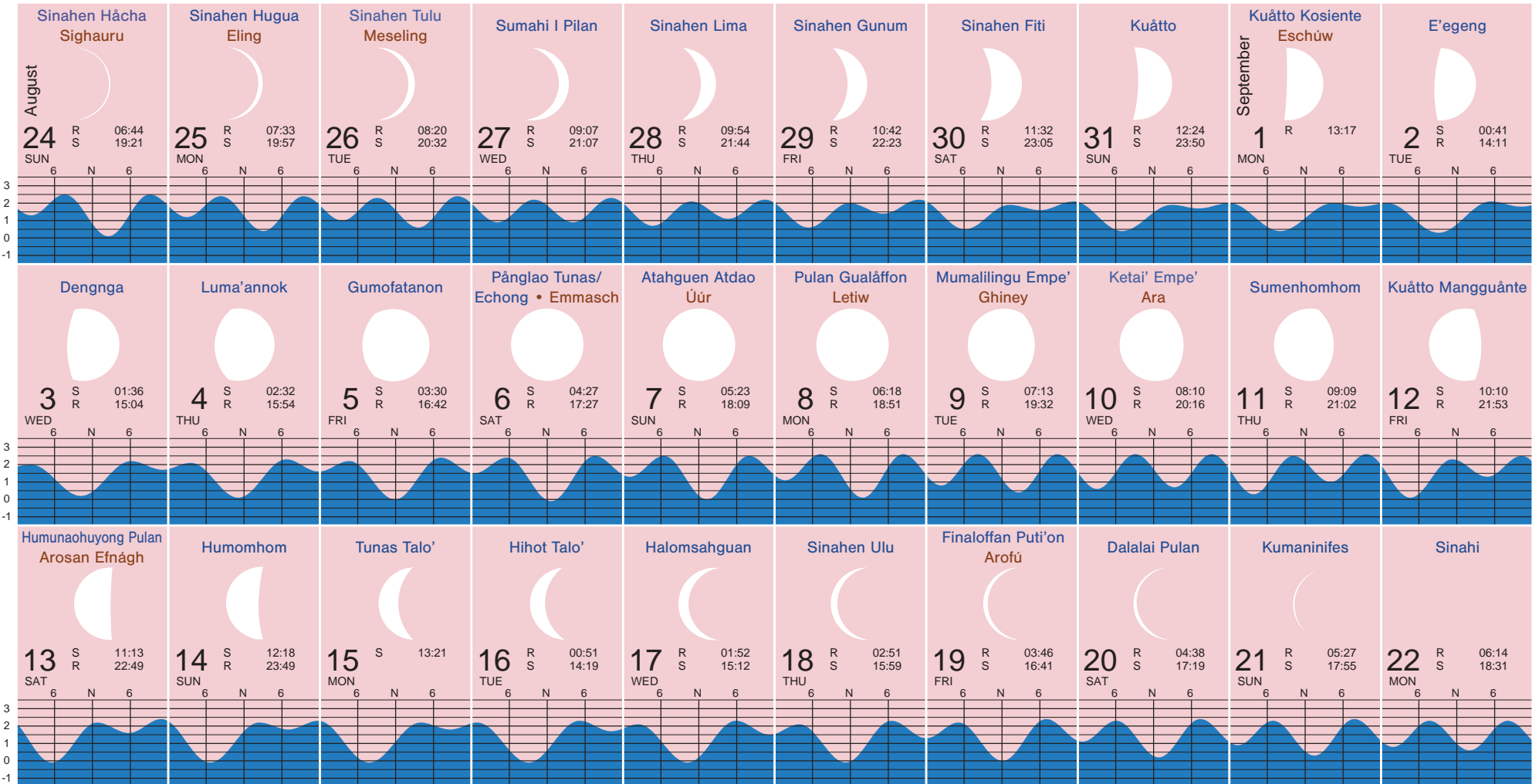
Longline boats docked at the Guam port. Deep-set longline gear, targeting tuna, typically consists of a continuous mainline set below the surface and supported in the water column horizontally by floats. Branch lines are attached at intervals on the mainline with single baited hooks.

Photo: WPRFMC

2025

# Lumåmlam Maan

August 24 - September 22



MOON-RELATED OBSERVATIONS AND ACTIVITIES

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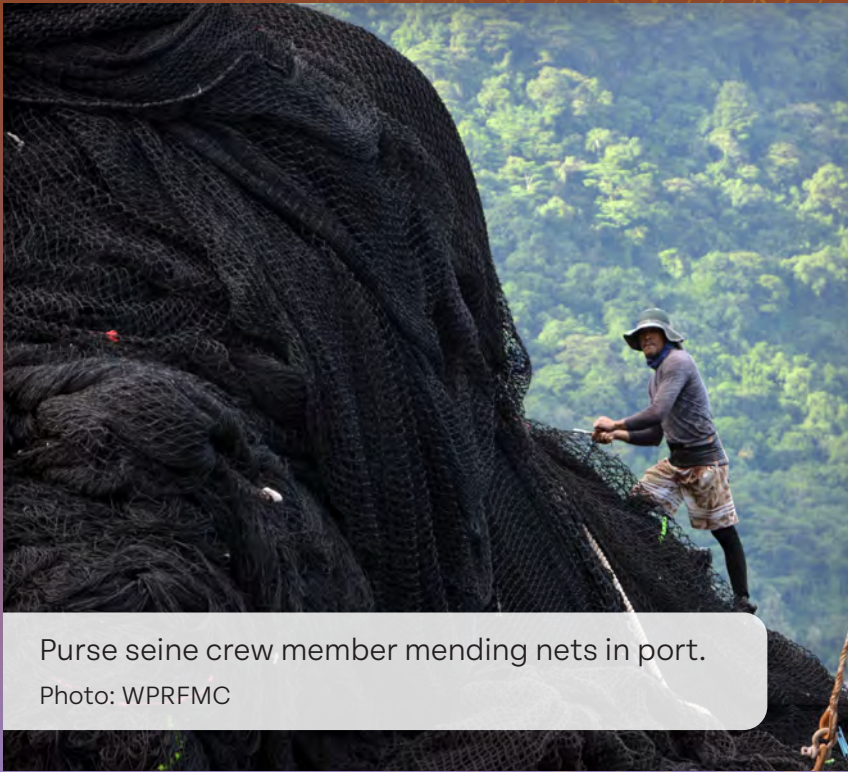


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Purse seine crew member mending nets in port.

Photo: WPRFMC



Transshipping tuna on Guam.

Photos: (left) Port Authority of Guam / (bottom) WPRFMC



## *Supporting Guam's Expanding Fishing Fleet*

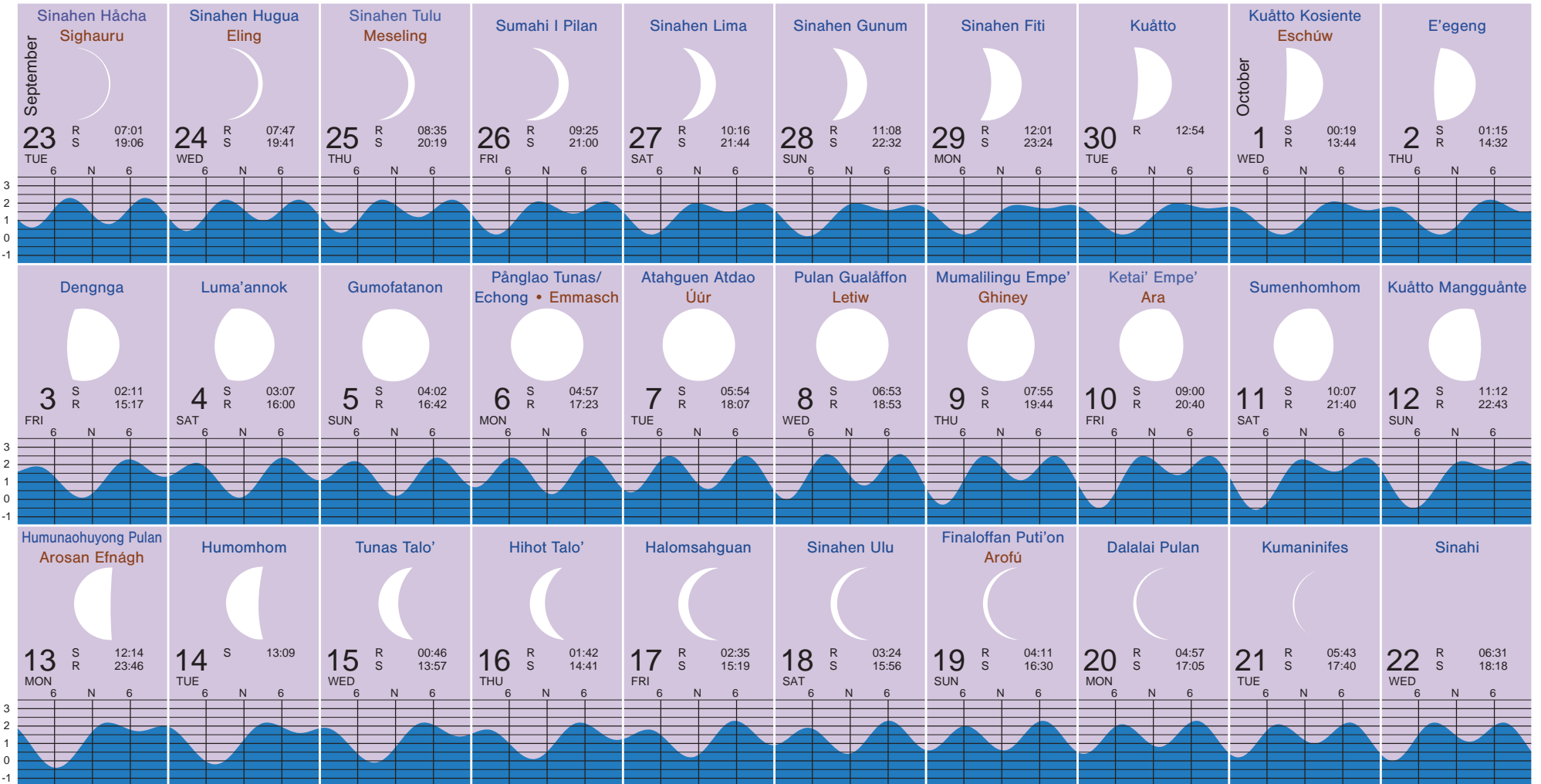
By the 1990s, Guam's Apra Harbor hosted more than 300 longline and purse seine vessels. As vessel wharfage demand increased, so did the need for a range of provisioning, maintenance, and gear repair services, which were gradually developed to support the fleet. Longliner vessels from Indonesia, Japan, and Taiwan made port calls in Guam, and advances in refrigeration and container technology improved the efficiency and capacity of transshipment operations.

Source: Michael P. Hamnett & William Sam Pintz

2025

# Faguálo' Sarobwél

September 23 - October 22

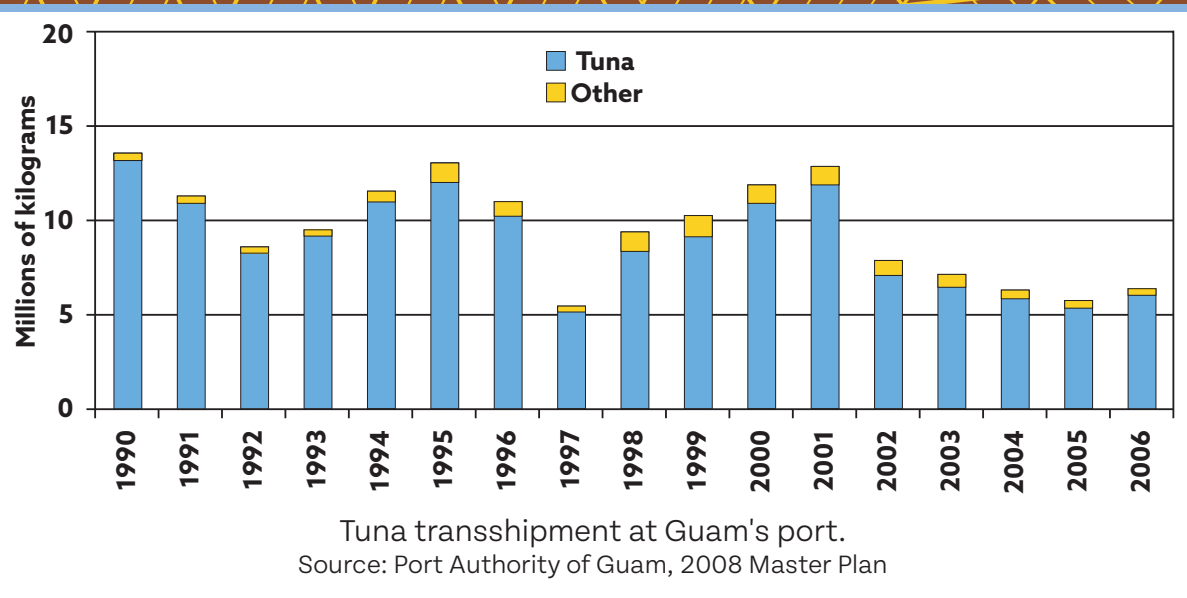


MOON-RELATED OBSERVATIONS AND ACTIVITIES



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Tuna being offloaded at port for transshipment to Asian markets.

Photo: David J. Doueman/National Marine Fisheries Service

## *From Guam to Japan: Sashimi-Grade Tuna's Journey*

In 1991, an air-transshipment operation was established with sashimi-grade tuna flown into Guam and Saipan from Micronesian fishing grounds on air cargo freighters, and out of Guam to Japanese markets on wide-body passenger planes.

By 1993, four operators were transshipping fish through Guam and Saipan. Air cargo capacity to Guam was approximately 80 metric tons (~176,000 pounds) per day. The total volume of fish transshipped through the port of Guam reached 12,584 mt (~27.8 million pounds), with monthly volumes ranging from 400 mt (~880,000 pounds) to 1,400 mt (~3.1 million pounds). Notably, by 1993, fish landed at Apra Harbor accounted for around 65% of the total fish being flown to Japan. The peak value of fish transshipped reached \$1.3 million in 2000.

Source: Michael P. Hamnet & Willian Sam Pintz

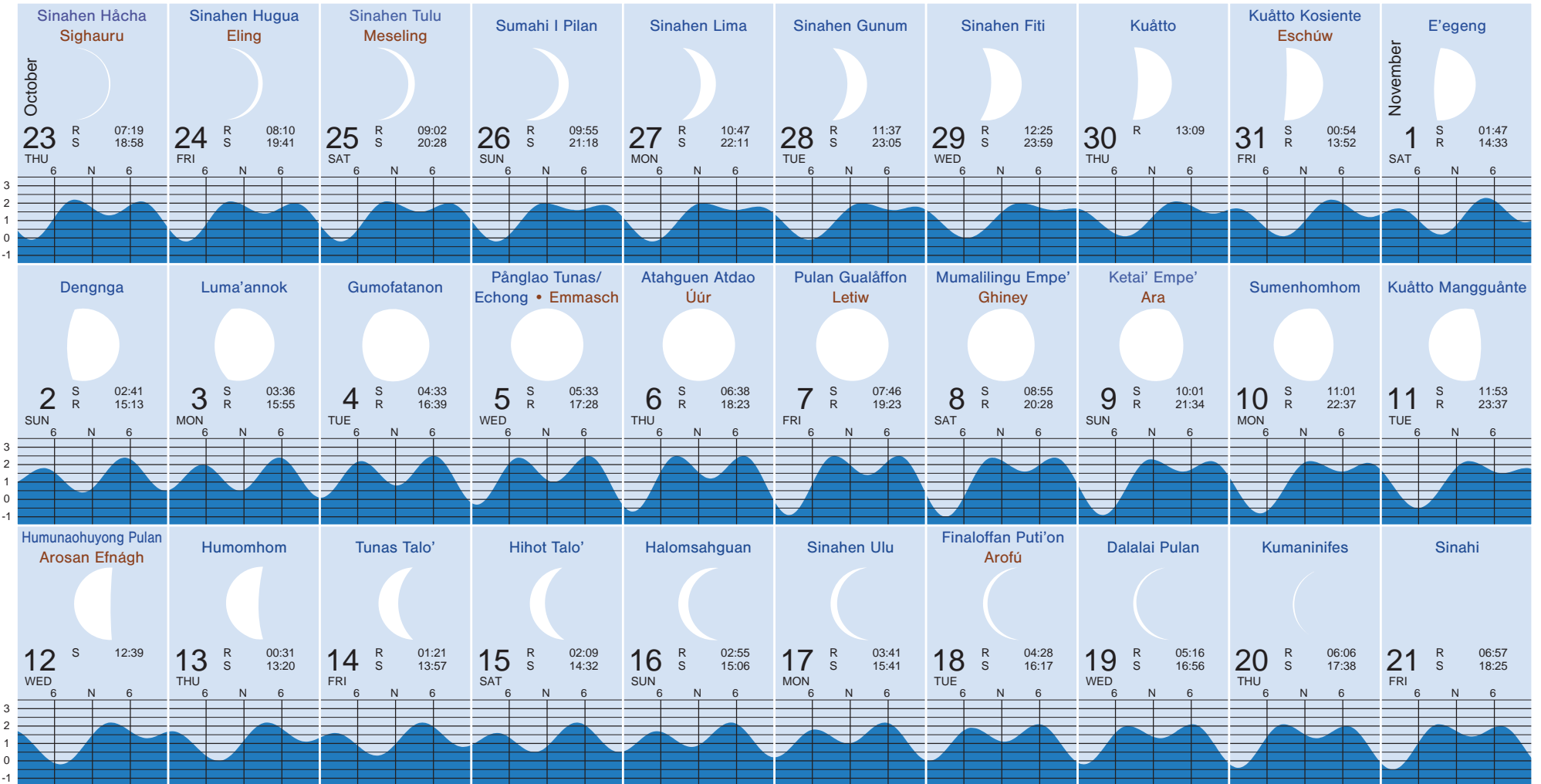
Year	Weight (million pounds)	Weight (mt)	Value (\$ million)
1990	0.313	141.9	0.562
1991	0.314	142.4	0.542
1992	0.325	147.4	0.571
1993	0.374	169.6	0.613
1994	0.397	180.0	0.740
1995	0.409	185.5	0.597
1996	0.292	132.4	0.506
1997	0.357	161.9	0.678
1998	0.549	249.0	1.171
1999	0.494	224.0	1.208
2000	0.609	276.2	1.332
2001	0.617	279.8	1.305
2002	0.486	220.4	0.945
2003	0.359	162.8	0.649
2004	0.397	180.0	0.754
2005	0.358	162.4	0.748
2006	0.335	151.9	0.726
2007	0.097	44.0	0.195

Annual tuna landings in Guam.  
Source: WPacFIN

2025

# Sumongsong Aremwoy

October 23 - November 21



MOON-RELATED OBSERVATIONS AND ACTIVITIES

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Tuna being offloaded in Guam.



B757 Cargo Aircraft.  
Photo: Asia Pacific Airlines



Efficient and quick delivery of tuna is essential for food freshness and security.  
Photos: Luen Thai Group



Longline vessels docked in Apra Harbor.

## *Changing Landscape of Pacific Tuna Operations*

At the height of the Pacific tuna industry, the Luen Thai Group operated the largest offshore fishing fleet in the region. Its sister company, Asia Pacific Airlines, ran cargo flights out of Guam, transporting fish to markets across Micronesia, Hawaii, Taiwan, Korea, Japan, and Hong Kong.

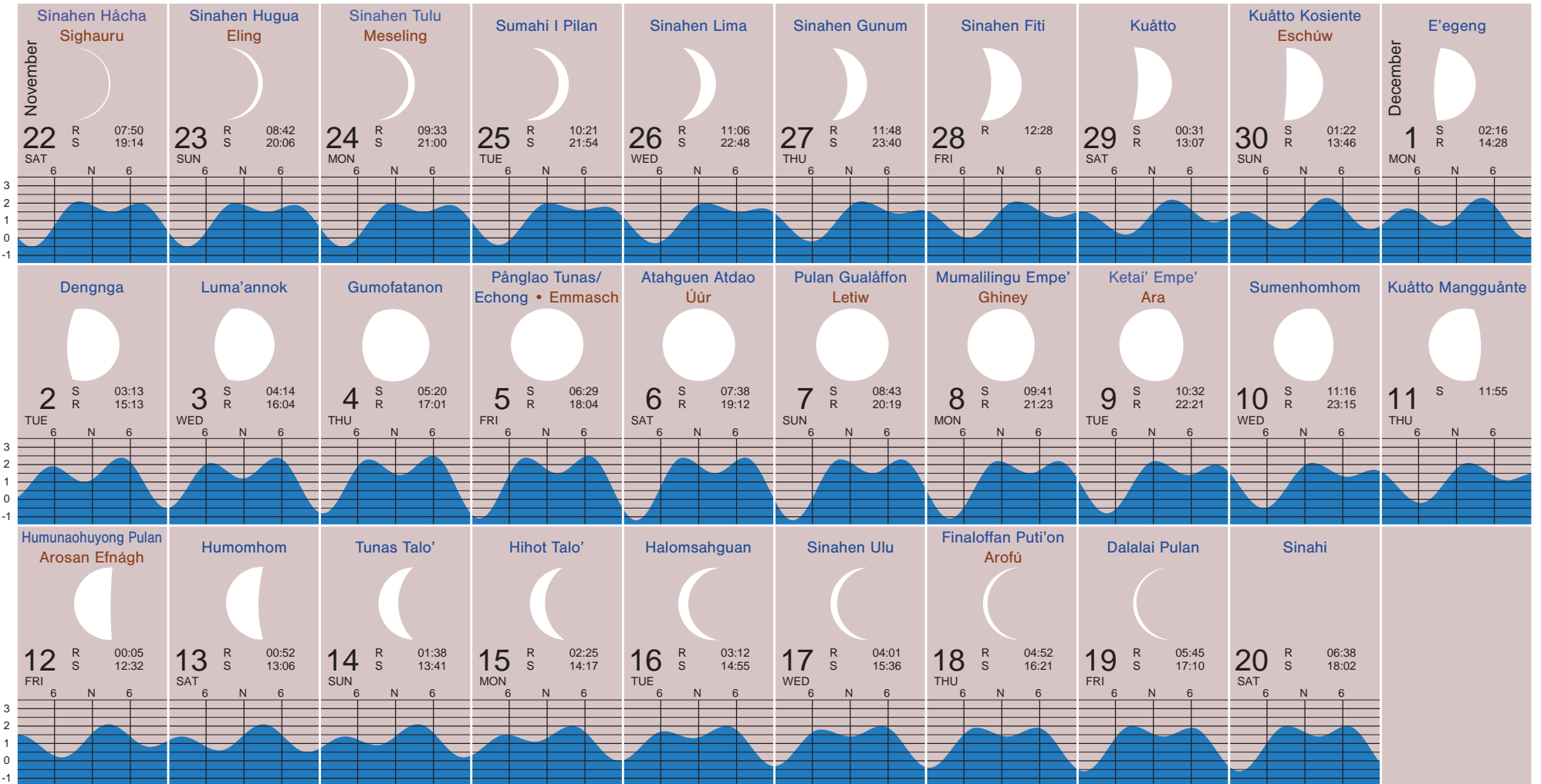
However, by 2006, the number of vessel calls at Apra Harbor had significantly declined, from 2,161 vessel calls in 1995 to just 771. By 2008, these operations were managed by Casamar, a shipbuilding and repair company that serviced 250 to 270 boats annually and handled fishing net repairs.

Source: Bartram, P. K., Bourland, J., Gates, P. D., Kaneko, J. J., & Seth, O. (1991). *Study of the longline fishery in Guam: Assessment of the market and economic impacts*. Guam Department of Commerce & NOAA Western Pacific Fisheries Information Network.

2025

# Umayanggan ⇨ Oromoi

November 22 - December 20



MOON-RELATED OBSERVATIONS AND ACTIVITIES



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# *Closure of Longline and Purse Seine Operations*

In 2007, a modest effort was initiated to establish a U.S.-style longline fishery in the CNMI. The fleet consisted of four longliners, though rarely more than two were active at any given time. Initially operating as Crystal Seas Fishing Ventures with a base in Rota, the operation later became U.S. Islands Seafoods, headquartered in Saipan.

The aim was to supply fresh fish to the U.S. military in Guam, in anticipation of the relocation of marines from Okinawa to Guam. Operations were shut down in the late 2000s due to low profits.

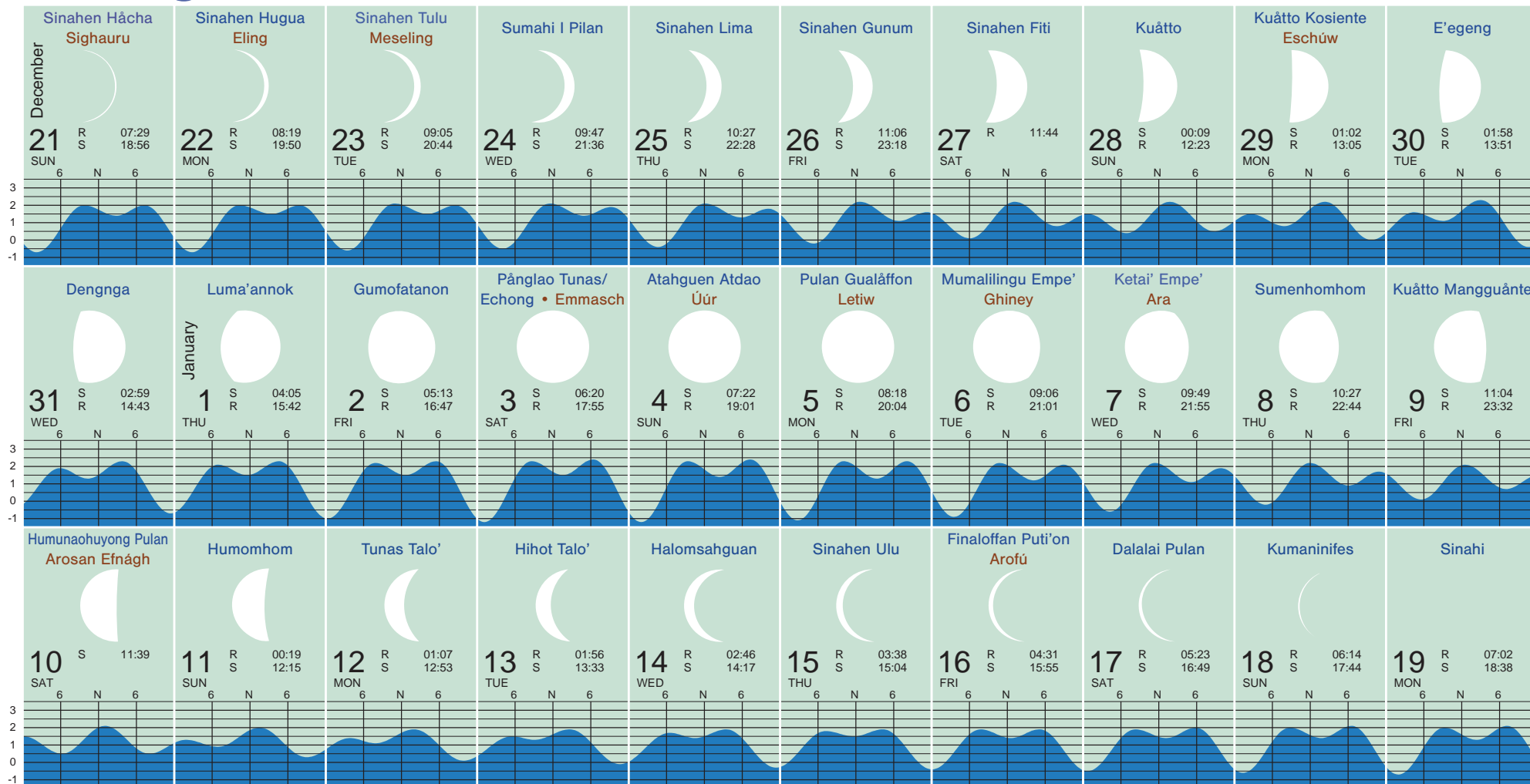
At the same time, all purse seine operations ceased in Guam when tuna stocks started moving east. The last longline fishing company at the port, Lotus Pacifica Trading, left in December 2020 due to low tuna prices, increasing fuel costs, and the hardships resulting from the COVID-19 pandemic.

Photos: WPRFMC



# Umagåhaf Tumwur

December 21, 2025 - January 19, 2026



MOON-RELATED OBSERVATIONS AND ACTIVITIES



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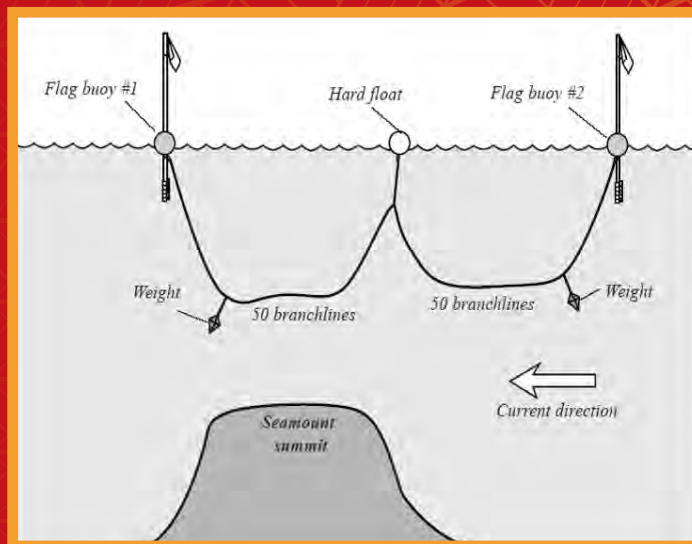


# Future of Shortline Pelagic Fishing

Fumi Kajiya, a young entrepreneur with ties to the old Mangilao Retail Store, continues his family's fishing legacy. In the 1970s, his father, Takayuki Kajiya, pioneered a new, efficient fishing style in Guam using Japanese fishing gear for trolling, shallow- and deep-bottom fishing, which was very successful. After his father's passing, Fumi took over the family's operations, earning respect within Guam's fishing community.

Recognizing growing demand for fresh, local fish, Fumi shifted his focus to shortline pelagic fishing, aiming for next-day store deliveries. He purchased a 35-foot Bertram boat, but Typhoon Mawar in 2023 delayed its refurbishment. Once repaired, he plans to begin exploratory fishing along the Mariana Archipelago, targeting tuna and other pelagic species, with future plans to export to Japan. His crew is entirely local.

The shortline fishing gear targets fish aggregating over seamounts, using a horizontal mainline less than one nautical mile long suspended with floats, and two baskets of approximately 50 hooks each. The gear is set before dawn and retrieved after a short soak time (about two hours), allowing year-round fishing.



Source for gear description: National Marine Fisheries Service

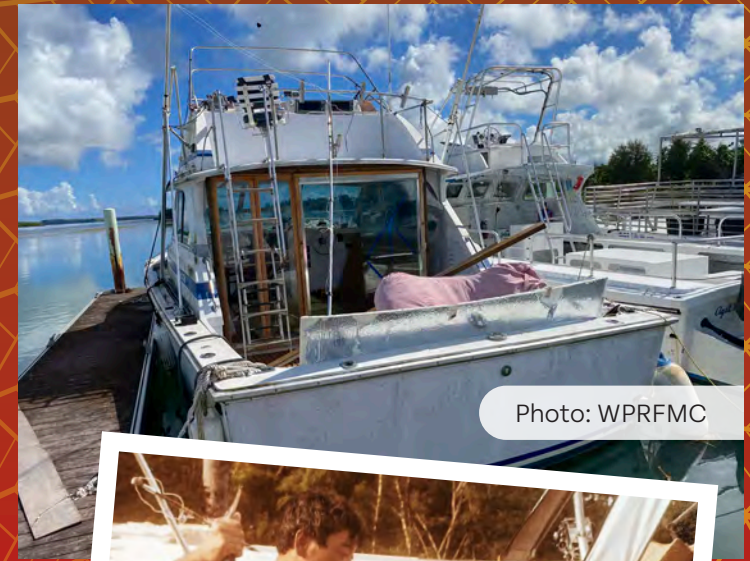


Photo: WPRFMC



Young Fumi Kajiya with his father, Takayuki, who taught him all about deepsea fishing.

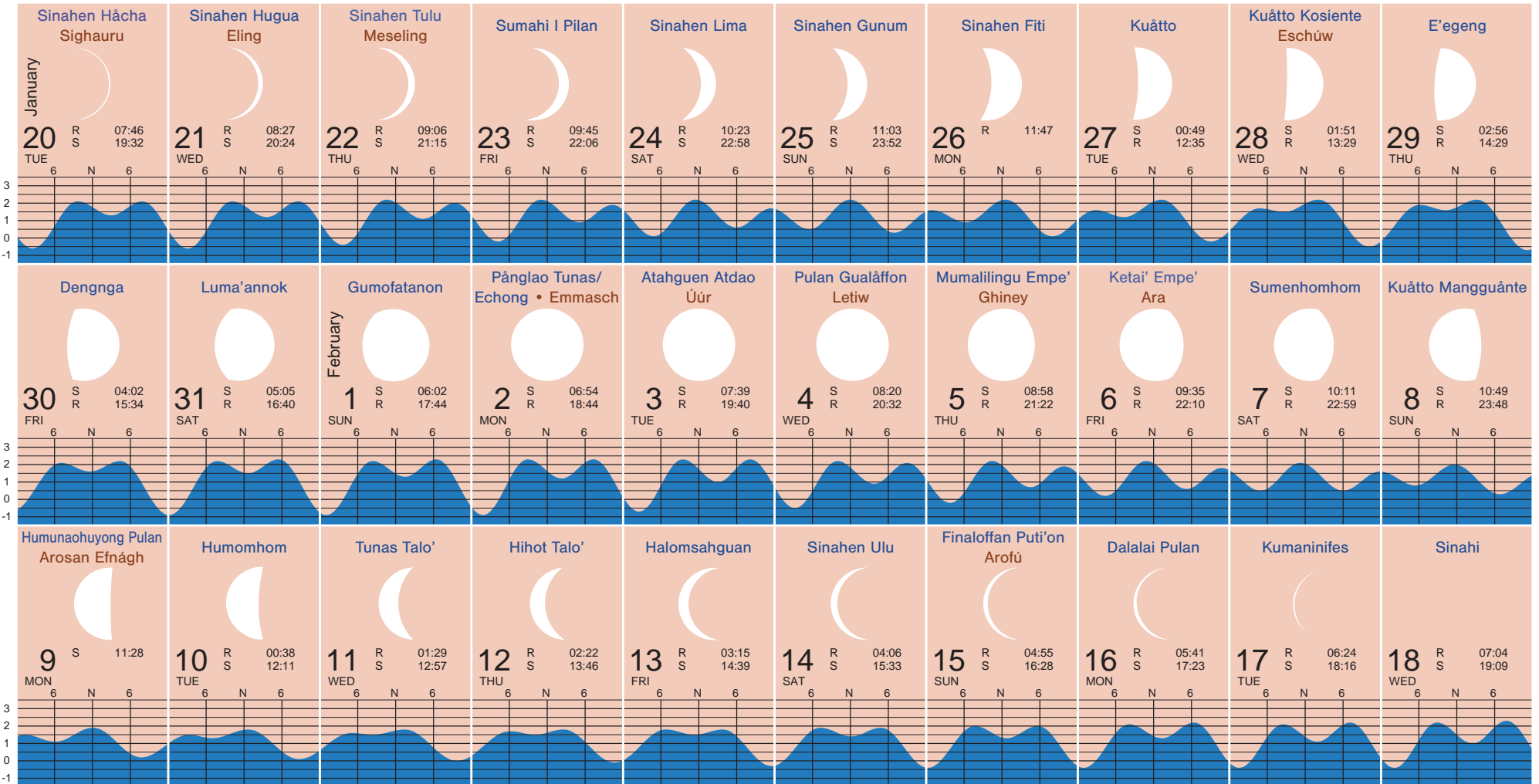
Photo: Fuji Kajiya

Typical shortline fishing method and gear.  
Source: Beverly, S., Robinson, E., & Itano, D. (2004). Trial setting of deep longline techniques to reduce bycatch and increase targeting of deep-swimming tunas.

2026

# Tumaiguini Schoow

January 20 - February 18



MOON-RELATED OBSERVATIONS AND ACTIVITIES

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## About This Calendar

The **Western Pacific Regional Fishery Management Council** has produced traditional lunar calendars for the Mariana Islands since 2007. The intent is to enhance community involvement in fishery management.

The *2025 Eskaleran Pulan Chamorro/2025 Refaluwasch Pápáál Maram* (Chamorro/Refaluwasch Lunar Calendar) explores the rich history and cultural significance of the fishing industry in the Mariana Islands. The Archipelago includes 15 islands and spans 495 miles from Guam in the south to Farallon de Pajaros (also called Uracas) in the north. The total land area is approximately 390 square miles.

Chamorro and Refaluwasch are the indigenous people of the Mariana Archipelago. The Chamorro names for the lunar months and moon phases are in dark blue, and the Refaluwasch names are in brown. The moon phases are for Hagåtña, Guam. Data to discern the first day of the lunar month are used with permission from HM Nautical Almanac Office, UKHO and the Keeper of Public Records, UK. The tide charts with moon rise and set times are in Chamorro Standard Time for Hagåtña and were provided by OceanFun Publishing, NZ.

Lunar month names may vary due to the traditional reliance on oral history transmitted through generations. This calendar uses Chamorro and Refaluwasch lunar month names following the guidance of Council member Pedro Itibus, and Council CNMI Advisory Panel (AP) members Cecilio Raiukiulipiy and Ramon Tebuteb.

A special *Un Dangkulu na Si Yu'us Ma'ase* (Chamorro) and *Ghilisou Tumo'o'gh* (Refaluwasch) calendar content contributors including CNMI AP Vice Chair Richard Farrell, Ron Laguaña, Sr., Vivian Leon and Fumi Kajiyama.

For an electronic version of this calendar, go to [www.wpcouncil.org/educational-resources/lunar-calendars](http://www.wpcouncil.org/educational-resources/lunar-calendars). Send us an email at [info@wpcouncil.org](mailto:info@wpcouncil.org) to let us know how you use our calendar!

## About the Council

The **Western Pacific Regional Fishery Management Council** was established by Congress in 1976 to manage fisheries in the offshore waters surrounding Guam, the Commonwealth of the Northern Mariana Islands, American Samoa, Hawai'i and the U.S. Pacific Remote Island Areas. The fisheries in federal waters surrounding Guam are managed under the Mariana Archipelago and Pacific Pelagic Fishery Ecosystem Plans. Traditional knowledge and wide community involvement are integral parts of the ecosystem-based approach to fishery management.



Pelagic fishermen at Camp Chulu in Tinian shortly after WWII. Photo: Richard Farrell

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Front cover: The development of Apra Harbor into a deep-water port after World War II paved the way for commercial fishing opportunities in Guam. Photo: Navy Lt. James Caliva / U.S. DOD