Eskaleran Pulan Chamorro « Refaluwasch Pápáál Maram

January 4, 2022 - January 22, 2023



Silvermouth

Silvermouth · lehi <> maróóbw · Aphareus rutilans

LIFE HISTORY INFORMATION: Native to Indian and Pacific Oceans from the African coast to the Hawaiian Islands. • Prefer inshore waters with coral reefs and rocky bottoms at depths of ~20 ft to >330 ft. • Can be solitary or occur in small schools.

LOCAL KNOWLEDGE: Local bottomfishers commonly target Lehi due to the high market demand.

CURRENT REGULATIONS: FEDERAL: A permit is required for any vessel commercially fishing for, landing, or transshipping bottomfish management unit species (BMUS) in the U.S. exclusive economic zone around the CNMI. Fishing is also managed under an annual catch limit for the BMUS complex. **COMMONWEALTH:** A permit and catch reporting are required for commercial fishing in the CNMI. Prohibited gears include explosives, poison, electric shocking devices, SCUBA spearfishing, hookah and certain types of nets.

COUNCIL MANAGEMENT: Currently monitored as part of the BMUS complex.

STOCK STATUS: Not overfished; not experiencing overfishing.

Baked Fish with Mayo and Kimchee Base

INGREDIENTS

1	2 to 3-lb fish
1 cup	mayo
1 tsp	black pepper
1	onion, choppe
1 tbsp	lemon sauce
1 tsp	garlic powder
2-3 tbsp	kimchee base
aluminum	foil

INSTRUCTIONS

Preheat oven to 350°F. Clean fish. Mix mayo, black pepper, chopped onions, lemon sauce, garlic powder and kimchee base. Place fish in foil and put mixture on top, inside, and around fish (spread generously covering the whole fish) then cover securely. Bake for ~30-45 minutes. Serve with white rice and finadene.

source: chamorrofood.net/category/seafood/7/1/index.html

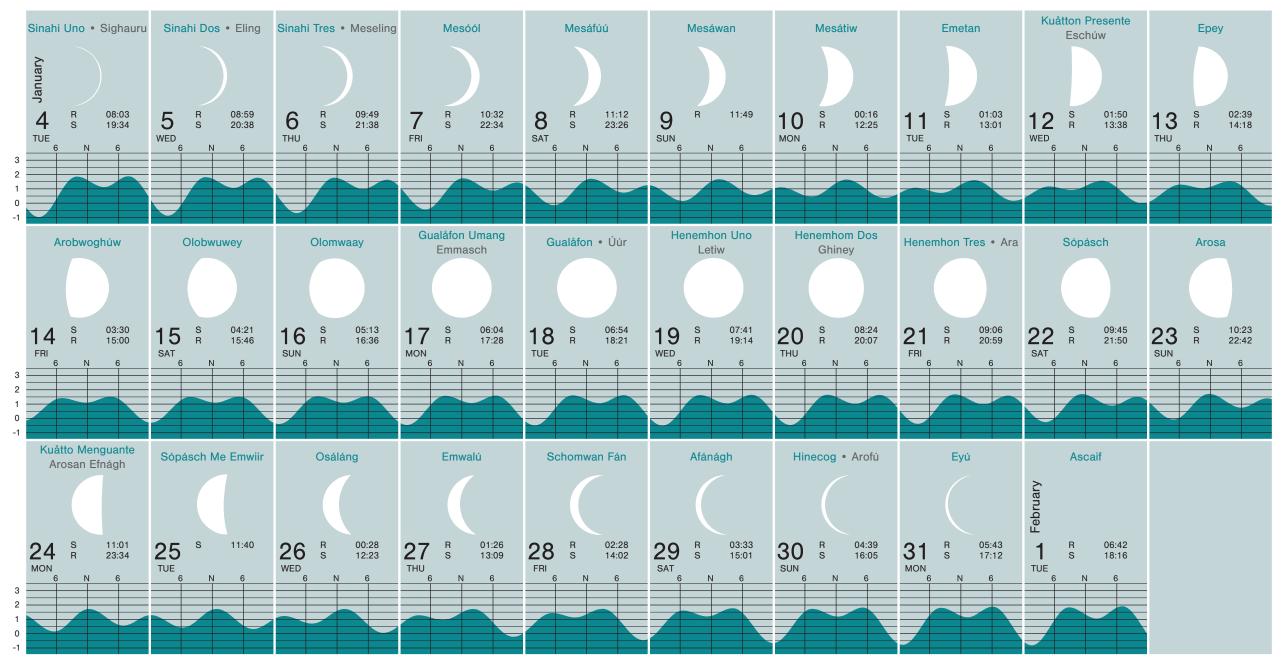
FISHERY INFORMATION: Deep-sea rod and reel - this hook-and-line method of fishing uses a heavy mainline that is lowered and raised with electric, hydraulic or hand-powered reels. 4 to 10 circle hooks, baited with squid or fish, branch off the mainline using monofilament lines. A "chum" or bait bag containing chopped fish like skipjack tuna or squid is sometimes suspended on the mainline above the hooks to attract fish. Fish are hauled aboard by hand.



Umayangan & Schoowl

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2022 January 4 - February 1



MOON-RELATED OBSERVATIONS AND ACTIVITIES



Giant Prevally

Giant Trevally • mamulan etam • Caranx ignobilis

LIFE HISTORY INFORMATION: Sexually mature at 21-24 in and 3-4 yrs old. • Widely distributed throughout the tropical and subtropical waters of the Bay of Bengal, Indian and Pacific Oceans. • Inhabit a range of offshore and inshore marine environments, as well as the low salinity waters of estuaries and rivers. • Spawning occurs during the warmer months in most locations.

LOCAL KNOWLEDGE: Mamulan is a sport fish, but fishers sometimes avoid catching them due to reports of people getting sick from eating larger catch.

CURRENT REGULATIONS: FEDERAL: A permit is required for any vessel commercially fishing for, landing, or transshipping bottomfish management unit species (BMUS) in the U.S. exclusive economic zone around the CNMI. Fishing is also managed under an annual catch limit for the BMUS complex. **COMMONWEALTH:** A permit and catch reporting are required for commercial fishing in the CNMI. Prohibited gears include explosives, poison, electric shocking devices, SCUBA spearfishing, hookah and certain types of nets.

COUNCIL MANAGEMENT: Currently monitored as part of the BMUS complex.

STOCK STATUS: Not overfished; not experiencing overfishing.

Fish Sinigang

This is a Filipino fish soup with vegetables cooked in sour broth.

INGREDIENTS

2-3 lbs	fish, sliced
40 g	Knorr Sinigang sa Sampaloc Mix Origina
2 pieces	tomato, cubed
I piece	onion, wedged
l cup	Daikon radish, sliced
5 pieces	okra
2 pieces	eggplant, sliced
B cups	water
2 cups	cooking oil
11/2 tbsp	salt, or to taste
fish sauce a	and ground black pepper, to taste
3 cups	fresh spinach

INSTRUCTIONS

- Slice the fish as needed. Sprinkle salt all over the fish slices and then rub in. Let it rest for at least 10 minutes.
- Heat oil in a pan. Fry the fish slices until golden brown. Turn it over and repeat on the opposite side. Remove fish from the pan and place on a clean plate. Set aside. Boil water in a large cooking pot. Add tomatoes, onions, and radish. Boil for 5 minutes.
- Add Knorr Sinigang sa Sampaloc Mix. Stir. Put the fried fish slices into the pot. Let the liquid boil. Adjust the heat between low to medium. Continue boiling for 7 minutes.
- Add eggplant. Cook for 3 minutes.
- Add okra. Cook for 3 to 5 minutes.
- Season with fish sauce and ground black pepper.
- Put the fresh spinach into the pot. Cook for 1 to 2 minutes.
- Transfer to a serving bowl. Serve warm.

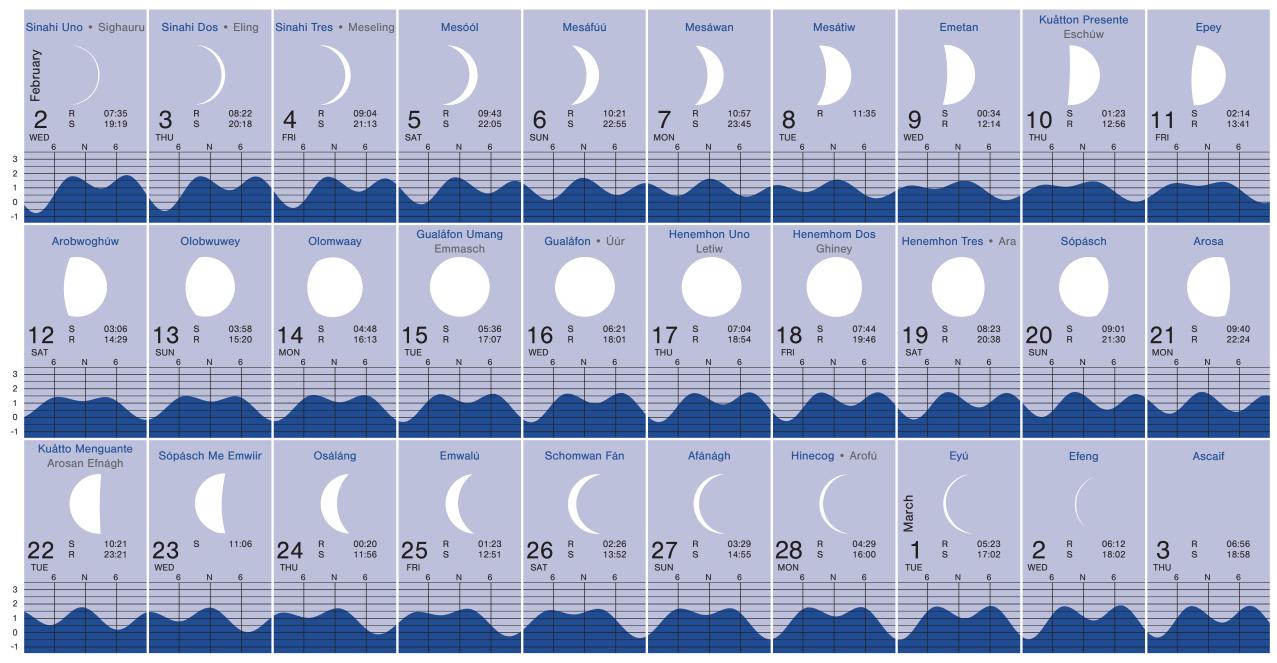


FISHERY INFORMATION:

Caught by a number of methods, including hook-and-line, hand lines, gill nets and other types of artisanal traps.

Tumaiguini & Méél

2022 February 2 - March 3



MOON-RELATED OBSERVATIONS AND ACTIVITIES





Ruby Snapper/Ehu · buninas agaga' le falaghal moróóbw Etelis carbunculus

LIFE HISTORY INFORMATION: Size - up to 12 in. • Indo-Pacific distribution, inhabiting both continental shelf and slope waters from 295 to 1150 ft deep.

FISHERY INFORMATION: Caught with deep-sea rod and reel.

CURRENT REGULATIONS: FEDERAL: A permit is required for any vessel commercially fishing for, landing, or transshipping bottomfish management unit species (BMUS) in the U.S. exclusive economic zone around the CNMI. Fishing is also managed under an annual catch limit for the BMUS complex. **COMMONWEALTH:** A permit and catch reporting are required for commercial fishing in the CNMI. Prohibited gears include explosives, poison, electric shocking devices, SCUBA spearfishing, hookah and certain types of nets.

COUNCIL MANAGEMENT: Currently monitored as part of the BMUS complex.

STOCK STATUS:

Not overfished; not experiencing overfishing.

Ma'afliton Guihan (Fried Fish)

INGREDIENTS

1-2 lbs fish salt and black pepper, to taste vegetable oil

For sauce - soy sauce, white vinegar and green onions

INSTRUCTIONS

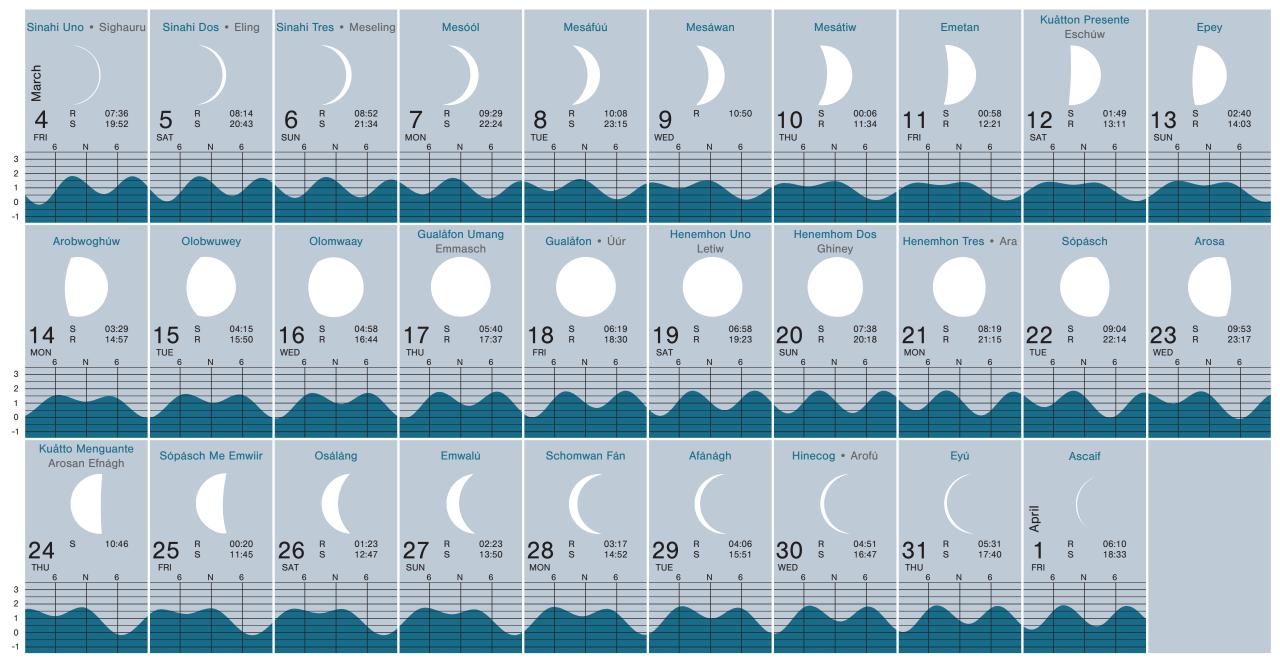
Depending on the size, clean fish (descale, cuting slits on both sides of fish; if preferred, remove fins), remove excess water with paper towels, and sprinkle with salt and black pepper. Fry to desired texture and color. Serve with steamed rice and sauce. Hot peppers optional.

Courtesy Floyd Masga

LOCAL KNOWLEDGE: Traditionally caught in deep water, Ehu is one of the most prized bottomfish at the market and is sold commercially to restaurants and hotels. In optimal weather conditions, fishers try their luck at outer banks such as Rota Banks and Esmeralda Bank, a submarine volcano west of Tinian.

Maimo & Máilap

2022 March 4 - April 1







Black Jack

Black Jack - tarakiton åttelong orong - Caranx lugubris

LIFE HISTORY INFORMATION: Size - up to 3 ft and 40 lbs. • Found in oceanic, offshore waters of the tropical zones of the Pacific, Atlantic and Indian Oceans. • Prefer deep reefs, ledges and seamounts in clear waters.

FISHERY INFORMATION: Caught with deep-sea rod and reel.

LOCAL KNOWLEDGE: Tarakito is a versatile fish used in many dishes.

CURRENT REGULATIONS: FEDERAL: A permit is required for any vessel commercially fishing for, landing, or transshipping bottomfish management unit species (BMUS) in the U.S. exclusive economic zone around the CNMI. Fishing is also managed under an annual catch limit for the BMUS complex. **COMMONWEALTH:** A permit and catch reporting are required for commercial fishing in the CNMI. Prohibited gears include explosives, poison, electric shocking devices, SCUBA spearfishing, hookah and certain types of nets.

COUNCIL MANAGEMENT: Currently monitored as part of the BMUS complex.

STOCK STATUS: Not overfished; not experiencing overfishing.

Keleguen Guihan

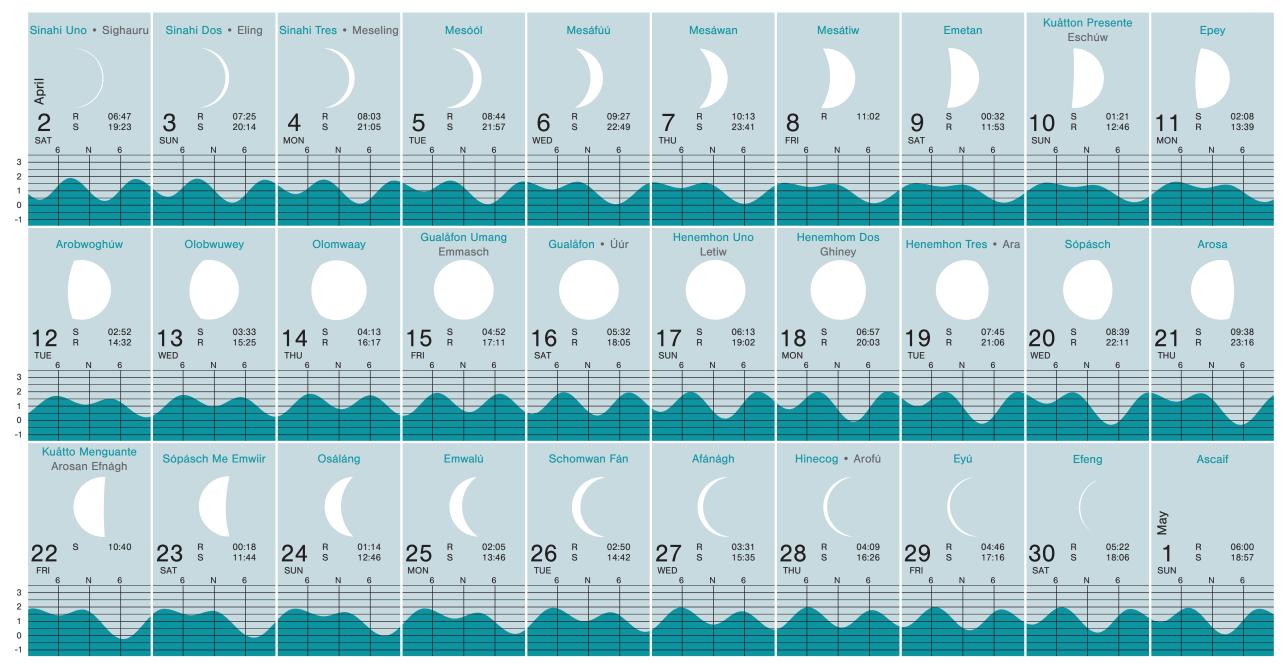
INGREDIENTS

1 lb of pref	ferred fish, sliced into thin bite sizes				
1	onion, diced				
1	palm-sized ginger, chopped into small pieces				
1 pkg	lemon powder or 6-8 fresh lemons, squeezed				
2 tbsp	salt				
2	Tinian hot peppers or habanero, chopped (optional)				
INSTRUCTIONS					

In mixing bowl, add fish with onions, ginger and lemon. Squeeze together, mixing evenly. Add salt a little at a time. Taste for desired flavor. If desired, add more lemon or salt to taste. Add peppers and mix for a spicy flavor. Great with corn tortillas or as an appetizer.

source: chamorrofood.net

2022 April 2 - May 1



MOON-RELATED OBSERVATIONS AND ACTIVITIES



Onaga

Flame Snapper/Onaga · buninas taighúlúpegh Etelis coruscans

LIFE HISTORY INFORMATION: Size - up to 31 in and 35 lbs. • The oldest known was 54 yrs old and 31 in. • Sexually mature at 10 yrs.

FISHERY INFORMATION: Caught with deep-sea rod and reel.

LOCAL KNOWLEDGE: Traditionally caught in deep water, Onaga is one of the most prized bottomfish at the market (\$7-9/lb) and is sold commercially to restaurants and hotels. It is commonly prepared for special events like weddings and large gatherings.

CURRENT REGULATIONS: FEDERAL: A permit is required for any vessel commercially fishing for, landing, or transshipping bottomfish management unit species (BMUS) in the U.S. exclusive economic zone around the CNMI. Fishing is also managed under an annual catch limit for the BMUS complex. COMMONWEALTH: A permit and catch reporting are required for commercial fishing in the CNMI. Prohibited gears include explosives, poison, electric shocking devices, SCUBA spearfishing, hookah and certain types of nets.

COUNCIL MANAGEMENT: Currently monitored as part of the BMUS complex.

STOCK STATUS: Not overfished; not experiencing overfishing.

Fried Fish Cubes

INGREDIENTS

1-2 lbs	onaga
1 cup	all-purpose flour
2 tbsp	baking powder
½ cup	milk
½ cup	water
flavorless v	regetable oil for deep frying, like sunflower or canola
salt and pe	epper, to taste

INSTRUCTIONS

Cut fish into cubes, season with salt and set aside. Whisk together the flour, baking powder and salt in a bowl to mix everything evenly. Add milk and water and whisk until a smooth batter forms. The batter should be of coating consistency so that it adheres to the fish cubes.

Heat enough vegetable oil in a deep frying pan to deep-fry the fish cubes on medium heat. Prepare one piece of fish at a time and dip it into the batter, making sure that all sides are coated generously and then tip into the hot oil. Do not over-crowd the frying pan. Fry pieces until golden brown. Remove fish with a slotted spoon and lay on an absorbent paper towel to soak up excess oil. Serve with tartar sauce or other desired dip.

Lumuhu & Naa

2022 May 2 - May 31

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MOON-RELATED OBSERVATIONS AND ACTIVITIES



Mafute

LIFE HISTORY INFORMATION: The oldest known was 8 yrs old and 20 in. - Sexually mature at 1 yr and 8-10 in. - Found over sand and rubble areas of outer reef slopes, from 33 to 650 ft deep. • Diet - crustaceans, fish, echinoderms and mollusks.

FISHERY INFORMATION: Caught with deep-sea rod and reel, but also by spearfishermen within the lagoon at night.

CURRENT REGULATIONS: FEDERAL: A permit is required for any vessel commercially fishing for, landing, or transshipping bottomfish management unit species (BMUS) in the U.S. exclusive economic zone around the CNMI. Fishing is also managed under an annual catch limit for the BMUS complex. **COMMONWEALTH:** A permit and catch reporting are required for commercial fishing in the CNMI. Prohibited gears include explosives, poison, electric shocking devices, SCUBA spearfishing, hookah and certain types of nets.

COUNCIL MANAGEMENT: Currently monitored as part of the BMUS complex.

STOCK STATUS: Not overfished: not experiencing overfishing.

Eskabeche (Fish with **Vegetables in Vinegar Sauce)**

INGREDIENTS

1 lb	fish
1⁄2 tsp	salt
1/2 cup	vegetable or coconut oil
1/2 lb	each green vegetables
	(eplant, pepper leaves,
	kadagan, cabbage, bell
	pepper, and green beans)
2	medium yellow ginger, grated
1	large onion, sliced
2 cloves	garlic, chopped
6 tbsp	vinegar
21/2 cups	water

INSTRUCTIONS

Clean fish, slit in several places and add salt to slotted area. Fry fish in oil. Cook the vegetables in boiling water separately until tender. In a serving dish, place a layer of vegetables then a layer of fish. Repeat until vegetables and fish are all used.

Put a small amount of oil in pan and heat.

When hot, add ginger, onions and garlic, and fry. Add vinegar and water; boil for about 5 minutes. Pour over vegetables and fish, and let stand about 5 to 10 minutes to let seasoning permeate the vegetables and fish. Serve hot or cold.

source: chamorrofood.net/free-recipe/seafood/eskabeche-fish-with-vegetables-invinegar-sauce-/17/index.html

LOCAL **KNOWLEDGE:**

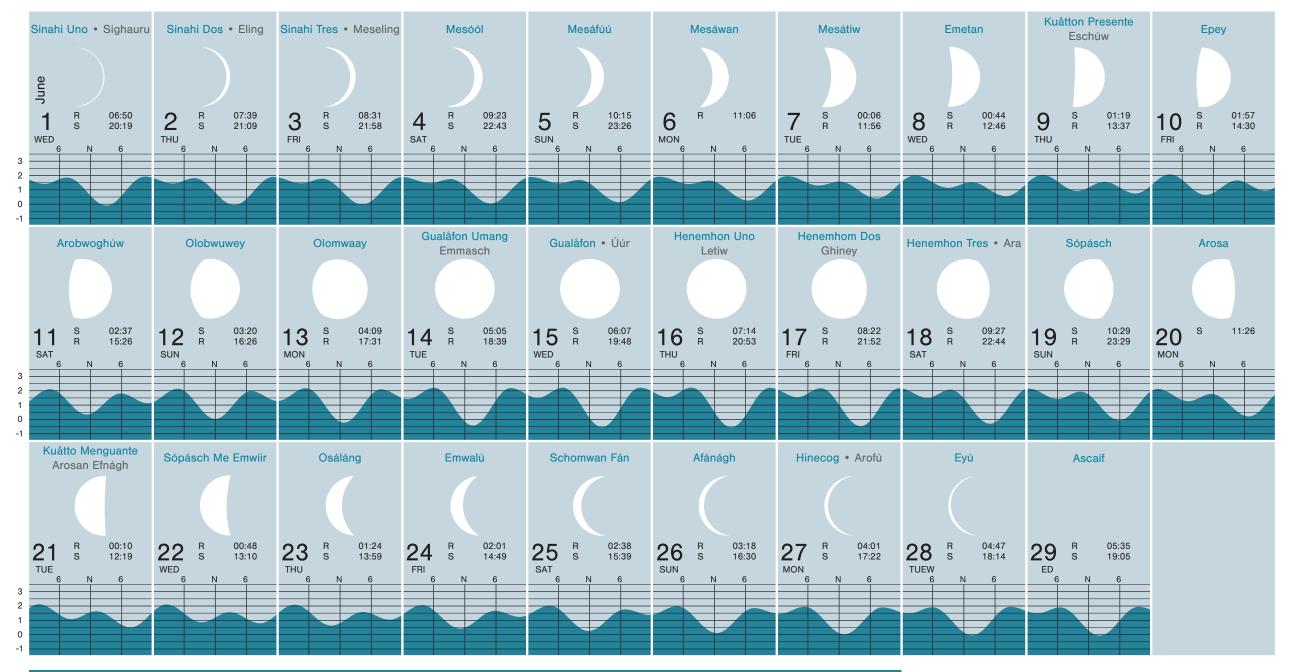
Mafute' is a local favorite due to its abundance and reasonable cost. It is prepared in a variety of ways, but the most popular are frying and Eskabeche.



Fish Photo (top right): Mike Fleming (w/grandson Eduardo Diaz) (bottom right): Frank Colnago, some rights reserved (CC BY-NC) / inaturalist.org

Makmamao & Ghúúw

2022 June 1 - June 29



MOON-RELATED OBSERVATIONS AND ACTIVITIES





LIFE HISTORY INFORMATION: Size - up to 16 in. • Sexually mature at 6.5-10 in. • Adults inhabit coral reefs, in both shallow lagoons and on outer reef slopes 10 to 870 ft deep. • Juveniles inhabit seagrass beds around patch reefs. • Diet - fishes, shrimps, crabs, stomatopods, cephalopods, planktonic crustaceans and algae.

FISHERY INFORMATION: Caught with deep-sea rod and reel.

CURRENT REGULATIONS: FEDERAL: A permit is required for any vessel commercially fishing for, landing, or transshipping bottomfish management unit species (BMUS) in the U.S. exclusive economic zone around the CNMI. Fishing is also managed under an annual catch limit for the BMUS complex. COMMONWEALTH: A permit and catch reporting are required for commercial fishing in the CNMI. Prohibited gears include explosives, poison, electric shocking devices, SCUBA spearfishing, hookah and certain types of nets.

COUNCIL MANAGEMENT: Currently monitored as part of the BMUS complex.

STOCK STATUS: Not overfished; not experiencing overfishing.

BBQ Fish

INGREDIENTS

12-3 lb fishsalt, to taste1large bell pepper½medium onion, sliced3lemons, squeezed3 tbspwater

INSTRUCTIONS

Clean fish and sprinkle with salt. Barbecue over charcoal (grill) or broil. If available, use banana leaves under fish. Place in a deep serving platter when done. Cover with foil to prevent unwanted visitors.

FOR SAUCE

Put bell pepper over charcoal (grill) or stove for a couple of minutes, or until wilted. Rinse, peel and dice. Mix onions, lemon juice, water, hot pepper and salt to taste in a bowl. Pour sauce over fish before serving.

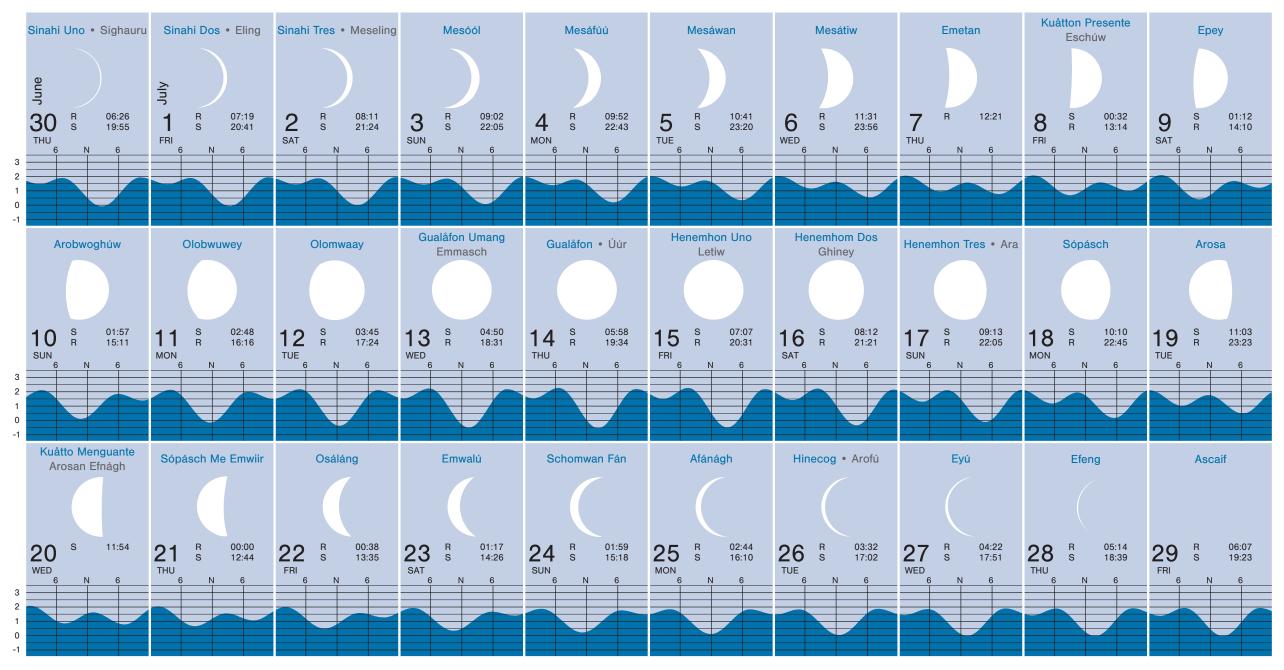
LOCAL KNOWLEDGE:

Saas is a versatile fish used in many dishes. It is commonly caught outside the CNMI lagoons by local bottomfishers.

Mananaf & Uul

MOON-RELATED OBSERVATIONS AND ACTIVITIES

2022 June 30 - July 29





Yellow Eye Opakapaka

Yellow Eye Opakapaka/Golden Eye Jobfish buninas falaghal-maróóbw · Pristipomoides flavipinnis

LIFE HISTORY INFORMATION: Size - up to 20 in. • Adults occur over rocky bottoms down to 295 to 1180 ft deep. • Diet - benthic fishes, crustaceans, squids and pelagic tunicates.

FISHERY INFORMATION: Caught with deep-sea rod and reel.

CURRENT REGULATIONS: FEDERAL: A permit is required for any vessel commercially fishing for, landing, or transshipping bottomfish management unit species (BMUS) in the U.S. exclusive economic zone around the CNMI. Fishing is also managed under an annual catch limit for the BMUS complex. COMMONWEALTH: A permit and catch reporting are required for commercial fishing in the CNMI. Prohibited gears include explosives, poison, electric shocking devices, SCUBA spearfishing, hookah and certain types of nets.

COUNCIL MANAGEMENT: Currently monitored as part of the BMUS complex.

STOCK STATUS: Not overfished; not experiencing overfishing.

Mondigas (Fish Cakes)

INGREDIENTS

2-5 lbs	boneless fish
1 cup	mayonnaise
2 tbsp	garlic, chopped
1 tbsp	Cajun seasoning
2 tbsp	lemon juice
1 tsp	salt
1 cup	panko bread crumbs, for mixture
4 stalks	green onions, sliced
2 tsp	Cajun (preference: Local Pepper) seasoning
1 tsp	garlic powder
2 cups	panko bread crumbs, for coating
vegetable	oil, for frying

INSTRUCTIONS

Drain the water from the fish then place into a mixing bowl. Add the remaining ingredients, reserving 2 cups of bread crumbs. Fold the ingredients together until combined.

Form the mixture into patties/balls. Then coat each one with the remaining 2 cups of bread crumbs.

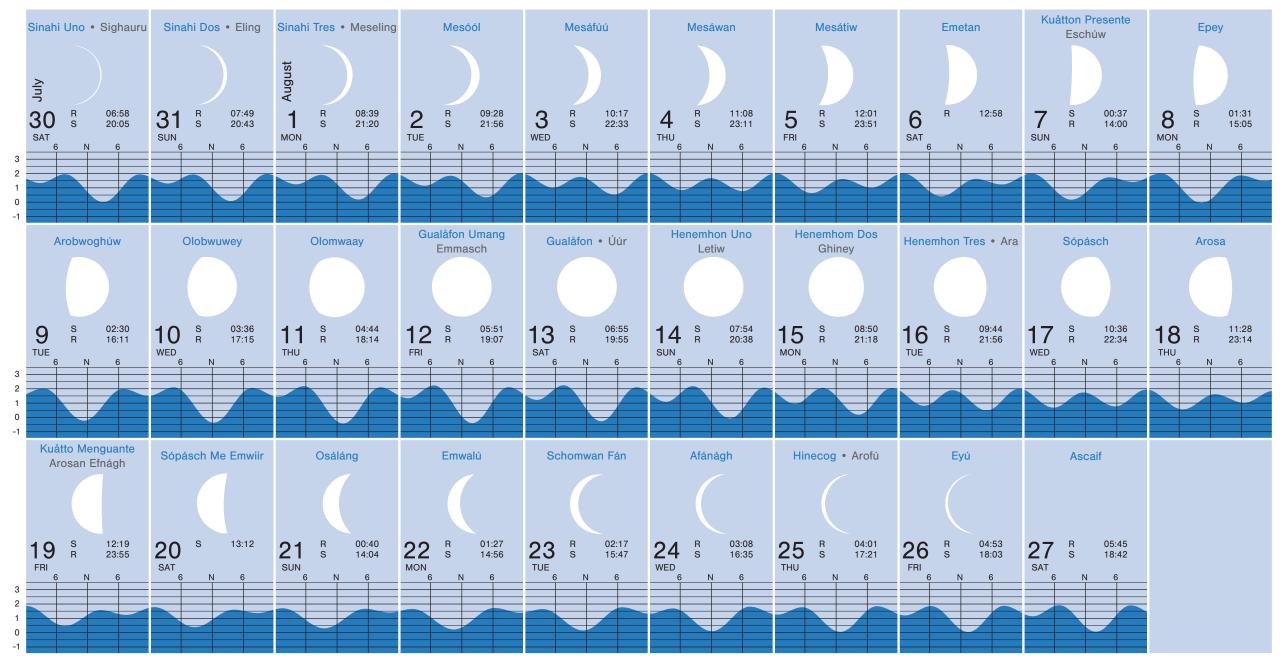
Heat a non-stick or cast-iron pan over medium high heat. Lightly coat the pan with vegetable oil (a couple of tablespoons will do). Pan fry the cakes for 3 to 4 minutes on each side. Add more oil to the pan if needed.

LOCAL KNOWLEDGE: Traditionally caught in deep water, Buninas is one of the most prized bottomfish at the market and is sold commercially to restaurants and hotels. It is commonly prepared for special events like weddings and large gatherings.



Semo & Ehiyél

2022 July 30 - August 27



MOON-RELATED OBSERVATIONS AND ACTIVITIES



Kalikali

Von Siebold's Snapper/Kalikali • buninas <> n/a Pristipomoides sieboldii

LIFE HISTORY INFORMATION: Sexually mature at ~9-11 in and ~2 yrs. • Average estimated maximum age is 8 yrs. • Inhabit tropical waters in the Indo-Pacific and Central Pacific Ocean. • Found on rocky reefs, from ~600 to 900 ft deep. • Diet - fishes, crustaceans, cephalopods and other benthic invertebrates.

FISHERY INFORMATION: Caught with deep-sea rod and reel.

CURRENT REGULATIONS: FEDERAL: A permit is required for any vessel commercially fishing for, landing, or transshipping bottomfish management unit species (BMUS) in the U.S. exclusive economic zone around the CNMI. Fishing is also managed under an annual catch limit for the BMUS complex. COMMONWEALTH: A permit and catch reporting are required for commercial fishing in the CNMI. Prohibited gears include explosives, poison, electric shocking devices, SCUBA spearfishing, hookah and certain types of nets.

COUNCIL MANAGEMENT: Currently monitored as part of the BMUS complex.

STOCK STATUS: Not overfished; not experiencing overfishing.

Paksiw A Filipino Dish

INGREDIENTS

- 1/2 cupvinegar1 cupwater2 tspsalt*1 tspwhole peppercorn2 piecesfish (~1/2 lb each), cleaned and scales removed1 knobginger, sliced and pounded6 clovesgarlic, skin removed1medium onion, sliced
- 1 small bitter gourd, chopped (optional)
- 3 pieces finger chili

INSTRUCTIONS

Pour vinegar and water into a pan. Add salt and whole peppercorn, then stir. Bring to a boil. Arrange the fish in the pan along with the ginger, garlic, onion, bitter gourd, and finger chili. Cover and simmer on low to medium heat for 12 to 15 minutes, or until fish is cooked through. Transfer to a serving plate. Serve hot with steamed rice. *Note: You may substitute salt with 3⁄4-1 tbsp fish sauce.



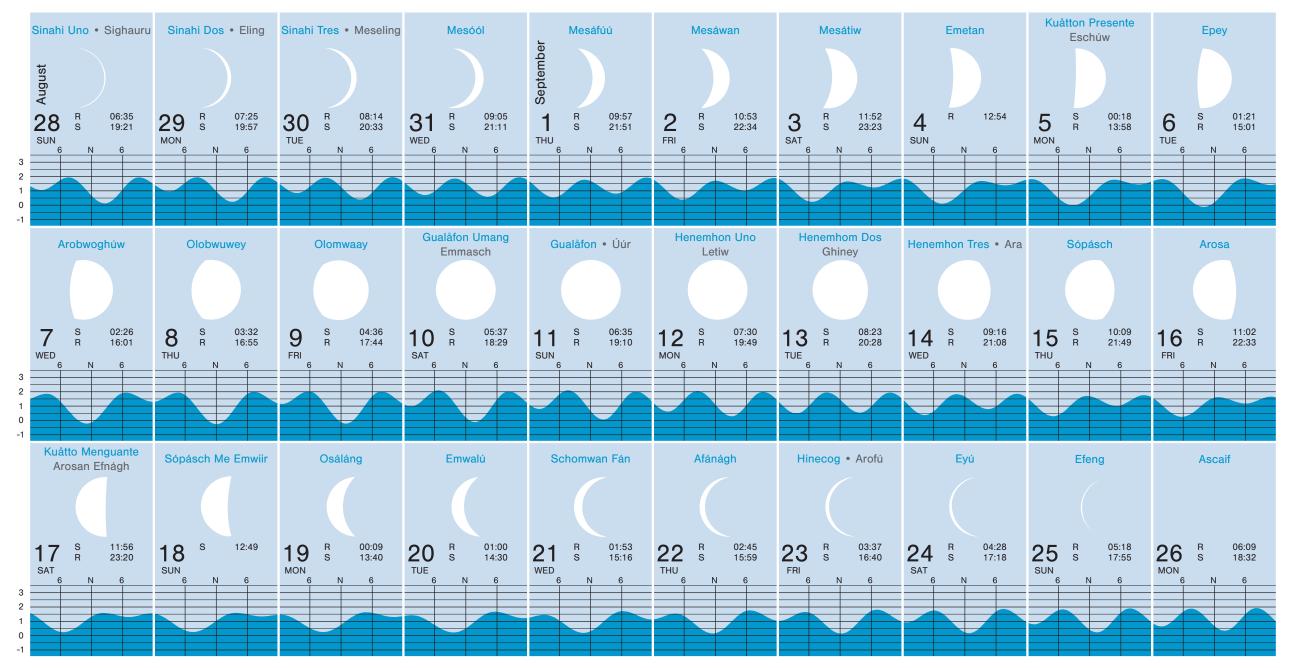
LOCAL KNOWLEDGE: Kalikali is a popular bottomfish and is typically prepared fried, baked in foil with mayo, or in soups.

Fish Photo (top right): Larry Chen, some rights reserved (CC BY-NC) / inaturalist.org (middle right): Jack Randall / Fishwise Professional (bottom right): Keoki Stender



2022 August 28 - September 26

Tenhos & Maal



MOON-RELATED OBSERVATIONS AND ACTIVITIES



Findai

Oblique-Banded Snapper/Gindai • buninas rayao amiriyu falaghal-maróóbw • Pristipomoides zonatus

LIFE HISTORY INFORMATION: Sexually mature at 11 in and ~1 yr. • Average estimated maximum age is 14 yrs. • Inhabit tropical waters in the Indo-Pacific and Central Pacific Ocean. • Found on rocky reefs on the continental shelf and upper slope, from 230 to 985 ft deep (most abundant between ~330 and 660 ft). • Diet - fishes, shrimps, crabs, cephalopods and other invertebrates.

CURRENT REGULATIONS: FEDERAL: A permit is required for any vessel commercially fishing for, landing, or transshipping bottomfish management unit species (BMUS) in the U.S. exclusive economic zone around the CNMI. Fishing is also managed under an annual catch limit for the BMUS complex. **COMMONWEALTH:** A permit and catch reporting are required for commercial fishing in the CNMI. Prohibited gears include explosives, poison, electric shocking devices, SCUBA spearfishing, hookah and certain types of nets.

COUNCIL MANAGEMENT: Currently monitored as part of the BMUS complex.

STOCK STATUS: Not overfished; not experiencing overfishing.

Steamed Soy and Ginger Gindai

INGREDIENTS

12 to 3-lb gindai, cleaned and deboned2 tbspwater2 tbspKikkoman soy sauce1 tbspoyster sauceginger, amount to taste1 tbspsesame oilgreen onions, thinly sliced2 sprigscilantro, finely chopped

INSTRUCTIONS

- Place fish onto a heatproof ceramic plate.
- For the sauce: Mix water, soy sauce and oyster sauce in a small bowl.
- Add sauce around fish. Scatter ginger over the top.
- Place fish into a steamer set over gently boiling water and cover. Steam for 10 minutes.
- Sprinkle fillet with green onions.
- Finishing: Heat sesame oil over medium-high heat until it begins to smoke. Carefully pour over dish. Sprinkle with cilantro.

Courtesy Hyatt Regency Saipan

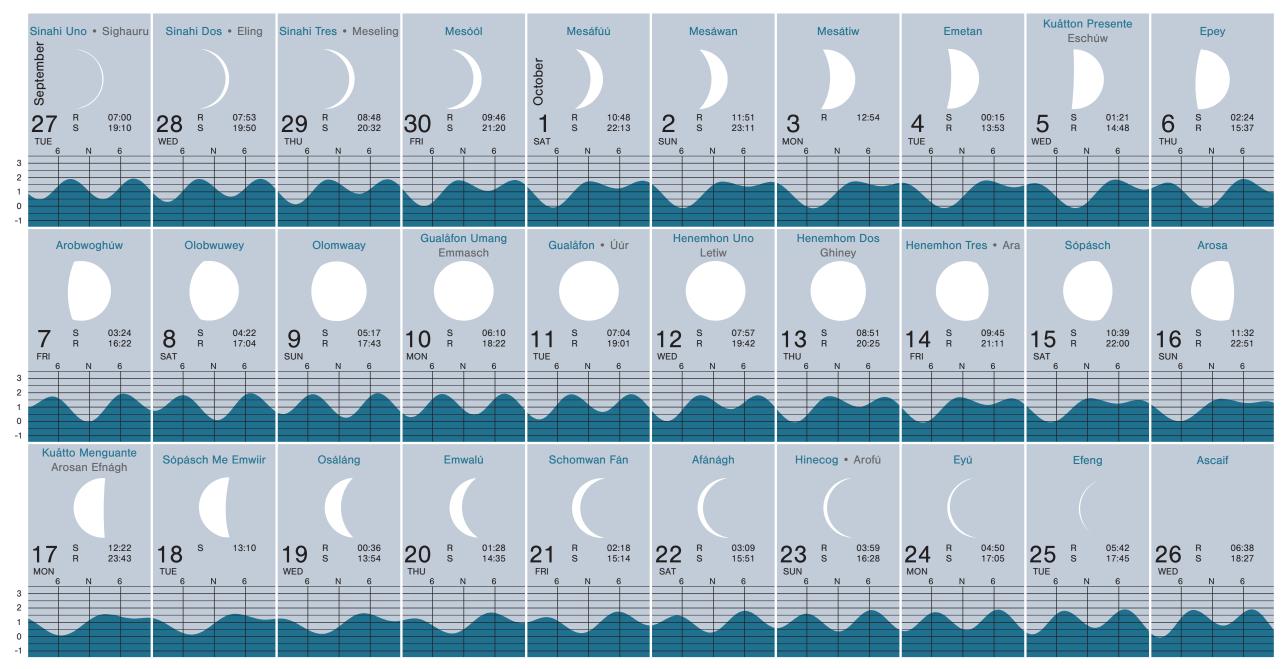
FISHERY INFORMATION:

Caught with deep-sea rod and reel.

LOCAL KNOWLEDGE: Traditionally caught in deep water, Gindai is one of the most prized bottomfish at the market and is sold commercially to restaurants and hotels. It is commonly prepared by frying or baked in foil with mayo, or with onions, salt and black pepper.

Lumamlam & Itch

2022 September 27 - October 26



MOON-RELATED OBSERVATIONS AND ACTIVITIES



Yellowtail Kalikali

LIFE HISTORY INFORMATION: Size - up to 20 in. • Sexually mature at ~2 yrs and 9.5 in. • Estimated maximum age is 8 yrs. • Inhabit tropical waters in the Indo-Pacific and Central Pacific. • Found on rocky reefs, from 260 to 1180 ft deep. • Diet - fishes, salps.

FISHERY INFORMATION: Caught with deep-sea rod and reel.

CURRENT REGULATIONS: FEDERAL: A permit is required for any vessel commercially fishing for, landing, or transshipping bottomfish management unit species (BMUS) in the U.S. exclusive economic zone around the CNMI. Fishing is also managed under an annual catch limit for the BMUS complex. **COMMONWEALTH:** A permit and catch reporting are required for commercial fishing in the CNMI. Prohibited gears include explosives, poison, electric shocking devices, SCUBA spearfishing, hookah and certain types of nets.

COUNCIL MANAGEMENT: Currently monitored as part of the BMUS complex.

STOCK STATUS: Not overfished; not experiencing overfishing.

Fish in Coconut Milk

A Filipino Dish

MAKES 2-4 SERVINGS

INGREDIENTS

2-3 lbs	fish, cleaned and cut into bite-sized pieces
1	medium onion, sliced
2 cloves	garlic
sea salt, to	
½ cup	lemon juice
2-3	hot peppers, chopped (optional)
1 cup	coconut milk (best to use fresh coconut milk)

INSTRUCTIONS

Combine fish, onion, garlic, salt, lemon juice and peppers (if using). Steam until tender.

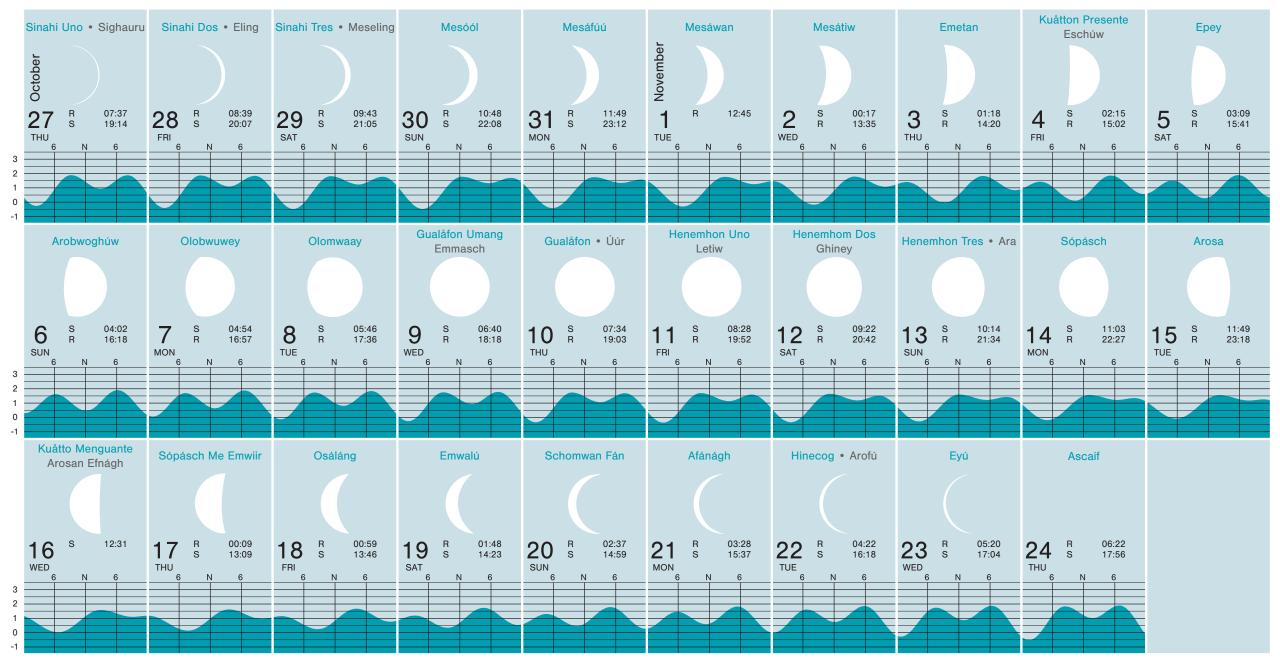
Add coconut milk and simmer for 2-3 minutes.

LOCAL KNOWLEDGE:

Traditionally caught in deep water, Kalikali is one of the most prized bottomfish at the market and is sold commercially to restaurants and hotels. Is is commonly prepared by frying, baked in foil, barbequed or made into a soup.

Fanggualo' & Sarobwél

2022 October 27 - November 24



MOON-RELATED OBSERVATIONS AND ACTIVITIES



Pink Opakapaka

LIFE HISTORY INFORMATION: Size - up to 39 in. • Sexually mature at 3 yrs and 18 in. • Ave lifespan - 13 yrs. • Oldest known was at least 40 yrs old. • Inhabit tropical waters in the Indo-Pacific and Central Pacific. • Found on rocky reefs on the continental shelf and upper slope, from 130 to 1180 ft deep (most abundant between ~330 and 660 ft). • Diet - fishes, shrimps, crabs, ascidians and salps.

FISHERY INFORMATION: Caught with deep-sea rod and reel.

CURRENT REGULATIONS: FEDERAL: A permit is required for any vessel commercially fishing for, landing, or transshipping bottomfish management unit species (BMUS) in the U.S. exclusive economic zone around the CNMI. Fishing is also managed under an annual catch limit for the BMUS complex. **COMMONWEALTH:** A permit and catch reporting are required for commercial fishing in the CNMI. Prohibited gears include explosives, poison, electric shocking devices, SCUBA spearfishing, hookah and certain types of nets.

COUNCIL MANAGEMENT: Currently monitored as part of the BMUS complex.

STOCK STATUS: Not overfished; not experiencing overfishing.

Bottomfish in Oyster Sauce

INGREDIENTS

3 to 5-lb fish 1 vegetable oil 1 onion, chopped 1/4 cup green onions, finely chopped 2 cloves garlic, chopped 1 tbsp ginger, minced kimchee base $\frac{1}{2}$ cup 1/2 CUD water sea salt, to taste 1/4 cup lowfat milk 2 tbsp oyster sauce

INSTRUCTIONS

Fry fish in oil for about 2 minutes. Place fish in deep baking pan, cover with foil and bake at 350°F for 20-30 minutes.

Add remaining ingredients, cover and bake for additional 10 minutes.

Note: Remove excess water, if needed. If too salty, add water or lowfat milk.

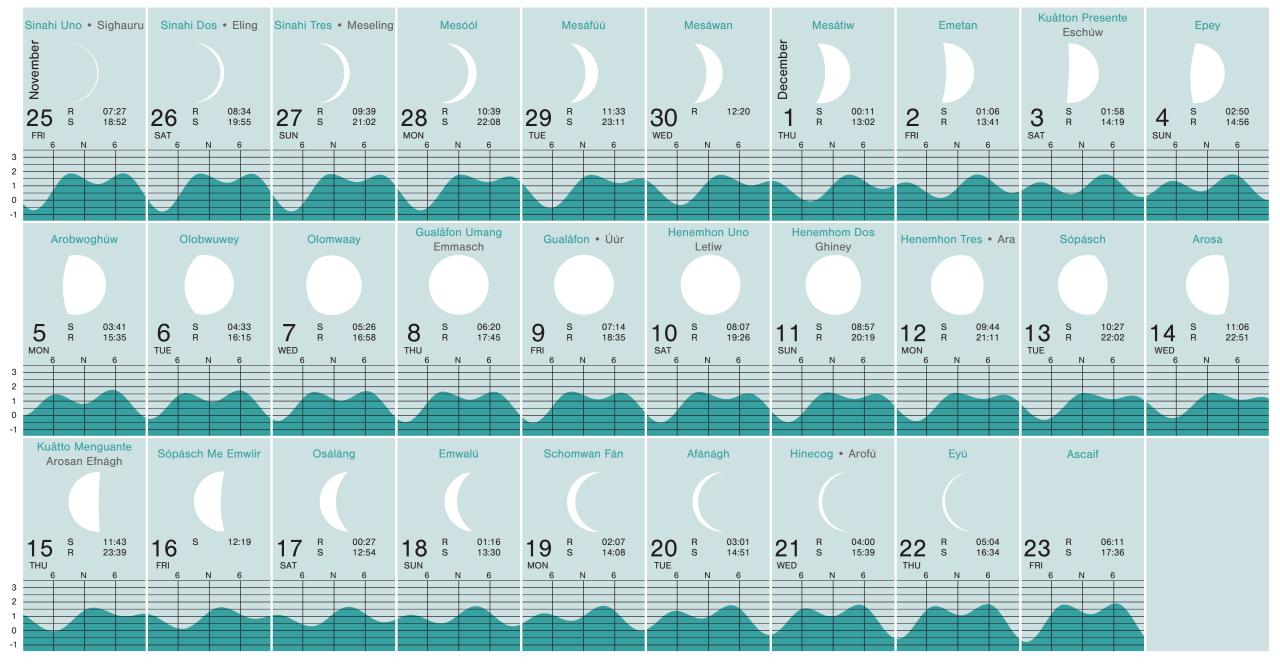
Courtesy Lino Tenorio

LOCAL KNOWLEDGE:

Caught commercially, Pink Opakapaka is commonly prepared by frying or baked in foil with mayo, or with onions, salt and black pepper.

Sumongsong & Oromoi

2022 November 25 - December 23



MOON-RELATED OBSERVATIONS AND ACTIVITIES



Lyretail Grouper

Lyretail Grouper · gádau mattingan · bwele · Variola louti

LIFE HISTORY INFORMATION: Size - up to 32 in. • Inhabit tropical waters in the Indo-Pacific. • Found on coral reefs, from 10 to 790 ft deep.

FISHERY INFORMATION: Caught with deep-sea rod and reel.

CURRENT REGULATIONS: FEDERAL: A permit is required for any vessel commercially fishing for, landing, or transshipping bottomfish management unit species (BMUS) in the U.S. exclusive economic zone around the CNMI. Fishing is also managed under an annual catch limit for the BMUS complex. **COMMONWEALTH:** A permit and catch reporting are required for commercial fishing in the CNMI. Prohibited gears include explosives, poison, electric shocking devices, SCUBA spearfishing, hookah and certain types of nets.

COUNCIL MANAGEMENT: Currently monitored as part of the BMUS complex.

STOCK STATUS: Not overfished; not experiencing overfishing.

Kadon Guihan (Fish Stew)

INGREDIENTS

1

- 2 to 3-lb fish, cleaned and cut into small pieces
- medium onion, chopped
- 2-3 baby tomatoes, chopped
- 2 cloves garlic, minced
- 1 tbsp fresh ginger, minced
- sea salt, to taste
- 1/2 cup lemon juice

INSTRUCTIONS

- Combine fish, onion, tomatoes, garlic, ginger, salt and lemon juice in a large saucepan. Cook fish until tender.
- Add ½ gallon of water and simmer for 10 15 minutes.
- If you wish to add pepper leaves, wash and chop them well, adding them to the stew after simmering. Remove from heat, cover, let stand a couple of minutes and serve.

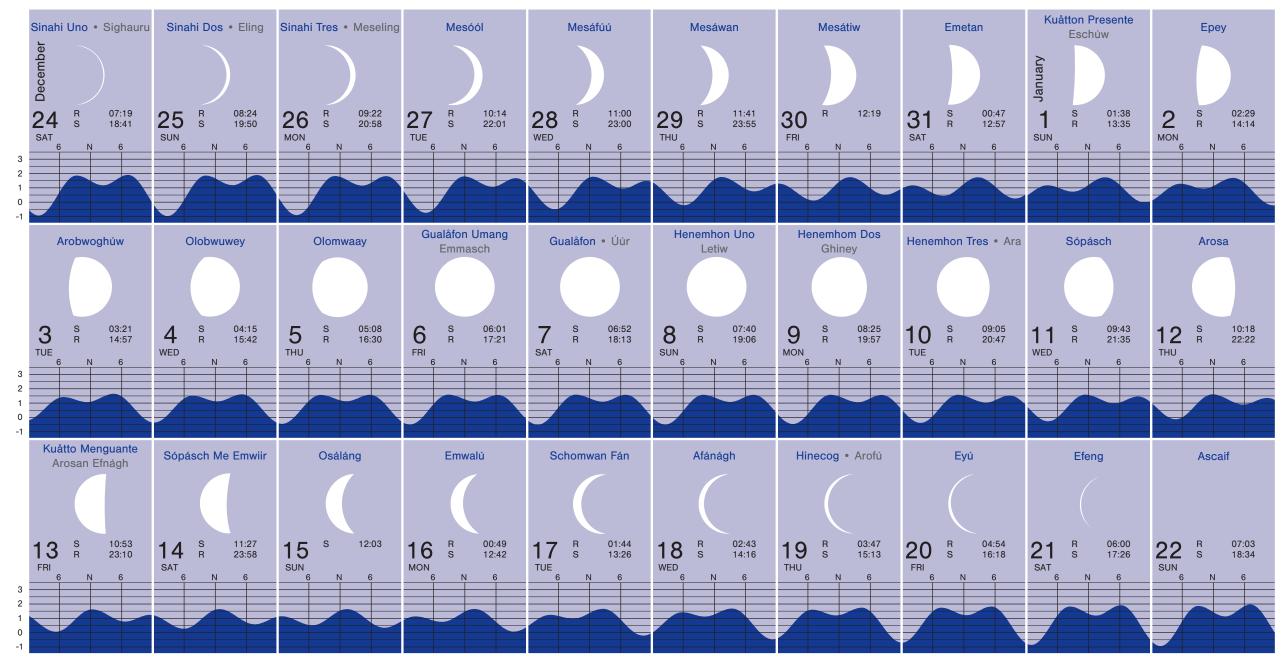
LOCAL KNOWLEDGE:

Fishers usually stay away from the larger groupers (usually more than 6 lbs) because some were found to be toxic (ciguatera poisoning). However, smallersized fish are usually kept and mainly prepared in soups using coconut.



Fish Photo (middle): Floyd Masga (right): andreybragin, some rights reserved (CC-BY-NC) / inaturalist.org

Umayangan & Schoow December 24, 2022 - January 22, 2023



MOON-RELATED OBSERVATIONS AND ACTIVITIES



About This Calendar

The **Western Pacific Regional Fishery Management Council** has produced traditional lunar calendars for the Commonwealth of the Northern Mariana Islands (CNMI) since 2007. The intent is to raise awareness about traditional ecological knowledge and enhance community involvement in fishery management.

The CNMI is a 300-mile archipelago consisting of 14 main islands, with a total land area of 183.5 square miles. The principal inhabited islands are Saipan, Rota and Tinian, with the uninhabited Island of Aguiguan (Goat Island) located southeast of Tinian. The northern, largely uninhabited islands are Farallon de Medinilla, Anatahan, Sarigan, Guguan, Alamagan, Pagan, Agrihan, Asuncion, Maug Islands and Farallon de Pajaros (Uracas).

Chamorro and Refaluwasch are the indigenous people of the Mariana Archipelago. Chamorro and Refaluwasch, along with English, are the official languages of the CNMI. The Chamorro names for the fish, lunar months and moon phases are in green or blue, and the Refaluwasch names are in gray.

This 2022 Eskaleran Pulan Chamorro/2022 Refaluwasch Pápáál Maram features 13 bottomfish species managed under the Council's Fishery Ecosystem Plan. Each month gives common, Chamorro, Refaluwasch and scientific names for each species, along with life history and fishery information, current regulations, management and stock status, and a delicious recipe to enjoy.

The moon phases in this calendar are for Saipan as calculated by the HM Nautical Almanac (astro.ukho.gov.uk/ websurf). The tide charts with moon rise and set times are in Chamorro time for Saipan and were provided by OceanFun Publishing, NZ.

A special un dangkulu na Si Yu'us Ma'ase and ghilisou tumo'o'gh to calendar contributors including Council family members George Moses, Lino Tenorio; Council staff Joshua DeMello, Floyd Masga, Felix Reyes, Amy Vandehey; Jimmy and Jan Cabanes, Pacific Source Fish Mart; William and Beatrice Fejeran, WJC Fish Mart; Hyatt Regency Saipan; Raquel Manalo, Daystar Fish Market; Maryann and Maria Jaime Navarro, SMJ Fish Market; PIFG BFISH Project; and Clarita Salinas, DJ Fish Mobile. All photos by Floyd Masga, unless otherwise noted.

DATA SOURCES USED: aquariumdomain.com, australian.museum, bioone.org, chamorrofood.net, en.wikipedia.org, fishbase.fr, fishbase.se, fishider.org, fishwisepro.com, flickr.com, inaturalist.org, scholarspace.manoa.hawaii.edu, thainationalparks.com, wpcouncil.org/annual-reports.

FRONT COVER: From the boat to the table.

For an electronic version of this calendar, go to wpcouncil.org/educational-resources/lunar-calendars.

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 CNMI, American Samoa, Hawai'i and the U.S. Pacific Remote Island Areas. The fisheries in federal waters surrounding the CNMI 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.



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