



CNMI Tide Calendar

Featuring Marine Debris: From Trash to Art



Image by: Nicole Schafer

Kodap Uludang (advisor), Frank Je Rabaulman, Joslynn "Peachy" Raza, Laureese Mattoo, Jezza Guerrero, Evert Van Der Moas, Harrison Smith



Image by: Nicole Schafer

ENRO Club Kid Names



NMC Photo

Image by: Nicole Schafer

NMC Name of kids



Image by: Polly Omechelang

4-H Polly Omechelang (advisor)

Special Thanks
to the students that
came together and
created amazing CNMI
wildlife from marine
debris and recyclables.



V. Mendiola 6th grade class & E. Mendiola 3rd grade class

Special thanks to Mr. Barry D. Smith for producing the tide charts featured in this calendar.

All daily tide predictions in this calendar are copyrighted by Mr. Barry D. Smith.

Special thanks to CRM staff and to those that donated their pictures.



To see more pictures of their art work
friend Primo on facebook
www.facebook.com/primo.crm

Putting A Stop To Marine Debris!

What is marine debris?

Marine debris is any man-made object that is disposed of or abandoned in a marine or coastal environment.

Supplies for a clean up!

Trash bags

Gloves

Sunscreen

Water

Volunteers



How you can help!

Get involved, help clean up!

Dispose of trash properly!

Reuse items!

Recycle!

Adopt a beach!

Remember that trash on land can end up in the water.



Location: Pau Pau Beach, Saipan
Artist: ENRO Club, NMC

January

Sunday

Monday

Tuesday

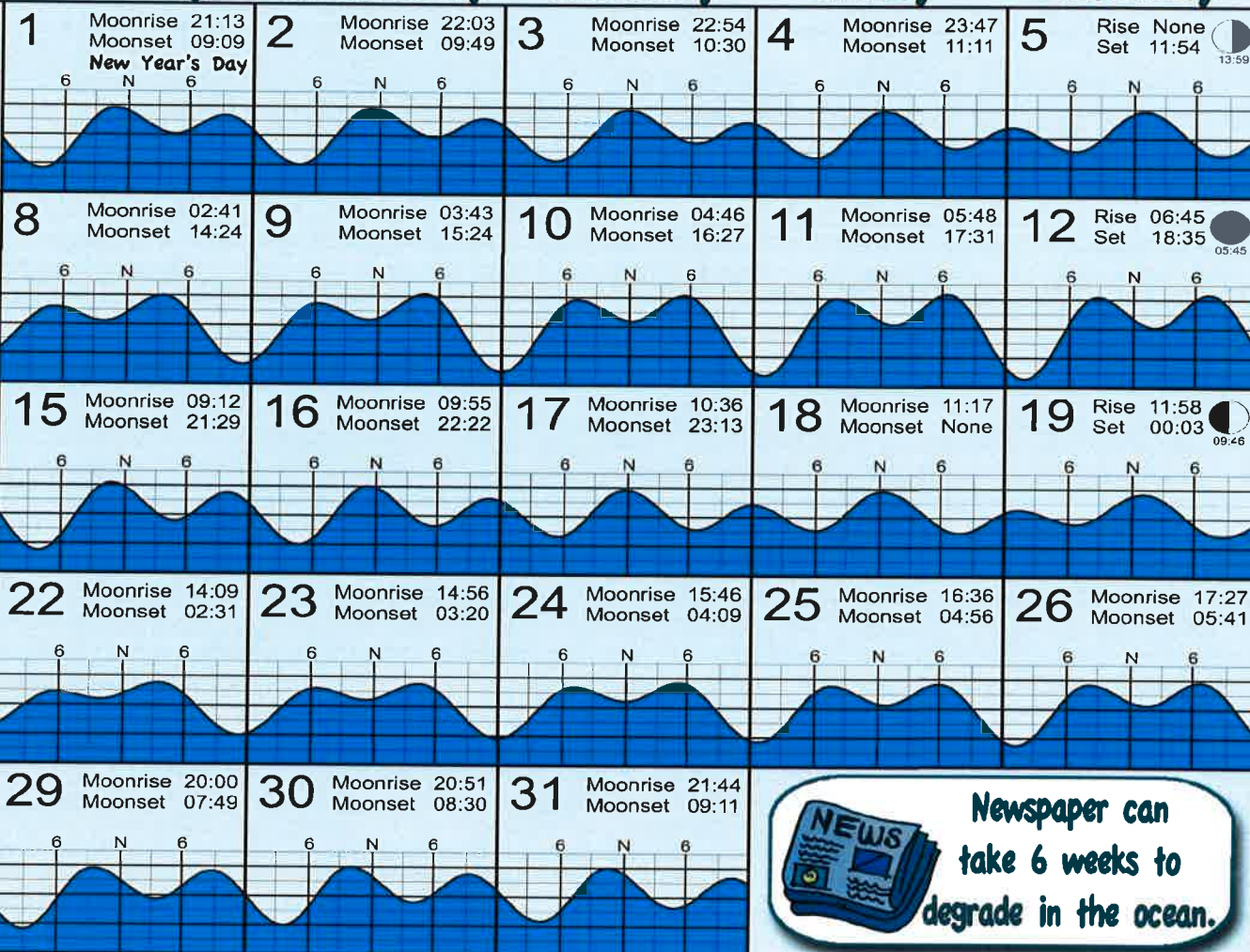
Wednesday

Thursday

Friday

Saturday

- New Moon
- ◐ First Quarter
- Full Moon
- ◑ Last Quarter



NEWS Newspaper can take 6 weeks to degrade in the ocean.

The Yellow-Crowned Butterfly Fish
is found only in the CNMI.

Some debris is Ocean-Based.
It comes from boats or
platforms in the ocean.



Location: Kilili Beach, Saipan
Artist:

February

Sunday

Monday

Tuesday

Wednesday

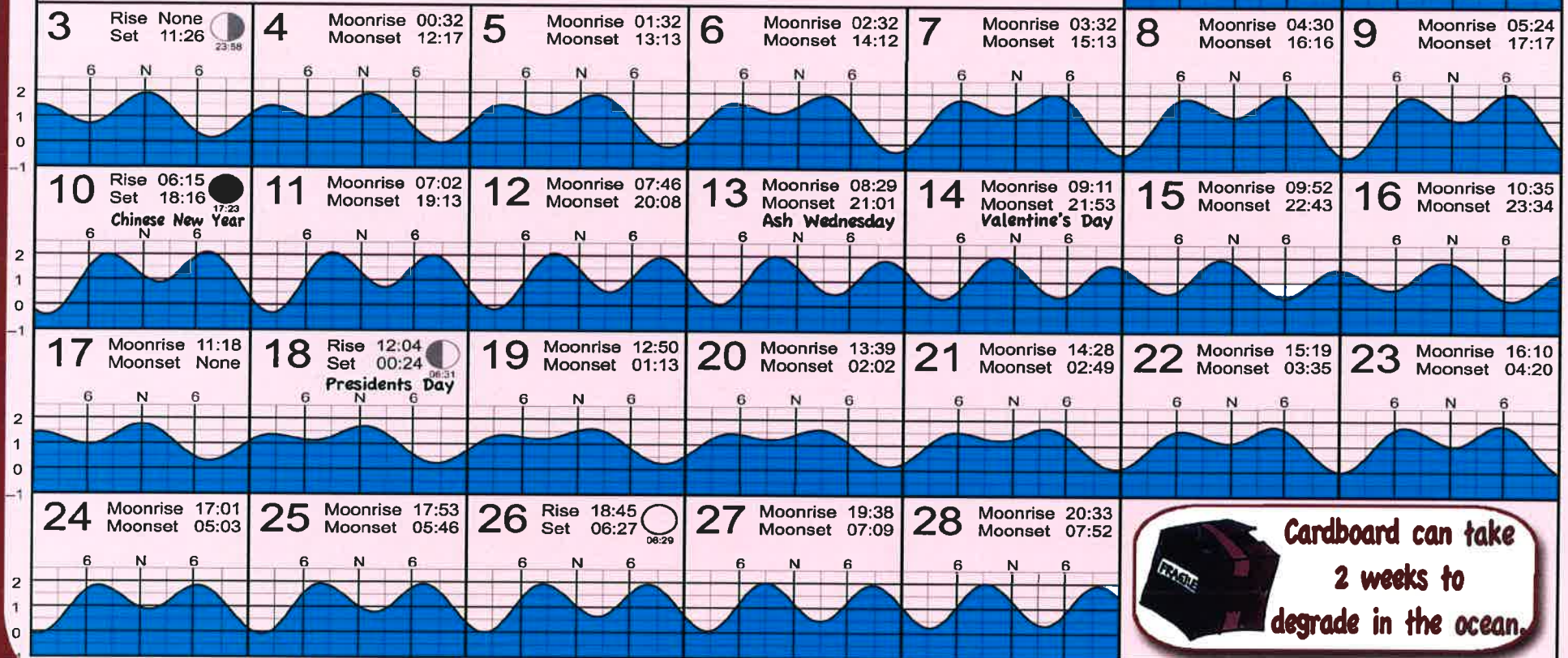
Thursday

Friday

Saturday

F
E
E
T

- New Moon
- ◐ First Quarter
- Full Moon
- ◑ Last Quarter



Cardboard can take
2 weeks to
degrade in the ocean.

When the ghost crab runs it uses only
its 1st and 2nd pair of walking legs.

Some debris is Land-Based.
It comes from roadways, storm drains,
or water sources that deposit into the ocean.



Location: Apansanmeena Beach, Pagan
Image by: Steven McKagan

March

Sunday

Monday

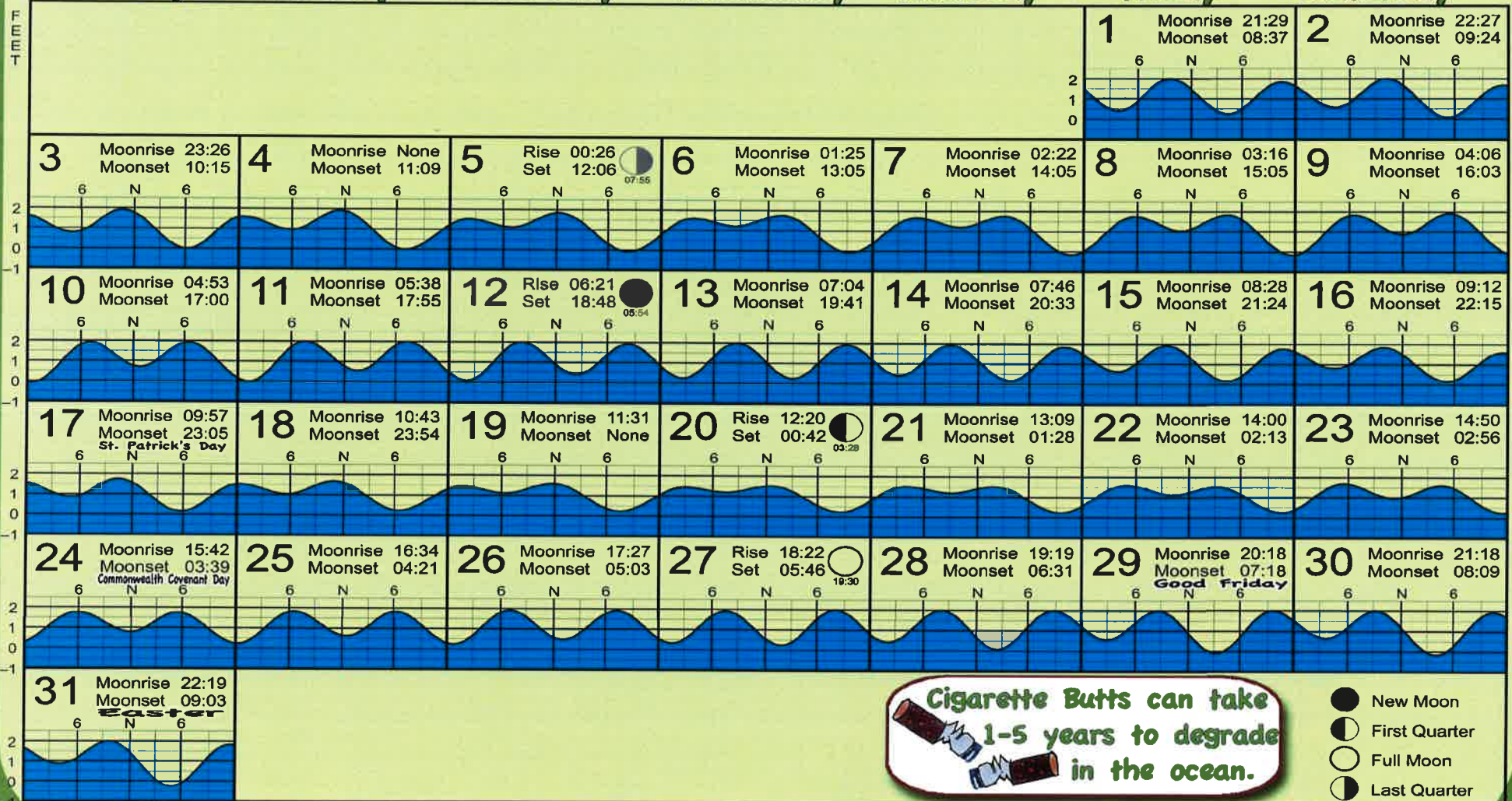
Tuesday

Wednesday

Thursday

Friday

Saturday



Cigarette Butts can take
1-5 years to degrade
in the ocean.

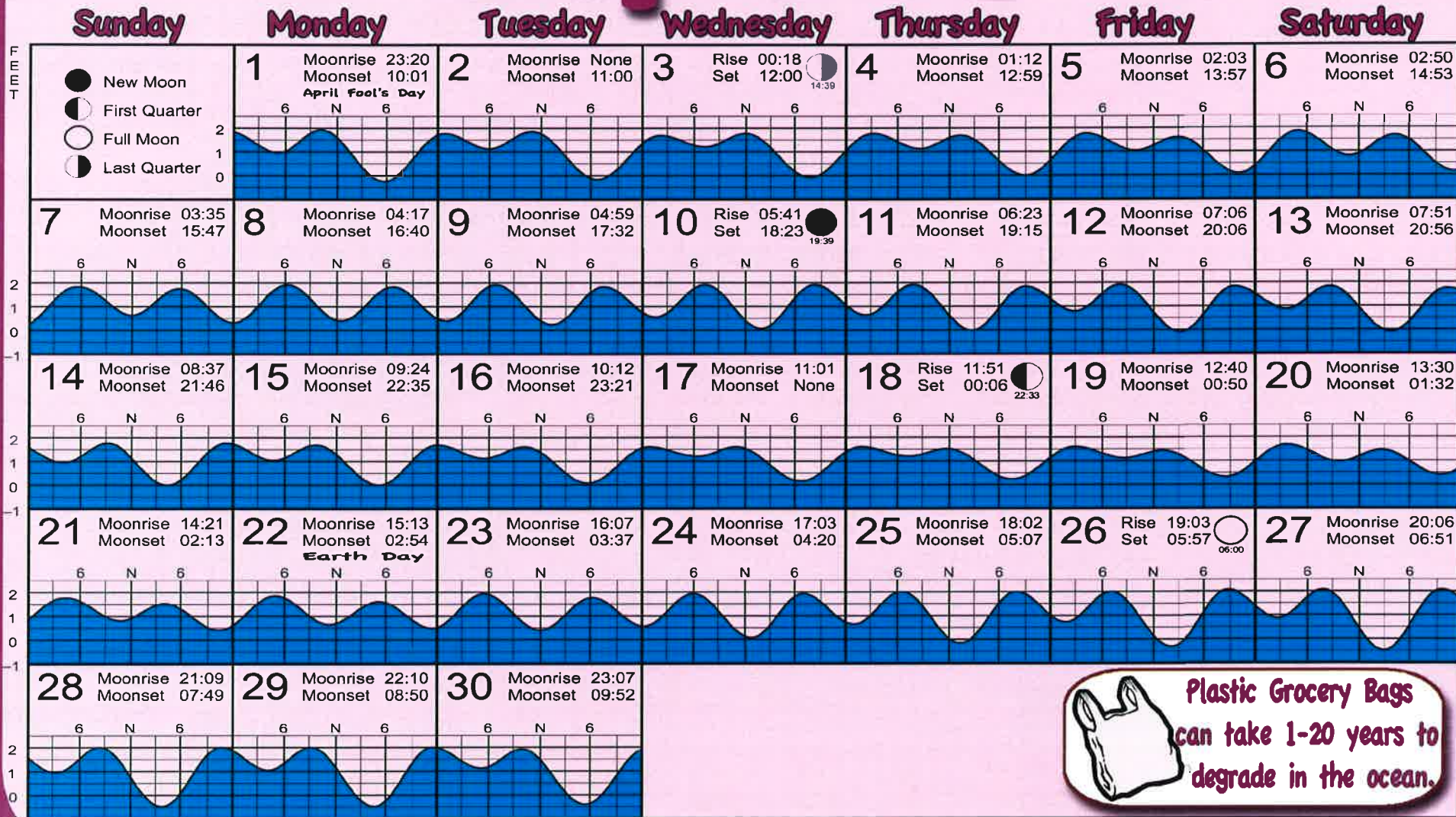
Pagan is the 4th largest island in the CNMI consisting of 2 stratovolcanoes.

Marine debris can be an eyesore on beaches and ruin the aesthetics.



Location: Laulau Bay, Saipan
Artist: 4-H Summer Camp

April



The male green turtle is larger
with a longer tail than the female.

Marine debris can be ingested
by wildlife. Bags can look like
jellyfish to turtles and sunfish.



Location: Sugar Dock, Saipan
Artist: Northern Marianas Academy

May

Sunday

Monday

Tuesday

Wednesday

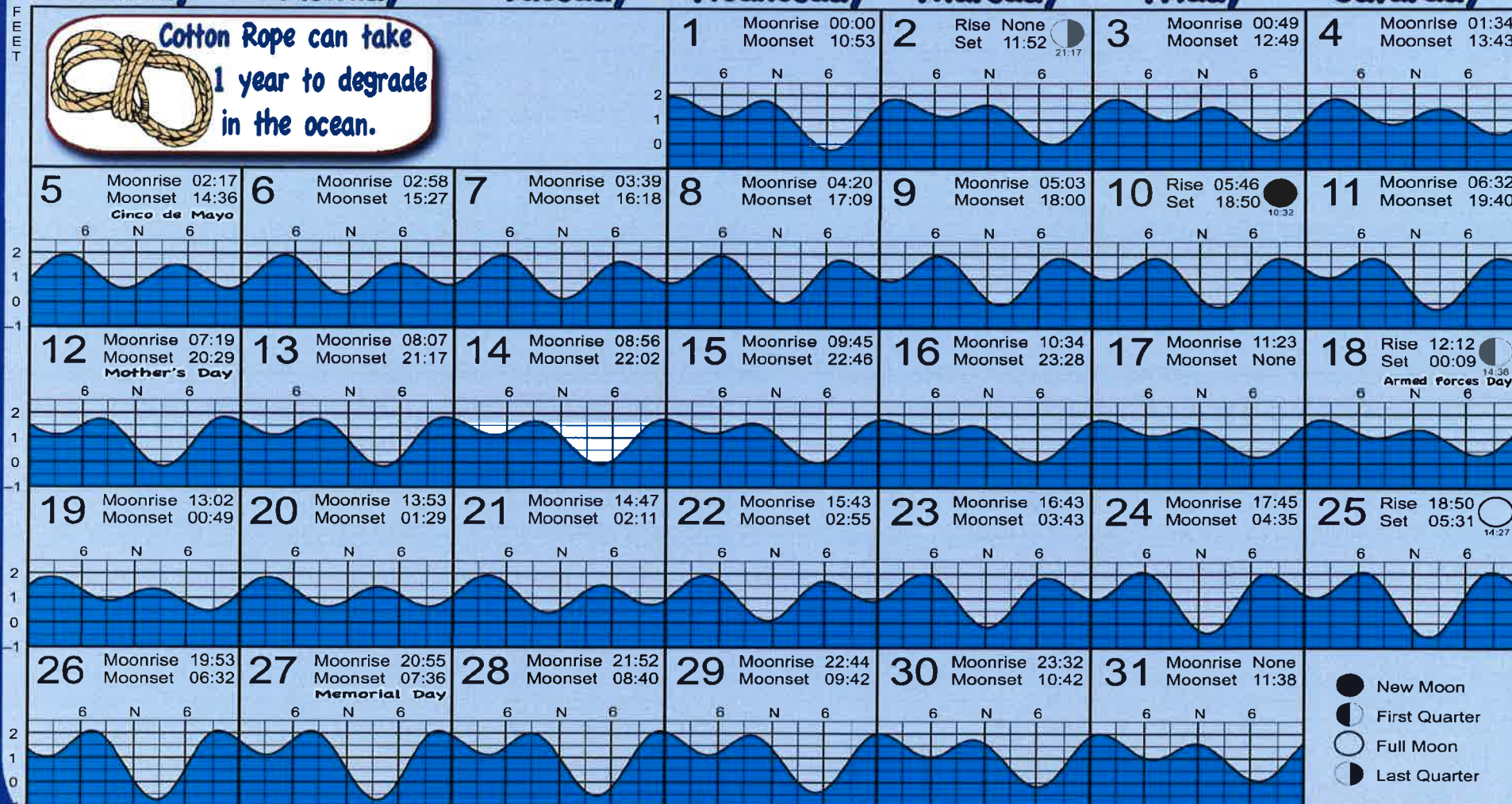
Thursday

Friday

Saturday



Cotton Rope can take
1 year to degrade
in the ocean.



Stingrays cannot see their prey underneath
them so they use electroreceptors to find it.

Marine debris can cause vessel
damage, like a rope getting
stuck in a boat propeller.



Location: Chiget Beach, Tinian
Image by: Rachel Volsteadt

June

Sunday

Monday

Tuesday

Wednesday

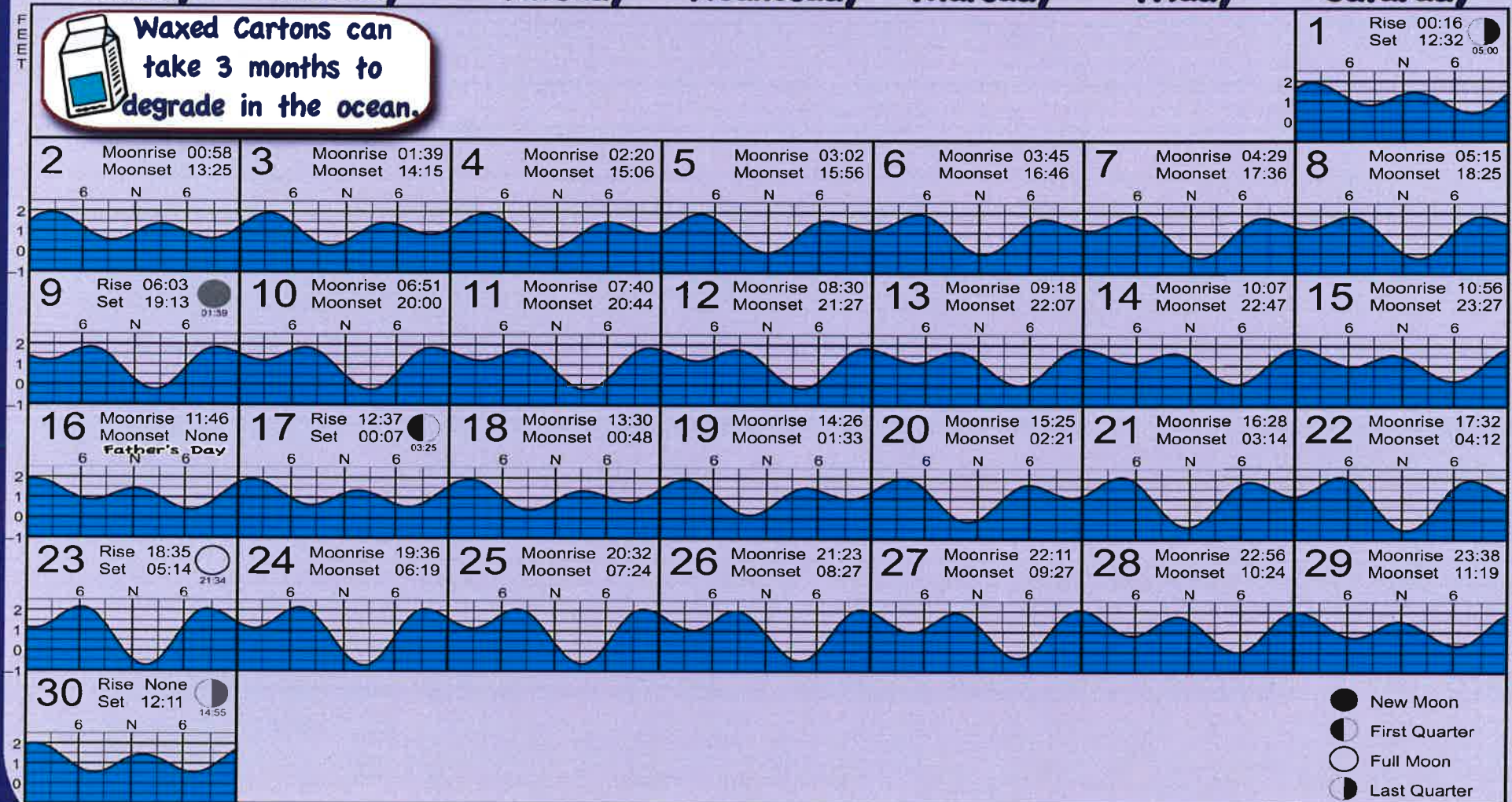
Thursday

Friday

Saturday



Waxed Cartons can
take 3 months to
degrade in the ocean.



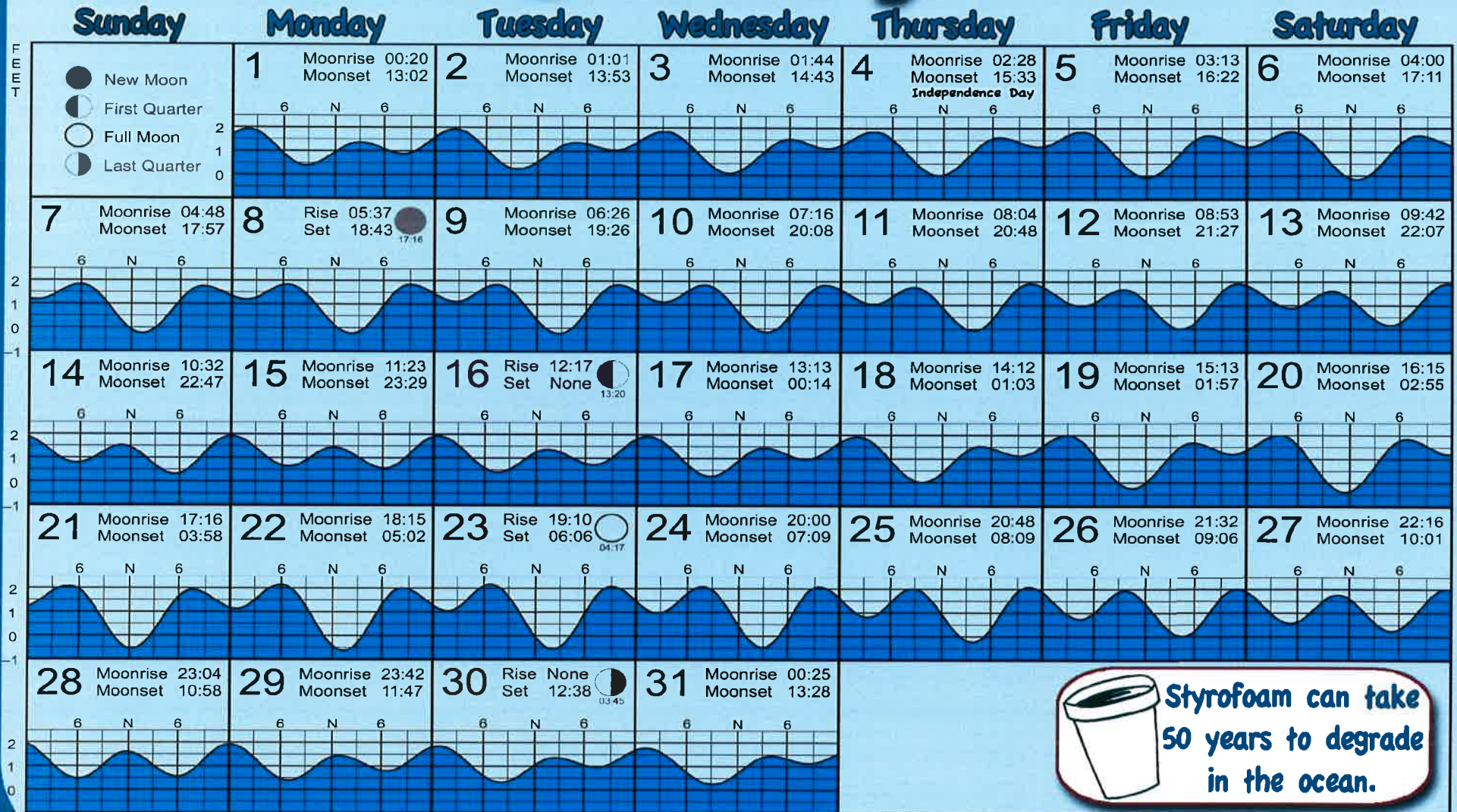
Tinian has one of the largest Latte
stone structures in the Marianas.

Marine debris can
impact human health
and safety.



Location: Garapan Shoreline, Saipan
Artist:

July



Garden eels live in burrows where most of their body remains hidden.

Marine debris can cause habitat damage.



Location: Coral Ocean Point Beach, Saipan
Artist: Koblerville Elementary School

August

Sunday

Monday

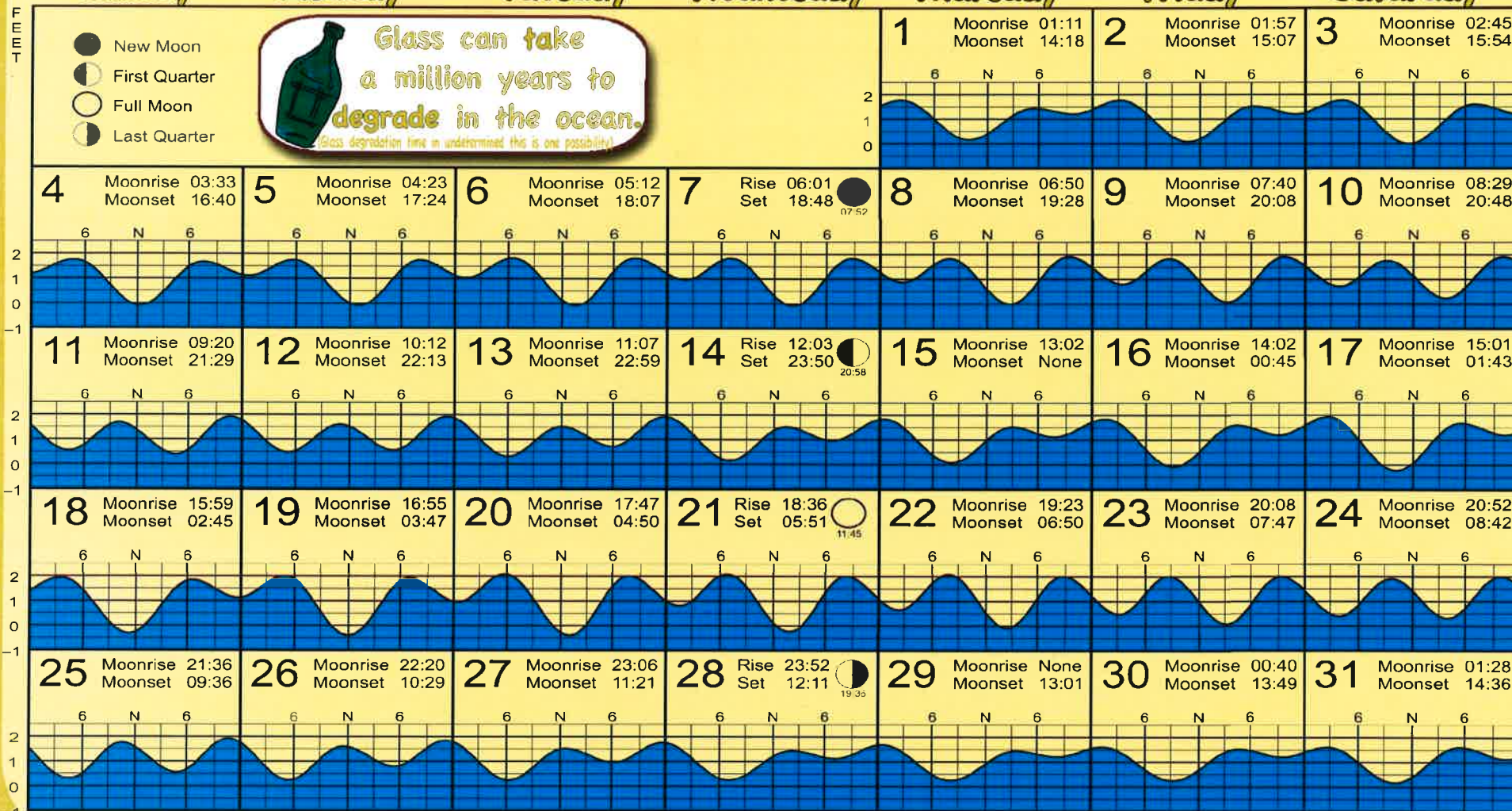
Tuesday

Wednesday

Thursday

Friday

Saturday



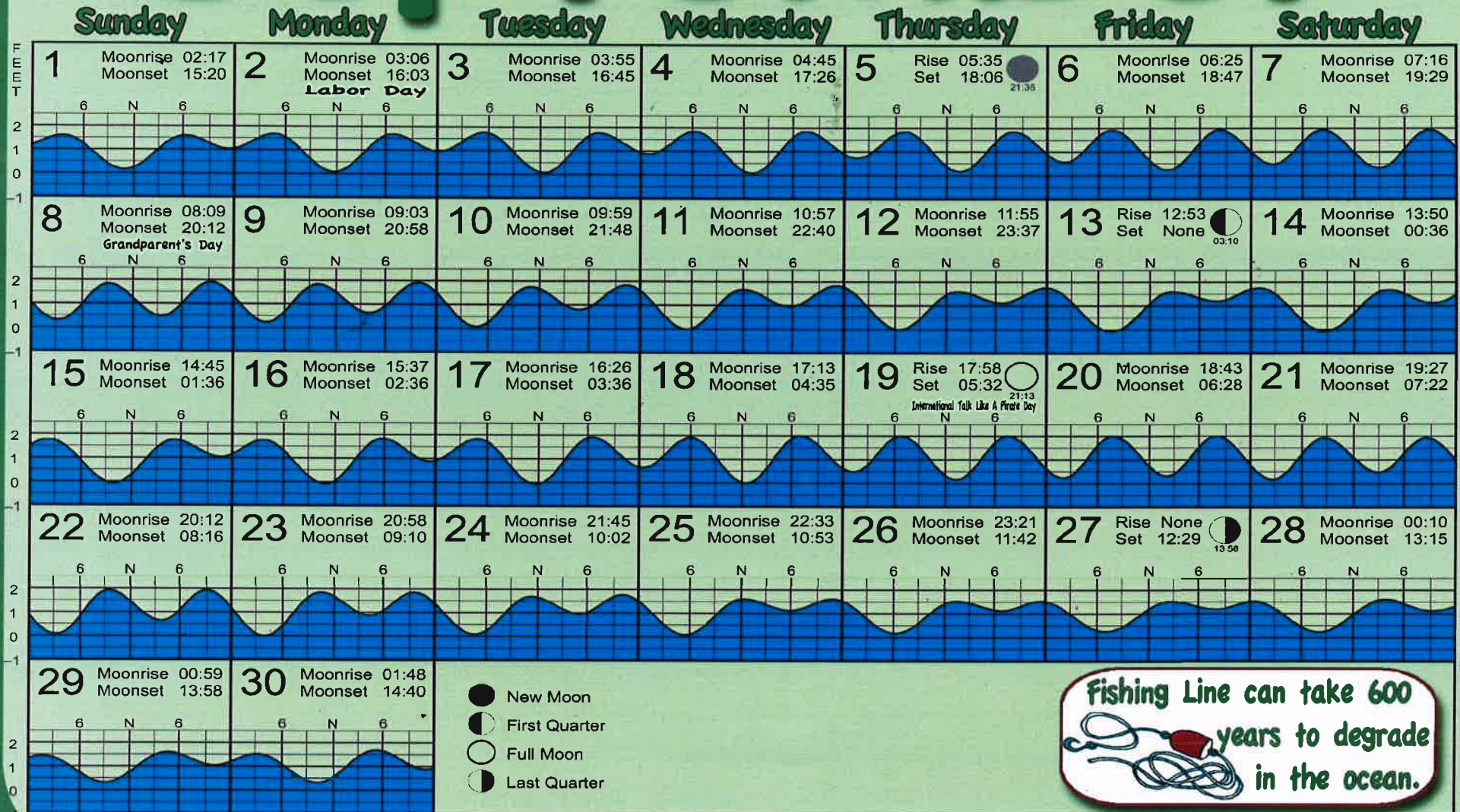
The Pacific Steephead Parrotfish uses its hard beak to eat corals, making them corallivores.

Marine debris can transport alien species of plants and animals.



Location: Laulau Bay, Saipan
Image by: Avra Heller

September



Saipan is the largest of CNMI's 15 islands,
it was first inhabited around 2000 BC.

Marine debris such as fishing line
can still catch animals, this is
called ghost fishing.



Location: Smiling Cove, Saipan
Artist:

October

Sunday

Monday

Tuesday

Wednesday

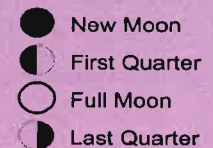
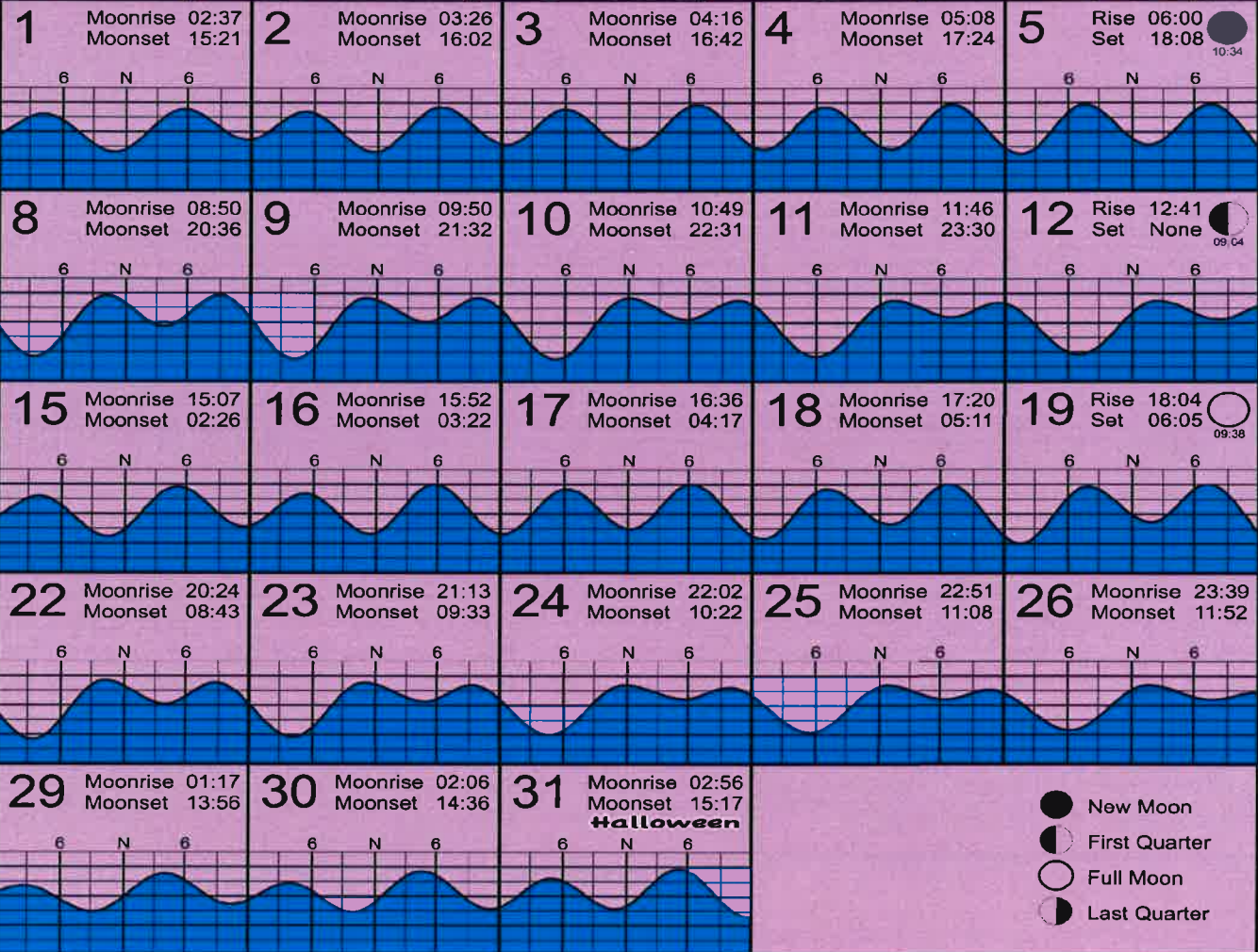
Thursday

Friday

Saturday



Disposable Diapers can
take 400 years to
degrade in the ocean.



Before sleeping some parrotfish make a
mucus cocoon from their mouth.

Marine debris can cause
economic impacts. Beaches covered
in debris are not favored by tourists.

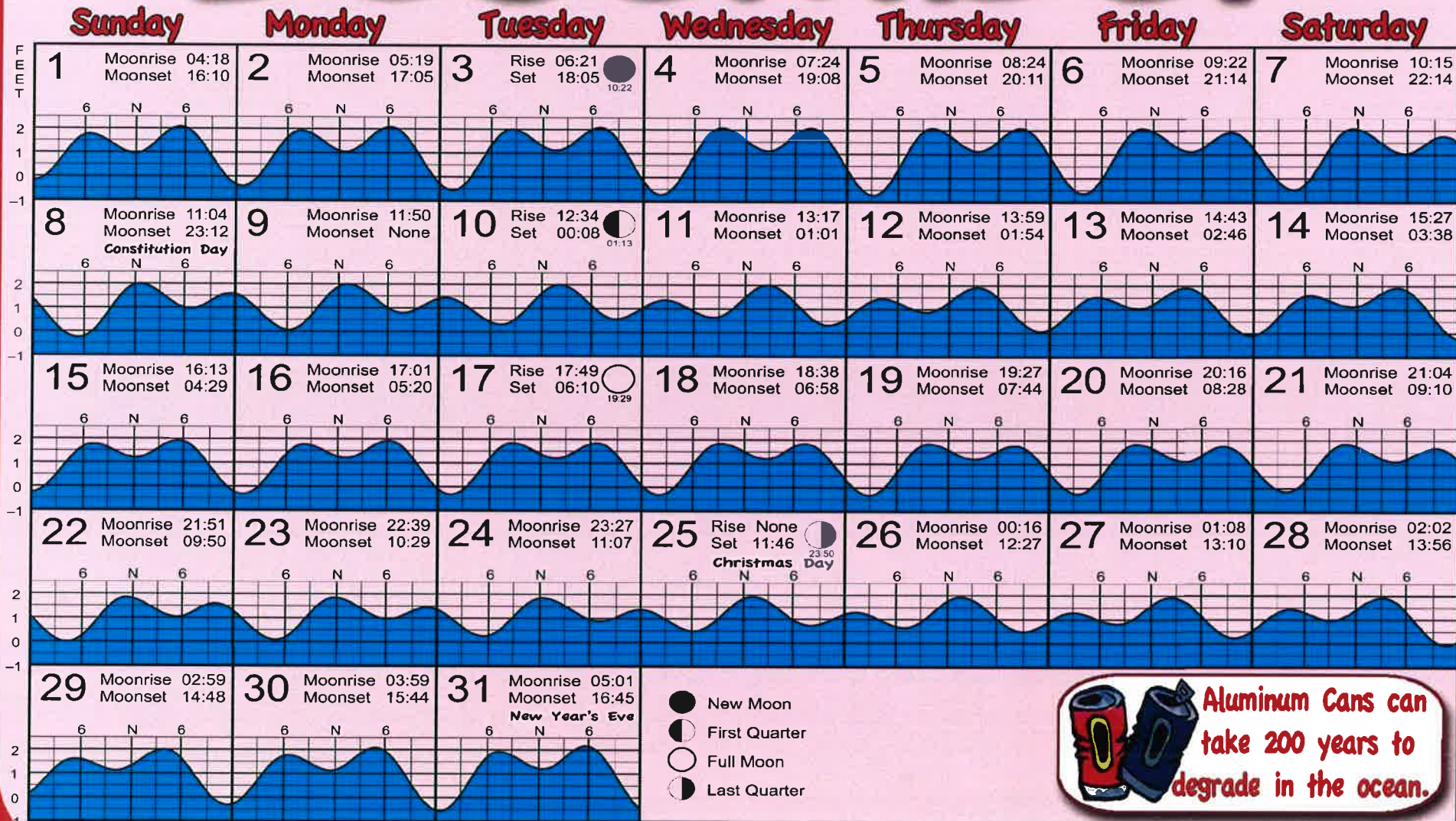


Location: Micro Beach, Saipan
Artist:



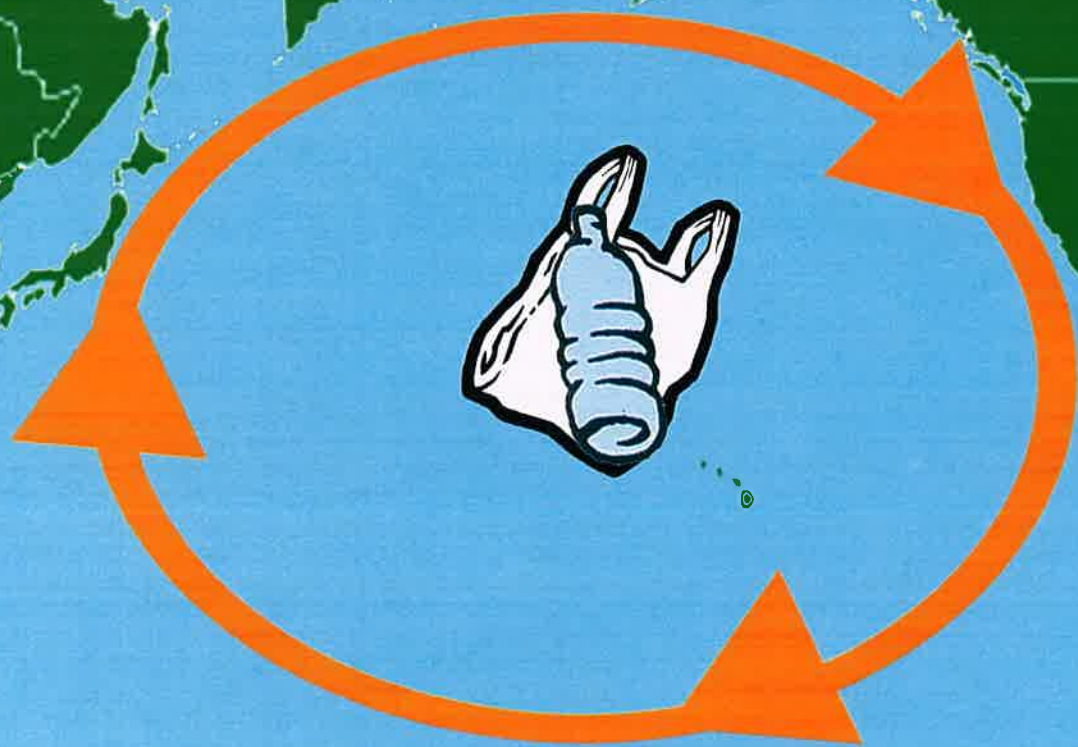
Location: Puntan Gagua Gahga, Rota
Image by: Nicole Schafer

December



The most southern island of CNMI is Rota
also known as the peaceful island.

Marine debris is caused
by humans. Do your part
and dispose of trash properly.



The "Great Pacific Garbage Patch" or North Pacific subtropical gyre is an area between Hawaii and California with a high marine debris concentration. A gyre is formed by circular ocean currents. These currents can draw debris into the calm waters within the gyre. The gyre is full of plastics because plastics do not wear down, but simply become tinier and tinier pieces. These plastics can be very dangerous to turtles, marine mammals, and birds.



1-5 Years 200 Years 1 Year 450 Years
 600 Years 400 Years Undetermined 2 Weeks
 6 Weeks 1-20 Years 50 Years 3 Months

Marine Debris Timeline Game

Connect the marine debris to
 its timeline of degradation.
 Answers are in the calendar.



Executive Directive 235 established the Commonwealth of the Northern Marianas Coral Reef Initiative Program under the Office of the Governor with an interagency structure to coordinate coral reef issues. The agencies included are Coastal Resources Management, the Division of Fish and Wildlife and Division of Environmental Quality. The interagency group is tasked with protecting coral reefs and implementation of Local Action Strategies projects. Website: www.cnmicoralreef.net



Coastal Resources Management Office provides technical assistance for the planning, management, and monitoring of coastal resources and ensuring their sustainable use and development.

Mailing Address: P.O. Box 10007 Saipan, MP 96950 Telephone: 670-664-8300 Facsimile: 670-664-8315 Website: www.crmsaipan.com



The Division of Environmental Quality's mission is to protect public health and the environment. To this end, DEQ develops, implements, and maintains programs that eliminate or minimize threats to the CNMI's land, air, and water.

Mailing Address: P.O. Box 501304 Saipan, MP 96950 Telephone: 670-664-8500 Facsimile: 670-664-8540 Website: www.deq.gov.mp



The Division of Fish and Wildlife was created in 1981 to conserve fish, game, and wildlife and to protect endangered and threatened species.

The Division does so through research, monitoring, regulation, enforcement, planning, and management.

Mailing Address: P.O. Box 10007 Saipan, MP 96950 Telephone: 670-664-6000 Facsimile: 670-664-6060 Website: www.dfw.gov.mp



Formed at the behest of DEQ in 1997 to address concerns over sediment erosion from illegal land clearing in Laoao Bay. The Marine Monitoring Team has expanded to surveys assessing and monitoring reef conditions throughout the Marianas. Actively supported by CRM and DEQ the MMT has had participation from DFW, NMC, and a number of volunteers since its inception. Website: <http://cnmimmt.blogspot.com> (as well as agency sites)



NOAA's mission is to understand and predict changes in Earth's environment and conserve and manage coastal and marine resources to meet our Nation's economic, social, and environmental needs.

CNMI Field Office: PMB 582 Box 10003 Saipan, MP 96950 Telephone: 670-234-0004 Facsimile: 670-234-0003 Website: <http://coralreef.noaa.gov>

BLK



Help us stop marine debris!

PLEASE RECYCLE
&
NOT LITTER

