

## GUAM YEAR OF THE REEF NEWSLETTER

### PLANT A TREE, SAVE A REEF

October's GYOR theme revisits the connection between watershed management and healthy coral reefs. While we explored ridge to reef concepts in July, this month we focus on trees and their importance to Guam's watersheds and coral reefs.

Trees provide many benefits:

- Control erosion
- Offset carbon emissions
- Absorb air pollution
- Reduce air temperature
- Beautify neighborhoods
- Provide habitat for wildlife
- Provide food for people and animals
- Produce traditional and medicinal products

If you would like to contribute content or photos, please let us know! [GuamYOR2018@bsp.guam.gov](mailto:GuamYOR2018@bsp.guam.gov)

Don't forget to check out our website at [www.guamcoralreefs.com](http://www.guamcoralreefs.com) and like us on Facebook at [@GuamYearoftheReef2018](https://www.facebook.com/GuamYearoftheReef2018).

**#GYOR2018**



### PLANTING PROJECTS SUPPORT CORAL REEFS, FORESTS, AND TREES.

About 30 people attended a plant propagation workshop in Malesso on August 18<sup>th</sup> to learn more about the connections between native plants and healthy reefs. Trees and plants hold soil on land, absorb water, create habitat for other species, and provide medicines and food for people. Without healthy trees and plants, soil can wash into rivers and across land to get into the ocean, where it can kill corals.

"I learned many new things about some native plants other than their medicinal uses. I was not aware of their importance in reef habitat and protection," said Bev Borja, a Talofofu resident.

The workshop, sponsored by NOAA & The Nature Conservancy, featured native trees and focused on their cultural, medicinal, and ecological importance on Guam. Participants learned to grow pago, abas duendes or chosgo, lada, fagot, and ahgao. These five tree species all have traditional uses ranging from medicinal preparations to wood for houses. Pago flowers, for instance, can be made into a poultice to treat skin infections, while ahgao was once an important source of medicine and wood.

"I remember my grandma using some of the plants we work with to make amot (medicine) when I was a little girl," said Audrey Meno, a Mongmong resident with Malojloj roots. "Now that I'm older I realize the importance of preserving these plants for future generations."

Everyone who attended the workshop prepared and planted their own seeds and cuttings. Most opted to take their plants home to grow in gardens and on ranches, but other newly potted plants were saved for restoration efforts in southern Guam. All five species featured at the workshop are used in projects



*Community members learn about native plants from Adrienne Loerzel (NOAA) at the Malesso native plant propagation workshop.*



*Patrick Keeler of BSP assists a child planting ifit at Masso Reservoir.*

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designed to recreate wildlife habitat, keep soil off the reefs, and help reduce flooding and erosion problems in southern villages.

Guam's volcanic southern hills are especially prone to erosion. Most of the southern hills are filled with grasses that burn frequently during the dry season. Once the vegetation is gone, rain carries tons of soil into rivers and the ocean, where it can smother corals, block the light they need, and interfere with corals' ability to reproduce.

"Badlands," areas with no vegetation, and grasslands are responsible for much more erosion than forested areas.

The Guam Department of Agriculture's Division of Forestry and Soil Resources is leading the charge to restore badlands and grasslands to forests that do a better job of holding soil and water on the hillsides. The Forestry team manages hundreds of acres in Santa Rita, Merizo, and other spots around the island to promote healthier forests, protect native species, and combat wildfires that threaten all of Guam's natural areas.

Written by Adrienne Loerzel, NOAA

# NATIVE TREES USED FOR RESTORATION ON GUAM



**KAFU**

## NATIVE PLANTS OF GUAM



Photo by: R. Therman

### Shade Trees

**Da'ok (*Calophyllum inophyllum*)** White flowers and golf ball size nuts.




Photos by: Elexitch Photo by: J.B. Friday

**Ifit (*Intsia bijuga*)** a medium to large tree, termite resistant.



**IFIT**



Photo by: by GreenGuru



### Erosion Control

**Yoga (*Elaeocarpus joga*)** Endemic. Large tree, smooth dark trunk and distinctive red leaves dotting the crown. Feathery and white flowers, fruits are round and blue.




Photos by: H. Manner

**Hunk (*Tournefortia agentea*)** Good for barrier to salt spray, windbreak on exposed coasts, and coastal stabilization.



**FAGOT**

### Flowering Trees



Photos by: Forestry & Soil Resources Division (F&SRD)

**Niyoron (*Cordia subcordata*)** Grows on beach strands, limestone cliffs and terraces. Flowers are pale orange, fruits are ball-shaped mature from green to brown.




Photos by: Forestry & Soil Resources Division (F&SRD)

**Gausail (*Bikkia mariannensis*)** Endemic to the Marianas. Shrub with white flowers. Grows on limestone cliffs.





**PANAO**



Photos by: Forestry & Soil Resources Division (F&SRD)

**Binalo (*Thespesia populnea*)** Medium size tree, heart-shaped leaves, yellow flowers with round woody fruit.



Funded in part through the Coastal Zone Management Act of 1972, as amended, administered by Office of Ocean and Coastal Resources Management, National Oceanic and Administration, and by the Guam Coastal Management Program, Bureau of Statistics and Plans, Government of Guam, through Grant No. NA03NO64190175.

## TIPS FOR ATTENDING PLANTINGS

- **BRING:** water, sunscreen, hat, closed-toe shoes, snack
- **PROVIDED:** trees, cotton gloves
- All minors (18 and below) must be accompanied by an adult with signed Liability Waivers, which will be sent to you when you register.
- Carpooling is recommended.
- **PLEASE** register beforehand with Patrick Keeler at [patrick.keeler@bsp.guam.gov](mailto:patrick.keeler@bsp.guam.gov)

## Guam Year of the Reef Exhibit Guam Museum, October 4 – December 7

The Guam Museum, in partnership with the Guam Year of the Reef Committee, presents B(reef)ly Ours: Guam's Changing Coral Reef Ecosystems, a limited term exhibit featuring the importance and dynamic nature of our island's coral reefs. The exhibit will highlight the cultural and ecological significance of Guam's reefs, with interactive sections and special family days this fall. The museum will showcase what Guam's reefs mean to our people, how our reefs have changed through time, and how we can all get involved to ensure these amazing resources continue to support our people in the future.

## OCTOBER EVENTS

**2<sup>nd</sup> Planting Event, As Gadao Reforestation Site**  
**October 6, 8:30 AM – 12:30 PM**

**As Gadao Malessu, signs along road**

**\*must register with [patrick.keeler@bsp.guam.gov](mailto:patrick.keeler@bsp.guam.gov)**  
Tree plantings continue in Malessu as part of the Manell-Geus Habitat Blueprint Initiative, a collaboration between the Department of Agriculture, Forestry and Soil Resources Division, the Bureau of Statistics and Plans, NOAA, and the USDA Forest Service. We will plant 4,000 trees during this free event!

**MDA Underwater Pumpkin Carving Contest**  
**October 27, 8:00 AM – 12:00 PM**

**Cost: \$20, proceeds go to Project AWARE**  
Take your carving skills to the next level, underwater!

**Trick or Trees**

**October 27, 8:30 AM – 12:30 PM**

**Quinene Road, Merizo**

Trick or Trees is a free kid-friendly planting event for the community to celebrate both Halloween, and the health of our watersheds! Events will include tree plantings, scavenger hunts, costume contests, and a mini fair. Kids wearing costumes will receive giveaways. Contact [patrick.keeler@bsp.guam.gov](mailto:patrick.keeler@bsp.guam.gov) for more info.

**Underwater Pumpkin Carving Show**

**October 31, 1:00 PM**

**Underwater World, free with price of ticket**

Underwater World divers will do a live pumpkin carving underwater, and the feeding dive will take place immediately after.

**Axe Murderers Halloween Night Dive**

**October 31, 6:30 PM – 9:00 PM**

**Cost: \$35 for boat dive**

Divers should come in costume! Dive site TBA

#GUAMMUSEUM | Exhibition

The Guam Museum Presents in Cooperation with  
The Guam Year of the Reef Committee. A New Exhibition.

**B(REEF)LY OURS**  
Guam's Changing  
Coral Reef Ecosystems

October 4, 2018 to December 7, 2018 | Changing Gallery

Photo by David Burdick

Exhibition Partners:

GUAM MUSEUM  
Champion Educational Facility

Open DAILY 10:00AM - 6:00PM  
Telephone: 1 (671) 989-4455 - [www.guammuseum.org](http://www.guammuseum.org)



**November's GYOR theme: Reef invaders**