



Pa'auilo Mauka Kalōpā Community Association

## February 2024 Newsletter

### *An Update on Rapid 'Ōhi'a Death (ROD)*

**Some good news – and no new bad news!**

Ruth Bennett  
PMKCA VP

Just a few months ago, I watched another of the mature 'Ōhi'a trees on my 6-acre homestead above Pa'auilo die of Rapid 'Ōhi'a Death (ROD). I have lost one or two each year since the disease arrived in my neighborhood. It hurts my heart to see the first branch in a tree's healthy crown suddenly turn brown, knowing that it's already too late to save the tree.

ROD has been killing our most precious native 'Ōhi'a since it was identified on our island in 2010. Over a *million* trees have died to date. The fungus (*Ceratocystis lukuohia*) invades the trees through wounds in the protective bark or holes bored by insects. An infected tree dies within a month or two when its supply of water and nutrients is choked off by the fungus. Learn more about ROD at the Big Island Invasive Species Committee website ([biisc.org](http://biisc.org)) under "Invasive Pests", or from other internet sources.



Endangered 'I'iwi on 'Ōhi'a in a Hāmākua forest. Credit: J.B. Friday

'Ōhi'a forests play a major role in maintaining watersheds, supplying the critical needs of communities and agriculture for fresh water. They provide food and habitat for other critically endangered native species. The wood from 'Ōhi'a has been used for centuries in home construction, canoe building and carving, and the blossoms have graced the lei used in ceremonies and hula traditions.

While there has been a good amount of effort and resources invested in research into the disease, in managing ROD's spread, and in educating our residents and visitors, progress in fighting the disease has been slow and news reports have often been bleak. **HOWEVER – there have been some advances!**

***Good news in understanding ROD, protecting trees from infection, and finding long-term solutions.***

ROD has no cure yet, but there are fungicide products being tested that may have some benefit and may be certified for use on our islands in coming years.

Products that can seal a wound are being recommended, especially when a tree is particularly valuable and accessible. Even painting a tree cut or injury with latex paint is now recommended. "Some protection is better than none at all!"

The disease is transported within a forest or rural landscape when the fungus spores become airborne in winds or are carried to new locations. The lethal spores are transported by insects (boring "Ambrosia beetles" releasing infected debris, "frass"), humans (carrying spores on shoes, tools, and vehicles) and other hoofed animals (pigs, goats, sheep, cattle).

The role played by insects can be reduced by products that are either attractants or repellents. These products can entice beetles into traps or discourage them from attacking trees. While no products are currently approved for use in Hawaii, the approval process is in progress.

Studies have been underway for some time to identify naturally occurring disease-resistant trees that can be used to build a stock of young trees to repopulate forests. Most of the tested trees are still only a few years old, but some have exhibited some resistance.

***Good news from the teams in the field, identifying areas under attack and finding methods to curtail the spread.***

Teams on the ground have collaborated with GIS mapping and satellite data agencies to pinpoint Hawaii island's forested areas vulnerable to ROD. Their studies have shown quite clearly the damaging role that feral hoofed animals play in our forests.

Satellite imagery is now proving that removing feral hoofed animals from fenced areas greatly reduces the loss of trees to ROD, compared to adjacent unfenced lands where ungulates are present and dead 'Ōhi'a trees abound. Look for the excellent "ARC GIS Story Map" link on the [rapidohiadeath.org](http://rapidohiadeath.org) website – really instructive!

UH, PCSU,SDAV,DLNR

## Interactions Between Feral Animals and Rapid 'Ōhi'a Death

- o ArcGIS ohia storymap is complete.
- o [Ohia Story Map](#)
- o [UH News video and article](#) Dec 3,2023

All articles, published papers can be found at

UH CTAHR ROD Website

[www.rapidohiadeath.org](http://www.rapidohiadeath.org)



*When feral hoofed animals are fenced out of 'ohi'a forest lands, trees have a far greater chance of survival.*

## **Good news in making residents and visitors aware of ROD and getting needed funding to combat ROD.**

Most Hawai'i residents, especially on the Big Island, now understand that ROD is a deadly invasive species and support efforts to combat it. Tourists are encouraged to understand the risks their activities can inflict on Hawaii's 'Ōhi'a trees and to be respectful during their visit.

Many agencies and companies that regularly work in vulnerable forested areas have taken steps to train crews in avoiding damaging healthy 'Ōhi'a trees and in cleaning their tools and vehicles so that they don't transport ROD spores to other locations.

Schools are educating children in identifying invasive species and encouraging them to both protect their environment and to pursue careers in environmental science.

The Hawaii legislature has allocated funds to help with studying ROD and in forest management actions that save 'Ōhi'a trees (removing hoofed animals).

And here in our rural areas along the Hāmākua Coast, we are starting to work with ROD scientists and forestry teams to examine the intersection between protecting 'Ōhi'a trees and preserving agriculture. We are looking for ways that ranchers and farmers can work with ROD teams to protect our 'Ōhi'a-and-agriculture landscapes so that both can thrive.

***Lots of good news to report, and lots still to be done!***

We have made some progress in understanding and combatting ROD in our forests and around our homes. But we all continue to have a role to play in protecting our 'Ōhi'a by not transporting infected spores or tree materials. Personally, I don't want to see another 'Ōhi'a tree that has lived longer than I have (and I'm a kupuna!) die in front of my eyes!



***Join PMKCA or Renew Your Membership for 2024!!***

PMKCA dues are only \$20 per calendar year and help support so many great community activities. Click the "Visit" link below and choose "Membership".

***We offer a PayPal option, or mail a check made out to  
PMKCA, PO Box 408, Pa'auilo, HI 96776.***

[Visit PMKCA.org](http://www.PMKCA.org)

Pa'auilo Mauka Kalōpā Community Association  
P.O. Box 408, Pa'auilo, HI 96776  
Email: [news.PMKCA@gmail.com](mailto:news.PMKCA@gmail.com)