VIDEO: “Hotel Rhino” a New Trap That Lets Rhino Beetles Check In, But Not Check Out

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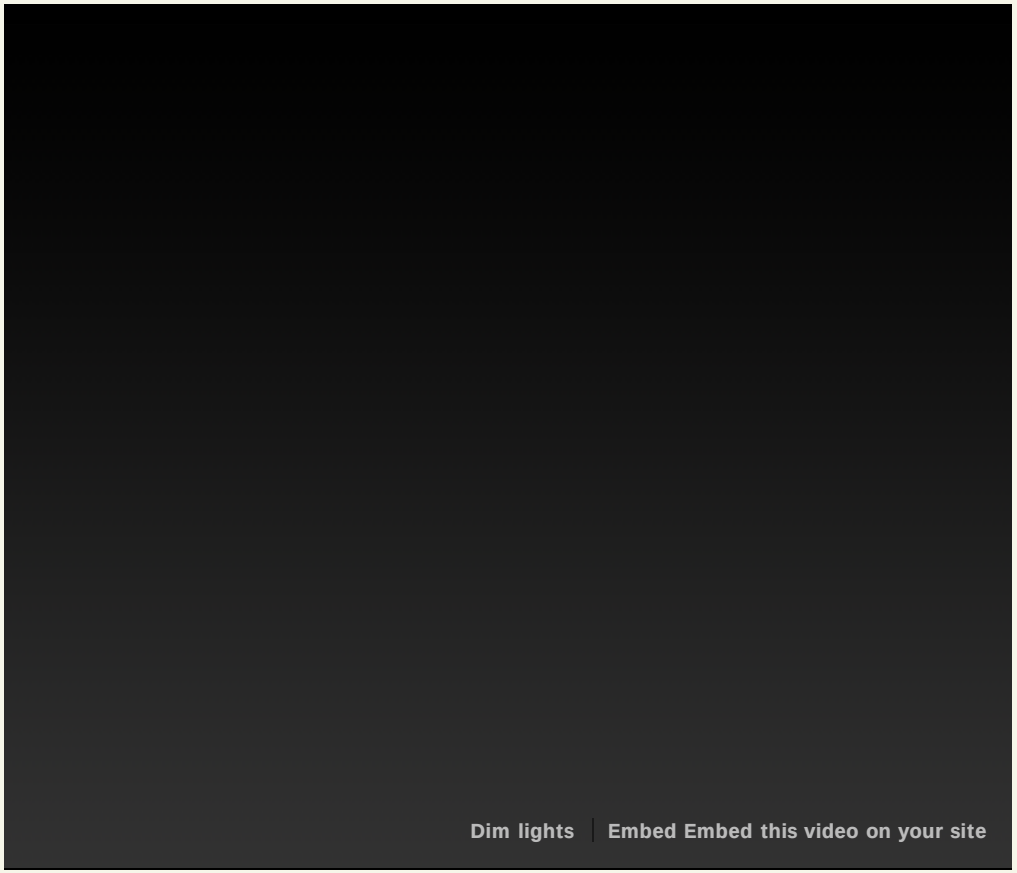
Guam- The Coconut Rhinoceros Beetle Eradication Program has developed a new trap that is 10 times more effective than its traditional version. The trap also provides another way to encourage composting and control Guam’s green waste problem.

Although the coconut rhinoceros beetle has spread to every village around Guam, the battle against this invasive species isn't over yet.

The eradication program has already introduced a fungus that is killing the rhino beetle population slowly.

However, Operations Chief Roland Quitugua says they have also created a new trap, called “Hotel Rhino”, which he considers 10 times more effective than placing a 5 gallon bucket and synthetic pheromone on a tree to trap the rhino beetles.

He mentions since the beetles are very good at finding organic matter and sites to breed, they are using this knowledge to their advantage.



“What we're doing now is we're taking 55 gallon oil barrels and we are putting green waste in, decomposing coconut material, and by doing that, it's becoming a very attractive site,” said Quitugua. “And what we do is we put chicken wire mesh on top. What happens is the rhino beetles are small enough that when they smell the chemicals coming off the decomposing organic matter, they are attracted to the barrel, they land on the wire. They then drop in because they're small enough but what happens is, if they try to escape, they have to open up and rely on their wings to try to fly and they become too large to escape.”

Quitugua says essentially, “Hotel Rhino” becomes a one way trap. He notes a metal bucket layer with holes is also incorporated to help them count how many beetles are trapped. He says they've trapped up to 6 beetles a week. They are also testing a UV light on the barrels because the rhino beetles are also attracted to it.

He mentions there is no need for a synthetic pheromone to attract rhino beetles anymore because once the rhino beetles are trapped, their natural pheromones will attract more of its species to the barrels.

Quitugua's eradication team is also scouting around the island every week to look for high incident areas and asking home owners to adopt these barrels. However, they couldn't do this project by themselves.

“With the help of PTI Guam, they've been providing us with these oil barrels to do our experiments and we have over 40

barrels out there right now and it's making a big impact,” said Quitugua.

Quitugua says the hope is get enough barrels or show people how to build these new traps on their own. They also want to engage the community further by launching a website to help the eradication program gather data on infestations and provide a service learning project for students. He emphasizes it is the community that helps keep them on track.

“What we're trying to do at this point is develop a site where we can do citizen science,” said Quitugua. “Soon as that website is up, people will be able to collect data. Maybe make traps like this on their own and then upload that data to that site and we'll be able to see and gather more data across the entire island.”

And as a by-product of these new traps, the rhino beetles also produce nutrient rich organic matter for plants and encourage composting. Quitugua says the organic matter can easily be sterilized before people use it.

In the meantime, he encourages anyone willing to adopt a barrel or seeking more information to call the Invasive Species Hotline at (671) 475-PEST. He adds no one has to wait for them to start a trap.

“If you find rhino beetle breeding in any material, take that material and put it in the barrel,” said Quitugua. “And then fill it with coconut decomposing material, but make sure that you keep about a 6 inch gap from the lip. That way, the rhino beetles can't crawl out. If you keep that below, they will try to fly out and when they fly out, this screen that you put on top will prevent them from escaping. So this is a one way trap and once again it's giving us hope.”

The new trap design is also in the process of being used in other islands, including Hawaii, to capture the rhino beetle.

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