Slimy residents fill gated community
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News Release
SCHOFIELD BARRACKS — Army staff have welcomed the last incoming residents to a gated community high atop the Waianae Mountains.

Staff from Oahu Army Natural Resources Program, or OANRP, joined by the University of Hawaii’s Rare Snail Conservation Laboratory and the U.S. Fish and Wildlife Service, or USFWS, flew the remaining half of more than 300 kahuli tree snails (Achatinella mustelina) to their new home in a one-of-a-kind snail enclosure, Feb. 21. Previously, the snails had spent the last two years in a temporary home at the UH snail lab.

“It’s very satisfying,” said Vince Costello, OANRP rare snail conservation specialist. “We’re bringing them back to either where they came from or where their ancestors came from.”

Costello and group introduced the first half of the snail colony, Feb. 8, but waited to introduce the second half to make sure the snails were doing OK in their new habitat, which consists of an enclosure almost the size of a basketball court.

Army and industry professionals designed the enclosure to safeguard the kahuli from voracious predators that have pushed this tiny Hawaiian native to the brink of extinction.

Predators like the cannibal rosy wolf snail (Euglandina rosea), mice, rats and the Jackson’s chameleon should not be able to snack on the kahuli inside the enclosure, thanks to its 4-foot tall surrounding wall with multiple layers of protection: a buried wall portion, curved fence hood, solid-wall construction, electric wiring and special sections of wire bristles that cannibal snails can’t cross.

“I describe it as the management tool of the future,” Costello said. “It’s a unique project — one that’s been built before — and we hope we’ll learn from it and be able to build others.”

The Army started monitoring the kahuli in 1995 as part of its mission to support Soldier training through the management of threatened and endangered species. As the years passed, Army biologists noted an increase in snail predators and a nearly 50-percent decrease in the Waianae Mountains kahuli population, spurting them to action.

“This area is exceptional in its (kahuli) richness, (but) also exceptional in its astronomical numbers of (rosy wolf snails). It deserves an exceptional response to preserve what snails remain,” Costello wrote in his 2010 report detailing the situation.

The proposal to save the kahuli included temporarily relocating them to the care of the UH snail lab, with the intention of building the snail a home safe from predators. Today that vision is reality with the help of conservation professionals from New Zealand and agencies like the USFWS.

“The services is excited about the completion of this snail enclosure because it provides a protected area where Oahu tree snails can once again thrive,” said Jess Newton, leader of the Endangered Species Recovery Program for USFWS’ Pacific Islands Fish and Wildlife Office.

“Currently 73 percent of these snail species are extinct and the remaining species are near extinction. To lose them, would be to lose a special piece of our local heritage.”

The kahuli were an important part of native Hawaiian culture: prized for their beautiful shells, referenced in folklore and songs, and used in lei and other ornaments.

“This effort could be the difference between extinction and survival,” Costello said.

He and other team members hope the enclosure will be a model for other agencies to use in the conservation battle.

In total, OANRP manages more than 100 threatened and endangered species on Oahu and the island of Hawaii. The team recently received an environmental award from the Secretary of the Army for its innovation and commitment to preserving Hawaii’s natural resources.

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Photos by Tech Sgt Michael S. Holcomb (U.S. Air Force)