



Dragonfly Prepares for take off!

Quirky Damselfly Facts

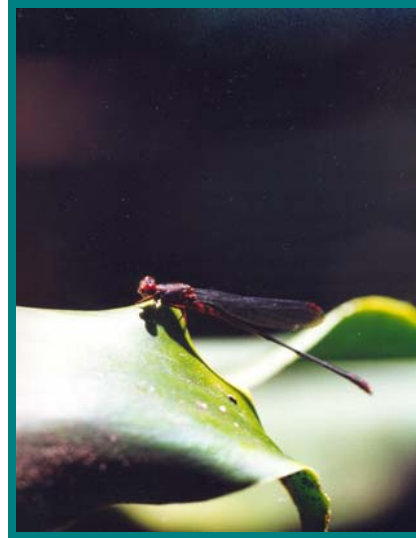
- When adult damselflies are caught, they will lay in your hand and play dead!
- Male damselflies are territorial and prefer vegetated areas with light gaps for resting sites.
- Developing naiads go through 11-17 different larval stages.
- Dragonflies rest with their wings out to the side while damselflies rest with their wings held erect above their bodies.
- There are 23 different species of damselflies native to Hawaii.



Captured damselfly playing dead.

Hope For The Future

The Army is currently partnering with the U.S. Fish and Wildlife Service Ecological Services and Oahu National Wildlife Refuge Complex, Waimea Valley Audubon Center, Bishop Museum, the State of Hawaii Department of Aquatic Resources, the Navy, and Tripler staff to try another translocation attempt. The team will try a combination of introducing the damselflies to both natural and man-made fresh and brackish water environments.



Adult male resting on a leaf

What Can You Do?

- Tell people about this rare Hawaiian treasure at TAMC.
- Don't litter the stream with construction or other materials.
- Practice Best Management Practices when working near the stream.
- Contact the Army's Natural Resource Manager, Michelle Mansker, at 656-2878 ext. 1029 if:
 1. You know of projects that may affect the stream at TAMC.
 2. The water level in the stream looks low.



Tripler Army Medical Center's Hidden Treasure

The Orange Black Damselfly *Megalagrion xanthomelas*



Megalagrion xanthomelas,
Orange Black Hawaiian
Damselfly

**Army Natural
Resource Program**



Species Biology

- *Megalagrion xanthomelas*, or the Orange Black Damselfly, is an endemic (found only in Hawaii) Hawaiian species.
- This damselfly is a lowland species that lives near pools of slow-moving fresh and brackish between 0 and 3,281 feet in elevation; however most current populations are found in coastal wetlands at elevations of less than 656 feet.
- As with most damselflies, the males are a bright showy color, red, while the females are a paler shade, tan.
- Damselflies lay their eggs in the tissues of plants near pools of water.
- The naiads, or immature damselflies, live in the submerged plants in these pools. They are voracious predators, just like dragonfly naiads.
- Adult damselflies live in the protective vegetation surrounding streams and wetlands.
- Adult damselflies feed on small flying insects.



Damselfly naiad

History of the Damselfly

- Historically, the Orange Black Damselfly was widespread on Oahu, Molokai, Lanai, Maui and the island of Hawaii.
- Today there is only one remaining population on Oahu along a stretch of stream at Tripler Army Medical Center (TAMC) about 328 feet long.
- Prior to its rediscovery at TAMC, this species was thought to have been wiped out on Oahu in 1974.
- The species growth and survival have been greatly affected by the introduction of invasive species and the alteration of its habitat.
- Two of the most harmful invasive species appear to be guppies and top minnows, which feed on damselfly naiads.



Original translocation team

- The current location of the damselfly at TAMC was threatened by construction impacts on the upper slope of the gully.
- To lessen these impacts, the Army built a temporary artificial habitat at TAMC to house the damselfly population until construction was over.
- The Army also provides additional water to the stream to further lessen any construction impacts and to maintain the damselflies' environment.



Capturing damselflies for translocation

- The Army is committed to attempts at moving, or *translocating*, the species to other water bodies on Oahu to try and spread the population out.
- Unfortunately, damselfly translocation attempts to Makiki and Dillingham Military Reservation between 1999 and 2005 were unsuccessful.



Damselfly mating ritual