

Anchialine Pool Shrimp of Hawaii





View of red and white color morphs Halocaridina rubra

Description

Halocaridina rubra, also known as the 'ōpae 'ula, is the most common species of anchialine shrimp in Hawai'i and can reach 10-15 years of age, an unusually long time for a tiny crustacean. At least eight different lineages of 'ōpae 'ula are found statewide. This small species is approximately 0.5 inches in length and occurs in a range of colors from red, pink, white, light yellow/clear, and banded (red/clear). **Distribution**

The *Halocaridina* genus of anchialine pool shrimp occurs only in Hawai'i with populations found on the islands of Hawai'i, Maui and O'ahu.

Population

Estimated to have a population in the millions, but like the other species it is difficult if not impossible to accurately determine the population size.

Description

Palaemonella burnsi is a small anchialine shrimp ranging from 0.2 to 0.3 inches in size.

Distribution

This species is found only on the islands of Maui and Hawai'i and is transparent, grayish-green to red in color. The shrimp is likely omnivorous and feeds upon algae and detritus. Known from only 3 pools on the island of Maui and one pool on Hawai'i. This species is known to occur in high salinity anchialine pools.

Population

Undetermined



View of transparent shrimp next to "M&M size" feeding tablet Palaemonella burnsi



Close up view Procaris hawaiana

Description

Procaris hawaiana is another one of the larger anchialine pool shrimp and ranges in size from 0.4 to 1.2 inches in length. The species has a pink to light red pigmentation that is darkest along the midline with a white to yellow upper body. Black pigments are associated with the eyes. The species lacks conspicuous claws or chelipeds. The shrimp is constantly on the move with its seta (bristle) covered appendages that spread out like a "catcher's mitt" to trap tiny food like plankton and other species of anchialine shrimp. Procaris is only one of two species globally that belong to the shrimp family Procarididae.

Distribution

The species is found in two pool groups on Maui and one pool on the island of Hawai'i.

Population Undetermined



View of clear morph *Metabetaeus lohena*

Description

Metabetaeus lohena grows up to 0.7 inches in length, and has a body coloration that ranges from pale pink to brilliant red. The species has a conspicuous spot near the mouth, and its claws are relatively large and conspicuous. It moves by crawling along the bottom of the pool. It is primarily a predator, feeding largely on the more common 'ōpae 'ula, but may also scavenge its food.

Distribution

This species is known only from the islands of Maui, Hawai'i and O'ahu. Historically, the species was reported from at least 61 pools on the three islands, but recent surveys indicate their presence at 9 pool groups on Maui, 3 pool groups on the island of Hawai'i, and 2 pools on O'ahu.

Population

Undetermined

Description

Antecaridina lauensis ranges from 0.4 to 0.6 inches in length. This species is light to bright red in color with relatively small whitish claws and black eyes. It moves by crawling along the bottom of the pool. Observations suggest that Antecaridina lauensis feeds on plants and is most active at night.

Distribution

This species is known from two pool groups on Maui and two pools on the southern end of the island of Hawai'i. This species is also found throughout the Indo-Pacific.

Population Undetermined



View of shrimp next to "M&M size" feeding tablet Antecaridina lauensis



Frontal view Callaismata pholidota

Description

One of the larger anchialine shrimp ranging from 0.6 to 1.2 inches in length. The body color is usually pink to brilliant red with red banding, and the legs are red to pale in color. The base of the tail usually has a red band, eyes are black, and the claws or chelipeds are conspicuous. The species moves by crawling along the substrate or bottom of the pool. Observations indicate that this species is an opportunistic feeder – taking live prey and scavenging. **Distribution**

This species is known to occur in one pool, and one pool group on the island of Hawai'i. On Maui it is known from four pool groups with few individuals. This species has never been abundant in Hawai'i.

Population

Undetermined