



Marine Invertebrates

Pūpū mo‘o or Chitons

Acanthochiton armata

Acanthochiton viridis

Ischnochiton petaloides

Aplacophorans

Chaetoderma hawaiiensis

Drepanomenia vampyrella

Lophomenia spiralis

Proneomenia hawaiiensis

Proneomenia insularis

Strophomenia scandens

SPECIES STATUS:

IUCN Red List - Not considered

Endemic

SPECIES INFORMATION: Pūpū mo‘o or chitons are primitive seashore molluscs. They feed by browsing on algae adhered to hard substrates. Both the kuakulu or green chiton (*A. viridis*) and the flat chiton (*I. petaloides*) have common names, while *A. armata* does not. They have separate sexes and external fertilization. The adult kuakulu, 28 millimeters long (one inch), is larger than the adult flat chiton (10 millimeters long or one-half inch). The aplacophorans are deep water mollusks that burrow into soft substrates. All of the endemic species are in the group caudofoveata – which means they lack a foot as well as a shell. They do have calcareous spicules or scales in their dorsal mantle. They are elongated (usually less than five cm or two inches long) and dioecious. None of the local species have common names.

DISTRIBUTION: Chitons occur on rocky and hard substrates throughout the islands. The distribution of aplacophorans is poorly known as sampling has been inadequate.

ABUNDANCE: Unknown.

LOCATION AND CONDITION OF KEY HABITAT: Key habitat is reef flats and tidepools. Kuakulu, however, prefers small depressions on limestone reef flats and holes or areas underneath the rubble of tidepools. Flat chitons prefer areas under rocks in both tidepools and reef flats.

THREATS: None identified.

CONSERVATION ACTIONS: In addition to common statewide and marine conservation actions, specific actions include:

- Ensure healthy habitat is maintained.

MONITORING:

- Survey for populations and distribution in known and likely habitats.

RESEARCH PRIORITIES:

- Improve understanding of factors affecting the species population size and distribution.

References:

Barnes RD. 1980. Invertebrate zoology. Philadelphia, PA: Saunders College. 1089 pp.

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Kay AE. 1979. Hawaiian marine shells reef and shore fauna of Hawaii, section 4: Mollusca. Honolulu, HI: Bishop Museum Press. 653 pp.