

NOTES & NEWS

Observations on Feeding in *Maxwellia santarosana* (Dall)

(Gastropoda : Muricidae)

BY

MARY K. WICKSTEN

Allan Hancock Foundation,
University of Southern California, University Park
Los Angeles, California 90007

THE CARNIVOROUS SNAIL *Maxwellia santarosana* (Dall, 1905) ranges from Point Estero, California to San Bartolomé Bay, central Baja California, Mexico. It occurs on sublittoral rocky bottoms (McLean, 1978). On 14 April 1978 I collected one of these snails while SCUBA diving at a depth of 12 m off Blue Cavern Point, Santa Catalina Island, California. The snail was on a rocky reef covered with sessile invertebrates including the pelecypod *Chama arcana* Bernard, 1976. When placed into an aquarium containing *C. arcana*, the snail drilled holes into the shells of three of the pelecypods and consumed them.

Two more *Maxwellia santarosana* were collected at 10-12 m on rocky reefs off Abalone Cove, Palos Verdes Peninsula, Los Angeles County, California during April and June, 1979. These snails ignored live blue mussels (*Mytilus edulis* Linnaeus, 1758) in the aquarium in which they were kept. One of the snails, however, attacked a *Chama arcana*. The snail moved toward the pelecypod two days after the prey was placed in the tank. On the following day, the snail began drilling the lower valve, about 3 mm from the hinge. The snail continued to drill and feed for 9 additional days. On the 9th day, the shell opened, revealing an intact hinge but no tissue except for an adductor muscle and a strip of mantle. The remaining tissue was consumed by a scavenging sea urchin (*Lytechinus anamesus* Clark). The drill hole tapered from the outside inward, the outer diameter being 1.5 mm and the inner diameter less than 1 mm.

The feeding habits of *Maxwellia santarosana* have not been reported previously. However, *Maxwellia gemma* (Sowerby, 1879) can drill holes and consume clams. Like *M. santarosana*, this species does not break the hinge, but

eats the tissue through the hole. *Maxwellia gemma* takes only 4 days to eat a clam. Its drill hole is straight-sided, not tapered (WILLIAMS, 1976). The species of prey was not recorded. However, photographs accompanying the article show the prey to be a venerid clam, probably *Protothaca staminea* (Conrad, 1837). I conclude that both species of *Maxwellia* are predators on the pelecypods of rocky subtidal to low intertidal zones.

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Range Extension for

Pterotyphis fimbriatus (A. Adams, 1854)

BY

JENS HEMMEN AND CHRISTA HEMMEN

22 Grillparzerstraße, D-6200 Wiesbaden, W. Germany

DURING A COLLECTING TRIP to Costa Rica in July and August 1979 we found a fine but crabbed specimen of *Pterotyphis fimbriatus* (A. Adams, 1854) at Playa Jaco, Puntarenas Province, Costa Rica, intertidally among rocks.

KEEN (1971) as well as RADWIN & D'ATTILIO (1976) report this apparently rare species from the Central Mexican coast only: Barra de Navidad and Bahía Cuastecoma (Jalisco) and Sayulita (Nayarit).

The record of our specimen thus extends the known range approximately 10 degrees south.

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