

# Tritons are Choosie Eaters

By NUMERIANO S. "BOY" ABREA

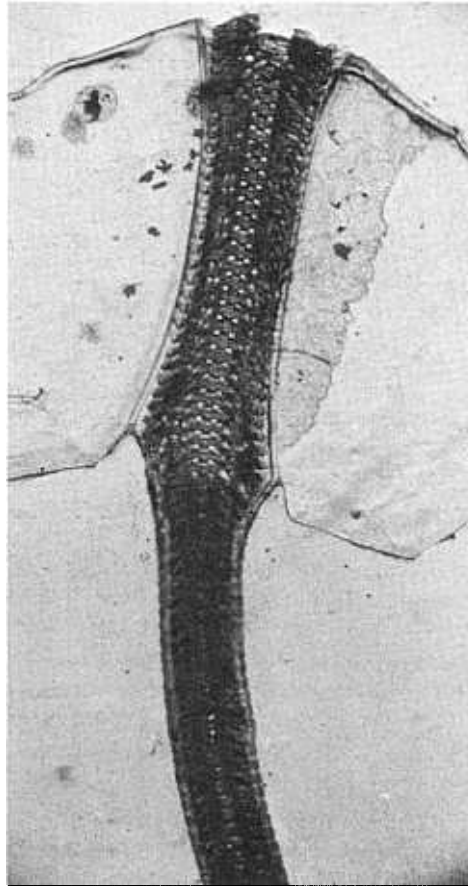
CABUG, Philippines — The members of the family Cymatiidae are popularly known as "tritons." The species range in size from quite small to the giant *Charonia tritonis* Linne, the second largest of the gastropods.

As a group, the tritons are generally molluscivorous, although *C. tritonis* might well be called "starfishivorous," since it feeds by preference on some of the echinoderms. One known favorite is the crown of thorns, *Acanthaster planci*. I once found a *Charonia tritonis* munching on a blue *Linckia* starfish.

In the Genus *Cymatium*, one species in particular, *Cymatium pileare* Linne, has a hydrostatically stretchable proboscis endowed with the unusual ability to extend two or three inches or more to reach for food. And it can penetrate the substrate to locate a buried *Tellina* or other goodie.

After zeroing in on the quarry, the *C. pileare* inserts his proboscis in the siphonal passage of the victim and lets down his "drilling apparatus" to bore a hole in its shell. The drilling maneuver is assisted by a substance secreted by the predator, the acidity of which can soften or dissolve the calcium carbonate of the victim's shell.

The sharp and clawlike edge of the drill is supported by a sharp filelike abrasive surface. By a continuous rhythm of precise rotation, the drill gains minute grinding penetration until a neat, clean hole is drilled through. Then the drilling ceases and a long odontophore equipped with a set of radulae is let down to execute the *coup de grace!*



Photomicrograph: Abrea  
*Cymatium pileare* rasping radula. The anterior end is at the top of the photo.

## A Note on *Colubraria soverbii* (Reeve) And a Comment on "*Notopeplum translucidum*?"

By HARALD A. REHDER

WASHINGTON — The reappearance in a recent issue of *Hawaiian Shell News* of the figure of the *Colubraria* collected by Taiwanese fisherman off Western Australia and first figured in *HSN* December 1980, and the accompanying comments by Aurora Richards induced me to send in my thoughts on the subject.

The original figure (*HSN* Dec. 1980, p. 9), only slightly larger than natural size (77mm high), clearly portrays the still rather rare species *Colubraria soverbii* (Reeve, 1844), erroneously described from the Galapagos Islands (see Keen, *Sea Shells of Tropical West America*, 1971, p. 511). It is characterized by its large size, and the dark spiral lines in the grooves between the rows of granules on the whorls. Emerson and D'Attilio (*Veliger*, vol. 8, 1966, p. 173-176) give the range of this species as East Africa to Japan, but fragments of what is undoubtedly this species have been dredged in the Marquesas Islands.

*Colubraria soverbyi* is a misspelling of the variant spelling *C. soverbyi* (Reeve), used by Keen in the first edition of her *Sea Shells of Tropical West America*. *Colubraria muricata* (Lightfoot, 1786), of which *C. maculosa* (Gmelin, 1791) is a junior synonym, is much more coarsely sculptured, with reddish brown spots and splotches, and it lacks the dark spiral lines of *C. soverbii*. *C. fantomei* Garrard, 1961, is smaller, more finely sculptured, and also lacks the spiral red-brown lines. *Colubraria myna* Garrard, 1961 (not *muyna*) is close to *fantomei* but is smaller, with weaker sculpture. It may represent only a form of the latter.

The shell figured on page 1 of *HSN* March 1982, and tentatively identified as *Notopeplum translucidum* Verco, 1896, does not seem to be that species. Tony Gabelish's shell has a more acute apex and more flattened spiral whorls. An examination of the soft parts, including a study of the radula, should reveal clues to its position, possibly even to the genus in which it should be placed.

## A Good *Lamellaxis* Can Live Anywhere!

By HARRY G. LEE

JACKSONVILLE — One of northeastern Florida's backyard snails, *Lamellaxis gracilis* (Hutton, 1834), was said by the late H. A. Pilsbry to be perhaps the most widely distributed terrestrial snail.

There are certain similarities between this 10mm *Terebra* look-alike and *Corbicula fluminea* (Muller, 1774), (see *HSN* Mar. 1982) which may aid in understanding why this is so. Besides being a native of Asia, *Lamellaxis* is also hermaphroditic (as are a majority of the terrestrial snails in most of its range). Perhaps equally important in the spread of these creatures is the notion of "exoticism."

For centuries man has witnessed — often to his own dismay — the successful introduction of living things across natural barriers. Around Jacksonville, stark examples are numerous: water hyacinths (South America), pigeons and starlings (Europe), fire ants (South America) and garden slugs (Europe). Why is it that such creatures succeed so strikingly?

First, they are extracted from an environment in which the population was held in balance by interaction with natural enemies. For certain slugs and our *Lamellaxis*, these included predators such as birds, beetles and other molluscs, on the one hand, and parasites such as flatworms and protozoa, on the other.

When *Lamellaxis* was brought to the United States on some Oriental plant, its predators were left behind.

Such was probably the situation when the giant African snail, *Achatina fulica*, was introduced into Hawaii in 1936. A few years later, its establishment there had biologists importing predators (including other snails like *Gonaxis* and Florida's own *Euglandina rosea*) and even pondering potential parasites to curb the unbridled spread of *Achatina*.

Most of our introduced gastropods found things in about the same shape as did *Achatina*. Fortunately, nobody need fret over most of them (including our *Lamellaxis*) because they don't create the disturbance that the up-to-eight-inch *Achatina* did.

Another advantage enjoyed by Old World introductions was that many already were adapted to the urban habitat. Certain species — the English sparrow and the escargot snail, for example — were quite able to make themselves at home in human-altered environments. With centuries, perhaps millennia, of adaptive co-existence with man in their history, it should be no surprise that in America they could quickly find a cozy niche for themselves. Native species were placed at an evolutionary disadvantage.

This synanthropism (co-existence with man) is typical of most exotic land gastropods. It probably has helped *Lamellaxis* gain new footholds repeatedly.