Assiminea californica *(=Syncera ranslucens)*

A small salt marsh snail (Tryon, 1865)

Phylum: Mollusca
Class: Gastropoda, Prosobranchia
Order: Mesogastropoda
Family: Assimineidae

Description

Size—less than 4 mm high; most specimens collected near 3 mm.
Color—glossy chestnut (Keen 1971), smooth, transparent (largest whorl); interior porcelain-like, not pearly; spire often almost black (Coos Bay specimens); animal white with black markings (fig. 4).
Shell Shape—5 whorls: rounded, convex; globose to turbinate (Keen and Coan 1974), taller than wide; aperture subcircular, without notch or canal; inner lip spread out as a small thickened callus (Keen and Coan 1974) (fig. 3).
Columella—continuous with inner lip: no shelf, no folds, appressed to whorl. Spreads into callus. (fig. 3).
Animal—eyes on short ocular peduncles, no tentacles: family Assimineidae (Keen 1971) (fig. 4). Radula with 3 basal cusps on both sides of central plate: genus *Assiminea* (not figured).
Operculum—very thin, transparent, subspiral, convex (fig. 2).

Possible Misidentifications

Assiminea californica is one of a small association of salt marsh snails. Within our range it is often found with or near *Littorina (Algamorda) newcombiana*. This is a slightly larger littorine (to 6 mm) with 4 whorls, a nearly circular aperture, and with a simple chink between the large whorl and inner lip. The general shape and appearance of the two gastropods is quite similar. *L. (A.) newcombiana* does not have ocular peduncles.

A 2nd snail common found in salt marshes is *Ovatella myosotis*, a pulmonate of rather olive shape, up to 8 mm long. It is subcylindrical, not turbinate, with a short spire, three columellar folds, and no operculum. (See plate)

Littorine snails are larger than *Assiminea*, but can be superficially similar: *Littorina sitkana*, often found in this association, is globose, almost as wide as long, and has either heavy striated sculpture or dark horizontal lines. The animal has long tentacles, not *Assiminea*'s unusual ocular peduncles. *Littorina scutulata*, the checkered littorine, is occasionally found in the saltier parts of marshes. It is quite a bit larger than all the preceding snails, and is patterned on its exterior and purple inside.

Ecological Information

Range—Vancouver Island, British Columbia, to Cabo San Lucas, Baja California (Keen 1971).
Local Distribution—Coos Bay, many stations: South Slough, Haynes Inlet.
Habitat—under driftwood, debris, *Salicornia*, in mud.
Salinity—generally a wide toleration of salinities: to 2.4 ‰ seawater; possibly to 16 ‰ (Matthews 1979).
Temperature—varied (salt marsh temperatures).
Tidal Level—family Assimineidae are intertidal[4]; all live above the low tide level; this species likes upper, usually dry parts of the marsh, about 3-4 feet (South Slough, Coos Bay).
Associates—littorines *L. sitkana*, *L. (A.) newcombiana*, pulmonate *Ovatella myosotis*, amphipod *Traskorchestia traskiana*; plants: *Salicornia, Distichilis, Fucus*.

Quantitative Information

Weight—
Abundance—common in Salicornia marshes (Smith and Carlton 1975).

Life History Information

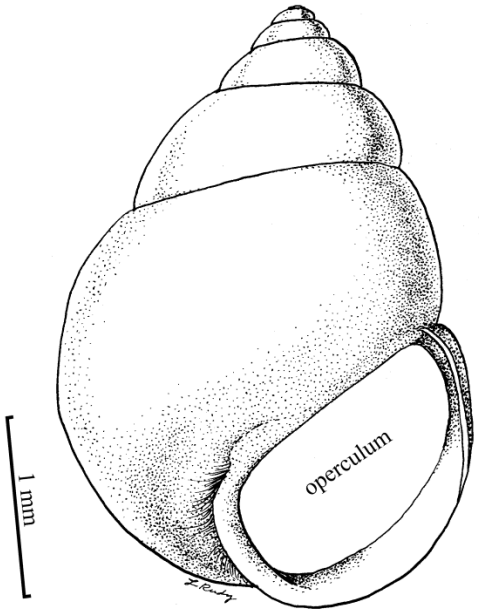
Reproduction—
Growth Rate—
Longevity—
Food—
Predators—fish: many snails found in gut content analysis (Coos Bay) (Matthews 1979).

Bibliography

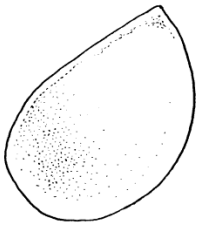
1. KEEN, A. M. 1971. Sea shells of

tropical west America; marine mollusks from Baja California to Peru. Stanford University Press, Stanford.
2. KEEN, A. M., and E. COAN. 1974. Marine Molluscan Genera of Western North America: An Illustrated Key. Stanford University Press, Stanford, California.
3. MATTHEWS, R. 1979. A comparative study of preferred salinities among South Slough snails. Oregon Institute of Marine Biology (University of Oregon).

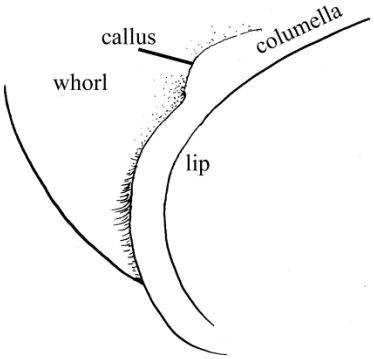
Assiminea californica



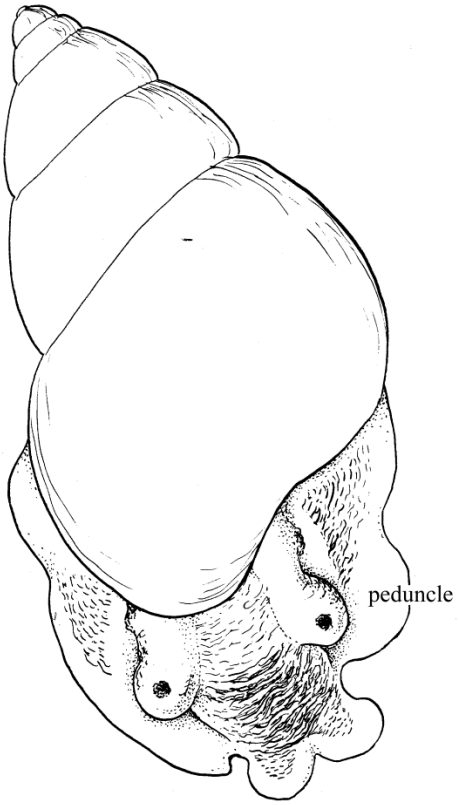
1. *Assiminea californica*
(anterior view, H:3.3 mm) x30:
5 convex whorls, taller than wide.



2. Operculum x30



3. Inner lip x50:
columella continuous with lip,
with no shelf, and a thick callus,
lip appressed to whorl.



4. Animal (dorsal view) x30:
note eyes on ocular peduncles; no tentacles.