

Atlantic Mud-piddock

Barnea truncata

STATUS

Threatened



Not Listed



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Rare view of this species in its burrow

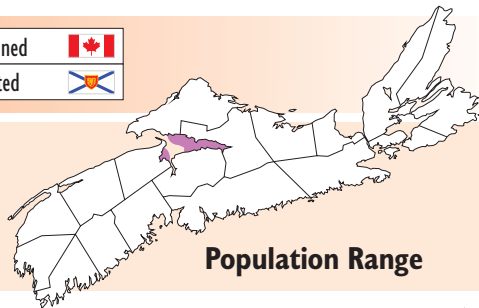
Species Description

The Atlantic Mud-piddock is an elongate, delicate, bivalve mollusc (typically 3-5 cm long), with a thin, greyish-white shell. One side of its shell (anterior section) has horizontal ridges crossed with lined “riblets”. The other side of its shell (posterior section) is smooth. There is a gap between the shells at the anterior end for the muscular “foot” (used for movement within the burrow) and at the posterior end for the siphon (used for feeding). Unlike many other molluscs, it cannot fully retract into its shell. It is not often observed as it is contained within its burrow throughout its life.



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Occurs irregularly along the eastern and western coasts of the Atlantic Ocean. In Canada, only known to occur along the Bay of Fundy.



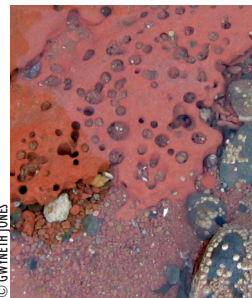
Population Range

Habitat

Found along the intertidal marine shores of the Minas Basin and Cobequid Bay in the Bay of Fundy. In Nova Scotia, it only burrows into a soft sedimentary rock called red-mudstone, which is made up of clay and silt. In the Minas Basin, these red-mudstone formations are usually topped with more stable sandstone or conglomerate. It requires locations free of sediment accumulation to prevent its burrow from being smothered.



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Eroded funnel-shaped burrows

Burrows can be observed in red-mudstone in tidal pools and drainage channels that are protected from strong currents and ice scour.

Interesting Points

- After about one month in tidal currents, tiny Atlantic Mud-piddock larvae settle on suitable substrates and start to tunnel a burrow. They continue to grow as they burrow down and consequently trap themselves inside their own burrow.
- This species relies on its burrow for protection and depends on conditions outside being suitable as they cannot relocate if conditions become poor.
- It is estimated that there is less than 0.6 km² of Atlantic Mud-piddock habitat in the Minas Basin.



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Atlantic Mud-piddock monitoring

Similar Species

False Angelwing (*Petricolaria pholadiformis*): Also found within a burrow. This species burrow is tubular-shaped (like a pipe) rather than the tapered funnel-shaped burrows of the Atlantic Mud-piddock. Widely distributed throughout the province.



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Eroded tubular-shaped burrows

Threats to Survival

- Loss and degradation of habitat from climate change (increased frequency and severity of storms, sea level rise, and sedimentation).
- Altered water flow to the intertidal zone (construction of dykes, barrages, causeways, or dredging) can cause sedimentation that smothers entire populations.
- Oil spills.
- Unknown impacts of tidal turbines and salt dome excavation.
- Agricultural and urban chemical runoff.



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How You Can Help

Do not disturb or attempt to extract this delicate species from its protective burrow. Farmers and landowners can practice proper nutrient and chemical management practices. Do your part to reduce greenhouse gas emissions at home and at work.



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Contacts, Information & Sighting Reports

Contact: DFO Species at Risk 1-866-891-0771 or xmarsara@mar.dfo-mpo.gc.ca
Info: www.sararegistry.gc.ca, www.dfo-mpo.gc.ca/species-especes
Sighting Reports: 1-866-727-3447 www.speciestatrisk.ca/sightings