



Identifying Common North Atlantic Wood-boring Bivalves

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TEREDINIDAE

(Shipworms) 3 species; Highly invasive
Depth: shallow

BOREHOLE Lining: Present in all;
Smooth except at very end; tends to follow
the wood grain.



Shipworm borehole lining

Teredinid animals:

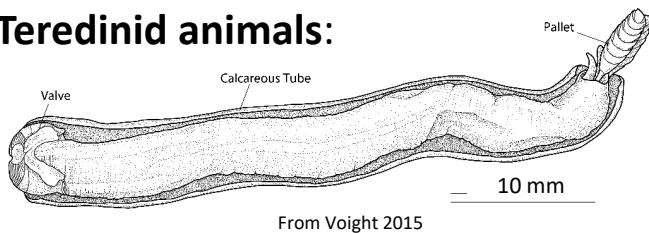


Photo by R. Shipway

Teredinids (Above): siphons very long, uniform; contain gills and organs

XYLOPHAGAIIDAE

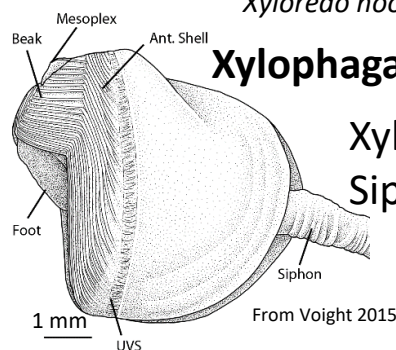
(Deep-sea borers) 3 species; Native
Depth: 5 to over 1000 m

BOREHOLE Lining: Present only in
Xyloredo spp.; Ridged; tends to cross the
wood grain.



Xyloredo nooi borehole lining

Xylophagaid animals:



Xylophagaid:
Siphon empty

Xylophagaid: *Xyloredo*
(below) siphon with
distinct parts

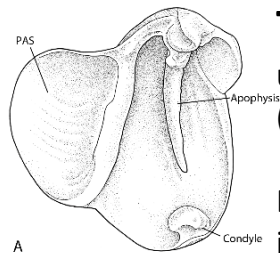


Photos R. Shipway

VALVE Identification

TEREDINIDS: inner valves with apophysis & usually a bigger Posterior Adductor Scar (PAS) (Left).

Teredinid species are identified by their pallets. Boreholes, valves & bodies do not aid in species identification.

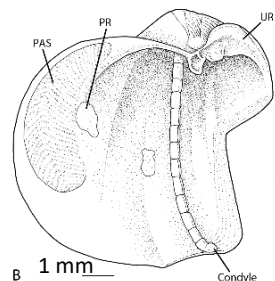


1 mm

From Voight 2015

XYLOPHAGAIDS: inner valves lack an apophysis; typically less angular.

Xylophagaid species are identified by differences in siphons, valves & mesoplax.



1 mm



Pallet & concamerations at end of borehole lining. (Photo: R. Shipway)



Xylophaga praestans Note strong ridges & odd siphon; mm increments shown. Photo: R. Shipway

Species in the North Atlantic

Below are the three teredinid species; three xylophagaid species are to the right.

Psiloterodo megotara

From Turner 1966 p. 181



Xylophaga dorsalis Note siphon with short Excurrent white spots (g) laterally, fringe distally; incurrent siphon Opening at siphon tip. Mesoplax large two-ply (Modified from Romano et al. 2014).

Nototerodo norvagica

From Turner 1966 p. 178

Xyloredo

(Dorsal view) identified by two-parted siphon (reverse), tiny mesoplax seen here, & ridged borehole lining. Species in genus are confused. Photo: R. Shipway.

Teredo navalis

From Turner 1966 p. 183

This species lacks concamerations at end of borehole lining (R. Shipway pers. comm.)

References

Turner, RD 1966 A survey and illustrated catalogue of the Teredinidae (Mollusca: Bivalvia). Published by Museum of Comparative Zoology, Harvard University <https://www.biodiversitylibrary.org/item/134382#page/9/mode/1up>
 Romano, C, JR Voight, R Pérez-Portela, D Martin 2014 Morphological and genetic diversity of the wood-boring *Xylophaga* (Mollusca, Bivalvia): new species and records from deep-sea Iberian canyons. **PlosOne** DOI: 10.1371/journal.pone.0102887.
 Voight, JR 2015 Xylotrophic Bivalves: Aspects of their biology and the impacts of humans. **Journal of Molluscan Studies**. 81 (2): 175-186. <http://mollus.oxfordjournals.org/content/early/2015/03/10/mollus.eyv008.full.pdf>
 See also: <https://naturalhistory.museumwales.ac.uk/BritishBivalves/home.php>