

GEOL204 Antiarch Poster

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Parayunnanolepis, a primitive antiarch placoderm.

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Depiction of *Bothriolepis canadensis*. *Bothriolepis canadensis* and other members of its genera represent one of the most abundant groups of antiarchs throughout the Middle to Late Devonian.



Antiarchi

Geographical Range:

Antiarchi inhabited seas and shallow coastal waters of various continents during the Devonian era, including what is now North America, Europe, Asia, and Australia.

Ecology/Habits:

- Primarily bottom dwellers
- Mostly found in shallow environments (marine and freshwater)
- Large egg batches and shared nurseries

Diet:

- Great diversity in feeding adaptations demonstrate a variety of diets
- Some ate tough plant material like and food debris
- Others consumed soft bodied prey like worms and agnathans
- Antiarch presence coincided with agnathan extinctions

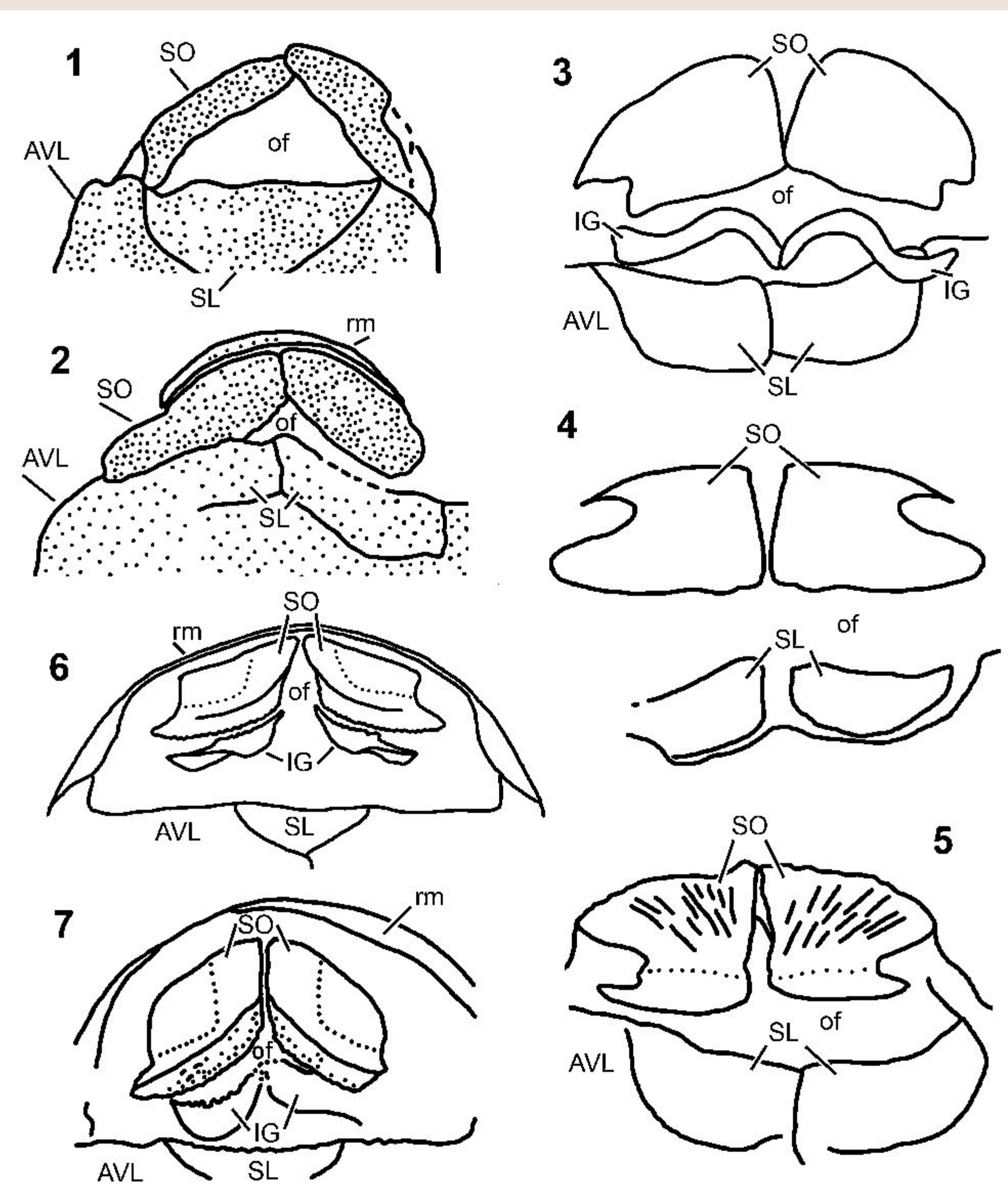
Geological Range:

387 to 360 Million Years Ago during the Middle to Late Devonian

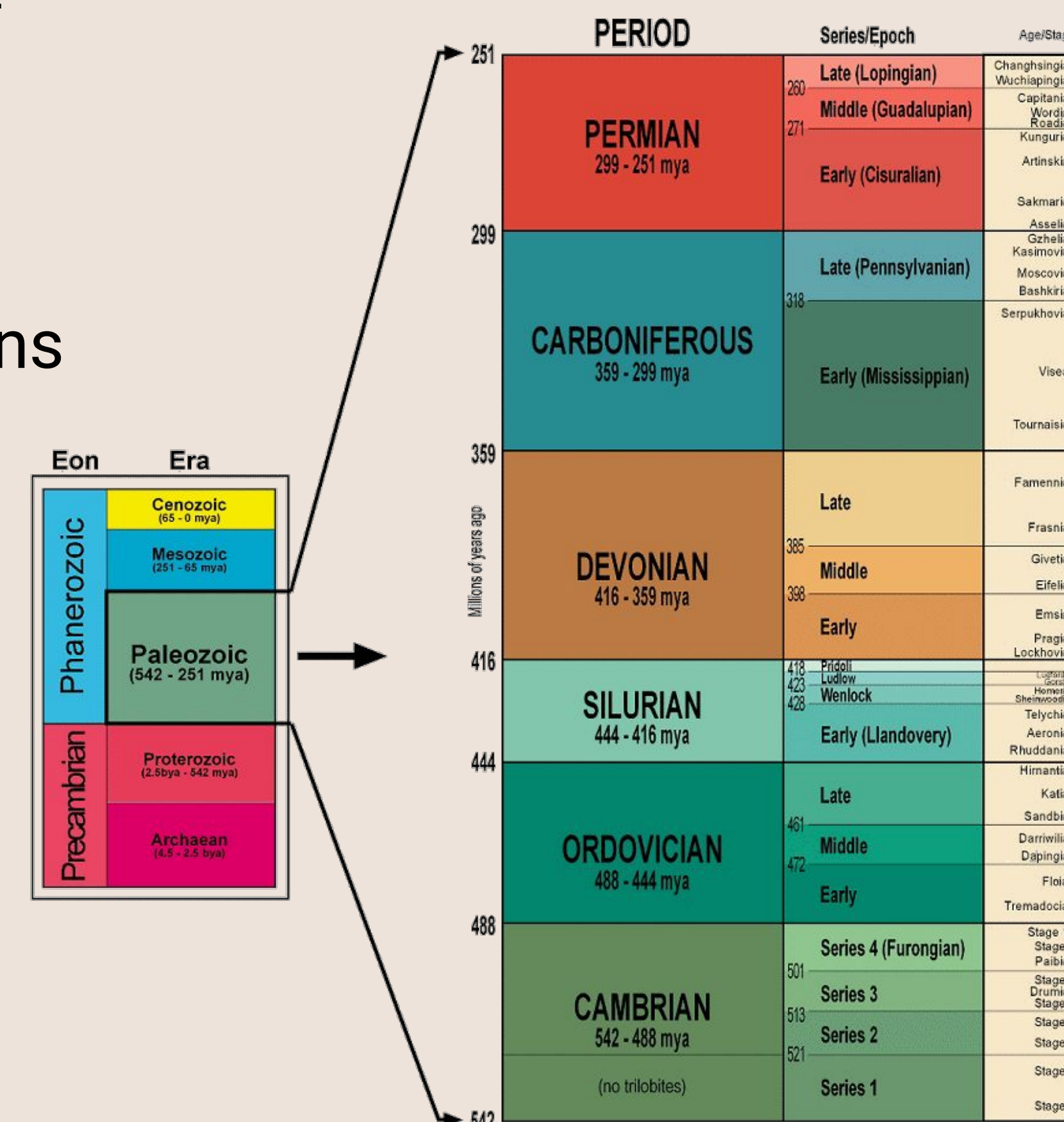
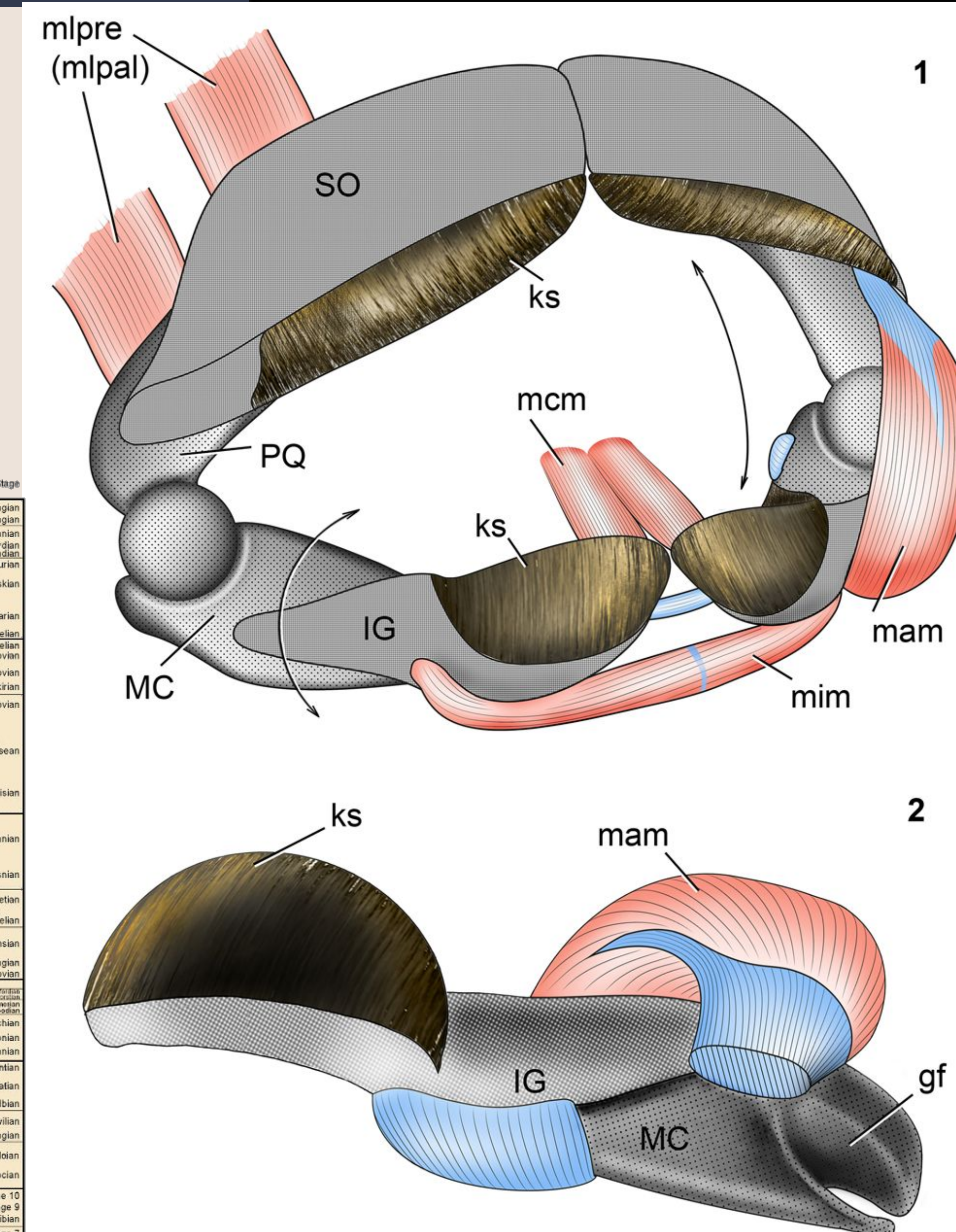
Distinct Features:

- Overlapping dermal plates on the head. ("Head Shield")
- Another set of overlapping plates on the pectoral to anal region. ("Trunk Shield")
- Jawed mouths.
- Basal clades had small limbs.

Jaw structures of various antiarch species ('of' = oral fenestra i.e. mouth opening):
(1, 2) Yunnanolepidoidei;
(3-5) Asterolepidoidei;
(6, 7) Bothriolepidoidei.



3D Reconstruction of Bothriolepis jaw structure with the muscles.



Geologic time scale for reference.

Bothriolepis canadensis fossil specimen.



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