

Belemnitida Explanatory

Taxon, Mesozoic

GEOLOGY 204 The Fossil Record
Spring 2020 Section 0104
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Fun Facts

F. 1 shows a belemnite is the internal skeleton of a squid-like animal. Most of the time only the most spherical part of the belemnite is found which is called the rostrum. (1)

F.2 shows the cone-shaped cavity called the alveolus. Inside it, the animal itself lived in a sort of shell, similar to the shells of other cephalopods such as Nautiloids and Ammonites. (1)

F. 3 shows a ring and how it represents the growth of the animal over months. (3)

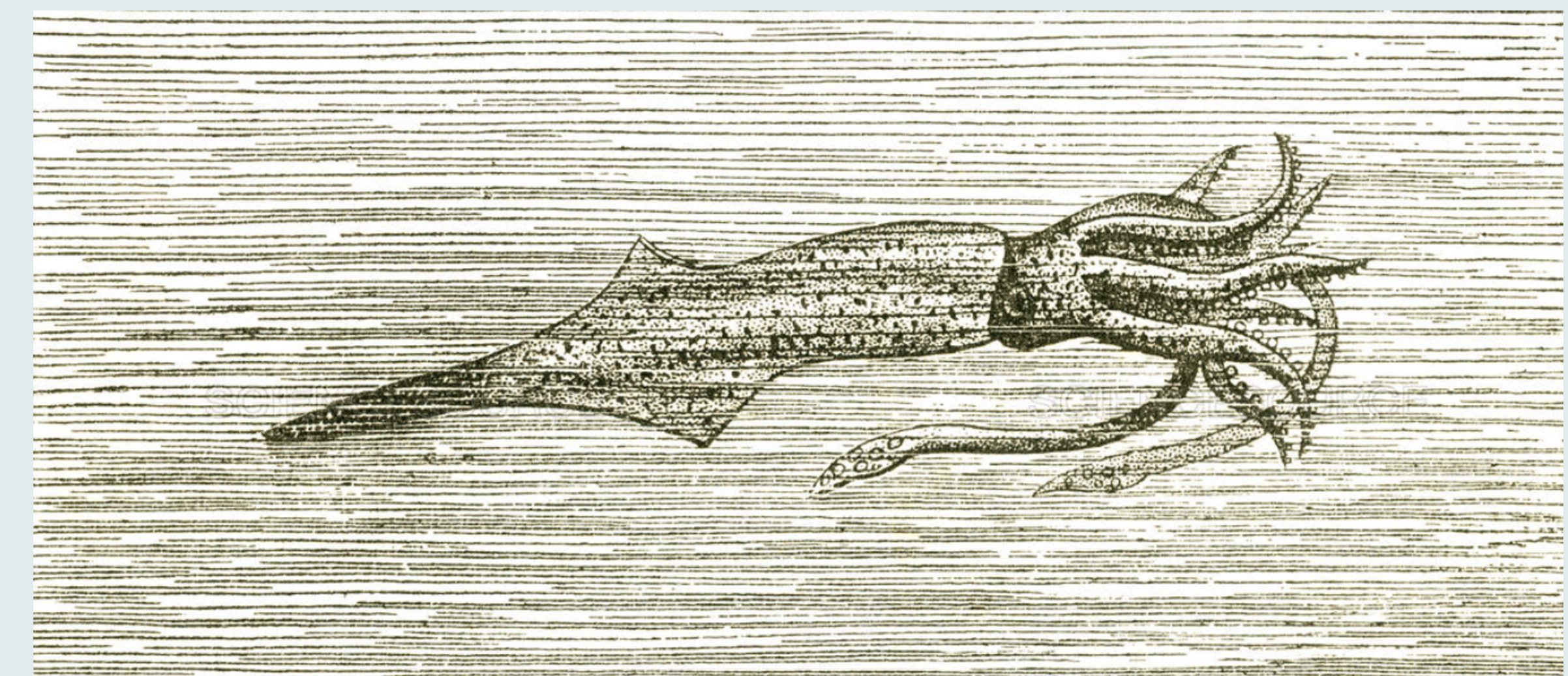
F. 4 shows chitin arm hooks. Belemnites had many tentacles. Soft parts decayed easily and are rarely found in fossils. However, some have been preserved from Jurassic rocks in southern England and southern Germany. (3)

F. 5 shows the ink sacs they had which were similar to octopus. (3)

F. 6 shows the squid-like body. Closest living relatives are the squid and cuttlefish. The largest belemnite had a 46cm rostra indicating that the animal itself must have been four or five meters long. (3)

F. 7 shows that Belemnites were widely distributed, highly abundant and diverse, and an important component of Mesozoic marine food webs. (2)

1. Belong to the phylum Mollusca. (3)
2. Were medium-sized predators in the epipelagic zone (less than 200 m). (2)
3. Hunted for crustaceans, other cephalopods, and fishes. (2)
4. Predators include sharks, bony fishes, and marine reptiles. (2)
5. Most likely lived for only 1–2 years. (2)
6. Became extinct at roughly the same time dinosaurs disappeared. (3)
7. Found as fossils when the remains of traces became buried in sediment that later solidified into rock. (3)
8. Their fossil record ranges from the early Late Triassic [~ 240 million years ago (Mya)] to the Cretaceous/Palaeogene boundary (65 Mya). (2)
9. Habitat depth was largely controlled by food and temperature → Optimum temperature was between 10°C and 30°C. (2)



Bibliography

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