

Hard-shelled Facts About Horseshoe Crabs

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Atlantic Horseshoe Crabs (*Limulus polyphemus*) can be found along the East Coast on shallow, muddy intertidal flats. Protected from the rough waves of the open ocean, these prehistoric arthropods comb the shoreline, preying upon worms, clams, and mussels.

The horseshoe crab is called a “living fossil,” because its body plan has not changed in millions of years. Named for its horseshoe shape, the body is divided into two parts with six pairs of legs and a pointy tail that is used like a boat rudder when the crab is swimming. Two eyes on top of the head can only see shadows. Horseshoe crabs can grow up to two feet in length, and females are larger than males.



Horseshoe crab with slipper shells

Mating Horseshoe Crabs



High tides between mid-May and mid-June are prime horseshoe-crab spawning season. The female will dig a hole in the sand and lay her clutch of tiny, pale blue eggs, which the male will then fertilize. A month later, the eggs will hatch.

Horseshoe crabs have been referred to as a “keystone species,” as their removal from an ecosystem could have devastating effects on other species. Migrating shorebirds such as the red knot and the ruddy turnstone gorge on these eggs and bulk themselves up for long flights. Over harvesting of horseshoe crabs equals less food for the shorebirds and reduces their ability fuel their long migrations.

A component in the bluish-colored blood of a horseshoe crab, known as limulus amoebocyte lysate (LAL), clots in the presence of certain toxins. This component can be used to test newly

developed medications and medical devices for contamination before they are mass produced and sold.