



Ancient whale a key link to evolutionary puzzle

Posted at: 01/12/2018

Ancient whale a key link to evolutionary puzzle-Maiabalaena nesbittae was toothless

- A prehistoric 15-foot-long whale that sucked prey into its mouth represents a key missing puzzle piece concerning the evolution of today's huge filter-feeding whales, scientists said.
- The researchers described fossils unearthed in Oregon of a whale named *Maiabalaena nesbittae* that lived 33 million years ago and possessed neither teeth nor baleen, the material that modern filter-feeding whales use to strain large amounts of tiny prey out of the water for food.
- They called *Maiabalaena*, meaning "mother whale," a surprising intermediate evolutionary stage between modern baleen whales and their toothed ancestors.
- *Maiabalaena* consumed fish and squid by sucking them into its mouth.
- The evolutionary steps that led to modern baleen filter-feeding giants like the blue whale, the earth's largest-known animal, had remained unclear.
- The first whales evolved from wolf-like land ancestors roughly 50 million years ago where all early whales had teeth.
- One leading hypothesis had been that in the early stages of baleen whales' evolution, they possessed both teeth and baleen before becoming toothless.
- *Maiabalaena*'s position on the whale family tree, the researchers said, indicates that tooth loss preceded baleens by millions of years.
- Baleen is a flexible material made of keratin, the same stuff found in hair and fingernails.

The Hindu