



Giants in the Sea

SN'T it odd, how we stick to the notion that the biggest animals that ever lived were the giant dinosaurs, that perished from the earth millions of years before men ever were born into it!

As a matter of fact, the biggest animals that ever lived are alive right now: whales. A full-grown sperm whale is said to reach a length of ninety feet. The longest dinosaur skeleton ever unearthed approaches this length, but a great deal of this yardage—nearly two-thirds of it in fact—is taken up with slim neck and even slimmer tail. The whale is all solid chunk; even its tail is massive.

So immense are whales that they can exist at all only by being aquatic. No leg-bones anatomically possible could hold up such monsters if they undertook to be terrestrial animals; even the vast muscles they now have could not move them. There is nothing that moves more awesome than a whale in the sea, where the greater part of its weight is buoyed up by the water; nothing more monstrously helpless than a stranded whale. Leviathan afloat is a fit subject for the epic poetry of the Book of Job; Leviathan ashore is a mountain in agony.

Because whales and a few of the bigger shark species are thus dependent on water to keep them up in the world, and even to preserve their normal shape against the flattening pull of gravity, some scientists have conjectured that the biggest dinosaurs, of the brontosaur type, must also have been at least partly water-lifted. True, they had massive legs, which may have sufficed to carry them for short distances on land, but perhaps they preferred to spend most of their days submerged or semi-submerged in the rivers and shallow lakes where they lived, and in whose muddy bottoms,

now turned to stone, we find their fossil remains.

This argument is partly supported by the enormously long necks of this dinosaurian type. These may have served as periscopes and ventilator-shafts as well as for means of reaching around a wide feeding radius with a minimum of bodylocomotion.

Whales, having no necks, must solve their breathing and feeding problems differently. For whales are strictly lungbreathing animals, and must have air. It would be possible to drown a whale easily enough, if there were any way to force it under water and keep it there.

The old saurians could get food enough even with their relatively small heads, because of the wide feeding radius those interminable necks gave them. But the whale has no neck, so it must keep on the move, using its enormous mouth as a scoop-net, at least in the case of the whalebone-whales, that feed exclusively on very small animals. The sperm whales, equipped with blunt but powerful teeth, hunt giant squid that live at great depths.

Science News Letter, September 5, 1936

CONSERVATION

## Single Plow Furrow Digs Deep Gully

See Front Cover

DEEP "canyon" which resulted from a single plow furrow is shown on the front cover of this week's SCIENCE NEWS LETTER.

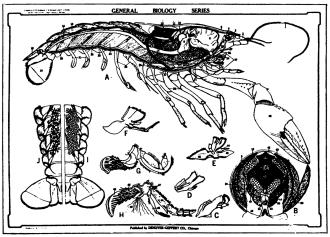
The tale of this wide wound of ruin in what was once a fertile hillside is tersely told by the U. S. Soil Conservation Service: Two farmers disputed the location of a field boundary. They got a surveyor to re-locate it for them. They drove a furrow straight down the slope, to mark the newly determined line. Rain underscored this gesture of division again and again—with results as shown. It all gives rather grim emphasis to the Biblical admonition, "Agree with thine adversary quickly." Or else—!!

Science News Letter, September 5, 1936

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