

Nature Note

Sea Star

▶ ALONG the rocky shores of the sea, near wharf pilings and on the sandy beaches live the stars of the sea—commonly called starfish, although they have no resemblance to fish.

These attractive star-shaped creatures range in size from less than half an inch in diameter to more than three feet across. In shape they range from regular stars with five or more arms to pentagons and near circles. They vary in color from the more usual yellows, buffs, pinks or reds to the rarer grays, greens, blues and purples.

Sea stars are members of the phylum Echinodermata, which includes the prickly sea urchins, brittle stars, sand dollars and sea cucumbers. The name of this phylum comes from the Greek word *echinos*, meaning a hedgehog, and *derma*, meaning the skin.

All echinoderms are radially symmetrical and most of them have a limy skeleton with protruding spines. They inhabit only the salty seas, living on seashores and the bottoms of oceans from the tide lines down to more than 12,000 feet.

The sea star has an interesting method of moving. Rows of tiny soft tube feet extend along each of the arms or tentacles. Each foot is shaped somewhat like a syringe with a bulb-like ampula extending inward into the body.

When this bulb contracts, fluid is forced into the opposite end, and the tube foot extends outward. When the bulb expands again, the fluid is drawn back into it, and a small vacuum is set up at the foot tip which thus acts as a suction cup.

By continuous coordinating movements of these tube feet, the sea star creeps slowly along the sea bottom, and is able to capture and handle its favorite food of mussels and clams, as well as small fish and shrimp.

• Science News Letter, 88:331 November 20, 1965

Do You Know?

According to one theory the initial condition of the *universe* may have been one of extremely dispersed gas of subatomic particles and antiparticles.

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• Science News Letter, 88:331 November 20, 1965

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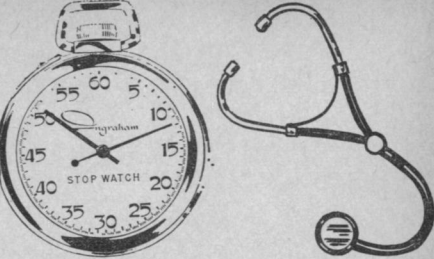
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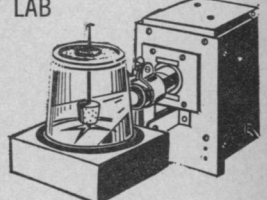
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