

Dr. Charles F. Brooks,
Secretary, American Meteorological Society,
describes:

WATERSPOUTS.

Waterspouts are most common in the warmer and calmer seas of the tropics, but they are by no means unknown in the waters that touch the shores of the United States for they may occur wherever violent thunderstorms are found. A famous instance was the beautiful waterspout of Oak Bluffs, Mass., then called Cottage City, on the island of Martha's Vinyard, on August 19, 1896, which passed in view of thousands of people. This one was in conjunction with a line thunderstorm, caused, perhaps, by the overrunning of the hot, moist surface air by a layer of cold air.

Waterspouts are simply tornadoes which occur over bodies of water, as is abundantly proved by the fact that whenever a tornado crosses a lake or river it instantly becomes a waterspout, and a waterspout which runs inland develops at once all the characteristics of the tornado.

The phenomenon is caused by a powerful updraught of air, so strong that it whisks up the water, at the same time whirling it into a mist. As the core of the spout is a partial vacuum the sea water rises within it, sometimes to a height of eight or ten feet. But the mass of the water above this fresh, condensed from the atmosphere, as has been demonstrated when a spout has crossed a vessel.

A similar phenomenon on a vastly smaller scale is the "white squall", which is a fair weather whirlwind over the water. In many such instances there is not enough condensation of the air to form a cloud, though occasionally a small misty cloud, sometimes called a "bulls-eye" is visible. At the surface the wind is strong enough to blow water into white spray, but the whirl is not powerful enough to raise the spray higher than from 20 to 50 feet above the surface.

(Tomorrow: Sun Seen Below Horizon)

All rights reserved by Science Service.
