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RAINS OF FISHES

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During violent thunderstorms and heavy rains, objects which normally are found on the land or in the water sometimes suddenly fall from the sky. The most spectacular of these are live animals, especially fishes. A great deal of excitement and speculation occurs when such falls are noticed.

Reports of fishes falling with rain have been recorded in many parts of the world since early times. A few instances are mentioned here; other accounts can be noted in the bibliography.

There was a downpour of small fish in the midst of a storm in June 1924 in Longreach, Central Queensland, New Zealand (Fishing Gazette, London, 1924). Within a few minutes after the storm struck the township every hollow and rivulet were filled with thousands and thousands of small fish, ranging from 1 to 4 inches long. The fish were of a species unknown in the district. Their nearest habitat was believed to be 500 miles away, in the swamp country of the far west. Fish were known to have fallen in storms in Queensland before this occurrence.

In 1928 dozens of tiny red fish, probably sticklebacks, were found on the ground and roof of a bungalow on a Drumhirk farm, near Comber in Ireland (Norman, 1947). An exceptionally violent thunderstorm with heavy rain had occurred just before the discovery of the fish. There was no river in the neighborhood, the nearest water being Strangford Lough, 2 miles distant.

An odd case occurred during a heavy storm at Essen,

Germany, in 1896 (Norman, 1947). A hailstone as large as a hen's egg fell; it contained a frozen Crucian carp (<u>Carassius</u>) about 1-1/2 inches long. This indicates that the fish had been lifted to the considerable height necessary for the formation of hail.

Several rains of fishes occurred in Scotland (Gudger, 1921). In 168L a shower of herring was seen to fall in Galloway, some 16 miles from the sea, but not far from the water of Munnach. Some of the fish were carried to the residence of the Earl of Galloway and exhibited to him. Much later, in 1821, a shower of herring fell in Lorn. They were so large and delicious that the tenants who found them sent some to their landlord in Edinburgh. The weather was exceedingly stormy at this time, and the hill on which the fish were found is exposed to the southwest wind, which blows along Loch Milford, an arm of the sea in which herring are frequently caught. A shower of herring fell near Loch Leven in Kinross-shire 4 years later when there was a strong wind from the Firth of Forth. It was concluded that the fish were blown out of the Firth, carried by the wind 10 miles across Fifeshire, and dropped in the vicinity of Loch Leven. Still later, in 1828, on a Ross-shire farm, a considerable portion of the ground was covered with young herring from 3 to 4 inches long. They were probably transported there by a waterspout, a phenomenon which had occurred before in that area. The nearest salt water was the Firth of Dingwell, 3 miles from the farm.

The United States also has had rains of fishes. In Cambridge, Maryland, in 1829, a ditch was dug 1 mile from the nearest river and in a location that was 10 feet higher in elevation than the river (Gudger, 1921). The ditch did not connect with any body of water and, after being finished, remained dry for 10 days. After a week or 10 days of heavy rain hundreds of small sunfishes from 4 to 7 inches long were found in the ditch, which was filled with water.

Fifty-seven years later, after heavy rains, small fishes were found on the roofs of office buildings in Aberdeen, South Dakota (Gudger, 1929). There had been a number of these falls at various times.

In 1893, during a thunderstorm, many 2- to 4-inch long sunfish fell with the rain at Winter Park, Florida (Gudger, 1921). A waterspout may have picked them up from Lake Virginia and carried them westward. The distance from the lake to the place where they fell is about a mile. In June 1901, hundreds of little fish (including catfish, perch, and trout) fell with the heavy rain at Tiller's Ferry, South Carolina. Afterwards they were found swimming in the pools between cotton rows in a nearby field (Gardner, 1901).

A more recent rain of fish occurred on October 23, 1947 in Marksville, Louisiana (Bajkov, 1949). Between 7 and 8 o'clock of that morning fish, ranging from 2 to 9 inches long, fell on the streets, roofs of houses, and lawns. Two merchants were struck by falling fishes as they walked toward their places of business. There were areas on Main Street that averaged one fish per square yard. The area in which they fell was about 1,000 feet long and 75 or 80 feet wide, extending in a northsouth direction, and was covered unevenly by fish. The fish were fresh-water species native to local waters: largemouth black bass, warmouth, two species of sunfish, several species of minnows, and hickory shad.

The actual falling of the Marksville fish occurred in short intervals, during foggy and comparatively calm weather. The velocity of the wind on the ground did not exceed 8 miles per hour. The New Orleans weather bureau had no report of any large tornado, or updraft, in the vicinity of Marksville at that time; however, numerous small tornadoes occurred the day before the rain of fish in Marksville. Fish rains have nearly always been described as being accompanied by violent thunderstorms and heavy rains. This, however, was not the case in Marksville.

Fallen fishes are usually alive, because fishes generally succumb slowly to falls and blows. If they fall on grassy lands, the shock, of course, is much decreased. However, numbers of those found are dead.

Fishery scientists of today agree with Raphael Eglini who believed in 1771 that these extraordinary events result from the action of heavy winds. Powerful, rising spirals of air form occasionally. If they occur over land, they are tornadoes, and if they occur over water, they are waterspouts. These whirlwinds can pick up objects, whirl them to considerable heights, often up into the thunderstorm clouds themselves, and transport them some distance from the locality at which they were picked up. The objects fall when the spirals disperse and usually scatter over a wide area.

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