9.19

## United States Department of the Interior Fish and Wildlife Service

## Fishery Leaflet 130

Chicago, Ill.

July, 1945

## RAI'S OF FISHES, TOADS, AND FROGS

Prepared in the Division of Fishery Biology

Reports of rains of organic matter have been recorded in all parts of the world, from ancient to very recent times, and the truth of such phenomena is quite well established. Among the materials reported as having been observed as having fallen from the sky are fishes, frogs, toads, birds, insects, earthworms, and plants. The U. S. Weather bureau has collected and published many references to such occurrences, in a paper by Waldo L. McAtee. This paper is out of print, but it may be possible to consult it in libraries which receive Government publications. It is cited among the titles given at the end of this memorandum.

Reports of toads and from falling in showers from the sky have come from various foreign countries, but the Weather Bureau has found no such occurrence reported for the United States. But for fishes, there are several reports; one instance may be cited. In the Monthly Heather Review for June, 1901, p 263, is the note that Mr. J. W. Gardner, voluntary observer at Tillers Ferry, S. C., reports that during a heavy local shower about June 27, (1901), there fell hundreds of little fishes (catfish, perch, trout, etc.) that were afterwards found swimming in the pools between the cotton rows.

Mr. McAtee, of this Service, in the article referred to above, writes substantially as follows: All strong winds have some lifting power, as is well known, especially when they begin to whirl, when their lifting and carrying capacity increases enormously. It is on record that by a tornado at Beauregard, Miss., April 22, 1833, the solid iron screw of a cotton press, weighing 675 pounds, was carried 900 feet, and there are records of other heavy material being transported distances by wind. There seems to be, therefore, no reason for general suspicion toward the accounts of organic showers. Laterspouts are reported as having emptied harbors and fish ponds to such an extent that the greater part of their bottoms were uncovered. Naturally under such circumstances, fishes and any other organisms in the water may go with the water.

Another explanation for the sudden appearance of young toads after rain is given in "The Freg Book," by Mary C. Dickerson, p. 71, published by Double-day Page and Co., New York, 1906. She atates that young toads, on first leaving the water, are very sensitive to a dry atmosphere, and by day have the habit of hiding under stones and in protected places; on the occurrence of rain they leave their hiding places and sometimes addenly appear in great numbers. This happens generally between the middle of June and the middle of July, according to the advancement of the season.

- Among a great number of papers on the subject of rains of fishes, etc., the following are cited:
- Gardner, J. W. A rain of small fish. Monthly Weather Review and Annual Summary, Vol. 29, p. 263. 1901.
- Gudger, E. W. Rains of fishes. Natural History, Vol. 21, No. 6, pp. 607-619. 1921.
- Gudger, E. W. Rains of fishes and of frogs. Ann. and Mag. of Watural History, Ser. 10, Vol. 3, p. 1, Jan., 1929.
- Jochelson, Waldemar. Fishes fallen from the skies. Science, Vol. 58, p. 516, 1923
- Meather Burgan, Southly Weather Review, key, 1917, Vol. 45, pp. 217-224.
- Martin, W. V. L. On the fall of frogs, toads, and fishes from the sky. Recreative Schence, Vol. 3, pp. 328-334, 1862.
- Prinsep, James Fall of fishes from the atmosphere in India. In Amer. Jour. Arts and Sciences, Vol. 32, pp. 199-200. 1337
- Sykes, (Col.) Fish and grain rain in India. In Reports British Ass'n Advancement of Science, 1840, 10th Meeting, p. 40.
- Symonds, W. S. Account of the fish-rain in Aberdare, Glamorganshire. In Report, Sritish ass'n advancement of Science for 1859, 29th Mesting, p. 158.