

The History of American Weather. Early American Tornadoes 1586-1870. By DAVID M. LUDLUM. (Boston: American Meteorological Society, 1970. Pp. 219. Foreword, illustrations, maps, appendix, chronological index, geographical index, index of individuals. \$10.00.)

Early American Tornadoes 1586-1870 is the fourth in a series of monographs of the history of American weather designed to relate the facts concerning the development of the science of meteorology in the Americas and to describe the principal weather events of the climatic past. The editor requests any person with meteorological records or descriptions of weather events, either in manuscript or in printed form, to kindly send them to:

Historian
American Meteorological Society
45 Beacon Street
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The first record of tornadic activity in America observed by the English is included in the Hakluyt Societie's *The Roanoke Voyages 1584-1590*. This account relates a four-day storm in 1586 which caught Sir Francis Drake in Albemarle Sound inside Cape Hatteras. There were great waterspouts engendered, then as now, by the mixture of the warm shallow waters of the Sound and unstable atmospheric conditions. Rain fell with hailstones "as big as hen's eggs."

The book goes on from this date, but not necessarily in chronological order, to detail the known records of America's weather in New England, the Middle Atlantic area, more of the Old South, and the Old Northwest. It is an excellent reference source, not only for meteorologists, but for authors of historical works or works of fiction. Weather facts make ideal focal points of reference now just as in the past.

One of the best sources of early American weather information is in John Winthrop's journals. In addition to his other observations, Winthrop was a very weather-conscious individual, mentioning hurricanes, northeasters, big snowstorms, solar phenomena, and other related geophysical occurrences.

An added benefit to the reader is obtained by the manner in which Mr. Ludlum has chosen to present the weather data. In each instance he quotes, exactly, first person observations of weather occurrences, either from correspondence or newspapers of the day. In this way, the reader or researcher partakes of the local color and the emotions of the

people involved. Of course, in accounts of this nature, much of the horror attendant upon the event is transmitted along with the gory details of the death and destruction wrought by these enormous forces of nature to man, animals, and property.

Aptly enough, the work is written in honor of Benjamin Franklin and James Pollard Espy. Franklin was quite prolific in his investigations, conclusions, and writings about the nature of whirlwinds, waterspouts, and tornadoes. No mention is made of kite flying.

Espy was born in Westmoreland County in Pennsylvania. He started with research into the behavior of heated air. This led him naturally into investigations of dew and weight of clouds. He developed a centripetal storm theory, formed a committee to study meteorology, speculated on the possibility of artificial precipitation, and invented a nephelescope to examine clouds.

The only account of early weather in the Western Pennsylvania area is of a tornado in Elizabeth in Allegheny County in 1830 during which much property was damaged, but "Thanks to that Providence, who watches over and protects us amid such calamitous visitations, no human lives are lost, though many have received slight wounds." This information was gleaned from the *National Intelligencer* of Washington, D. C. It would seem the historian of the American Meteorological Society does indeed need some accounts of early weather from Western Pennsylvania.

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BOOK NOTE

For those who read the poetry of Haniel Long, Pittsburgher and beloved teacher at Carnegie-Mellon University in its early years, news of his steadily-growing European reputation will be welcome. In a way, this announcement is a follow-up of a review of *If He Can Make Her So*, a volume of selections from his work, edited and designed by a young Pittsburgh admirer, Ron Caplan, which appeared in the October 1969 issue of the *Western Pennsylvania Historical Magazine*. The following is an announcement of publishers and costs of these European editions, since many readers have inquired about available reprints of Long's work. First editions are collector's items.

If He Can Make Her So, the volume of selections made by Ron