

of the peoples of Mesopotamia in this branch of science, and of the indebtedness of Greek thought to Babylonian and Assyrian conceptions of the nature and movements of the heavenly bodies. At the same time, research on the astronomical knowledge of the ancient Egyptians has shown that its basis of exact and scientific observation has, if anything, been overrated. At the recent autumn meeting of the National Academy of Sciences, held at Brown University, Providence, R.I., on October 23-25, Dr. O. Neugebauer, in a communication on "The Egyptian Picture of the Sky" (*Science*, 90, 410; Nov. 3, 1939), pointed out that while Egyptian and Babylonian astronomy are usually quoted as equivalent foundations of Greek, and, therefore, medieval and modern astronomy, really very little is known about Egyptian astronomy. Investigation of Demotic texts, however, has now shown that Egyptian methods of treating the movements of the moon and planets were only very approximate, and without any consideration of details. This picture, Dr. Neugebauer stated, has now been completed by a Demotic text recently purchased by the Egyptological Institute in Copenhagen, which shows how the aspect of the sky and the setting and rising of the stars was connected with the religious myths. The close connexion of religion, especially so far as the underworld is concerned, with the changing aspect of the sky during the year indicates that the main interest of Egyptian astronomy was not a mathematically detailed description of very complex effects, but merely a rough scheme, just good enough to reflect the main traces of the observed facts.

Submarine Valleys

DURING the last nine years, the United States Coast and Geodetic Survey has made an intensive acoustic survey of the Atlantic continental shelf and slope of the United States. The surveys are now so far advanced that the surface topography can be studied in detail. Charts of most of the slope have been published by the Geological Society of America (Special Paper No. 7; 1939). The *Geographical Review* of October 1939 publishes "Atlantic Submarine Valleys" by Mr. R. A. Smith, with a chart on a scale of 1:1,000,000 of the shelf and slope, and adjacent land, between New England and Albemarle Sound. Even on this reduced scale many striking features are shown. The flatness of the shelf is so remarkable that only by the use of a five-fathom contour interval can any noticeable relief be shown. The slope, on the other hand, shows a topography so irregular and broken that a 100-fathom contour interval has to be employed for the sake of lucidity. While the shelf, for a distance of 60-125 miles seaward, shows beach forms, the outcome of marine erosion, or modified river forms, the continental slope is deeply dissected and shows forms characteristic of subaerial erosion. In many places the complexity of relief is much greater than that found in the Appalachian Mountains and is more comparable, according to Mr. Smith, with that of the western mountains of North America.

Lancashire and Cheshire Fauna

THE twenty-fifth annual report of the Lancashire and Cheshire Fauna Committee adds a large number of insects to the dual county lists and also to the British area and some species new to science. Among Coleoptera, *Philonthus jurgans* Tott. was discovered new to science from a specimen obtained at Ashton-under-Lyme in 1935, since when it has been found widespread throughout the British Isles, also occurring in Cheshire at Tarporley and Arden. *Aphis davidsoniella* Theob., a species that has been separated from *A. rumicis* L., has been obtained on dock at Preston and Stalybridge. The fly *Bairamliia nidicola* Ferriere is described as new from material obtained from flies breeding in birds' nests at Mobberley, Cheshire. Six new moths are added to the dual counties' lists and one new to Lancashire. The bird, mammal and Lepidoptera notes are largely of local interest, but some of the more general items include the breeding of the death's head moth from larvæ at Raby, Cheshire, a 1927 specimen of the rare migrant Camberwell Beauty at Alderley Edge, Cheshire, numerous foreign insects collected from imported fruit and other goods, the beetle *Cryptophagus acutangulus* Gyll feeding abundantly on the mould on damp plaster in almost all the new houses in the district, increasing numbers of red squirrels in the Ribblesdale valley and in west Cheshire, detailed reports of the surveys on reed-warblers, tufted duck and turtle-dove surveyed for the British Trust for Ornithology, Lapland bunting at Ainsdale, where the little tern is nesting again, the spotted crake nesting in Cheshire, the bittern at Rostlerne, the quail near Nantwich and increasing numbers of reports about many wading birds and duck formerly considered rare in the districts but which are obviously much more frequently seen now. The committee, of which Prof. J. H. Orton is chairman, has a membership of 280 and commences the year with a surplus of £146.

Merseyside Naturalists' President

THE annual meeting of the Merseyside Naturalists' Association (the Merseyside Branch of the British Empire Naturalists' Association), held at Liverpool Museum on December 3, elected Mr. R. K. Perry, keeper of vertebrates at the Museum, president for 1940, Dr. J. C. P. Miller, lecturer in applied mathematics in the University of Liverpool, as chairman, and Mr. Eric Hardy as honorary secretary. Formed last winter, the Society faces the War with a surplus in its ordinary and its sanctuary accounts, and will shortly issue a portfolio of its faunal and floral work during the past year.

Horticulture of the Lily

THE eighth number of the Royal Horticultural Society's Lily Year-book (from the Society's Office, Vincent Square, Westminster, S.W.1, 5s. paper, 6s. cloth), makes a very effective attempt to keep pace with the multitudinous variations of these plants. Mr. A. Simmonds lists the names and origins of 114 hybrid lilies, and there are papers which