

Arizona";² and, in said article, the Cretaceous formation receives mention as follows:³

The Cretaceous.—About twenty-six miles northwest of Fort Apache near Forestdale (not far from Pinedale mentioned in the article above) a coal outcrop is exposed, which seems on lithological grounds, to be the same as the Fort Union or Laramie coal of New Mexico. The extent of this coal series is not known to the writer as it is almost everywhere covered with later deposits.

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NETT LAKE, MINN.

THE SECOND RECORD FOR BLANDING'S TURTLE IN CONCORD, MASS.

As curator of the Thoreau Museum of Natural History, Middlesex School, Concord, Mass., I have just received a specimen of Blanding's turtle [*Emys Blandingii* (Holbrook) Strauch] caught by W. A. Patch on July 19, 1911, in the Concord River, off Dakin's Hill. The specimen was given me by Mr. John Hoar, and is peculiar in that it has a large growth beneath the chin. The only other Concord record is of a specimen taken by Thoreau in the same river, and now (only carapace and plastron) preserved (No. 454) in the Boston Society of Natural History.

R. HEBER HOWE, JR.

SCIENTIFIC BOOKS

The Biological Stations of Europe. By CHARLES ATWOOD KOFOID. United States Bureau of Education; Bulletin, 1910, No. 4. Pp. 360. Washington.

The biologist of sixty and seventy years ago labored under difficulties that the present generation can hardly appreciate. The facilities for work were scarce; books and apparatus of all sorts were hard to obtain; there were no laboratories of any kind with the exception of the dissecting rooms of the medical schools. Little was known of methods of study of marine life. To be sure, one could wander along the shore, picking up the forms living between tides, and could preserve them in a bottle of new rum, but for the species living

² *American Geologist*, Vol. XXXII., pp. 265-308.

³ *Ibid.*, p. 280.

below low-water mark the student and collector had to depend upon the wreckage thrown up by storms or upon the contents of the stomachs of fishes. The latter method was employed by Dr. Stimpson in obtaining the material for his work upon the shells of New England, and, while looking over fish refuse for this purpose, was stoned as a crazy man by the boys of Marblehead. It was not until a few years later that the late Dr. Henry Wheatland, of Salem, constructed the first naturalist's dredge ever used in America and initiated Stimpson into a line of work which he turned to such good account while acting as naturalist of the Ringgold-Rogers expedition to the North Pacific Ocean.

The student of to-day has everything ready at hand. From the moment he enters the laboratory as an undergraduate until his doctor's dissertation is accepted, everything he needs in the material line is placed before him—specimens, books, apparatus—and all of his time and all of his energies can be devoted to his problem. Then when he goes to the shore for his investigations he is no longer compelled, like Johannes Müller, the father of marine biology, to depend upon the limited facilities of a fisherman's hut. He finds, in almost every region of the globe, a biological station equipped with every requisite for his work. In the evening he states his needs for the next day—animals, apparatus, chemicals—and the next morning he finds these ready in the well-equipped study set aside for his exclusive use.

Whether this is best in every respect for the student is a question. It is often remarked that the younger men have no such acquaintance with the animals and plants, their systematic position, names and habitats, that the older men had, and this lack of knowledge of one aspect of nature is in large measure due to the lack of any necessity of hunting the specimens. A little less helpfulness on the part of the laboratory collector would result in a better acquaintance with life and living things.

Be this as it may, the fact remains that biological stations are with us and they are