change our ideas about that locality. Evidently, in the case of Pocono, we are forced either to propose an entirely new term, or, and this is by far the more reasonable and least confusing course, accept a name, which, however dubious its origin, is made acceptable by long usage.

> GEORGE H. ASHLEY BRADFORD WILLARD

PENNSYLVANIA TOPOGRAPHIC AND GEOLOGIC SURVEY

## DELAYED ACTION OF SELENIUM POISON-ING OF LIVE STOCK

THE various manifestations of selenium poisoning of live stock by ingesting grains, forages and native range plants carrying toxic and lethal quantities of selenium has received considerable attention during the past few years from chemists and physiologists in the U. S. Department of Agriculture and in a few state experiment stations. Through accumulative data covering many field and experimental cases, it appears that under certain conditions not understood at present an animal may not show any outward sign of poisoning perhaps for several months after grazing upon range plants carrying selenium. When the "break down" occurs, death usually follows in from one to six days. Those that survive seldom regain normalcy. Severe cases show much characteristic pathology.

It is indeed surprising to observe cattle and sheep in an apparently sound and healthy condition suddenly go "off feed," pass bloody urine and rapidly lose weight. To one not familiar with this type of poisoning, it is generally interpreted as due to some immediate physiological disturbance. As a matter of fact, it is now known that such cases may have grazed the causal toxicant months previous to the occurrence of the final acute stage.

UNIVERSITY OF WYOMING

O. A. BEATH

## AQUATIC ANIMALS AS COLLECTORS

RECENTLY, when examining some young specimens of the Ocean Sunfish (*Orthagoriscus mola* and *Masturus lanceolatus*), these giants of the ocean, weighing from 400 to 2,000 pounds, I discovered certain young individuals, measuring  $2\frac{1}{2}$  inches, among the collections of fishes of the Museum of Comparative Zoology, Cambridge, Mass. They have been found in the stomach of a dolphin.

Another giant fresh-water fish is the Great Caspian Sturgeon (*Huso huso*), which also attains the weight of 2,000 pounds. The young of this species were unknown for a long time until I happened to discover them, as well as those of other sturgeons, in the stomachs of cat-fishes (*Silurus glanis*).

Thus, naturalists are indebted to the voracious dolphin in the ocean and to the voracious cat-fish in fresh waters for collecting the rarest specimens of the young of two giant fishes.

By publishing this short notice I would like to call the attention of my ichthyological colleagues to those facts and urge to lose no opportunity of dissecting the stomachs of voracious aquatic animals with a view to finding other fish which they have swallowed. Those creatures may prove of great assistance to us in collecting very rare specimens.

N. A. BORODIN

MUSEUM OF COMPARATIVE ZOOLOGY CAMBRIDGE, MASS.

## EXTENDED HIBERNATION IN THE TOAD

THE writer believes he has an example of extended hibernation in the common toad, Bufo americanus.<sup>1</sup> In 1908, the W. E. Caldwell Company, Louisville, Kentucky, constructed a structural steel plant over some filled swampy land. On November 1, 1934, twenty-six years later, while digging in one of the buildings for the placing of a new furnace, two toads were exhumed. The first was about four and one-half feet and the second nearly eight feet below the clay floor of the building. An examination of the walls of the pit showed the fill to be of yellow clay with an occasional small air space, none over one-half inch in diameter. There was no indication of any type of passage-way by which the toads may have entered. The closest distance from the pit to the wall of the building was twenty-five feet. The foundation of the building is fourteen inches thick and extends four and one-half feet below the clay floor of the building.

The workmen placed the first toad on the edge of the pit, believing it to be dead, but in a short time it hopped away. The second toad was saved. It was so thin that little remained but skin and bones. It revived to such an extent that it was able to hop and to turn over when placed on its back. When it was brought into the warm laboratory, it died within two hours.

UNIVERSITY OF LOUISVILLE

P. A. DAVIES

E. A. VUILLEUMIER

## ECOLOGICAL NOTE

OUR Felis domestica recently committed a nuisance on a small rug. He then removed from the bookcase a Guidebook to Boston and a Guide to the Wild Flowers of Pennsylvania, with which he carefully covered his misdeed.

DICKINSON COLLEGE

<sup>1</sup> The writer is indebted to Mr. Walter E. Caldwell for calling his attention to the hibernation and for permission to examine the pit and to take the necessary measurements.