

COMMENTS

by Readers

Please! New York's city colleges have had a difficult enough time telling the American public of the good work they have done these many years. Your note on page 159 of the February 7 issue of *Science* on the death of Morris Raphael Cohen, identifying him as "professor of philosophy at the University of Chicago until his retirement in 1941," robs the City College of the most sparkling jewel in its diadem of scholars. It is true that Prof. Cohen taught one or two quarters at Chicago, but before that and for much of his productive life as mathematician, philosopher, writer, scholar, and teacher, from about 1912 to his retirement, he was a member of the Department of Philosophy, City College of New York.

In all the four New York city colleges, we were proud for many, many years to count ourselves as colleagues of Prof. Cohen, and it comes as something of a shock to us to find him identified simply with the institution at which he temporarily taught for a short interval after his retirement from the City College. (AUSTIN B. WOOD, *Brooklyn College, Brooklyn, New York.*)

Our interest in the fauna of Joshua Tree National Monument, on the Southern California desert, has taken A. J. Van Rossem and myself to the area on three occasions during the past winter (1946-47). The monument is confined to the "high desert" terrain of San Bernardino and Riverside Counties, the stations which we occupied ranging from 3,500 to 4,700 feet above sea level. Furthermore, this winter seems to have been slightly below average in temperatures. Observations were made during the first weeks of November, of December, and of February.

Daytime temperatures in direct sunlight were cool enough to make it uncomfortable to remain inactive without warm clothing. As soon as the sun dropped

behind the San Gorgonio Mountain mass to the west, the air rapidly became cold. At 7:00 P.M. the temperatures would fall to 33°-38° F. At sunrise the temperatures would range between 20° and 28°. In short, the temperatures were winter temperatures for the area, and night temperatures remained low throughout the whole period of darkness.

During each visit to the monument, bats were seen or heard in active flight in air strata from head height to distances 40-50 feet above the ground. Small Lepidoptera occasionally came into the light of our campfire, and desert mosquitoes visited our sleeping bags though ice formed in our drinking water.

Once at dawn the bats came close enough to my head to give the impression of a small species—probably a *Pipistrellus*. On one occasion at 11:15 A.M. in bright, clear sunshine, a small, gray-brown bat with dark membranes came to the cattle trough at Quail Spring and dipped the surface of the water after the fashion of drinking swallows. The temperature four hours earlier had stood at 20° F.

The following conclusions seem justified: (1) The bats seen or heard were not in transit; (2) they remained active during a considerable portion of the night; (3) such activity could hardly be that of a hibernating animal temporarily aroused by warm periods of weather; (4) some insect food species are active at surprisingly low temperatures; (5) some species of bats have temperature tolerance of fairly wide range. (LOYE MILLER, *University of California at Los Angeles.*)

Some time ago the undersigned published a note, in the Dutch language, on the action of neutrons on hafnium, no other way of publication being available at the time (*Ned. Tijdschr. Nat.*, 1943, 10, 258). As this paper is hardly accessible, it seems worth while to mention its con-

tents here. With slow neutrons a period of 20 seconds was reported; with fast neutrons periods of 20 seconds, 10 minutes, and about 6 hours. As the stable hafnium isotopes are 174, 176, 177, 178, 179, and 180, the second period was supposed to be due to Hf^{175} , and it was recommended for the estimation of hafnium in mixtures with zirconium. It was also shown that zirconium could be determined in mixtures with hafnium by prolonged irradiation with fast neutrons. Under these circumstances no periods of the order of days were found in hafnium; after two days decay the activity of our hafnium sample amounted to only 2 per cent of that of a similarly treated zirconium sample.

Recently, A. Flammersfeld (*Z. Naturforsch.*, 1946, 1, 190) also has observed the formation of a hafnium isotope with slow neutrons. Since he used $(D + D)$ neutrons instead of $(Li + D)$ neutrons, as we did, he has not been able to observe the formation by the $(n; 2n)$ process. He was, however, able to carry out some absorption measurements of the radiation, which lead to the assumption that the 20-second isotope is an isomer, decaying with internal conversion. Of the mass numbers suggested by his experiments (175, 177, 178, 179, 180, and 181), this author rules out the first and the last by means of intensity considerations and the numbers 178 and 180 on the strength of a rule of Mattauch. Mass numbers 180 and 181 are definitely excluded by the activation with fast neutrons. (A. H. W. ATEN, JR., *Natuurkundig Laboratorium der N. V. Philips' Gloeilampenfabrieken, Eindhoven, Holland.*)

A new laboratory plant for the study of carbohydrate metabolism is recommended by John S. Bailey and Emmett Bennett, of Massachusetts Agricultural Experiment Station, Amherst, Massachusetts. The plant, *Impatiens Sultanii*, is a commonly used household ornament growing to the height of 12-24 inches. Exudates proved to be principally sucrose. The stems on a dry weight basis yield approximately 33 per cent reducing sugars as dextrose. Nonreducing sugars are present only in traces. Although the amount of sugar is only one-third to one-half that found in sugar beets or sugar cane, it is high compared with most other plants.