

anticipated, so that two large volumes have been necessary to describe them. These two volumes contain 1,846 pages and 1,783 figures. In these volumes the treatment used in the others has been followed.

Chemists and crystallographers, the world over, are greatly indebted to Professor Groth for this most important reference work, which is a critical survey of all the crystallized material described thus far. As is generally known, Professor Groth has devoted his life to problems in chemical crystallography. He was the founder of and for many years the editor of the *Zeitschrift fuer Krystallographie und Mineralogie*. Hence, he was peculiarly fitted to undertake this very difficult and time-consuming task.

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SPECIAL ARTICLES

THE CHANGE IN THE FAT OF PEANUT-FED RABBITS

In the course of our investigation of the soft pork of peanut-fed hogs it occurred to me that if an animal in starving used its liquid fat first, this would make it possible to overcome the softness of the pork on peanut-fed hogs. If the animal used the liquid fat first in starving it would be reasonable to suppose that if both liquid and solid fat were fed at the same time he would use a greater proportion of the liquid fat to meet the energy requirements of his body. Then it would be possible to attack the soft pork problem in two ways. One would be to feed peanuts alone for forty or fifty days then starve the hog for some eight or ten days so as to remove the liquid fat as much as possible, and afterwards finish the feeding with other feeds. The other way would be to feed the peanuts not alone for forty or fifty days as is the custom but to feed them with some feed that would produce solid fat and in this way the animal would use a greater percentage of the soft fat that was fed than he would otherwise. We got some results this past spring which indicated that it is much better to feed the hogs peanuts with other feeds for

seventy days than it is to feed for forty or fifty days with peanuts alone, then to finish with other feeds.

To determine whether an animal in starving uses the liquid fat more rapidly than it does the solid fat, rabbits were fed on peanuts and alfalfa for six weeks. One of the rabbits was killed at the end of the feeding period and the others were killed after starving three, five and seven days. The iodine numbers of the kidney fat and the back fat were determined. Two series of rabbits were treated in this way but the results of the last series only will be given.

| Rabbit No. | Iodine Number of Back Fat | Iodine Number of Kidney Fat |
|------------|------------------------------|--------------------------------|
| 1 | 96.23 | 98.00 |
| 2 | 78.34 | 97.92 |
| 3 | 70.98 | 95.33 |
| 4 | 66.22 | 92.36 |

The per cent. of the livers extracted by ether, were rabbit 1, 8.15, rabbit 2, 17.04 rabbit 3, 19.18, rabbit 4, 20.09. It was expected that the ether extract of the livers would increase in starvation and it was thought that the iodine number of this extract would increase but in this last we were disappointed as the iodine number was practically constant, showing the values from 98 to 104.

Our results indicate that the liquid fat of an animal during starvation is used more rapidly than the solid fat, that the liquid fat of the back or subcutaneous fat is used more rapidly than that of the kidney. It is our intention to repeat this work, beginning in about a month, using pigs instead of rabbits.

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THE AMERICAN SOCIETY OF MAMMALOGISTS

THE third annual meeting of the American Society of Mammalogists was held in the United States National Museum, Washington, D. C., May 2-4, 1921. Officers elected for the

year are Dr. E. W. Nelson, *president*; Dr. Wilfred H. Osgood and Mr. Gerrit S. Miller, Jr., *vice-presidents*; Dr. H. H. Lane, *recording secretary*; Dr. Hartley H. T. Jackson, *corresponding secretary*; Mr. Arthur J. Poole, *treasurer*. Mr. N. Hollister was reappointed *editor*, and *director ex officio*. The following were elected *directors of the 1921 class*: Dr. Glover M. Allen, Dr. J. Grinnell, Dr. Witmer Stone, Dr. J. C. Merriam, Mr. H. E. Anthony. Upon recommendation by the directors, ninety-nine new members were elected. The Society voted to affiliate with the American Association for Advancement of Science. It also authorized the appointment of a Committee on Marine Mammals to cooperate with the National Research Council or other agencies toward the international preservation of marine mammals.

The following was the program:

MONDAY, MAY 2, 10:00 A.M.

Meeting of the Board of Directors

Afternoon Session, 2:00 P.M.

Remarks on certain mammals of Panama: E. A. GOLDMAN.

A singing mouse: H. H. LANE.

Disposition and intelligence of the orang-utan: W. H. SHEAK.

The California elk-drive of 1904: C. HART MERRIAM.

Some observations on beaver culture with reference to the national forests: SMITH RILEY.

Progress in mammalogy during 1920. General discussion for members, led by T. S. PALMER.

Evening Session, 8:15 P.M.

A motion picture record of the animal collections of the Washington and Philadelphia Zoological Parks. (Made with the camera invented by Carl E. Akeley.) ARTHUR H. FISHER.

TUESDAY, MAY 3

Morning Session, 10:00 A.M.

Geography and evolution as pertaining to the kangaroo rats of California: JOSEPH GRINNELL.

Nerve-endings of the maculae and cristae acusticae: H. H. LANE.

Business Session, 10:45 A.M.

Afternoon Session, 2:00 P.M.

Life histories of African squirrels and related groups: H. LANG.

(a) *Meaning of California records for the buffalo*: (b) *The range of mountain sheep in northern California*: C. HART MERRIAM. *Habits of the mammals of Celebes and Borneo*: H. C. RAVEN.

WEDNESDAY, MAY 4

Morning Session, 10:00 A.M.

Present status of some of the larger mammals of Canada: R. M. ANDERSON.

Observations on certain specialized structures of the integument of primates. (a) *Carpal sinus hairs*. (b) *A sternal gland in the orang-utan*: ADOLPH H. SCHULTZ.

Improved methods of trapping small mammals alive: VERNON BAILEY. (Presented by E. A. GOLDMAN.)

Life-zones of southern Ecuador: H. E. ANTHONY.

Remarks on the distribution and relationships of the North American chipmunks: ARTHUR H. HOWELL.

Some significant features of economic mammalogy: W. B. BELL.

1:00 P.M.

Administration Building, National Zoological Park

Luncheon for members and their wives, as guests of the Administration of the National Zoological Park and the Washington Members.

2:15 P.M.

Final Business Session

2:30 P.M.

Tour of National Zoological Park under direction of N. Hollister, superintendent.

HARTLEY H. T. JACKSON,
Corresponding Secretary