

Squirrels' Memory Tests

Do squirrels remember where they hide nuts? Or can they smell a nut hidden in the ground? Or do they sometimes just dig around and find something by chance, because so many squirrels have buried so many nuts in the squirrel neighborhood?

This squirrel puzzle is a live topic among naturalists.

The story of a red squirrel that buried nine nuts in the snow on a house balcony, and that came next day and carefully dug up the nine nuts, one by one, even though a new fall of snow complicated the problem, is told by Dr. A. Brooker Klugh, of Cornell University, in a report to the forthcoming issue of the *Journal of Mammalogy*. This incident, Dr. Klugh says, is proof of the red squirrel's remarkably strong memory for location. In many cases, there is a possibility that the sense of smell may help a squirrel to find hidden objects, he adds, but this time such assistance seems out of the question.

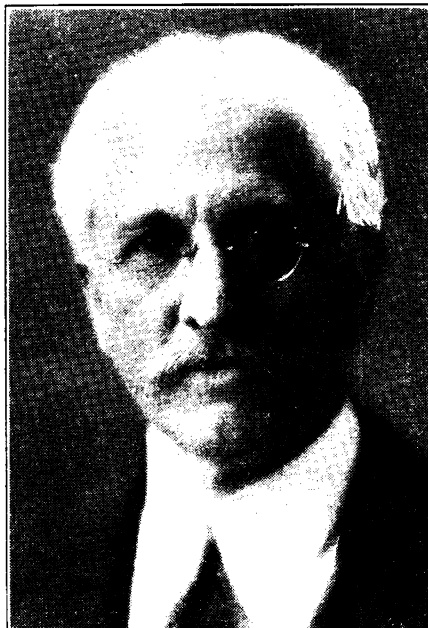
Dr. Klugh has studied red squirrels for eight years, and has watched individual squirrels over periods as long as two years.

He says: "Time after time, I have seen a squirrel go by the nearest route to something it has stored, take it out, and eat it."

Observations indicating that squirrels do not "smell out" buried nuts have been made by L. R. Dice, of the University of Michigan, and described in the same journal. A fox squirrel, which came regularly to be fed, was observed over a period of several months. The squirrel was fed in a shallow box on the house porch, and Mr. Dice filled it with sand and buried a number of nuts under the sand. The squirrel came frequently to the box, to eat nuts which were left for it on top of the sand. It sometimes dug around in the sand, and if a nut were partially buried with one end sticking up in sight, the squirrel would be likely to find it. But it never discovered a single completely buried nut. If no walnuts were in sight, it would hunt about, and leave without its dinner.

"If squirrels do not find buried nuts by use of the sense of smell," he states, "the presumption would be that they remember the place where they have buried each nut that they find. This would require a well developed memory, though not necessarily a perfect memory, for squirrels undoubtedly fail to find many nuts they have buried."

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JAMES HENRY BREASTED

Digger in the Past

The discovery a few years ago of the tomb of King Tutankhamen focussed the attention of the world on Egyptian archæology. But Dr. Breasted has followed it since 1894, when he was appointed assistant in Egyptology at the University of Chicago. In the winter of 1894-95 he was in Egypt collecting for the University of Chicago. Since then he has spent pretty nearly all of his time the same way, and in 1925 the University relieved him of all teaching duties. This has enabled him to take full charge of the work of the University's Oriental Institute, of which he was made director in 1919.

All his work, however, has not been teaching and digging. In 1900, for instance, he found time to visit the European museums on a commission of the Royal Academies of Germany to copy and arrange the Egyptian inscriptions in these museums for an Egyptian dictionary. For a number of years he has been associate editor of the *American Journal of Semitic Languages*.

Dr. Breasted was born at Rockford, Ill., on the 27th of August, 1865, and in 1888 he finished his undergraduate studies at Northwestern College. Then he studied at the Chicago Theological Seminary, specializing in Hebrew. From there he went to Yale, taking a master's degree in 1892, and in 1894 he received his Ph.D. from the University of Berlin. Since that time he has received many honorary degrees, including the highly prized Doctor of Letters of Oxford University.

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To Publish Epidemic Record

Word of what may be an important step toward the solution of the influenza problem has just been received at the Surgeon General's office of the U. S. Public Health Service from Dr. Ludwih Rajchman, medical director of the health section of the League of Nations.

Health authorities all over Europe have been asked to start work on the preparation of a report for the League of Nations on the course of the present epidemic in each country, just as soon as the epidemic has subsided to the point where such research is practicable. It is hoped that by the prompt tabulation of this information the medical world will have some useful data to use in putting up defenses against the next epidemic.

The health officials will have their hands full checking up on all the details that are wanted concerning the intangible enemy. It is particularly desirable to know the geographical distribution of the disease, the time order in which it appeared in different districts, and the movement of contagion from week to week. Description of the clinical types of the disease at different periods and the kind and frequency of complications as well as the ages of the fatal cases are other points on which information is desired. Last but not far from least will be a comparison of the bacteriological findings from cases in the different countries and the measures that the health officials have found the most successful in controlling the disease.

In spite of the vast amount of bacteriological work that has been done on the subject, medical science is still in the dark as to the cause of influenza. The complications like bronchitis and pneumonia that frequently follow have rendered the isolation of the germ causing primary influenza particularly difficult. The various vaccines that have been tried out have met with almost as much failure as success. Leaders in the medical profession admit that should a visitation of influenza assume the proportions and virulence of 1918, we should be as impotent to deal with it as we were then.

What Europe has learned that is new from her recent experiences with this much dreaded disease will be made available to the rest of the world with the publication of this report.

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