



Too Many Mouths

GAME management has been for so long a matter of saving the fragments that this generation still thinks of in terms of conservation only. But the simple command, "Don't shoot!" no longer covers the case. In many places a more liberal, though still regulated, policy of game removal seems now in order.

One of the points laid before the recent meeting of the Society of American Foresters in Syracuse, N. Y., in an address by Dr. Homer L. Shantz, chief of the division of wildlife management of the U. S. Forest Service, was the overcrowding of parts of the big-game ranges in the national forests.

"Deer protected by a buck law and control of predators have over-used their range, especially in winter," Dr. Shantz said. This is true in both western and eastern forests.

The fact that deer know no man-made, legal boundaries complicates the problem. In summer, the range within the national forests takes adequate care of the herds. In winter, they migrate out of the jurisdiction of the Forest Service, into lands where their needs are not taken adequately into consideration. Too often the result is winter starvation. In

their more restricted habitats, elk present something of the same problem.

The solution does not necessarily consist in shooting the deer until the herds fit the present range. A possible alternative, more pleasant for most of us to contemplate, is to enlarge the range to fit the herd. Or, more exactly, to enlarge

the winter range until it balances the summer range in sustaining capacity, and then seeing to it that the herd stays within this balanced capacity.

The governing principle, Dr. Shantz emphasized, is that biological needs shall decide action rather than dogmatic fiat.

Science News Letter, January 29, 1938

PHILOSOPHY

Brain and Intelligence Grew Together, Says Dr. Ritter

WHICH came first, brain or intelligence?

This scientific version of the old hen-and-egg question, propounded by a well-known anthropologist, is answered in the course of an article in the *Scientific Monthly* by Dr. William E. Ritter, professor emeritus of zoology at the University of California, and co-founder and honorary president of Science Service.

Neither brain nor intelligence preceded the other, declares Dr. Ritter. They grew up together, along with all the rest of the unified organism they belong to. "Neither in biotic metabolism nor logic can an organ and its function exist, strictly speaking, the one *before* the other."

Part of Whole Pattern

Man does not have the kind of mind he possesses merely because of the physical development of one special part or organ, however important that part may be. In man, as in all other animate forms, the mental pattern has developed as a part of the whole life pattern.

Our brain and our way of using it is intimately influenced by our whole head and our way of using other parts of it, as the mouth for eating and making sounds, or the eye for seeing and guiding movements.

All the rest of the body is involved in brain (and mind) evolution also, Dr. Ritter points out. Especially intimate and influential in their mutual relationship has been the brain-and-hand combination. The statement that man's head is to a large extent the product of his own handiwork is not altogether a paradox or an hyperbole.

As another example of mutual developmental influence between head and forelimbs Dr. Ritter selects the woodpecker, of which he has long made a special study. The bird's brain and other

head-organs are influenced by the development of the forelimbs into wings as are man's brain and head by the fact that his forelimbs have grown into arms with hands at their ends.

Science News Letter, January 29, 1938

ENTOMOLOGY

Want Key-of-G Crickets; Princeton Sends Regrets

CRICKETS in the Key of G, that chirp one-beat notes in four-four time, wanted in Hollywood to accompany a singer in a new film now in the making. Right away, of course.

Princeton University biologists were astounded to receive these specifications in a wired request from the property (or was it the publicity?) department of a West Coast studio. The filmologists even went learned on their bug-spearing colleagues, and specified specific species: they wanted *Gryllus domesticus* or *G. neglectus*, and nothing else but.

There are plenty of crickets in Hollywood of course, but voice tests proved them to be sissies with no hair on the chest at all; they chirp only in B-flat. Sound-effect men tried their hands; but with all their ingenuity they could not make a noise like a Key-of-G cricket. Hence the hurry call to Princeton for a quick lateral.

Never doubting at all that New Jersey can produce any desired number of deep-voiced G-crickets, the Princeton biologists nevertheless had to wire back that they cannot fill the order just now. Princeton crickets are like bears—they sleep all winter.

Science News Letter, January 29, 1938

Navajo Indians in one part of Arizona are blaming a new air route for weather troubles; they say the airplanes scare off the Rain Bird.

● RADIO

February 3, 4:00 p. m., E.S.T.
THE USEFUL SOYBEAN—Dr. Henry J. Knight, Chief of the U. S. Bureau of Chemistry and Soils.

February 10, 4:00 p. m., E.S.T.
POWERFUL X-RAYS—Lauriston Taylor of the National Bureau of Standards.

In the Science Service series of radio discussions led by Wadson Davis, Director, over the Columbia Broadcasting System.