

Nature Note

Animal Kingdom

► LIFE AS WE KNOW IT on earth has long been divided into two basic groups or kingdoms—animal and plant—although scientists have named a third group, protist, to include creatures that have characteristics of both plants and animals.

There are certain obvious differences between plants and animals: animals feed on other animals or plants, while most plants make their own food from chemicals and energy from the sun. Animals move about freely, while most plants are fixed in one place. Most animals have a nervous system, while plants have none. Animals grow in all parts of their bodies up to a certain age, while plants grow only at the tips and stems, and continue growing all their lives.

Scientists classify the animal kingdom into large groups called phyla, which in turn are divided into classes, then into orders; orders are split into families, and these into genera and species.

Members of these great phyla include protozoans (amoeba, paramecia), which include about 35,000 species; sponges with 5,000 species, coelenterates (jellyfish, corals) with 10,000 species; flatworms (planaria, tapeworms) with 7,000 species; roundworms (garden worms, ascaris, hookworms) with 20,000 species; starfish and allies with 5,000 species; and mollusks (snails, clams) with 45,000 species. The largest group of animals—85% of all species—is called arthropods, which are animals with jointed bodies and legs. This includes segmented worms (centipedes) with 6,500 species; crustaceans (lobsters, crayfish), with 25,000; spiders, with 40,000; and the numerous insects, with 900,000 species.

The last and "highest" or most advanced group is the chordates which are creatures with a backbone, among other distinguishing traits. With 45,000 species, this group includes animals such as fish, cats, apes and man.

• Science News Letter, 88:155 September 4, 1965

ZOOLOGY

Quails Stop Learning When Fed Excessive DDT

► THE BROWN AND WHITE speckled quails, also called bobwhites, showed decreased ability to learn simple tricks when fed the pesticide DDT in amounts formerly considered quite safe.

Contrary to what has been believed, even a slight exposure to DDT in the quail's diet causes a decline in learning ability, Dr. Douglas James of the University of Arkansas, Fayetteville, has found.

It had been thought that one pound of DDT in 25 tons of food would have no effect on adult birds, the scientists told the 16th annual meeting of the American Institute of Biological Sciences. This dosage reduced the ability of eggs to hatch and baby chicks to survive, but adult birds supposedly could take in twice that amount of DDT

without any effect on their survival rate.

Dr. James' experiments showed that the quail fed on DDT food declined in learning ability. He believes that this could have a harmful effect on their ability to survive in a natural environment.

The quail were trained to peck at a disk when it was illuminated. As a reward they received food to which DDT had been added.

The birds were deprived of food for one week before their learning was tested, Dr. James reported. During this time their stored body fat was depleted. Since DDT accumulates in fat tissue, the birds probably received a sudden dosage of DDT released from these fat stores.

The question of DDT being assimilated from agricultural food chains and thereby affecting learning ability in human beings is certainly "germane and worthy of consideration through research," Dr. James said.

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Do You Know?

Substantial services for the *blind* in France began in the 13th century in response to the need to help those who were blinded during the Crusades.

Never burn poison ivy because the oil that causes the allergic reaction is transmitted in the *smoke*.

Control of *prairie dog* colonies may pose danger to the nearly extinct black-footed ferrets, which prey on these rodents as their principal food supply.

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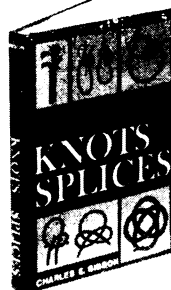
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