

# natural sciences notes

## GEOLOGY

### Discovery of conodont animal

Conodonts, named for their resemblance to conical fish teeth, are abundant small fossils leaned on heavily by geologists for dating strata of the Paleozoic and early Mesozoic Eras. There is an elaborate classification system for the various kinds of conodonts, and strata are dated according to the type of this fossil they bear.

The nature of the animal that left the conodonts behind has remained a mystery, however, since their discovery in 1856. Now University of Illinois geologist Harold W. Scott reports from Urbana that he has found the fossil impression of the animal. Though some leading conodont specialists are skeptical of Dr. Scott's claims, he says re-inspection of specimens reveals the outline of an apparently immature animal about 10 millimeters long, consisting of a head and unsegmented body covered with scaly skin.

The conodonts themselves, apparently not teeth but calcified internal organs of the head, are found imbedded in the asphalt residue of the cartilaginous substance which gave shape to the head.

No appendages have been observed, but Dr. Scott says X-ray study of the portion of the body hidden in the rock may reveal some.

## THYLACINES

### Tasmanian wolf believed sighted

The last Tasmanian wolf to be captured on the mainland of Australia died about 60 years ago. Isolated survivors of the mainland population of these dog-like marsupials may exist in the rain forests of North Queensland, but it has been generally believed that if thylacines exist at all it is on Tasmania.

Now R. F. Lighton of South Australia reports that while inspecting stock he observed a creature strongly resembling a thylacine for some 15 minutes through field glasses. Previously reported sightings of possible thylacines have been for seconds only. Lighton, whose work takes him over wide areas of South Australia, says he had familiarized himself with the animal's appearance on the chance of making a sighting.

## PESTS

### Locust plague probable in East Africa

The United Nations Food and Agriculture Organization predicts a plague of desert locusts in eastern Africa and along both coasts of the Red Sea.

Field reports indicate that heavy breeding and some swarm movements are in progress. Eight medium swarms have been sighted this month in Saudi Arabia alone. A total of more than two dozen swarms have been reported in May from the Somali Republic, Ethiopia and Djibouti. The insect formations, some of them 50 miles long and 10 miles wide, have been seen flying in a westerly direction.

While the movements so far do not constitute a plague, FAO officials say the situation is serious enough to warrant immediate large-scale aid to the threatened

areas. The FAO says heavy rainfall late last year and early this year is the main factor responsible for the flare-up. The desert locust problem had been in a recession since 1963.

Officials say continued favorable weather could produce swarms in plague proportions by September.

## PEST CONTROL

### Fleas war against Australian rabbits

The viral disease myxomatosis, which almost wiped out rabbits in Great Britain, has been used intentionally to control rabbits in Australia. It has been transmitted to rabbits via infected mosquitoes, but with only limited success. Mosquitoes depend on rainfall and warm weather for breeding, thus are only sparsely available to infect young rabbits in the spring.

Now field tests are underway of another insect vector of the disease, the European rabbit flea. This flea, which will infest only rabbits and has been found to be harmless to humans and several species of Australian marsupials, was responsible for the myxomatosis epidemic in Britain. Its breeding cycle is synchronous with the rabbits' breeding cycle. Thus heavy spring litters of rabbits will be exposed to heavy concentrations of infected fleas.

The flea apparently tends to transmit more virulent strains of the myxomatosis virus than mosquitoes.

## GAME BIRDS

### Everglades stocked with jungle fowl

Several years of drought have reduced game bird populations in Florida's Everglades. As a part of a restocking effort the Florida Game Commission is undertaking research to determine if there are exotic species that will do well in Everglades sawgrass.

The first birds to be released under the program were 100 jungle fowl from Southeast Asia. Prolific and hardy in their native land, the birds closely resemble domestic bantam chickens or the once-plentiful prairie chicken. Another exotic species, the ringnecked pheasant, has been stocked in Florida for some years, but has never done well. It seems to prefer cooler weather.

## AIR POLLUTION

### Birds return to cleaner air

Air-pollution-sensitive birds are returning to London, once the most polluted major city in the world.

The Committee on Bird Sanctuaries in the Royal Parks' report to the Ministry of Building and Works points to an increase in the number of insectivorous birds. These are about the first to go when air is polluted because smog cuts down insect populations. House martins, which have not nested in London in 80 years, were observed doing so.

The committee credits the Clean Air Act of 1956 with the recovery. The law restricts the free burning of coal in hearths, considered the prime villain in London's infamous smog.

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