



Animal Old-Timers

► **HOW OLD** is an "old" animal? This question intrigues both scientists and nature lovers. We know the age limits of many common species. The elephant and the parrot, for instance, both may live a century. Cats that have lived up to 30 active years are on record.

The "seventeen-year locust," an insect, spends 17 years under the earth as a grub, then emerges as a winged cicada for one brief summer. A giant anaconda, which grew to be 17 feet long, holds the old age record for snakes in captivity in the United States. This snake lived to be 28 years old in its Washington, D. C., zoo home.

Recently a new old age figure for the Gila monster, the only poisonous lizard in the United States, has been reported. Biologist Arthur M. Crozman of New York University has called attention to a pair of Gila monsters that have been kept in captivity since September, 1930, or for more than 25 years.

These brilliantly colored pink and black lizards were a little less than half their present size, 19 inches long, when they were captured—about nine inches long 25 years ago. Since Gila monsters are usually about four inches long when they hatch from their eggs, this ancient pair of lizards evidently were already several months old when captured.

The Gila monster, *Heloderma suspecta*, is an inhabitant of the U. S. southwestern

deserts. It and the Mexican beaded lizard, *Heloderma horridum*, a close relative from south of the border, are the only lizards in the world definitely known to be poisonous. A more distant relative of the two from Borneo, *Lanthanotus*, is under suspicion of being poisonous but has not been proved guilty.

The pair of ancient Gila monsters live a placid life in their laboratory cage and are quite sluggish. Captive Gila monsters do not object to being handled and seem to enjoy having their beady backs stroked. Wild Gila monsters are quite different, showing bad tempers and an agility amazing for their large size.

Although experts and amateurs argue about just how poisonous the Gila monster is, one set of statistics gathered showed that 20% of humans bitten by them died as a result. Whether this figure is high or low, it certainly indicates that the Gila monster should be treated with caution.

Besides biting, Gila monsters have been known to work up poison and saliva into a froth and blow it in generous sprays at animals that annoy them.

Science News Letter, April 21, 1956

BIOCHEMISTRY

Antibiotic Detoxifies After Liver Operation

► **NEOMYCIN** is effective in reducing the accumulation of noxious ammonia in the blood following an operation to relieve a condition arising in cirrhosis of the liver.

In cirrhosis, liver damage slows down the flow of blood through that organ, causing back-pressure in blood vessels. Pressure is greatest in veins of the esophagus, and death from hemorrhage following rupture of those vessels is a danger.

To relieve the pressure, as much as 70% of the blood that normally flows through the liver is shunted into the general blood stream by an operation. But this blood does not undergo the liver's detoxification process, and ammonia accumulates in the blood and poisons the system.

Clinically, physicians have obtained good results generally by using a diet low in protein, which is a source of ammonia, and administering antibiotics to reduce the colon's population of bacteria that break down proteins.

However, the factors involved were so complex that it has been difficult to determine what measures give good results. And reductions in ammonia had not actually been demonstrated with antibiotics.

Using animals, the California researchers demonstrated that neomycin sterilizes the intestine and reduces ammonia. Other antibiotics did not reduce ammonia. The results with neomycin have been confirmed in human patients, especially in the critical phase right after operation.

The scientists are Drs. William Silen, Harold A. Harper, Dean L. Mawdsley and William Weirich.

Science News Letter, April 21, 1956

VETERINARY MEDICINE

Sleeping Sickness Kills Southeast Horses, Mules

► **HORSES AND MULES** in southeastern United States are being killed by sleeping sickness in greater numbers than at any time in recent years.

U. S. Department of Agriculture officials believe the higher mortality rate is caused by the more deadly Eastern virus. The Western virus, while milder, is usually more widespread. Vaccination against the one type does not protect an animal against the other.

Outside the South, Massachusetts and Rhode Island reported the disease in 1955. No cases were reported in either state in 1954. Wyoming, Colorado and New Mexico also report increases.

The virus, which can cause encephalitis in human beings, is carried chiefly by mosquitoes. The virus has visited nearly every state in the nation. The best way to prevent outbreaks of the disease among horses is by vaccination.

Science News Letter, April 21, 1956

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