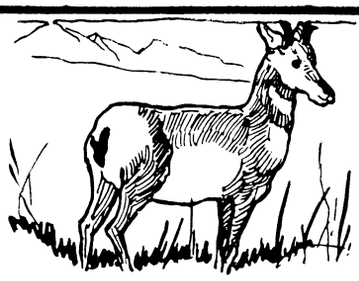
ZOOLOGY

NATURE RAMBLINGS



Pronghorn

➤ FOR long distances the prong-horn antelope, fastest of all four-footed animals in America, can cover the countryside at 45 miles an hour. In sprints they can put up the pace to close to a mile a minute.

Since the early days of the West, when pronghorns roamed in herds as large as those of the bison, the sharp, snorting whistle of this fleet antelope has sounded over the wide, flat prairies from Texas to Oregon.

Almost hunted to extinction in the early 1900's, the pronghorn under strict game laws has increased to better than 150,000 animals. Today, on the great, privately-owned rangelands of western Texas, annual antelope hunts are held under game-warden supervision. For each antelope killed, the hunter must pay the ranch owner $40.

The horns of the prongbuck are unique. They are hollow and braced by bony spikes like other horns, but each horn has a short, dagger-guard offshoot like the antlers of deer. Like deer but unlike any other antelope, the prongbuck's horns are shed each year.

The horns are made of hairs, glued together by a strong cement exuded by the skin on the prongbuck's head. At maturity these horns can measure as long as 20 inches. The prongbuck puts them to good use, for upon his fighting efficiency depends his ability to acquire a mate. He parries and thrusts with them in the finest swordplay of the animal world.

A pronghorn can see a coyote and keep tabs on him so far away that a man must use binoculars to find out what the antelope is looking at. This trait of looking long and hard at a suspicious object gives the American antelope a reputation for curiosity. Actually, it is his best defense.

Once startled, the prongbuck breaks and runs like the wind. His pure-white rump serves as a warning to others at a great distance, as well as providing a guide-flag for fawns to follow.

Often the pronghorn will run for the pure competition offered by a passing train or car. In the early days of the West, the antelope could win consistently over the wood-burning, clanking old locomotives. Whole herds would run parallel to the train, edging closer and closer. Then in a terrific burst of speed they would cross in front of the engine, waving their white flags in derision at the engineer.

Science News Letter, August 19, 1950

MEDICINE

Irradiated Plasma Danger

➤ SOME of the blood plasma being collected and stored for use in a possible atomic disaster may actually harm the victims instead of saving them.

If they are suffering from bleeding diseases, as many atomic victims would be, this particular plasma will make them worse because it interferes with the clotting of normal blood.

Warning of this danger is given by Drs. Seymour S. Cutler, Benjamin Burbank and Eugene R. Marzullo, of Long Island College Hospital and Long Island Medical College, Brooklyn, N. Y., in the JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION (July 22).

This plasma may, on the other hand, be useful for patients whose blood has too much clotting tendency, such as those suffering from thrombosis.

The plasma with the anticlotting tendency is that which has been irradiated with ultraviolet light from the Schumann region of the spectrum, with wave lengths from 1,751 to 2,026 angstrom units.

Ultraviolet light is used to sterilize pooled batches of blood plasma. This is done because some plasmas contain the virus of serum jaundice. Irradiation at 2,537 angstrom units did not cause the change in clotting, the Brooklyn scientists found.

The reason for the change in clotting, or coagulability, after irradiation from Schumann region ultraviolet light is not known. The fact that a body fluid, such as blood, is so profoundly altered biochemically by this part of the ultraviolet calls for more investigation, the scientists point out.

Science News Letter, August 19, 1950

AERONAUTICS

Planes Should Have Stall Resistance

➤ ALL new airplanes should be designed so that they will have stall resistance. All present planes should be equipped with mechanical stall warning devices. These are the conclusions just presented to the Civil Aeronautics Administration by a special committee studying stalls, the large number of airplane accidents due to stall and methods of prevention.

Stall is a condition encountered by planes when the speed becomes insufficient to assure proper lift or when a plane is operating at an angle of attack on the air ahead which is greater than the angle of attack of maximum lift. Several warning devices have been developed and their use would save many lives. Stall-proof light planes have been developed.

The study was conducted by the National Research Council under contract with the Civil Aeronautics Administration. It was under the direction of Dr. Philip J. Rulon of Harvard University, an experienced pilot who has made other stall studies for the CAA.

In the study many test runs were made and some 40 flight instructors were interviewed relative to maneuvers to be tested. Seven methods of recovering from a straight-ahead, climbing-power stall were evaluated. Also evaluated were 14 methods of recovering from a straight-ahead, cruising-power stall.

The report of the committee, as well as reports of three earlier studies, are available from the CAA. These four studies represent a major contribution to the safety of flying, according to D. W. Rentzell, Administrator of Civil Aeronautics. The CAA can now assist the industry in eliminating, or at least greatly curtailing, the accidents due to stalls in all types of planes, he said. The first stall-proof light plane originated in a CAA development program in 1934, he added.

Science News Letter, August 19, 1950

ENTOMOLOGY-BOTANY

Farmers Battle Nine New Plant Diseases

➤ NINE new plant diseases popped up to plague the U. S. farmer in 1949, the Department of Agriculture reported.

In Kentucky wheat fields, a blight known as cladosporium herbarum appeared. It has caused serious losses in Europe. A new leaf blight caused complete infection of three fields of broomcorn in Illinois. Sugar beet mosaic, a virus disease, attacked California clover, and a new mold appeared in clover in Oregon and Washington.

There were 19 instances of plant diseases popping up in states where they had not been found before. In many states, 1949's hot dry weather brought greater than normal losses from plant disease, the Department said.

Science News Letter, August 19, 1950