ZOOLOGY

NATURE RAMBLINGS

Mountain Sheep

➤ MOUNTAIN sheep, the native wild sheep of North America, suffer severely from what in Hollywood is a common enough occupational hazard, but which is rarely associated with the sheep family: an excess of good looks.

No panting love-sick ewe, even when the fall mating-season fever grips the flock and Pan is undisputed king, puts a higher valuation on the magnificent head of a mature ram than do certain kinds of trophy-proud, game-hunting bipeds.

The horns are broad and massive, with a bold curving sweep which starts at the forehead and turns on itself almost full circle, upwards, outwards, downwards and gently up again, so that the points are almost on a level with the eyes. This lovely downward spiral has been one of the causes of the mountain sheep's sharp numerical reduction.

Were a census of bighorns to include not only the diminishing flocks scattered throughout the Rockies from Mexico to Canada, but also the stuffed heads on sportsmen's walls, the population would doubtless come to a healthy total. But subtracting the non-productive wall trophies, the survival situation is pretty shaky.

The severe decline of the Bighorn throughout the southern half of its natural range is only partially the fault of over-hunting. Disease has taken a heavy toll. Even more drastic has been the taking over of the native habitat as pasturage for domestic sheep. Where sheep-grazing land is limited, man is sure to sponsor the interests of the money-making domestic sheep at the expense of the picturesque but uneconomic wild variety.

Except for rigidly-controlled hunting seasons in Idaho and Wyoming—where bag limits are carefully set to keep the mountain sheep population in healthy balance with local forage capacity—the animals are no longer fair game in this country. But despite severe penalties for unlawfully taking mountain sheep, a certain amount of head hunting still goes on.

Among professional wildlife managers, out-of-season, excessive or gluttonous hunting always arouses the keenest contempt, but lawless depredations committed against Bighorns seem to offend some special sentiment or passion.

An Interior Department biologist, Victor H. Cahalane, has summed up the professional attitude in these scathing words: "Whether he kills for his own trophy, or to sell the head for money, the poacher of a rare Bighorn is one of the meanest of outlaws. This human should be shot, stuffed and mounted for all to see."

Science News Letter, June 17, 1950

PHYSICS

Fine Wire Made by New Electropolishing Process

➤ EXTREMELY fine wire for miniature electronic equipment is being made, not by the usual drawing out process, but by chemically "eating" down larger wire to the size desired. Technically, it is an electropolishing method.

Wire less than one-tenth the thickness of a human hair has been successfully made at the Armour Research Foundation of the Illinois Institute of Technology. Foundation scientists have produced wire 0.00015 inch in diameter, Dr. Howard T. Francis of the organization announced. The process is still in an experimental stage.

In the new method, wire is passed through a chemical bath in which an electric current is flowing. It becomes an electrode in an electropolishing bath and is dissolved away to the desired size.

Wire is normally made by drawing metal through successively smaller holes until a desired diameter is reached. The new process is chemical, not mechanical. Further research will determine how the method will work with various metals, and also just how fine a wire can be made and used.

Science News Letter, June 17, 1950

On This Week's Cover

➤ THE sea-horse, *Hippocampus h. hudsonius,* as shown on this week's cover of SCIENCE NEWS LETTER, long known as a symbol of marine life and surroundings, has a horse-like head. Its head is prolonged into a sort of snout, having very prominent eyes, either one of which can be rolled independently of the other. The entire body of the sea-horse is encased in a tough horny skin or skeleton which is cumbersome and makes swimming difficult, making it necessary for the animal to cling to some support lest it be carried away by even moderate currents. This the sea-horse is enabled to do by its prehensile, or grasping, tail, long considered its most singular feature by naturalists, as it is the only fish to have a prehensile tail. Its limited swimming is done by means of the dorsal fin. Indeed, as one apt description goes, if a coiled worm were attached to the base of the piece known to chess players as the knight, the sea-horse would be well imitated.

The development of this slow-moving predatory animal is unusual. The eggs are carried in the brood pouch of the male until they hatch. The male forcibly ejects its living burden when the food becomes exhausted from the membrane of the bag. However, unlike certain of the pipe-fishes (a group allied to the sea-horse), which continue to foster their young by readmittance to the paternal pouch after their ejection, the duty of the parent, when once the brood has been ejected, is at an end.

Science News Letter, June 17, 1950