

FORESTRY

Man Deliberately Starts Many Forest Fires in West

THE FACT that a number of the recent destructive forest fires in western states are definitely known to have been started by pyromaniacs—fiends who deliberately set fire to timber—has made significant figures from the U. S. Forest Service here which show that 1,300 of the 8,400 conflagrations in national forests last year were of incendiary origin.

Up to the latter part of last month, more than half of the total number of this year's fires in these forests, 3,600 out of 6,322, were due to man's action, whether careless or on purpose. Lightning is held responsible for the remainder of the number.

One of Worst Seasons

The present season is turning out to be one of the worst fire years in the history of the Forest Service. A total area of 385,168 acres has been burned over in the national forests since January 1, the latest summary shows. Three hundred thousand of these acres are in western states, and of them, Idaho is at present suffering the greatest losses.

The severity of conditions this past summer is brought out in a comparison with 1930, only 137,000 acres being burned during that year. So far this year, Henry Wold of the U. S. Forest Service told Science Service, more money has been spent in national forests for fire control—\$2,100,000 up to August 20—than was spent all last year, and the situation is worse than in 1929, which was considered to be an extremely bad fire season.

Reports from the field indicate, Mr. Wold stated, that the present fires are harder to suppress than those in 1910, the worst year on record for acres burned and lives lost. The fire fighting organization is better now, however, than at that date.

Although the number of fires that actually get started is large, as the result of watchfulness of rangers, few of them actually become very destructive. While they are still infants, they are discovered and put out. So far this year, 87 per cent. of the fires in national forests have been extinguished before they burned more than ten acres. If the forest areas are burned over only once they will grow back again; if they receive a

double burning, however, replanting of the trees becomes necessary.

This effective fire control is exercised by three main units of personnel in the national forests, Mr. Wold pointed out: lookouts, rangers, and "smoke chasers." Assigned to particular areas, they operate in close conjunction with each other. From his vantage point atop the tower, the lookout spots the fire, made evident by the rising smoke. He immediately reports his discovery to the ranger, or district chief who directs operations. The ranger delegates one of the men attached to his group to search for or "chase" the smoke.

This smoke chaser hoists a pack containing three days' rations to his back along with his pick, shovel and other fire fighting apparatus and proceeds to move on to the location given by the lessly clean and perfectly preserved.

PALEONTOLOGY

First Complete Remains of Ancient Horse Discovered

THE WORLD'S first complete collection of skeletal remains of the Plesippus, a little-known ancient horse living more than 1,000,000 years ago, has been unearthed in Idaho by Norman H. Boss, chief preparator of the division of paleontology, National Museum at Washington.

Hundreds of parts of this comparatively unknown horse, which is somewhat smaller than the modern horse, have been found, it was explained at the Museum. Two complete skeletons, and parts of many others, filling 37 large boxes, are now on their way to Washington. They will give the Museum the finest collection of this sort in the world today.

The remains of Plesippus found in the past have been insufficient to effect a restoration, but with the new discovery of many bones and two complete skeletons scientists will mount the skeletons and later may model the horse as it appeared 1,000,000 years ago.

lookout. It is the smoke chaser's duty to stay at the fire, once he has found it, until it has been put out, or to inform the ranger of severe conditions.

Constant communication is maintained between the lookout and the ranger. If the smoke continues to rise unduly long or increases in volume, the ranger is notified and he dispatches reinforcements to the smoke spot without waiting to hear from the man there.

Science News Letter, September 12, 1931

ARCHAEOLOGY

Fabrics Well Preserved After 1500-Year Burial

SEVERAL brown and white braided sashes and head bands that adorned Indian maid and warrior who lived in Arizona 1,500 years ago have been exhibited at Santa Fe as the first specimens of such well-preserved fabrics of their type that have been found. They were examined by the prominent scientists from all parts of the country attending the conference following the opening of the new \$2,000,000 Santa Fe Anthropological Laboratory. The fabrics are spot-

Science News Letter, September 12, 1931

Mr. Boss spent the summer at the head of a National Museum expedition at Hagerman, Idaho, where last year Dr. J. W. Gidley, museum paleontologist, discovered an unusual horse quarry.

The quarry, evidently the remnant of a stream channel deposit made up of cross-bedded layers of coarse and fine sand, is composed of rocks of the Pliocene period. It contains bones of literally hundreds of animals, but the greater part of them belong to the extinct Plesippus. For the most part the bones are disarticulated, intermingled, and scattered in a way to suggest they represent the slow accumulation of many years, rather than the sudden overwhelming of a large herd.

Bones collected represent all stages of growth of both sexes from embryo to old age. Thus they afford an unusual opportunity for a systematic study of the species, especially as concerns the limits of individual and sex variations.

Science News Letter, September 12, 1931