WILD LIFE ADMINISTRATION

NATURE RAMBLINGS

by Frank Thone

Woodman, Spare That Dead Tree!

WHEN YOU are riding or walking (quietly, if you want to see them!) along the trails of national parks or forests, birds are surely among the things you most desire to see. And dead trees—"old snags, eyesores"—probably among the things you wish you did not have to look at. Why don't the rangers chop them all down, get them out of the way?

To some extent, these two entirely natural desires are mutually contradictory, George M. Wright of the National Park Service points out, in a communication to *The Condor,* a journal devoted to the study of bird life in the West. Some of the most interesting birds demand dead timber for nests or feeding-places, and will vacate the neighborhood if all the defunct trees are removed. This is true of several species of owls and woodpeckers, as well as some kinds of swallows, blue-birds, nuthatches and chickadees. And lofty trees with leafless crowns are preferred as nesting sites by vultures and some of the hawks, as well as band-tailed pigeons and a number of other birds. Even the proud bald eagle nests in leafless treetops in lowlands where its traditional towering crags are not available. Indeed, it is not unlikely that more bald eagles live in dead or half-dead trees than on the more poetic remote rocks of mountainsides.

The problem of dead trees and their removal to "pretty up the park," satisfying the tourists' sense of neatness and diminishing fire risks, is only one of many questions which wild-life administrators of the National Park and the National Forest Services have to face, in the many-horned dilemma posed by the necessity of getting vacationers around to see the sights and at the same time preserving the sights for them to see Others mentioned by Mr. Wright are the trampling of the ground in congested areas, endangering even the largest trees by exposing their roots, the many ways in which careless visitors start fires, the necessary oiling of ponds to keep down mosquitoes, which, however, also unavoidably works injury to some birds, and even the automobile casualties inflicted on at least a few individuals every year.

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MEDICINE

Radio Knife Invented As Aid to Surgeons

MEDICAL men are hailing a new radio knife for surgery as a boon to surgeons and patients alike.

C. J. Breitwieser, graduate research student at the California Institute of Technology, in his spare time and with his surplus cash, built apparatus for converting an ordinary scalpel into an electrical surgical instrument by high frequency radio waves.

At a demonstration of the instrument at the Monte Sano Hospital, Los Angeles, prominent medical men, and Dr. Lee DeForest, famed radio audition tube inventor, were astonished and enthusiastic over operation of the instrument and apparatus, a vital part of which are two vacuum tubes that cost $35 each.

The radio knife has many advantages over the electrical knife now in use, said Mr. Breitwieser, listing them as follows:

Need for cumbersome wire connections between the knife and electricity source is eliminated, and wire connections to the patient are abolished.

Being free of electrical connections and insulating material, the new knife is easier to sterilize.

Electrical properties can be given the surgeon's scalpel or operating knife.

Apparatus used to radio current to the knife can be used to keep the patient warm.

Possibility of electrical shock to either the patient or doctor is eliminated.

Another important feature is that the danger of sparking is minimized by the radio knife, thus adding another safety factor to electrical surgery.

Not having human patients on which to experiment and operate, Mr. Breitwieser "operated" on chunks of beef, demonstrating that high frequency radio waves are practical in surgery.

While the use of high-frequency electricity as a cutting medium is widely known, the possibility of getting the power by radio waves is a decidedly new development.

Electrical surgical knives cauterize the tissue as they cut, reduce the flow of blood, and are said to result in swifter healing than a cut by a non-electrified scalpel, and to leave less of a scar.

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