the sky, and a barred owl sits in a hollow tree.

At a turn of the switch, the displaying grouse begins to shake his head and hiss, the female takes her place on the eggs, and the male in the background starts to drum so that one not only hears the rhythmic thumps but sees exactly how the sound is produced. The song sparrow and the brown thrashers sing, the flicker throws out chips of dead wood, the pileated woodpecker calls and disappears into his hole, the wild geese pass overhead honking, the owl hoots.

The use of sound motion pictures to give greater realism to museum groups, Professor Allen points out, has endless possibilities. There is no reason why mounted lions should not roar, wolves howl and deer snort as well as the birds sing when the cinematographer and sound technicians take their places with the taxidermist, the artist and the collector in gathering the material and setting up the habitat groups of the future. Furthermore, the usefulness of the museum groups can be greatly extended because the motion picture film is easily duplicated and can be shipped all over the country, while the original group is available to only the comparative few who visit the museum.

Science News Letter, December 19, 1936

DENDROLOGY

Christmas Holly Trees Have Their Flowers Too

See Front Cover

DESPITE the popularity of the familiar red holly berries for Christmas decorations, few of us are familiar with the rare beauty of the holly tree's flower. The illustration on the front cover of this week's SCIENCE NEWS LETTER is one of the superb enlargements in Walter E. Rogers' book on *Tree Flowers*.

Prof. Rogers tells why many holly trees bear no berries at all. The holly flowers are of two sexes; the berry-less trees are those with exclusively staminate flowers. The two flowers are very much alike in general appearance.

Science News Letter, December 19, 1936

Coming!

The Science News Letter for December 26 will contain the Science Review of the Year. Important scientific achievements in 1936 will be classified by sciences. An excellent issue for your permanent records. Order extra copies now.





Christmas Oak

AKS had a Yuletide significance to our ancestors of northern and western Europe that we have forgotten, to a very considerable degree. It is regrettable, too, that we have done so, for some of these ancient oak observances were picturesque and meaningful.

Bringing in the Yule log was a midwinter ceremony that survived as long as houses were heated by open hearths and wood was the fuel. The Yule log was usually an oak log. But when coal began to be substituted, and then closed stoves came in (we have commonsenseskeptical old Dr. Benjamin Franklin to thank for that!), such mass uses of wood fuel passed out.

Oaks figured prominently, too, in the ancient Celtic rites of the mistletoe, for the mistletoe shrub is a semi-parasite that gains part of its nourishment from the sap of hardwood trees, again usually oaks, at least in European woods. To be sure, there are mistletoe species that grow on evergreens, but nobody except a botanist would recognize them as such. And the girls don't want to receive Yuletide attentions exclusively from botanists!

Oaks even helped provide the Christmas feast, for the mighty wild boar, whose smoking head burdened many a castle's high table at Yuletide, fed on acorns and beechnuts in the forests. And acorns, ground into flour, sometimes kept famine at bay when there had been a bad grain crop.

Oaks provided timbers for houses and castle and cathedral roofs, planking and ribs for ships, staves for such house-gear as casks and pails. Oak bark went into the tanner's pits to make leather. Oak galls, soaked with scraps of iron, furnished monastery scribes with ink that after centuries remains unfaded. In

oaken coffins men were borne at last to the churchyard.

Small wonder then that people regarded the oak so highly, and even in pagan times made a god of it. If oak trees were green in winter like firs and spruces and pines, the chances are that our Christmas trees would all be oaks.

Science News Letter, December 19, 1936

