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## ECOLOGY

## TREES BEARING GIFTS

CHRISTMAS trees are always decked with tinsel frost and cotton snow, even in the South where children rarely or never see such wonders. Snow is inseparable from the idea of a Christmas tree; indeed, in the pre-Christian days in northern Europe the green of the tree, mysteriously defiant of the white wind-sheer of snow that carried all other leaves down in death, stood as a symbol of the hopes of the returning sun.

Medieval Christianity willingly adopted and adapted for its own uses this kindest of the old pagan observances, with very little change in the symbolism. Modern science, however, goes a step beyond, and finds in the white snow that lies beneath the trees and nestles among their branches not an image of death but the very material that will be most needed and used by the abundant life that will teem in the forests and over the wide fields beneath, when spring returns again. Snow, the best gift showered down by the gray winter heavens, is kept for us through the guardianship of the trees.

They hold out their arms and prevent


the wind from blowing it away. They stand against the climbing sun of early spring and keep him from melting it away too soon. The interlaced fingers of their roots hold the soil against the terrible eroding power of racing free water, even in the smallest streams. The litter of dead leaves and the spongy ground beneath soak up the water that trickles down and release it gradually through long thirsty weeks in summer, when bare rock has long since become a skeleton and even the prairie grasses are beggars under the hot scorn of the drought.

In this great service, little trees as well as great are effective guardians of the great gift of snow. Even the humble, too-often-despised proletariat bushes do their part of the work; for recent research in forestry has shown that brushland is almost as good as mature forest when it comes to holding snow and water, and in preventing erosion.

The beautiful photograph reproduced on the cover of this issue of SCIENCE NEWS LETTER was taken by Chief Ranger David H. Canfield, of Crater Lake National Park.

Science News Letter, December 23, 1933

## Season's Greetings

UPERIMPOSED upon the holiday spirit, the emotional reverence and the good resolutions of this time of the yearly cycle, there comes the opportunity of scientific evaluation. The physical necessity of changing our calendars from 1933 to 1934 gives an excuse for stock-taking and inventory.

Christmas week will bring numerous scientific meetings at which successful researches are reported, friendships are made and renewed and wells of inspiration are replenished.

As its contribution, Science Service has compiled a comprehensive review of some of the outstanding events and achievements of the closing year. This issue of the SCIENCE NEWS LETTER is devoted to this review of science.

In thus extending the season's greetings, the staff of Science Service desires to express its appreciation of the whole-hearted cooperation that has made effective its popularization of science. We greet the editors, scientists and laymen who participate through Science Service's newspaper services, the SCIENCE NEWS LETTER, and our other science popularization activities. With the assurance of their continued participation in our work, we rededicate our energies and ideals.