trees TREES trees

A southbound Pacific Great Eastern freight winds along the tree-lined shores of Brittania Bay in British Columbia in July 1969. ***Mike Schafer photo.***

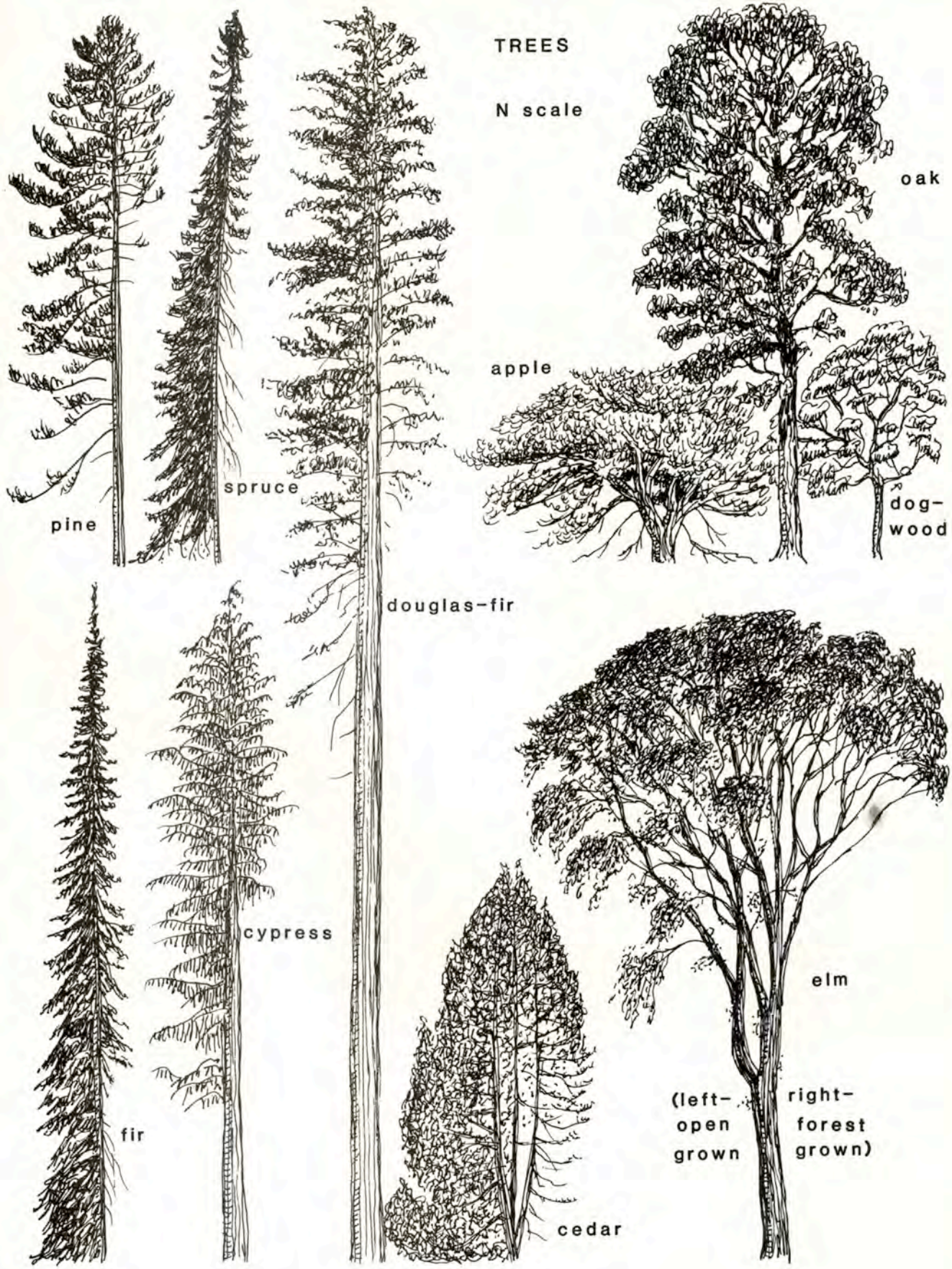
By Andy Hamilton

Illustrations by the author except where noted

You don't have to be wealthy to have a well-treed layout. You don't have to be an artist, either. And even patience is not needed in great quantities when modeling trees, for the good news is: You can make trees at the rate of 50 or more an hour! All that's required is a little knowledge and inventiveness. None of the techniques described here require any unusual skills, and these trees cost just a few cents each. Only the very largest take more than a few minutes each to construct. At that price and speed you can quickly model a whole forest!

There's additional good news for those who model in N: Trees are one of the facets where you have the advantage over other modelers. More kinds of trees can be made in 1:160 proportions than in the larger scales, and most trees can be constructed more easily and quickly. Your realistic-length trains can now traverse forests without needing a painted backdrop.

The basic idea behind modeling deciduous (hardwood) trees is to start with a framework of branches and attach leaves to them in clumps. In the larger scales (S, O, etc.) the trunks and branches must be cast or sculptured and minute bits of colored card, representing leaves, can be glued to aluminum mesh tangled in the limbs. For HO and smaller scales the trunks and branches can be made from actual twigs selected by the ingenuity of the modeler. The "leaves" can then be made by applying clumps of lichen (dyed green) to the branches. For superb realism, model the twigs also by dyeing the lichen to match the branches, then cover it with green ground foam. A very realistic color can be achieved by using a mixture of sizes and colors of foam. I prefer 2 parts Herka variegated green foam—which is coarse—to 1 part Elm City dark green foam—which is fine, and filters down to the lower levels in a manner that heightens the depth effect of the foliage. Bushes can be modeled using


TREES
N scale
oak
apple
dog-
wood
pine
spruce
douglas-fir
cypress
fir
cedar
elm
(left-
open
grown
right-
forest
grown)

(Above) Alpine fir and douglas fir seedlings surround a mine on the author's Kettle Canyon Railway. Realistic tree heights improve the appearance of any pike; in real life, trees often dwarf the size of a train. (Below) Hydrangea and lichen combine to produce a realistic N scale poplar tree to shade the street. "See-through" branches perfect the model.

the same technique, starting with the dense rounded tips from the lichen as the base for the foliage.

Many different twigs can be used as the basis for HO scale trees. The selection is much more limited for smaller scales, however, since the branches must be closer together. The following work well in N scale: hydrangea flower heads (without the "petals") for broadly spreading trees like beech, live oak, magnolia and hickory; goldenrod tassels for elms; privet hedge twigs for many other more slender trees.

Evergreens (softwoods) require different methods. HO scale railroads and larger pikes need tree trunks made of balsa with individual branches implanted: tedious work, but effective if the branches are carefully chosen and generously added. Cassia flowers and "air fern" are the two most popular choices for branches. Modelers in the smaller scales can make use of the same technique for modeling the very large douglas-firs and sequoias.

N scale is particularly well suited for modeling other evergreens. Firs and spruces can be made from 6-inch bumpy chenille, available at craft stores in short sections or in 100-bump rolls. Cut the bumps apart, and sever each near the middle; further from the middle gives you one large tree and one small one. Fuse or retwist the cut ends, then stroke the chenille with dilute glue to reduce the gloss and mat the bristles.

N scale cedars can be made from shorter sections of bumpy chenille. Trim the bristles to make the desired shape, then roll their tips in glue followed by ground green foam.

N scale pines can be modeled using spirea heads gathered in the fall when the leaves wither. Spirea is widely grown as an ornamental, but the heads of the wild species that grow in northern bogs are usually a better shape. Break off the remaining leaves and the slender lower branches of the head (also the tip if it is too long) and paint the seed pods green, or simply dip the whole plant in green paint and later repaint the "trunk".

Imagination and a bit of searching in your area will turn up other good ideas for tree forms. Inventiveness can make *your* layout unique!

The second basic ingredient of good models is knowledge. Knowing how a tree grows, and where, and what the different kinds look like can make the difference between something crude and something stunning.

The form of a tree is the product of its species and its location. Trees in dry areas are shorter and less dense than those in wet areas. Trees in forests grow straight and slender, crowding their neighbors and reaching towards the sunlight; their leaves are usually only at the top. Open-grown trees have wide-spreading branches which may reach right down to the ground. Trees in exposed windy places generally have most of their branches on the sheltered side of the trunk, and the trunk may be twisted by the wind.

Age greatly modifies a tree. Young evergreens all have a "Christmas tree" shape, but when mature are either pencil-shaped or rounded, depending on the species. Young oaks and willows grow straight and slender, but when older have twisted trunks and drooping or gnarled limbs.

Selecting the tree species for your layout is as important as choosing the right kind of rolling stock. Distinctive trees in the wrong setting look very awkward. Live oaks and magnolias do not grow along the CPR nor are black spruce and paper birch found in Clinchfield country. Many books on trees will give you range maps and other information to make your choice easier.

What most books will not give you are detailed tree plans, so I have included some of my own. These plans show some typical northern trees that are readily constructed in N scale. The left side of each tree shows the typical open-grown form; the right side is of a forest-grown tree.

You will notice right away some differences between these trees and most ready-made models:

1. The plans are in N scale, but the trees are similar in size to those commonly used in HO-scale layouts. The sizes given here are for average full-grown trees, so individual trees in a forest could be up to 100 percent taller still. Younger trees of course are smaller, but these are less common except in areas recently logged, or in new housing sub-divisions.

2. Leaves do *not* form solid balls, but instead are spread around the outside of the branches. Leaving gaps where the open spaces around the limbs can be seen vastly increases the realism of a tree model.

3. Branches are much more complex and highly visible, especially in forest-grown trees.

4. Trees are more or less irregular in shape, neither round nor conical (with a few exceptions) and with the branches varying greatly in length. "Bottle brush" models of evergreens are especially unrealistic due to their too-regular shape.

As with locomotives and buildings, so with trees: Accurate details make the model. Learn some of the distinguishing features of shape and bough that characterize the various trees:

- Pine branches turn upwards at the tips; in other evergreens the tips hang down.
- Black spruce often has a "knob" at the top, formed by the young branches that do not droop like the older ones.
- Cypress twigs hang limply from the branches.
- Mountain fir is slender and spire-like.
- White cedars are gumdrop-shaped, with branches to the ground; red cedars are rounded, lacking the lower branches.
- Paper birches and white cedars usually divide near the ground into multiple trunks.
- Oak and magnolia branches are gnarled and twisted.
- Apple and hawthorn trees are low and broad.
- Elms have gracefully spreading branches. Pecans are similar, but the branches are straight and start lower on the trunk.
- Beeches and live oaks have very long, horizontally spreading lower limbs.
- Maples are some of the few trees with a rounded leaf mass.

Observe the trees in your neighborhood. How can you recognize them easily? If you aren't sure, try taking a few pictures. You may find that "tree-fanning" is as much fun as railfanning!

(Above) Woods should have as many types of vegetation as possible — weeds, bushes, various live and dead trees produce a natural setting. This N scale diorama is but 3 inches deep. (Below) These N scale bushes are made of ground foam glued to bark-colored lichen. The tiny bush at center is five-eighths of an inch tall.