

# WOOD

## OF THE MONTH

july 2011

## Yellow Birch

Yellow birch yields an array of colors: red, white and two-toned veneers.

### Bundle of Beauty

By Jo-Ann Kaiser

Yellow birch, *Betula alleghaniensis*, is one of some 60 species of birch from around the world, and grows in Canada, the Great Lakes region and New England, and as far south as North Carolina. Readily available as lumber and veneer, it is probably the most commercially used of the North American birches for furniture, millwork, interior and exterior doors, paneling, store fixtures, institutional furniture, kitchen cabinetry, flooring, turnings, toys and accessories.

The Architectural Woodwork Institute's Guide to Wood Species, has high praise for yellow birch. "Yellow birch has been, and continues to be, one of the prominent wood species used for architectural woodwork. This is due not only to its attractive appearance, but also to its general availability both as lumber and as veneered products, its adaptability to either paint or transparent finish and its abrasion resistance."

The guide also explains the sometimes confusing terms used with yellow birch. "The term 'natural' or 'unselected' birch means that the lumber or veneer may contain both the sapwood or white portion as well as the heartwood or dark portion of the tree in unrestricted amounts. The term 'select red' birch describes the lumber or veneer produced from the heartwood portion of the tree and the term 'select white' birch describes the lumber or veneer produced from the sapwood portion of the tree."

With yellow birch there is often a high percentage of red heartwood in any given log. If the flitch were flat sliced, the first few bundles would be white or sap but going deeper into the flitch, the red starts to develop, netting two-toned veneers. If the flitch is peeled with a full rotary mill, the sheets the output would be big sheets of all white, which are graded out, then two-toned, so-called natural birch, and then all red heartwood or red birch — three different products from one log and there are markets for each one.

According to the AWI guide, "To obtain 'red' or 'white' birch exclusively requires selective cutting with corresponding cost premium, as well as considerable restriction on the width and length availability in lumber form." Birch in veneer form, it said, is readily available in all selections, usually rotary cut.

Red birch is the common name for yellow birch heartwood and has colors ranging from yellowish-white to reddish-white to light brown. The tree develops a darker color heartwood that can be 90 percent of the diameter.

Article excerpted from *Wood of the Month* archives.



#### \* Family Name

BETULA ALLEGHANIENSIS OF THE FAMILY BETULACEAE

#### \* Common Names

AMERICAN BIRCH, YELLOW BIRCH, HARD BIRCH, BETULA WOOD, CANADIAN YELLOW BIRCH, QUEBEC BIRCH, GREY BIRCH, SILVER BIRCH, SWAMP BIRCH

#### \* Height/Weight

AVERAGE HEIGHT IS 70 TO 80 FEET. AVERAGE WEIGHT IS 44 POUNDS PER CUBIC FOOT WITH A SPECIFIC GRAVITY OF 0.71.

#### Properties

\* THE WOOD IS HEAVY, STRONG AND HARD WITH A CLOSE GRAIN AND EVEN TEXTURE.

YELLOW BIRCH DRIES SLOWLY, WITH SOME SHRINKAGE.

THE WOOD HAS VERY GOOD BENDING PROPERTIES, WITH GOOD CRUSHING STRENGTH AND SHOCK RESISTANCE.

YELLOW BIRCH WORKS FAIRLY EASILY. IT GLUES WELL WITH CARE AND TAKES A STAIN EXTREMELY WELL. IT ALSO TAKES NAILS AND SCREWS SATISFACTORILY, ALTHOUGH PRE-BORING MIGHT BE NECESSARY.