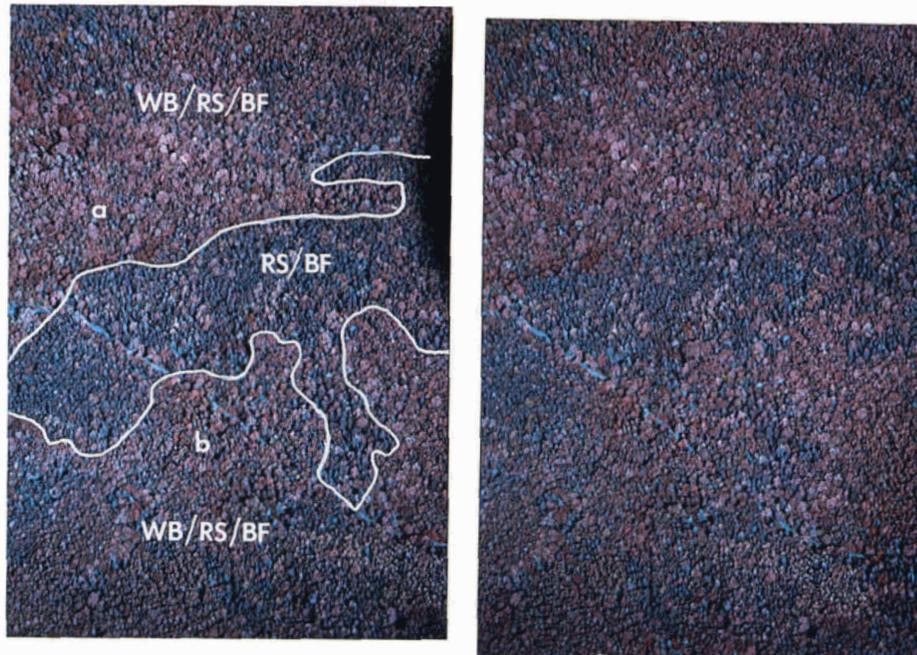


White Birch--Red Spruce--Balsam Fir

(*Betula papyrifera*, *Picea rubens*, *Abies balsamea*)

Composition: White birch, red spruce and balsam fir in various combinations constitute the major stocking.

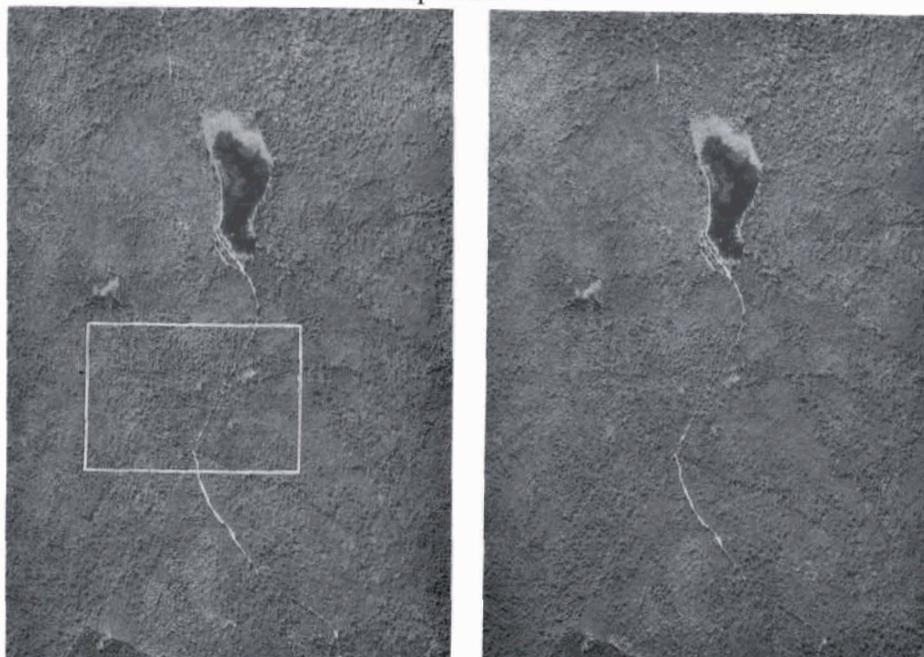


Cardigan State Forest, NH; 12 August 1986; a=WB 35% RS 0% BF 30%
1:6000 b=WB 25% RS 10% BF 30%

Identifying features: White Birch--Red Spruce--Balsam Fir is finely textured, as white birch is a very small-crowned hardwood. The canopy is surprisingly even, and young stands may have a carpet-like texture. Individual lanceolate spruce, spire-like fir, and rounded birch crowns become more distinguishable in older stands. Color in CIR varies broadly, as different relative compositions have a large effect. In general, color ranges from patchy dark (more red spruce) to pink and tan (more white birch, balsam fir, and other hardwood associates).

1:20000

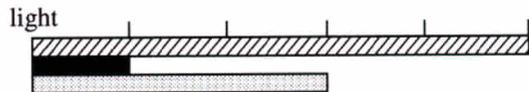
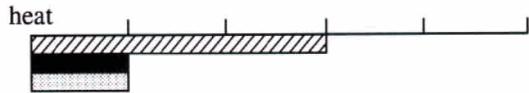
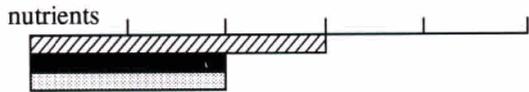
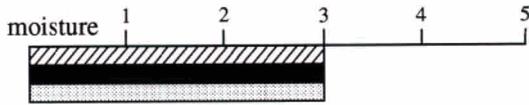
2 September 1970



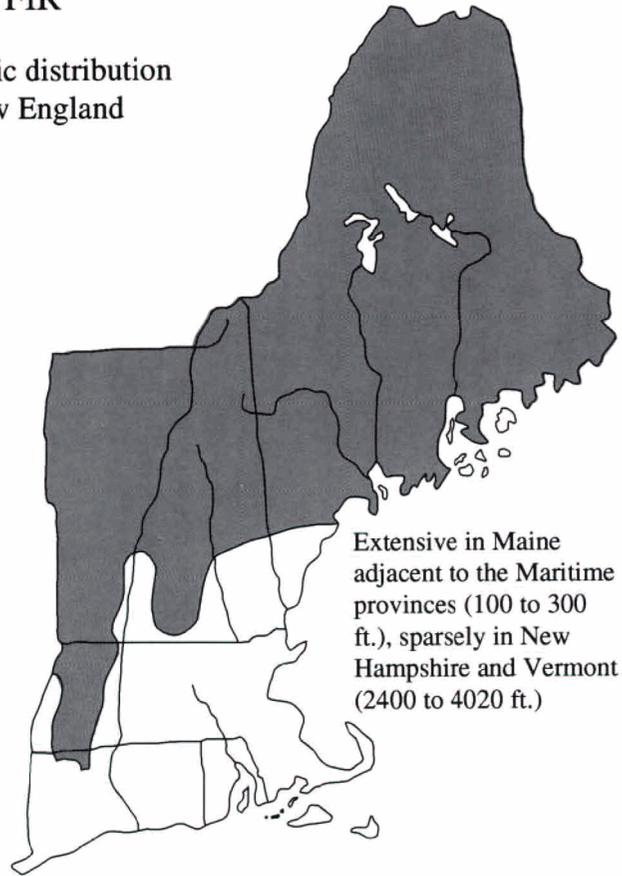
WHITE BIRCH--RED SPRUCE--BALSAM FIR

Ecological relations

Relative values characterizing the intensity of each factor at which a species prevails (1 = low, 5 = high)



Geographic distribution in New England



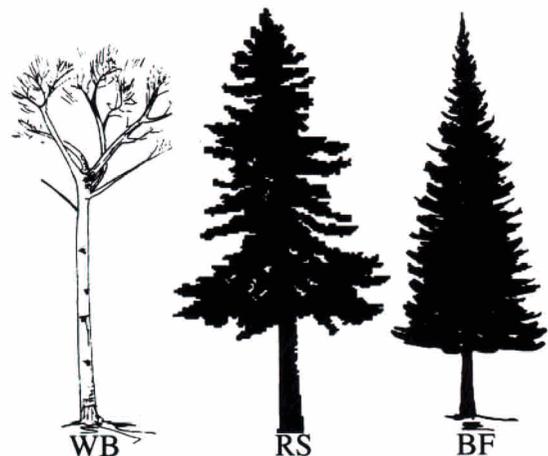
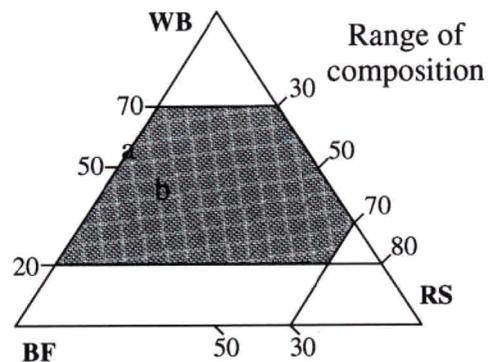
Extensive in Maine adjacent to the Maritime provinces (100 to 300 ft.), sparsely in New Hampshire and Vermont (2400 to 4020 ft.)

Common situation: Upland flats, benches, and slopes.

Boundaries: Merges gradually into adjacent types.

Associate species: Principally, red maple, grey birch. Occasionally, northern white-cedar, white pine, aspen, pin cherry, and mountain ash. Occasionally, hemlock, yellow birch, sugar maple, and beech.

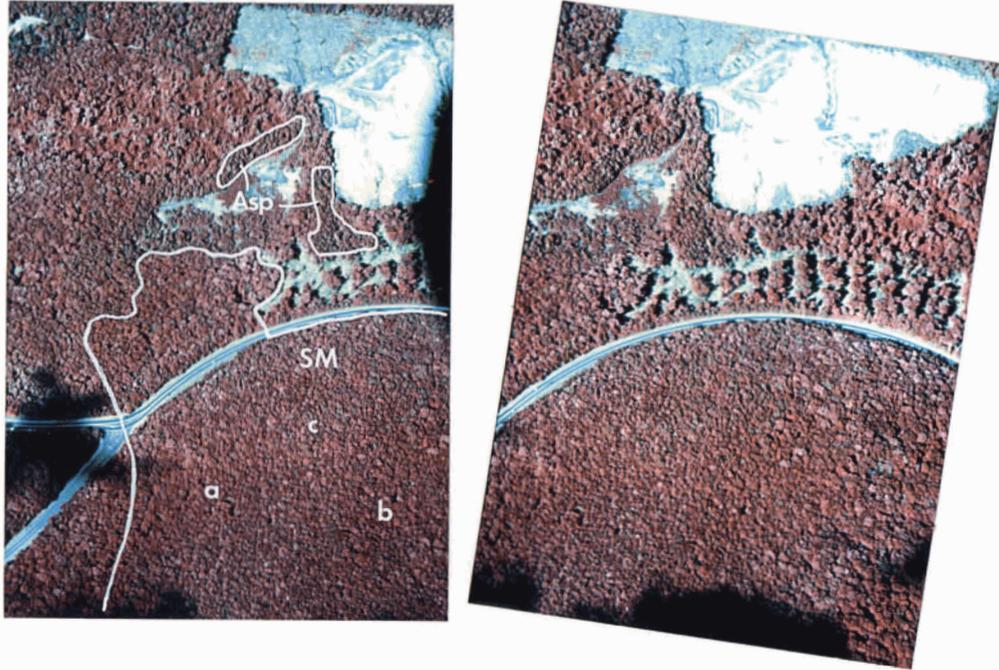
Comparisons: The presence of white birch distinguishes this type from RS/BF. Crowns generally smaller than in RS/SM/B.



Sugar Maple

(*Acer saccharum*)

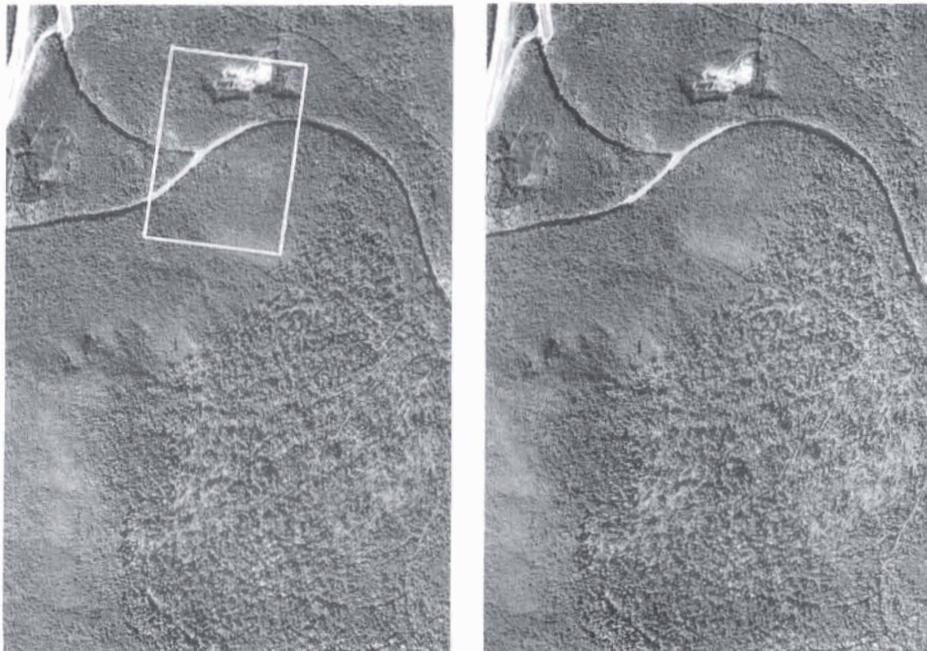
Composition: Sugar maple usually constitutes a majority of the stocking and frequently occurs in pure stands. Several other species are commonly present, though each constitutes less than 20 percent of the total basal area.



Franconia, NH; 4 August 1986; a=SM 90%, b=SM 70%, c=SM 50%
1:8500

Identifying features: Sugar Maple has large and billowy, but compact crowns. The dense, unbroken canopy is somewhat uneven, creating a pockmarked appearance, and individual crowns and their texture can often be distinguished. Individual emergent sugar maple crowns are typically a very light pink in CIR, but whole stands are less consistently so.

1:20000
12 September 1970



SUGAR MAPLE

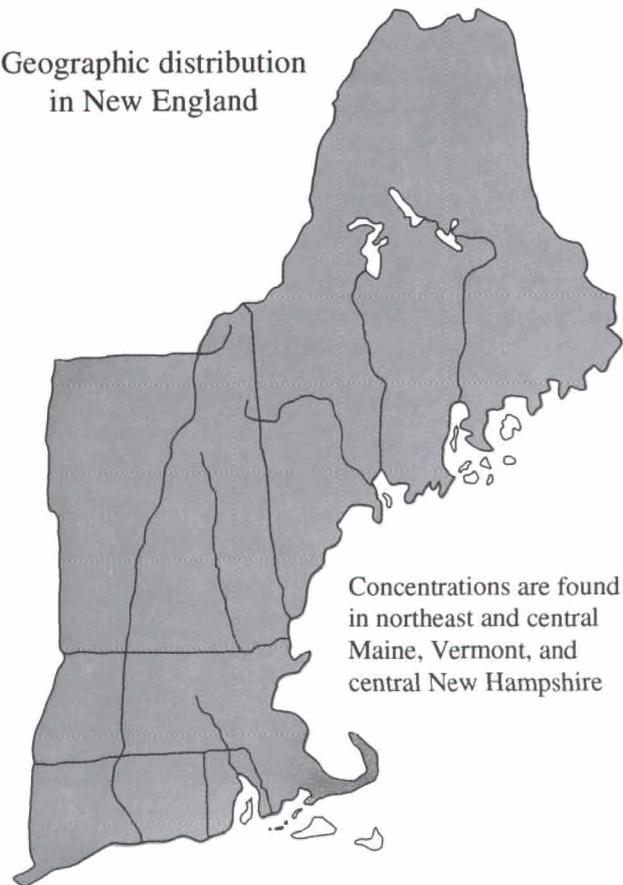
Ecological relations

Relative values characterizing the intensity of each factor at which a species prevails (1 = low, 5 = high)

SM 



Geographic distribution in New England



Concentrations are found in northeast and central Maine, Vermont, and central New Hampshire

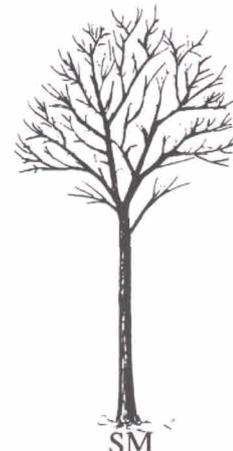
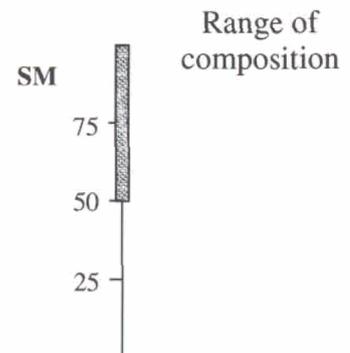
Common situation: Occurs over a wide range of soil and site conditions. Best development on deeper silt-loam soils with good drainage and moderate acidity.

Boundaries: Usually indistinct from related types.

Associate species: Typically, white ash, basswood, beech, yellow birch, red maple, and red spruce. Occasionally, red oak, hophornbeam, American elm, balsam fir, black ash, black cherry, white birch, black birch, hemlock, white pine, and white spruce.

Comparisons: To avoid possible confusion with a Red Maple stand, the crowns of Sugar Maple can be distinguished by their much more rounded crown shape, compared to the upright tufts, almost needlelike in appearance, of Red Maple crowns.

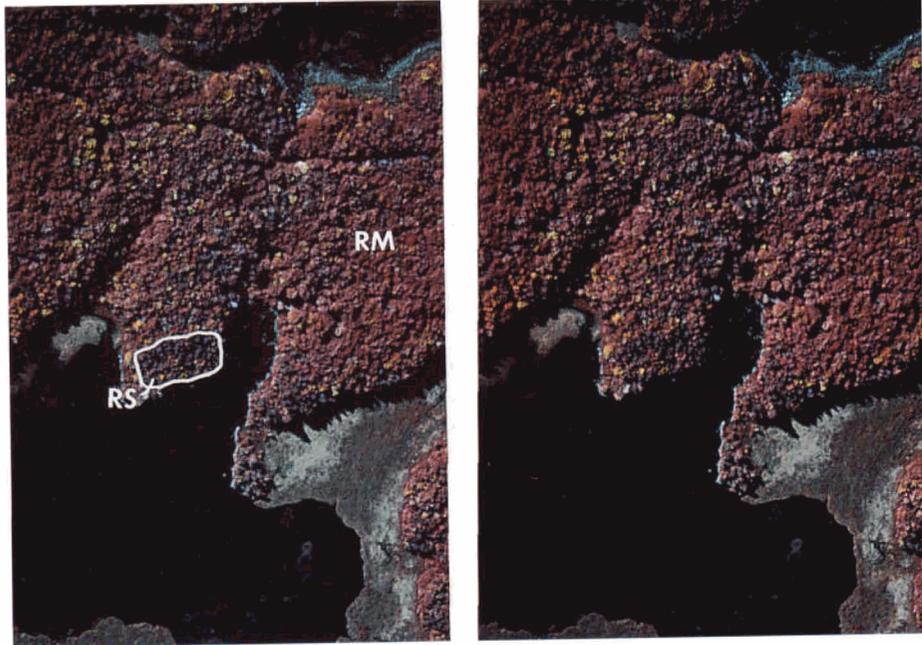
A young stand of the Sugar Maple type can be nearly as dark as Red Oak, but the canopy of Sugar Maple is usually more uneven, and the maple crowns are typically smaller, slightly less well-defined, less orange, and less intensely colored.



Red Maple

(Acer rubrum)

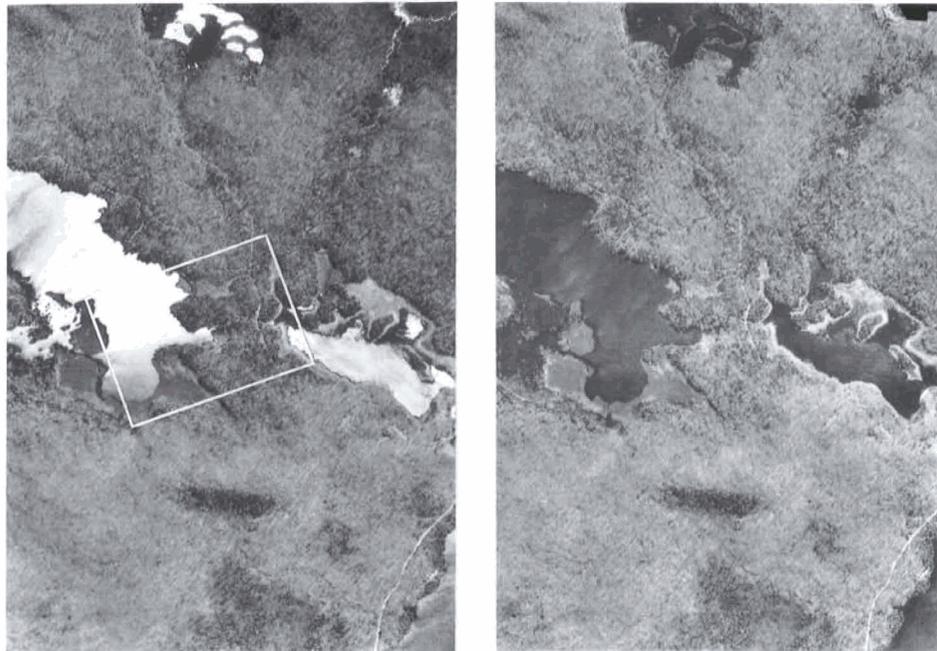
Composition: Red maple constitutes a majority of the stocking.



Pillsbury State Park, NH; 8 September 1986; RM 55%
1:6000

Identifying features: Red Maple has moderately large crowns of upright tufts or needles at large scales, forming a finely textured canopy. Red maple occurs with almost every other species and type. The canopy is typically closed, but of uneven crown height, creating a generally lumpy texture.

1:20000
17 May 1975



RED MAPLE

Ecological relations

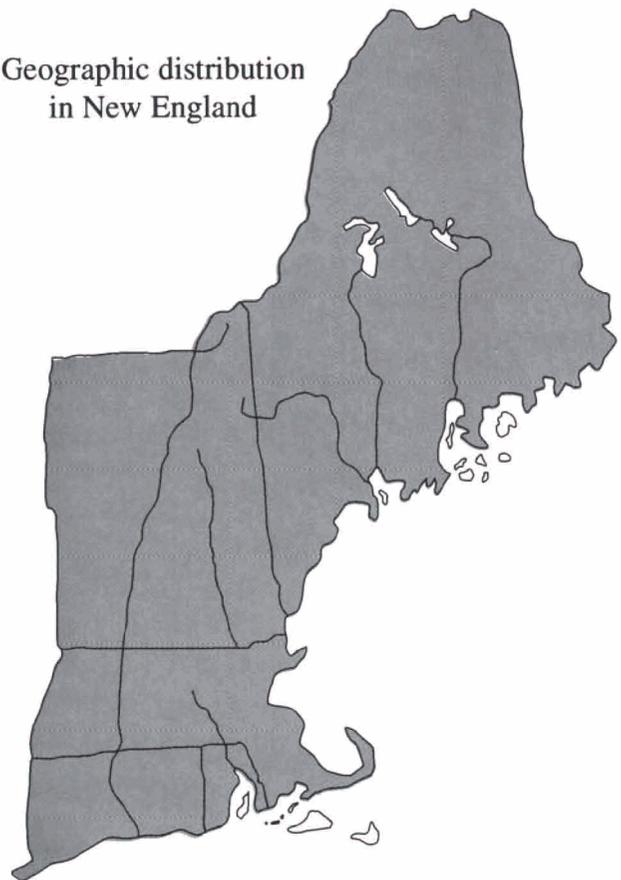
Relative values characterizing the intensity of each factor at which a species prevails (1 - low, 5 = high)

RM 



* Found under a wide range of conditions. The moderate rating is a result of averaging.

Geographic distribution in New England

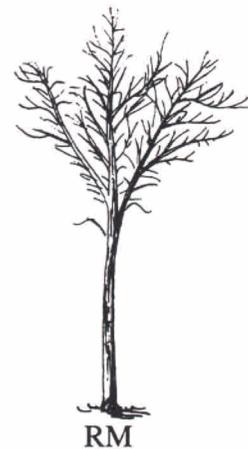
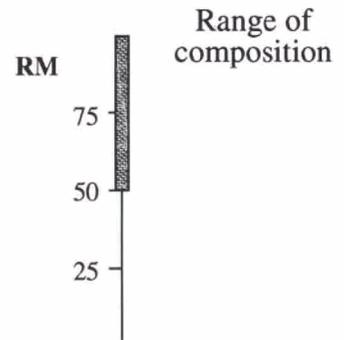


Common situation: Occurs on a wide variety of sites. Common on moist soils and swamp borders, cut stands where red maple was left as an undesirable, and on old Black Ash--American Elm--Red Maple sites altered by Dutch elm disease.

Boundaries: Indefinite.

Associate species: From north to south, red spruce, white pine, sugar maple, beech, yellow birch, hemlock, northern white-cedar, white birch, aspen, black ash, pin cherry, black cherry, red oak, and American elm.

Comparisons: Both red oak and sugar maple crowns are rounded billows instead of upright tufts. In CIR, red maple is a deeper red than sugar maple, but still less intense and orange than red oak. See Figure T for a color comparison of Red Maple and Red Oak types.

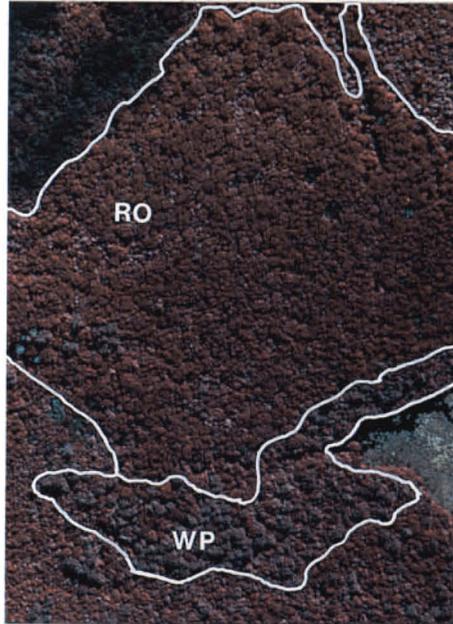


RM

Northern Red Oak

(Quercus rubra)

Composition: Northern red oak constitutes a majority of the stocking; in limited areas it may occur in pure stands.



Bear Brook State Park, NH; 21 August 1986; RO 80%
1:6000

Identifying features: Northern Red Oak crowns are large, rounded, highly textured and very well defined. The coarse billows in the crowns create a "popcornball" texture. The canopy is usually fairly continuous and even. In CIR, Red Oak has the most intense red-orange of the hardwood shades. Colors in this example are shifted into the blue; Red Oak is usually more red-orange than shown here.

1:20000
2 May 1974



NORTHERN RED OAK

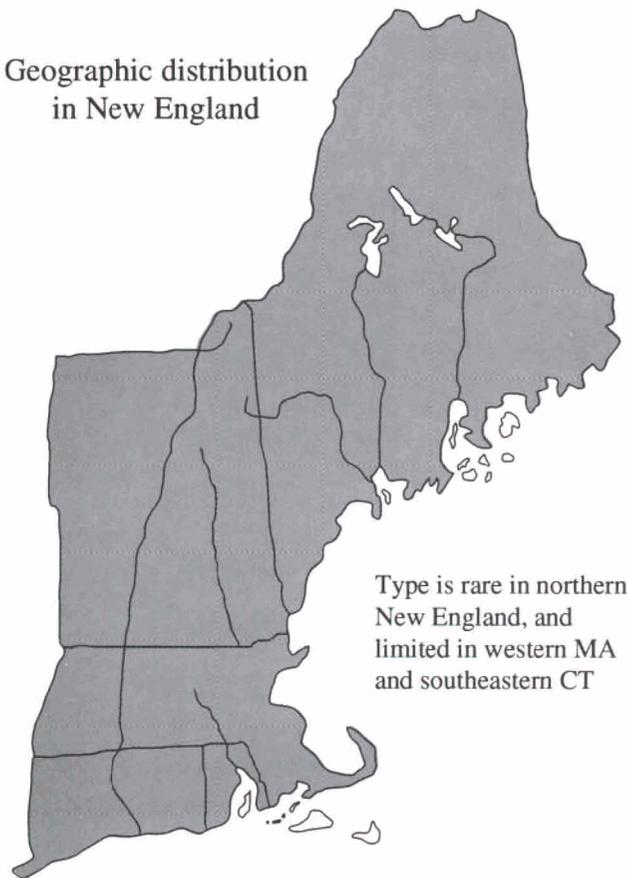
Ecological relations

Relative values characterizing the intensity of each factor at which a species prevails (1 = low, 5 = high)

RO 



Geographic distribution in New England



Type is rare in northern New England, and limited in western MA and southeastern CT

Common situation: Coves, north and east slopes, and benches in the south. More frequently on south and west slopes from central New Hampshire north. The species red oak is common; the type occurs infrequently.

Boundaries: Except where site changes abruptly, type merges with adjacent types.

Associate species: On moist sites, yellow-poplar, black cherry, sugar maple, white ash, white oak, and beech. On dry sites, oaks, hickories, and red maple.

Comparisons: For a more typical color representation of Red Oak in CIR, refer to Figure U or page PP.

For a color comparison of Red Oak with Red Maple, refer to Figure T. At the smaller scales, Red Oak may be mistaken for one of the Sugar Maple types (SM, SM/B, SM/B/YB). Red Oak has a more even canopy and better defined crowns.

Red Oak can be distinguished from WO/BO/RO by its more intense red-orange color and typically larger, denser crowns.

