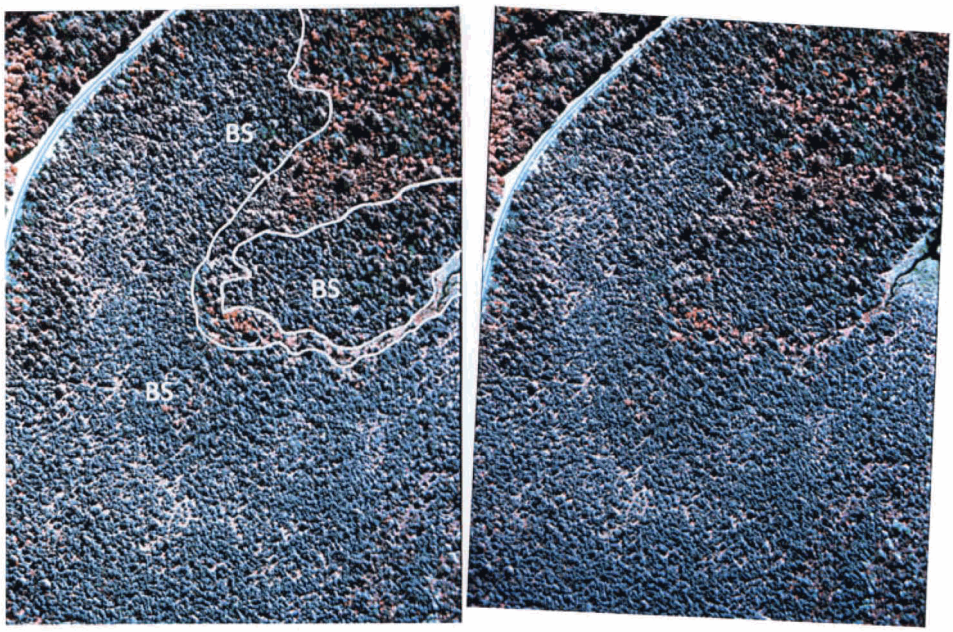
Black Spruce

(Picea mariana)

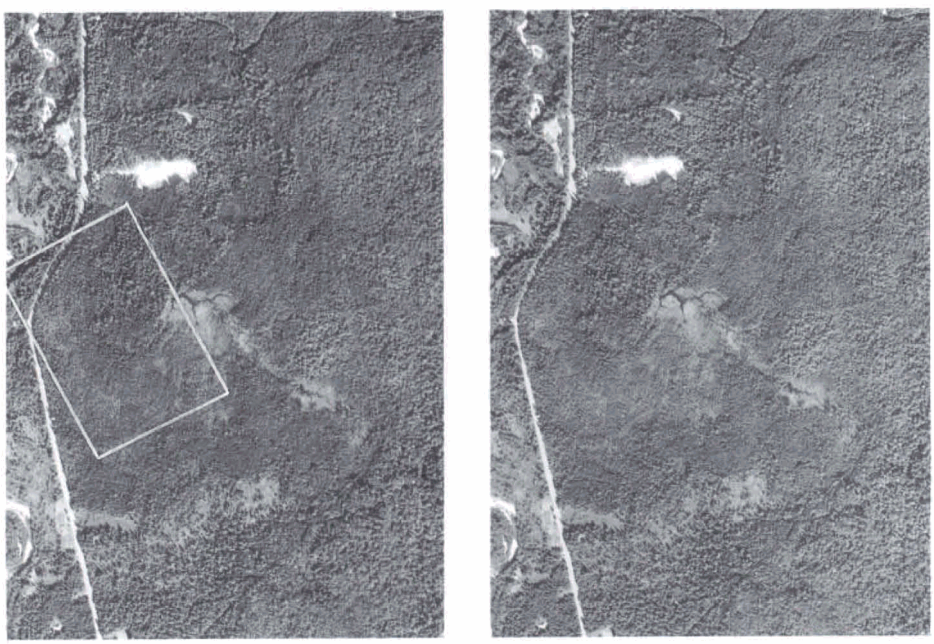
Composition: Black spruce occurs mainly as pure stands and always constitutes a majority of the stocking.



Albany, NH; 4 August 1986; BS 80-90%
1:6000

Identifying features: Black Spruce occurs on flat, wet sites, often at the periphery of bogs. The finely textured, even canopy always remains smooth, as tree height changes uniformly, decreasing with site quality. In CIR, Black Spruce is a dark, but distinctly green, conifer shade.

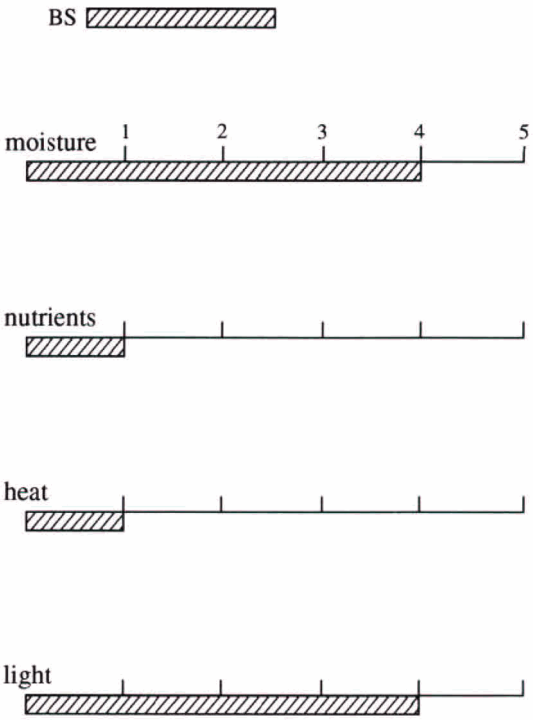
1:20000
12 September 1970



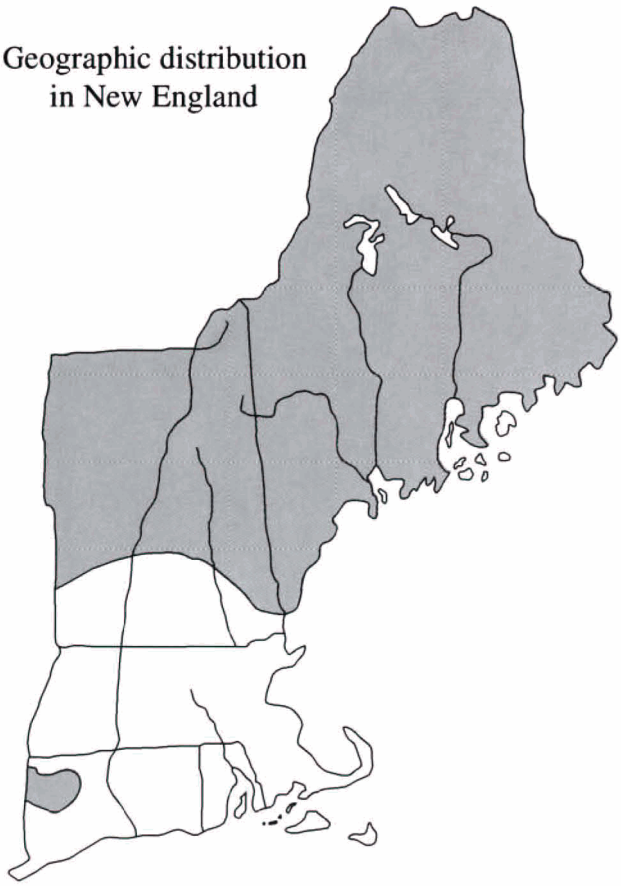
BLACK SPRUCE

Ecological relations

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



Geographic distribution in New England



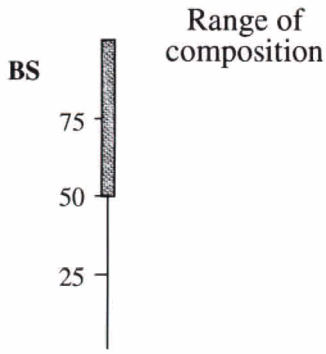
Common situation: Typical of boggy or peatland sites on gently sloping lake beds or smaller filled lakes. Often even-aged stands after fire; unevenaged stands develop on poor sites.

Boundaries: Merges with the BS/T type, but maintains a distinct boundary with most other types.

Associate species: More numerous on better sites. In boreal regions, white spruce, aspen, balsam fir, white birch, tamarack. Northern white-cedar, black ash, red maple in addition farther south. In New England, red spruce, sometimes hybridizing with the black spruce.

Comparisons: The interpreter may confuse Black Spruce with young Red Spruce. The Red Spruce canopy is less green in color on CIR, and does not remain even, breaking up as the site changes and the stand ages.

Atlantic White-Cedar is another type that occupies flat, wet sites. The very densely packed canopy of the AWC type distinguishes it from the Black Spruce type.



BS

Black Spruce--Tamarack

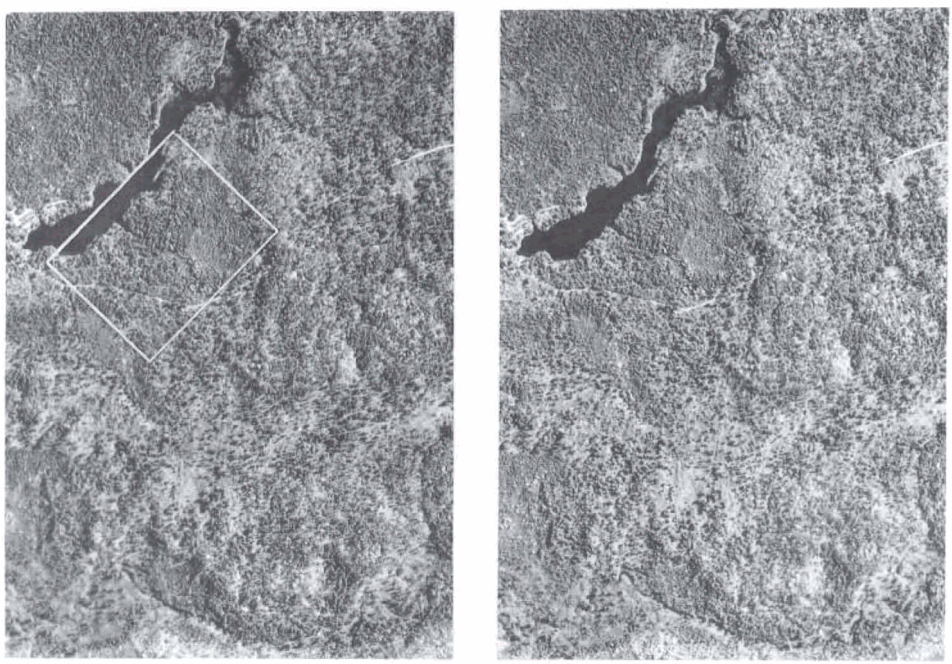
(Picea mariana, Larix laricina)

Composition: Black spruce and tamarack together constitute the type.

Pine River State Forest, NH; 12 August 1986; BS 65%, T 35%
1:6000

Identifying features: Black Spruce--Tamarack often accompanies the Black Spruce type on flat, wet sites, with tamarack favoring the wetter areas. The tamarack has an open, feathery crown that appears brighter in tone and less distinct than the associated spruce. Like Black Spruce, the open but even canopy changes height uniformly, decreasing with site quality.

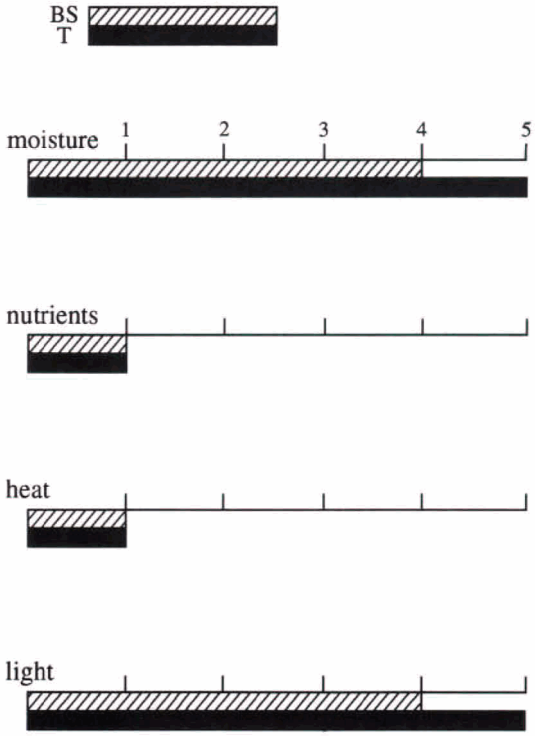
1:20000
28 October 1970



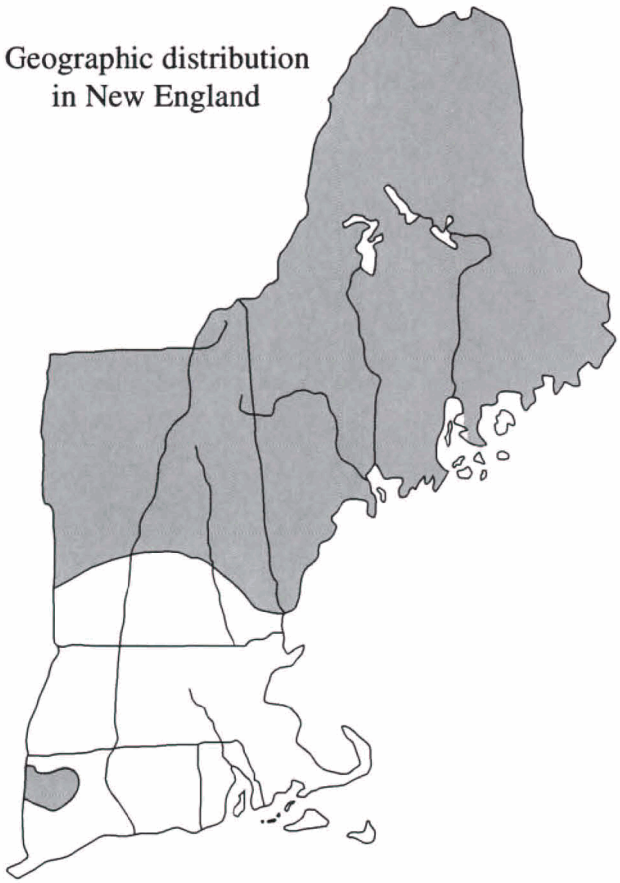
BLACK SPRUCE--TAMARACK

Ecological relations

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



Geographic distribution in New England

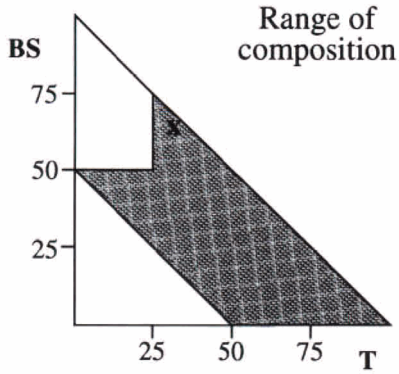


Common situation: Low, wet sites of mineral soil, along streams, and peat bogs. Individual areas small in size, but may be very extensive in aggregate (especially in the most northeastern parts of New England).

Boundaries: Often grades into the Black Spruce type, but is quite distinct from most others with almost no transition.

Associate species: Balsam fir, northern white-cedar.

Comparisons: To distinguish from Black Spruce, the tamarack component gives the type a slightly lighter tone and greener hue in CIR.



Red Spruce

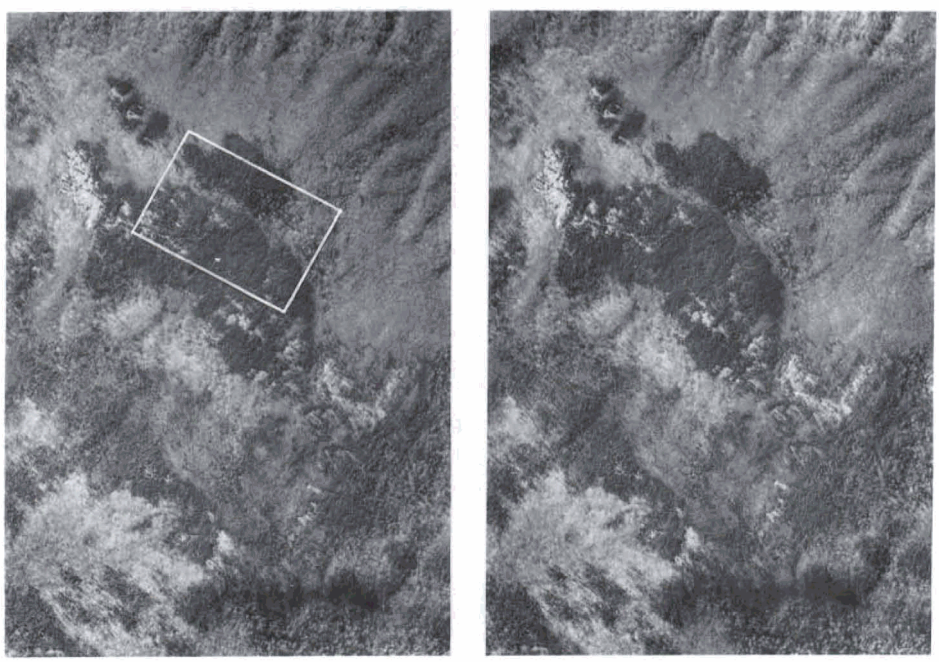
(Picea rubens)

Composition: Red spruce is either pure or constitutes a majority of the growing stock.

Gorham, NH; 31 August 1986; RS 90%
1:6000

Identifying features: Red Spruce is one of the darkest of the New England cover types. The very distinct lanceolate crowns create a finely textured image. In southern New England, the type is found most often at the higher elevations (above 2500 feet) and is frequently pure in those areas. Unlike the Black Spruce type, tree height does not remain even, but breaks up and becomes irregular as the site changes.

1:20000
20 October 1970

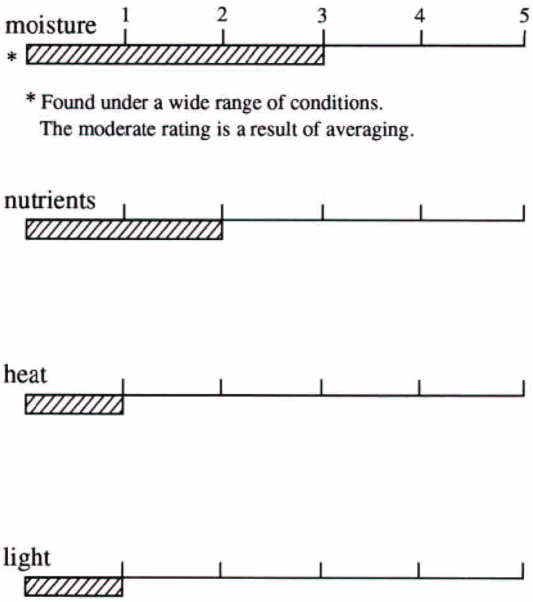


RED SPRUCE

Ecological relations

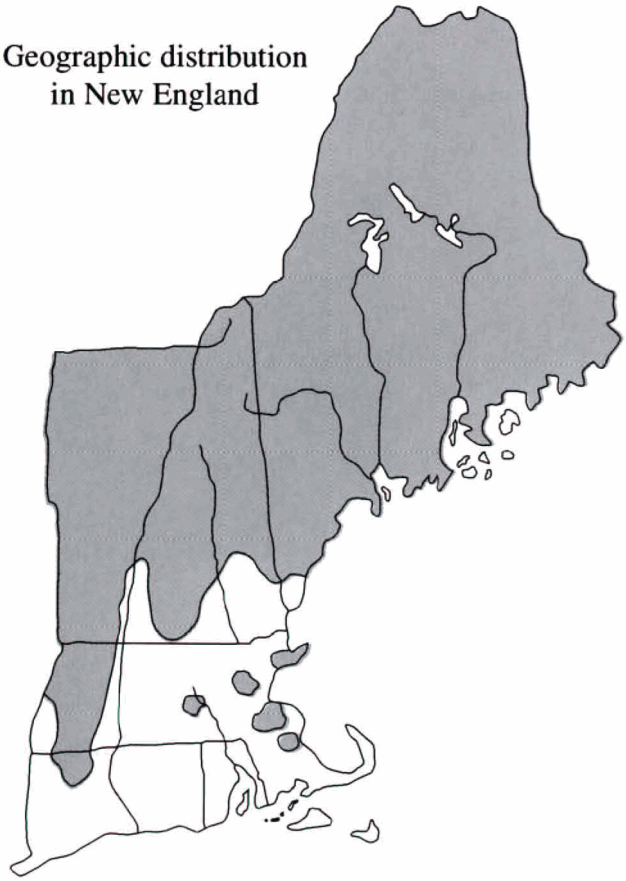
Relative values characterizing the intensity of each factor at which a species prevails (1 = low, 5 = high)

RS



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

Geographic distribution in New England



Common situation: Occurs over a range of sites including moderately well drained to poorly drained flats, and thin-soiled upper slopes.

Boundaries: Usually blends into related types, but can be quite distinct at the higher elevations.

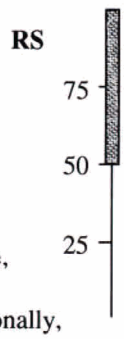
Associate species: Most frequent associate, balsam fir. Common associates are red maple, yellow birch, eastern hemlock, white pine, white spruce, northern white-cedar, white birch, pin cherry (early in succession), and black spruce (wet sites). Occasionally, red oak, red pine, and aspen.

Comparisons: Red Spruce in combination with many hardwood associates, as it frequently occurs at the lower elevations, can be identified by the very dark, lanceolate crowns (see Fig. K).

Young Red Spruce may be confused with Black Spruce. In CIR, the Black Spruce canopy is greener in color and remains uniform as the site changes.

The absence of the lighter, spirelike crowns of balsam fir distinguishes it from the RS/BF type.

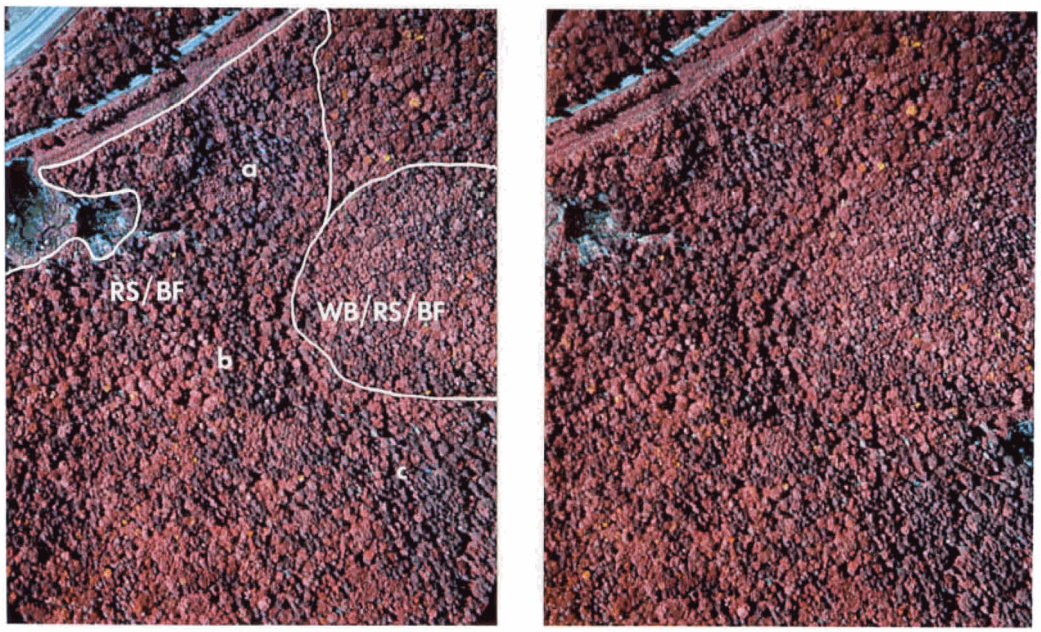
Range of composition



Red Spruce--Balsam Fir

(Picea rubens, Abies balsamea)

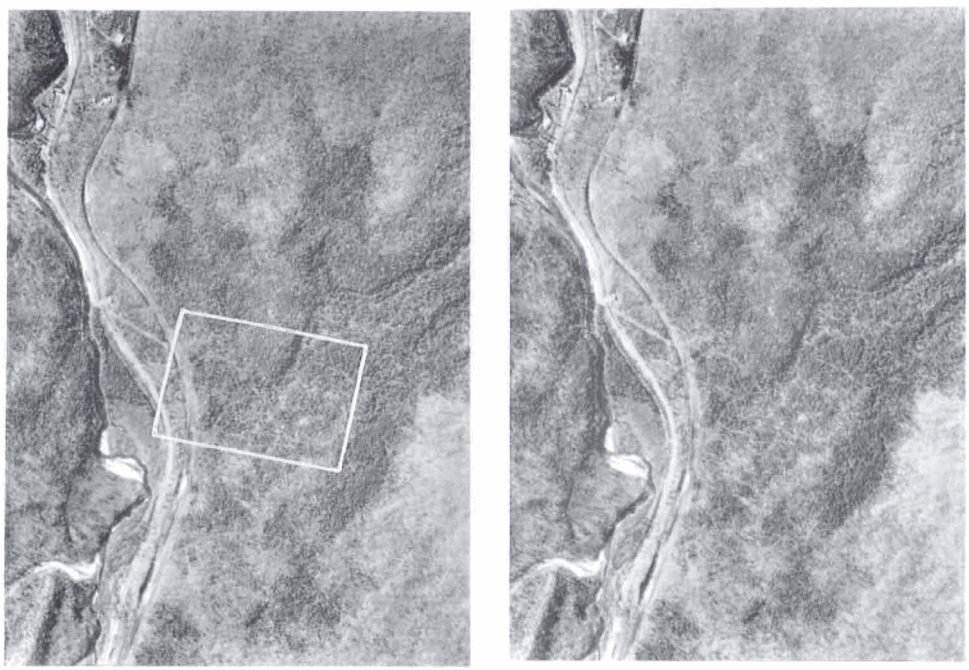
Composition: Red spruce and balsam fir together constitue a majority of the growing stock.



Twin Mountain, NH; 31 August 1986; a=RS 40% BF 40%
1:6000 b=more BF, c=more RS

Identifying features: Red Spruce--Balsam Fir is dark in color and dominated by narrow pointed crowns, among which the spirelike balsam fir and the lanceolate red spruce crowns are often distinguishable. Red Spruce--Balsam Fir is less distinct from adjacent hardwood types than Red Spruce. Balsam fir is much lighter in color and intensity than red spruce and moderates the type coloration. In CIR, a stand of mostly balsam fir can create an almost sandy-colored, although still very finely textured, image. In this example, it is the crown shapes that most distinguish red spruce and balsam fir.

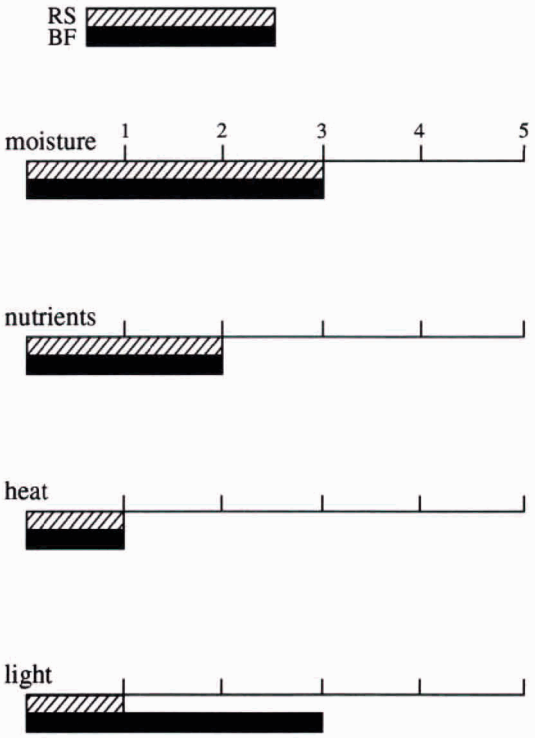
1:20000
19 October 1970



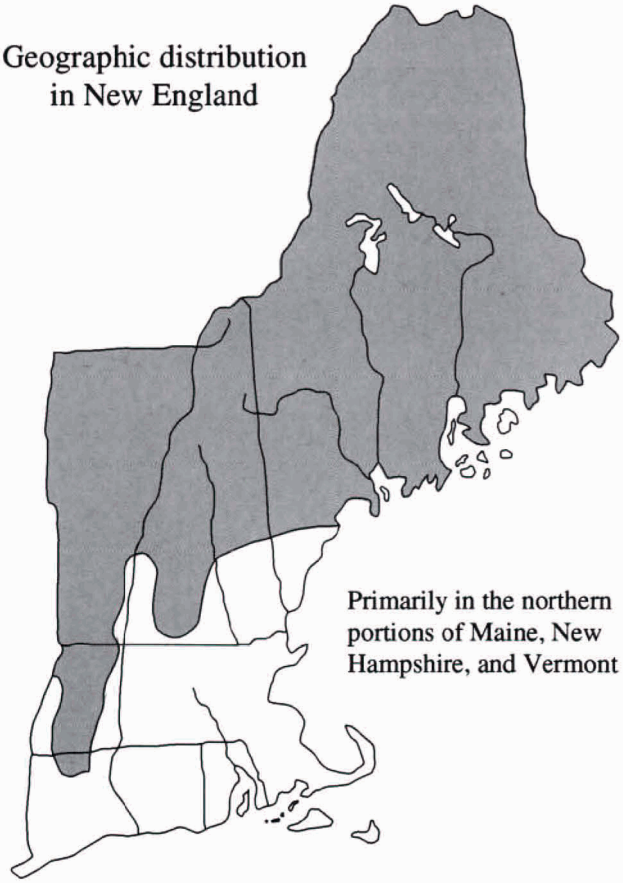
RED SPRUCE--BALSAM FIR

Ecological relations

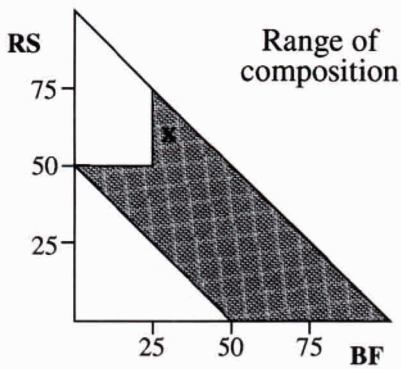
Relative values characterizing the intensity of each factor at which a species prevails (1 = low, 5 = high)



Geographic distribution in New England



Primarily in the northern portions of Maine, New Hampshire, and Vermont



Common situation: Low ridges and knolls around streams, swamps, and bogs; extensive flats and upper mountain slopes.

Boundaries: Merges gradually with related types.

Associate species: Principally white spruce, eastern white pine, eastern hemlock, northern white-cedar. Often black spruce, tamarack, white birch, yellow birch, red maple, mountain maple, striped maple, mountain ash, and pin cherry. Occasionally sugar maple, beech, hophornbeam, aspen, white ash, and gray birch.

Comparisons: The presence of the lighter, spirelike crowns of balsam fir in the type distinguish it from Red Spruce.