



# Oak - Northern Hardwoods Forest

**State Rank S5** Maine, maple-leaved viburnum is an indicator shrub.

## Community Description

This is a mixed upland forest type with red oak and northern hardwoods in the canopy. Some stands are almost entirely deciduous (typically oak - beech), while others are mixed with white pine, red spruce, hemlock, or (especially along the coast) northern white cedar. Red oak comprises up to 25-85% cover; beech is less than half that of red oak. Large red oak trees are prominent. Red maple is frequent. The shrub/sapling layer is usually sparse (<25%, but occasionally up to 50% cover). The herb layer is likewise spotty (usually <10% cover, sometimes 20-50% cover), with very few dwarf shrubs aside from lowbush blueberry, and with typical forest herbs and tree regeneration (red maple, red oak, white pine, beech). Few bryoids are found on the leaf litter covered forest floor.

## Soil and Site Characteristics

Sites occur on gently to somewhat steeply sloping (15-35%) mid- and lower slopes, occasionally upper slopes, but usually not highly exposed sites. Known sites are at low elevations (<1200') on moderately well drained mineral soils, often rocky but not extremely shallow (typically 25-50 cm) and loamy, with pH 5.0-5.4.

## Diagnostics

These are closed canopy forests in which red oak and at least one northern hardwood species (beech, sugar maple, or, infrequently, yellow birch) dominate the canopy. In southern



Maple-leaved Viburnum

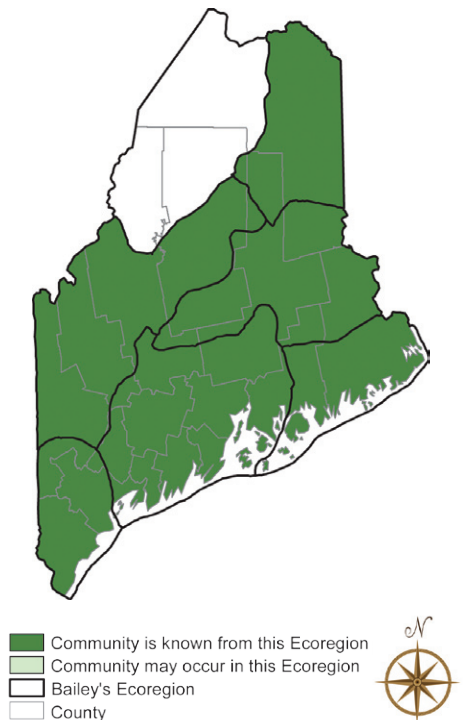
## Similar Types

Oak - Pine Forests, the most similar type, generally lack sugar maple, white ash, and ironwood. Beech - Birch - Maple Forests have only minor amounts of red oak, and generally are strongly deciduous (>75%) rather than mixed. Spruce - Northern Hardwoods Forests lack red oak.

## Conservation, Wildlife, and Management Considerations

Most sites in Maine are on lands with a long settlement history, and have apparently been timbered, pastured, or burned in the past. Several sites occur on public lands but are not necessarily designated as areas to be set aside from timber harvest. Small and

## Location Map



Oak - Northern Hardwoods Forest

isolated protected stands (on the order of 25 acres or less) may not be viable in the long run; though larger stands, or naturally small stands protected within a managed forest matrix, could be viable.

The community provides nesting habitat for a large number of passerine bird species, such as black-throated blue warbler, black-throated green warbler, scarlet tanager, and ovenbird. Mature stands offer excellent potential sites for cavity nesters. The rare red-winged sallow moth uses red oak as one of its host plants and may be found in this community. The globally uncommon early hairstreak butterfly uses beech as its larval host plant.

## Distribution

Primarily the Laurentian Mixed Forest Province (except for the far northern portion) and southern portion of the New England - Adirondack Province, extending eastward and westward from Maine.

Landscape Pattern: Matrix-forming in southern Maine, though currently many occurrences exist as large patches due to fragmentation.

## Examples on Conservation Lands You Can Visit

- Albany Mountain, White Mountain National Forest - Oxford Co.

## Characteristic Plants

These plants are frequently found in this community type. Those with an asterisk are often diagnostic of this community.

### Canopy

- American beech
- Paper birch
- Red maple
- Red oak\*
- Striped maple
- Sugar maple\*
- White pine

### Sapling/shrub

- American Beech
- Maple-leaved viburnum
- Striped maple
- Sugar maple
- White pine

### Herb

- Bracken fern
- Canada mayflower
- Starflower
- Wild sarsaparilla
- Wild-oats

## Associated Rare Plants

- American chestnut
- Mountain-laurel
- Nantucket shadbush
- Ram's-head lady's-slipper

## Associated Rare Animals

- Early hairstreak
- Red-winged sallow
- Whip-poor-will

- Alonzo Garcelon Wildlife Management Area - Kennebec Co.
- Center Hill, Mount Blue State Park - Franklin Co.
- Mt Megunticook, Camden Hills State Park - Knox Co.
- Patte Hill, White Mountain National Forest - Oxford Co.
- Sebago Lake State Park - Cumberland Co.