

White Oak - Red Oak Forest

State Rank S3

Community Description

This deciduous forest type is dominated by red oak with white oak as a canopy associate. White pine is occasionally present, but conifers comprise only a small proportion (<20%) of the canopy. Sugar maple and beech may be present in minor amounts. Shrubs occur as well spaced patches; typical species include striped maple and ironwood. The forest floor is characterized by low heath shrubs such as lowbush blueberry. Common herbs include woodland sedge, bracken fern, whorled loosestrife, and Canada mayflower. Bryoids are very sparse.

Soil and Site Characteristics

Sites of this type are on well drained gentle slopes (up to 20%) below 600' elevation. The soil is generally well drained, stony, sandy loam, fairly acidic (pH 4.8-5.0), and 20-50 cm deep. These forests are usually on somewhat sheltered sites.

Diagnostics

Forests dominated by a mixture of red oak and white oak, without a strong



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white pine or hickory component. White oak forms at least 25% of the canopy.

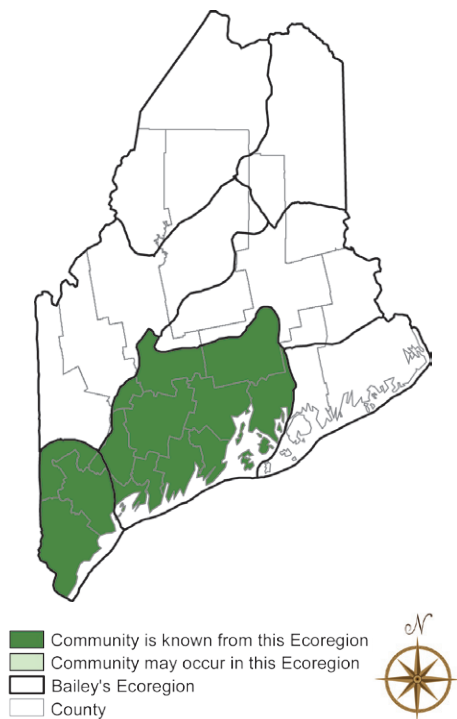
Similar Types

Oak - Pine Forests lack white oak and may have white pine co-dominant with red oak. Red Oak - Northern Hardwoods - White Pine Forests lack white oak and have a larger component of beech or sugar maple. Shagbark hickory is dominant in Oak - Hickory forests.

Conservation, Wildlife, and Management Considerations

The few mature sites of White Oak - Red Oak Forest known to remain in Maine are all on land that was once cleared. The known sites are subject to fragmentation

Location Map



Scarlet Oak Leaf held against Oak Bark

by timber harvesting, clearing for agriculture, and residential development, uses that have reduced this naturally rare type even further. Community dynamics are not well known, but there are some indications that red oak regenerates more strongly than white oak at some sites and may replace it over time. Fire may also play a role in natural regeneration. Most occurrences of this type are on private lands.

This type offers habitat for a variety of birds, including scarlet tanager and ovenbird. Mature occurrences of this community type offer excellent potential sites for cavity dwellers such as the southern flying squirrel. The rare red-



White Oak Leaf

Characteristic Plants

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

Canopy

- Red oak*
- Sugar maple
- White oak*

Herb

- Rough-leaved ricegrass
- Wild sarsaparilla
- Wild-oats
- Wintergreen
- Woodland sedge*

Associated Rare Plants

- Bitternut hickory
- Chestnut oak
- Flowering dogwood
- Scarlet oak

Associated Rare Animals

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

winged swallow moth uses red oak as one of its host plants and may be found in this community.

Distribution

Restricted primarily to southern Maine, characteristic of the Eastern Broadleaf Forest Province.

Landscape Pattern: Small to Large Patch, generally 100 acres or less.

Examples on Conservation Lands You Can Visit

- Mt. Agamenticus - York Co.
- Sebago Lake State Park - Cumberland Co.