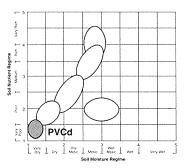
PVCd

Pinus strobus/Vaccinium spp.-Cladina spp. (White pine/Blueberry-Reindeer lichen)

Distribution: Most prevalent in Cheboygan, Presque Isle, Montmorency, Crawford, Oscoda, Missaukee, Roscommon, and Ogemaw counties although sporadic areas of this type can be found in most counties in the region. This type is associated with the sandy outwash plains of Sub-subsection VII.2.2 and the dry beach ridges of Sub-subsection VII.6.3 (Albert 1995).



Similar habitat types: PArVHa

Landform and soils: Primarily located on coarse textured sands with very limited horizon development. The soils are infertile and excessively well drained with no indication of perched water table within five feet of soil surface. A typical soil series is Grayling sand. This type is classified as very dry/very poor nutrient.

VEGETATION

Common forest cover types: Jack pine is usually dominant and best represented, with red pine, white pine and a variety of oaks as common associates. Jack pine exhibits moderate to good growth and form. Oaks consistently have poor form although large diameter stems can be found.

Shrub and small tree layer: Blueberry is often the dominant shrub species, at times forming almost continuous cover. Other species with high frequency of occurrence but variable coverage are sweetfern, bear berry, and juneberry. Seedlings and saplings of jack pine, black cherry, and oaks are most common but are often widely scattered with low coverage. Black cherry rarely attains more than sapling status on this type.

Ground flora characteristics: A very limited number of herbaceous species are found on this type but coverage can often be high. Bracken fern is often the most conspicuous species and can dominate open areas. Other commonly occurring and abundant species include grasses, mosses, and wintergreen. The common occurrences of reindeer moss and blue cladonia best distinguish this type from **PArVHa**.

DISTURBANCE AND SUCCESSION

Historically these sites supported mixed jack pine/red pine forests and pine/oak barrens. Heavy logging at the turn of the 19th century and the fires that followed tended to favor jack pine and scrub oak reproduction, the best fire adapted species. Jack pine and red pine currently dominate

this type and will persist with the help of periodic fires to maintain a suitable seedbed and limit competition. Fire suppression will favor the establishment of white pine on sites where seed source is present. Though white pine is not common in current stands, it, in addition to red pine is thought to be the potential dominant species in climax forests. These two pines are successful due to their ability to thrive on dry sites and their longevity with respect to jack pine. Little competition exists from the more demanding hardwoods including red maple and American beech. The accompanying diagram depicts the common present cover types and most conspicuous directions of change in the absence of disturbance.

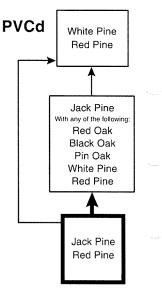
MANAGEMENT IMPLICATIONS

Regeneration: Jack pine, red pine, and scrub oak are the best adapted species to

this type, but because of their intolerance to shade they do not regenerate in the absence of disturbance. Fire has historically been the principal form of disturbance on this type. Northern pin oak and black oak-red oak hybrids are also well adapted to this disturbance regime and will persist through their sprouting ability. The moderately tolerant white pine is not currently abundant in the large size classes, but is capable of establishing itself if seed source is present. Although jack pine reproduction is adapted to fire disturbance, recently burned areas often require additional planting or seeding to provide sufficient stocking.

Growth potential: Pulp is the primary product from forests on this type. Jack pine and red pine are the best-suited species. White pine does not achieve vigorous growth. Northern pin oak, black oak-red oak hybrids, and to a lesser degree white oak, persist on these sites but from a forestry perspective, they are best suited for firewood.

Other management considerations: These dry sites are subject to severe fire risk throughout the growing season. Kirtland's warbler habitat is most easily developed on this type due to the relative ease of maintaining appropriate jack pine size classes required for nesting. From an ecological perspective, the argument can be made for maintaining less productive deciduous species on these sites. Soils on this type are very low in nutrients and organic matter. Coniferous foliage is not a good source of mineral nutrients and additionally it promotes loss of soil nutrients through leaching. The foliage of less productive deciduous species is richer in nutrients and will contribute to nutrient build up through litter fall.



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