



November 2024

DRAFT FOR COUNCIL REVIEW

Red Pine and Oak Forest Age Class Distribution

Introduction

Wisconsin's roughly 17 million acres of forest includes about 815,000 acres of red pine and 4.5 million acres of the oak-hickory forest type. Both contribute importantly to the state's forest-based economy and the vigor and diversity of the state's forested ecosystems.

Like much of Wisconsin's forests, these forest types, as a whole, are maturing. The weighted average age of planted red pine has changed from 27 in 1983 to 44 years of age today across all owners. While the weighted average of the oak/hickory forest type has remained around the mid 60's for the past 40 years, only 7 percent of this forest type is 20 years old or less.

Regeneration of these forest types typically requires active forest management, including site preparation for natural regeneration, and tree planting especially in the case of red pine, along with post establishment work to assure successful seedling establishment.

The concern, and of potential consideration for the Council on Forestry to address, is the decrease in acreage of these young forests, and the challenges potentially impacting public and private landowner's abilities to regenerate these forest types moving forward.

Background

For initial background data to facilitate an informed discussion, the Council's Chair requested from the WDNR forest data from the USDA Forest Inventory and Analysis program and from WDNR's forest stand data on State, County, and small owner MFL lands. WisFIRS data at this time was limited to examining the red pine resource. A portion of this is summarized below.

USDA FIA age class distributions for all owners is shown to the right in the two charts.

Approximately 61 percent of planted red pine is on private lands, while county and state red pine plantations comprise about 25 percent of the total acreage. The balance, 14 percent is on federal lands.

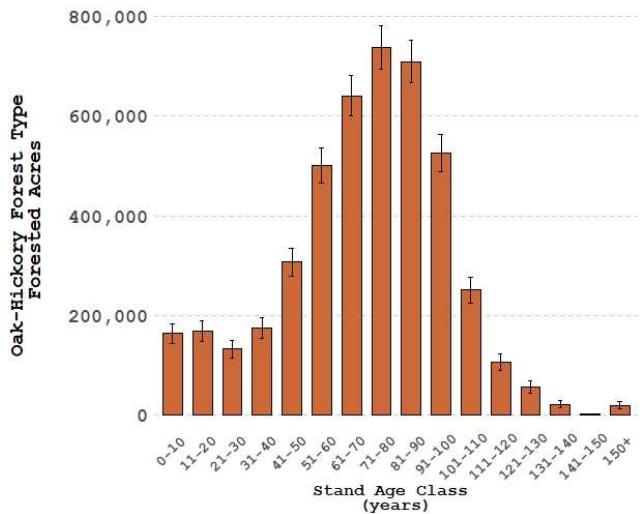
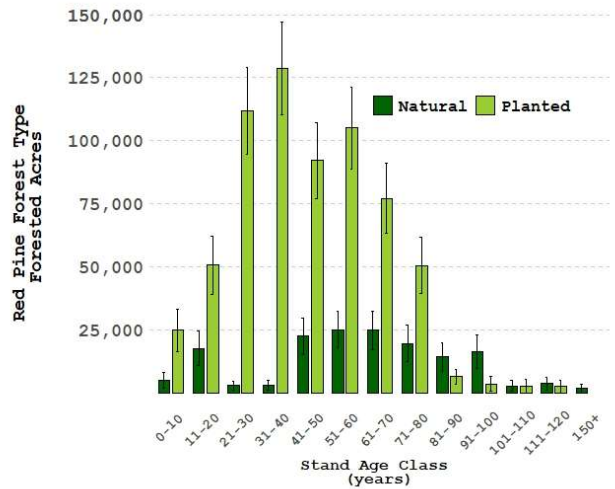
By far, the largest percentage of the oak/hickory type is on private lands, comprising 84 percent of the acreage. Counties own 9 percent, the state 5 percent, while 3 percent is on federal lands.

WisFIRS data on public lands indicates about 70 percent of the red pine forest acreage has a management objective to continue as red pine plantation through rotations, while 40 percent of the small private MFL red pine forest type includes a management objective of continued red pine management with planting after rotation.

There are approximately 20,000 acres of planted red pine with an even-age harvest planned in the next 20 years on state and county forestlands. About three-fourths of this acreage is schedule to be planted again into red pine. On small private MFL lands, about 18 percent of the nearly 8,500 acres of planted red pine that have an even aged harvest planned in the next 20 years is scheduled to be planted again to red pine.

Overall, over the next 40 years 70 to 80 percent of harvested red pine is planned to go back into plantation pine, while less than 20 percent of private red pine plantation (on small MFL ownerships) is planned to be planted again into red pine.

(There are roughly 650,000 acres of large account MFL lands where information for this initial look was not investigated.)



For Future Discussion

The trends highlighted here are a quick snapshot of age class distributions for these two forest types that may indicate a comparative decline in future acreage and harvestable volumes of red pine and oak.

Questions that could be asked:

- Who are the key stakeholders, and do they care?
- Is what may be replacing these forest types preferred or not as desirable?
- What are the economic implications?
- What are the ecosystem implications?
- What are the factors contributing to the skewed age class distribution?
- Can these factors be addressed? How?
- Are there targeted solution opportunities?
- What are the overall costs and benefits of increased efforts to establish more acreage of young red pine and oak/hickory forests?
- What are the implications if no action is taken?
- Is pursuing this topic a fit for the Council on Forestry?