



## Northwestern Wet-Mesic Aspen Woodland

Wet-mesic woodlands dominated by quaking aspen. Present on poorly drained, flat, sandy soils, occasionally capped with loamy sediment, on the Glacial Lake Agassiz plain and rarely on the Anoka Sand Plain. Surface fires were common historically, and catastrophic crown fires were occasional.

### Vegetation Structure & Composition

Description is based on summary of vegetation data from 44 plots (relevés).

- **Ground-layer** cover is sparse to patchy (5–50%). Common species include starry false Solomon's seal (*Smilacina stellata*), common strawberry (*Fragaria virginiana*), northern bedstraw (*Galium boreale*), Maryland black snakeroot (*Sanicula marilandica*), tall meadow-rue (*Thalictrum dasycarpum*), dwarf raspberry (*Rubus pubescens*), Canada goldenrod (*Solidago canadensis*), wild sarsaparilla (*Aralia nudicaulis*), bluejoint (*Calamagrostis canadensis*), and Pennsylvania sedge (*Carex pensylvanica*).
- **Shrub-layer** cover is patchy to interrupted (25–75%). Bur oak, quaking aspen, prickly or smooth wild rose (*Rosa acicularis* or *R. blanda*), juneberries (*Amelanchier* spp.), American hazelnut (*Corylus americana*), gray dogwood (*Cornus racemosa*), red-osier dogwood (*Cornus stolonifera*), and poison ivy (*Toxicodendron rydbergii*) are all common.
- **Subcanopy** cover is sparse to patchy (5–50%). Quaking aspen is common although not abundant, with occasional bur oak, balsam poplar, American elm, and green ash.
- **Canopy** cover is patchy to interrupted (25–75%). The most important species is quaking aspen. Bur oak is present occasionally although typically not abundant; balsam poplar can be abundant when present. American elm, white spruce, and green ash may also be present.

### Landscape Setting & Soils

- **Glacial lake plains**—Common. Present on flat, sandy sites on the Glacial Lake Agassiz plain and on the Anoka Sand Plain. Parent material is very well sorted, fine sand characteristic of shallow water deposits. Typically this material is > 60in (150cm) deep, stoneless, and leached of carbonates. On occasion the fine sand is deposited over calcareous gravelly till. Soil surface is nearly black in the upper 7–15in (20–40cm) due to incorporated organic matter. Soils lack clayey subsoil horizons capable of perching snowmelt or rainfall. Soil colors and bright mottles indicate that soils are saturated in the spring and dry to about 30in (75cm), but not much deeper, during the growing season. Soils are moderately well drained to somewhat poorly drained. Soil-moisture regime is very moist. (LAP; Anoka Sand Plain Subsection in MIM)

### Natural History

In the past, fires were very common throughout the range of FDw44. An analysis of Public Land Survey records indicates that the rotation of catastrophic fires was about 100 years and the rotation of moderate surface fires about 15 years. The rotation of all fires combined is estimated to be 14 years. Windthrow was less frequent than fire but still played a significant role in stand regeneration, with the rotation for catastrophic windthrow estimated at 230 years.

The vegetation within the primary range of FDw44 was described by land surveyors as scattered timber, thickets, and groves of aspen separated by brushland and prairie, with





