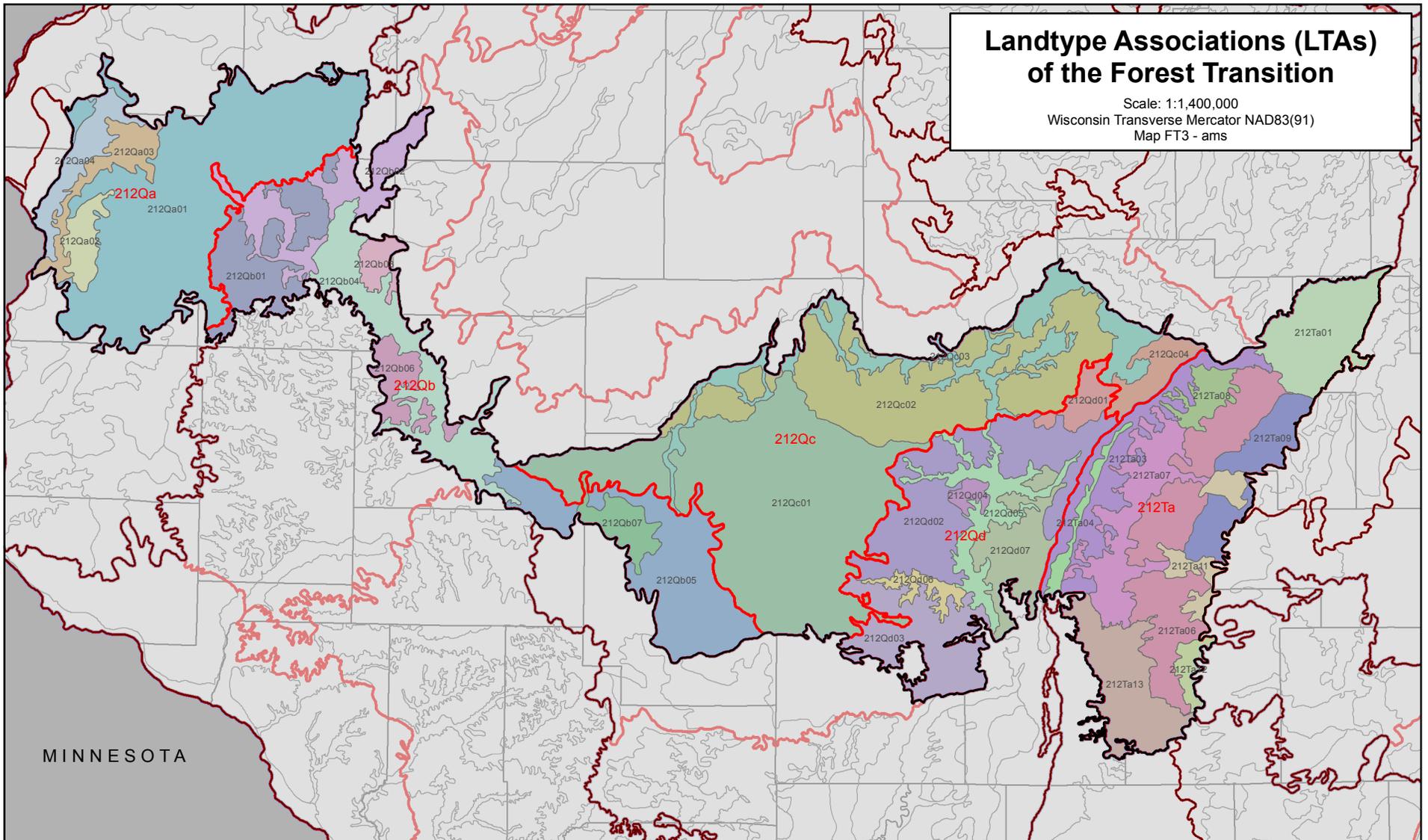


Landtype Associations (LTAs) of the Forest Transition

Scale: 1:1,400,000
Wisconsin Transverse Mercator NAD83(91)
Map FT3 - ams

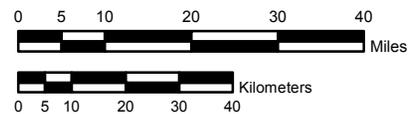


MINNESOTA

-  Ecological Landscape
-  County Boundaries
-  Sections
-  Subsections
-  Landtype Associations

This map is based on the National Hierarchical Framework of Ecological Units (NHFEU) (Cleland et al. 1997).

The Ecological landscapes used in this handbook are based substantially on Subsections of the NHFEU. Ecological landscapes use the same boundaries as NHFEU Sections or Subsections. However, some NHFEU Subsections were combined to reduce the number of geographical units in the state to a manageable number. LTA descriptions can be found on the back page of this map.



Landtype Association Descriptions for the Forest Transition Ecological Landscape

212Qa01	Late St. Croix Moraines	The characteristic landform pattern is rolling collapsed moraine interlaced with outwash terraces and intermixed with ice-walled lake plains. Soils are predominantly moderately well drained sandy loam over dense, acid sandy loam till. Common habitat types include ACaCi and AAt.
212Qa02	Centuria Plains	The characteristic landform pattern is undulating outwash plain with isolated morainic knolls. Soils are predominantly well drained silt loam over outwash. Common habitat types include ACaCi and AAt.
212Qa03	Polk Basalt Moraines	Landform pattern is undulating, rolling collapsed moraines intermixed with ice-walled lake plains, bedrock knolls and ridges. Soils are predominantly well drained sandy loam over dense, acid sandy loam till or igneous/metamorphic bedrock. Common habitat types include AcaCi, AAt and AVDe.
212Qa04	Frederic Knolls	The characteristic landform pattern is rolling collapsed outwash plain with isolated morainic and bedrock knolls and ridges. Soils are predominantly well drained sandy loam over outwash. Common habitat types include AAt, AVDe and ACaCi.
212Qb01	Poskin Moraines	The characteristic landform pattern is undulating moraine. Soils are predominantly moderately well drained silt loam over dense, acid sandy loam till. Common habitat types include ACaCi, forested lowland, hydromesic, AAt and AVDe.
212Qb02	Barron-Dobie Plains	The characteristic landform pattern is nearly level outwash plain, with terraces and fans common. Soils are predominantly well drained silt loam over outwash. Common habitat types include ACaCi, forested lowland, hydromesic, AAt and AVDe.
212Qb03	Sumner Moraines	The characteristic landform pattern is undulating moraine with pediments common. Soils are predominantly moderately well drained silt loam over dense, acid sandy loam till or sandstone. Common habitat types include ACaCi, forested lowland, hydromesic, AAt and AVDe.
212Qb04	Chetek Plains	The characteristic landform pattern is nearly level outwash plain with terraces, fans, and sandstone hills common. Soils are predominantly well drained sandy loam over outwash. Common habitat types include AAt/ArCi, AVDe/ArDe-V, ACaCi/ATiSa-De, PArVAm/PVCr and forested lowland.
212Qb05	Greenwood Moraines	The characteristic landform pattern is undulating moraine and with pediments common. Soils are predominantly moderately well drained loam over acid loam till or sandstone. Common habitat types include AH, hydromesic, AVb and AVb-V.
212Qb06	New Auburn Moraines	The characteristic landform pattern is rolling moraine with pediments common. Soils are predominantly moderately well drained silt loam over dense, acid sandy loam till or sandstone. Common habitat types include ATiSa-De, ArCi, ArDe-V, hydromesic and forested lowland.
212Qb07	Mead Lake Eroded Moraines	The characteristic landform pattern is rolling erosional surface with moraines, pediments, and stream terraces common. Soils are predominantly moderately well drained loamy soils over sandstone or acid loam till. Common habitat types include PArVHa, PArVRh and AH.
212Qc01	Abbotsford Moraines	The characteristic landform pattern is undulating moraine. Soils are predominantly somewhat poorly drained silt loam over acid loam till. Common habitat types include AH, hydromesic, forested lowland and ATAtOn.
212Qc02	Medford-Hamburg Moraines	The characteristic landform pattern is undulating moraine. Soils are predominantly somewhat poorly drained silt loam over acid sandy loam till. Common habitat types include AH/AOCa, hydromesic, forested lowland, ATM and TMC.
212Qc03	Merrill Outwash Plain	The characteristic landform pattern is nearly level outwash plains, terraces, and fans. Soils are predominantly somewhat poorly drained silt loam over outwash. Common habitat types include forested lowland, hydromesic, TMC, ATM and AH/AOCa.
212Qc04	Antigo Flats	The characteristic landform pattern is nearly level outwash plains and fans. Soils are predominantly well drained silt loam over outwash. The common habitat type is AH/AOCa.
212Qd01	Ackley Plains	The characteristic landform pattern is nearly level erosional surface and swamps. Soils are predominantly somewhat poorly drained silt loam over acid loam till or loamy residuum. Common habitat types include forested lowland, ATAtOn and AH.

212Qd02	Marathon Uplands	The characteristic landform pattern is rolling bedrock-controlled erosional surface. Soils are predominantly well drained silt loam over acid loam till, loamy residuum, or igneous/metamorphic bedrock. Common habitat types include ATAtOn, AH, AHVb, forested lowland and AVb.
212Qd03	Milladore Uplands	The characteristic landform pattern is undulating erosional surface. Soils are predominantly somewhat poorly drained sandy loam over loamy residuum, till, or igneous/metamorphic bedrock. Common habitat types include ATAtOn, forested lowland, AVb and AH.
212Qd04	Rib Mountain	The characteristic landform pattern is steep monadnock and bedrock controlled erosional surface. Soils are predominantly well drained silt loam over quartzite and igneous/metamorphic bedrock. Common habitat types include AH, AHVb, AVb and ATAtOn.
212Qd05	DuBay Plains	The characteristic landform pattern is nearly level outwash plain, stream terrace, and floodplain complex. Soils are predominantly well drained loamy sand over outwash. Common habitat types include forested lowland, ATAtOn, PVG, AH and TMC.
212Qd06	Mead Marsh	The characteristic landform pattern is nearly level marsh. Soils are very poorly drained muck. Common habitat type is forested lowland.
212Qd07	Peplin Uplands	The characteristic landform pattern is undulating erosional surface. Soils are predominantly somewhat poorly drained sandy loam over loamy residuum, till, or igneous/metamorphic bedrock. Common habitat types include ATAtOn, hydromesic, TMC, ATM, PVG, and forested lowland.
212Ta01	Lakewood Plains and Moraines	Landforms are rolling pitted and unpitted outwash plains, kames, and hummocky moraine complex with lakes, and bogs common. Soils are predominantly well drained loam over acid gravelly sandy outwash, loamy sand till, or drift. Common habitat types include AVb, ATM, ATDH and PARVAa-Vb.
212Ta03	Hatley Moraines	The characteristic landform pattern is rolling collapsed moraine dissected with stream terraces. Soils are predominantly well drained sandy loam over acid loamy sand till. Common habitat types include AH, forested lowland, ATDH, ATM and AVb.
212Ta04	Upper Plover River Plains	The characteristic landform pattern is nearly level outwash plain and stream terraces. Soils are predominantly excessively drained loamy sand over outwash. Common habitat types include AVb, forested lowland, AH, TMC and PARVPo.
212Ta06	Elderon-Bowler Drumlins and Moraines	Landform pattern is rolling recessional moraines and outwash plains with many drumlins and swamps. Soils are predominantly well drained loam over acid gravelly sand outwash or loamy sand to sandy loam till. Common habitat types include AH, forested lowland, hydromesic, AQVb-Gr, ATDH and ATM.
212Ta07	Birnamwood-Rosholt Plains	The characteristic landform pattern is undulating outwash plain with swamps and morainic knolls common. Soils are predominantly well drained silt over acid gravelly sandy outwash. Common habitat types include forested lowland, ATM, TMC and ATDH.
212Ta08	Rabe Knolls	The characteristic landform pattern is rolling outwash plain with swamps, morainic knolls, and ridges common. Soils are predominantly well drained loam and silt over acid gravelly sandy outwash. Common habitat types include AH, forested lowland and ATDH.
212Ta09	Neopit-Tilleda Plains and Drumlins	The characteristic landform pattern is undulating outwash plain with a few scattered drumlins. Soils are predominantly well drained loam over acid gravelly sandy outwash or sandy loam till. Common habitat types include ATDH, TMC, forested lowland, AVb and ATFD.
212Ta11	Stockbridge-Tigerton Plains	The characteristic landform pattern is undulating outwash plain. Soils are predominantly well drained loam over acid sand outwash. Common habitat types include ATFD, forested lowland, AVb, AFVb and TMC.
212Ta12	Ogdensburg Plains	The characteristic landform pattern is undulating outwash plain with scattered morainic knolls. Soils are predominantly well drained sand over acid sandy loam till. Common habitat types include hydromesic, forested lowland, AQVb-Gr, PVG and ATM.
212Ta13	Amherst -Waupaca Moraine Complex	Description not available.