

Natural Community Surveys of State Forest Lands



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Bass Cove Drummond Island limestone bedrock lakeshore. Photo by Matthew J. Lewis.

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Cover Photo: Two-Hearted Lakes dry-mesic northern forest, Newberry Forest Management Unit. Photo by Joshua G. Cohen.

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Baraga Compartments 68 and 69

Surveys targeted five known element occurrences within the compartments: mesic northern forest (EO ID 17294), northern shrub thicket (EO ID 18136), sand and gravel beach (EO ID 17292), sandstone bedrock lakeshore (EO ID 17293), and sandstone cobble shore (EO ID 17290). Surveys confirmed the element occurrence ranks for the northern shrub thicket (AB Rank), sandstone bedrock lakeshore (AB Rank), and sandstone cobble shore (AB Rank). The sand and gravel beach was downgraded from an AB Rank to a B Rank due to increased off-road-vehicle activity along the shoreline. The mesic northern forest has been severely degraded by logging activity since the initial survey in 2009. The mesic northern forest element occurrence formerly contained three polygons of uneven-aged hemlock. The westernmost polygon was logged and was eliminated from the element occurrence and the central polygon was mostly logged with just the portion of the polygon on private land remaining in the element occurrence. The total size of this element occurrence decreased from 421 acres to 86 acres. The mesic northern forest was downgraded from an AB Rank to a BC Rank. A new northern hardwood swamp element occurrence (Wolf Point Swamp, EO ID 22091, B Rank) was documented opportunistically during the course of the surveys.



Sleeping Bay and Misery Bay mesic northern forest (EO ID 17294) is dominated by uneven-aged hemlock. Photo by Joshua G. Cohen.



Portions of the central polygon of the mesic northern forest (EO ID 17294) have been selectively logged and were excluded from the element occurrence. Photo by Joshua G. Cohen.



The mesic northern forest (EO ID 17294) has been severely degraded by logging activity. The element occurrence has been reduced in acreage from 421 acres to 86 acres and was downgraded from an AB Rank to a BC Rank. Photo by Joshua G. Cohen.



2013 aerial photograph of Sleeping Bay and Misery Bay mesic northern forest (EO ID 17294).



Sleeping Bay and Misery Bay mesic northern forest (EO ID 17294). Photos by Joshua G. Cohen.



Wolf Point Swamp northern hardwood swamp (EO ID 22091). Photos by Joshua G. Cohen.





2013 aerial photograph of Wolf Point Swamp northern hardwood swamp (EO ID 22091).



Wolf Point Swamp northern hardwood swamp (EO ID 22091) occurs immediately inland from the Sleeping Bay and Misery Bay sandstone cobble shore (EO ID 17290). Photos by Joshua G. Cohen.



Sleeping River northern shrub thicket (EO ID 18136). Photos by Joshua G. Cohen.





2013 aerial photograph of Sleeping River northern shrub thicket (EO ID 18136).



Sleeping Bay and Misery Bay sand and gravel beach (EO ID 17292). Photos by Joshua G. Cohen.





2013 aerial photograph of Sleeping Bay and Misery Bay sand and gravel beach (EO ID 17292).



Sleeping Bay and Misery Bay sand and gravel beach (EO ID 17292). Photos by Joshua G. Cohen.



Sleeping Bay and Misery Bay sandstone bedrock lakeshore (EO ID 17293). Photos by Joshua G. Cohen.





2013 aerial photograph of Sleeping Bay and Misery Bay sandstone bedrock lakeshore (EO ID 17293).



Sleeping Bay and Misery Bay sandstone bedrock lakeshore (EO ID 17293). Photo by Joshua G. Cohen.



Sleeping Bay and Misery Bay sandstone cobble shore (EO ID 17290). Photos by Joshua G. Cohen.





2013 aerial photograph of Sleeping Bay and Misery Bay sandstone cobble shore (EO ID 17290)



Sleeping Bay and Misery Bay sandstone cobble shore (EO ID 17290). Photos by Joshua G. Cohen.

Grayling Compartment 217

Surveys were conducted in recently harvested stands (30 and 50) for rare plants associated with pine barrens. No rare species were observed during surveys.



Grayling Compartment 217 (Stand 50 above and Stand 30 below). Photos by Joshua G. Cohen.



Grayling Compartment 231

Surveys were conducted in recently harvested stands (17 and 23) for rare plants associated with pine barrens including Hill's Thistle (EO ID 1584). Surveys resulted in documentation of one Hill's thistle plant in Stand 17, modification of the boundary of the Hill's thistle element occurrence, and confirmation of the element occurrence rank of CD. In addition, surveys in Stand 17 also documented a new element occurrences for rough fescue (EO ID 22095, CD rank) . No rare plants were documented in Stand 23.



Hill's thistle and rough fescue were both documented in Grayling Compartment 231, Stand 17. One Hill's thistle was found within the regenerating stand (pictured above) and rough fescue was noted throughout the stand (pictured below). Photos by Joshua G. Cohen.

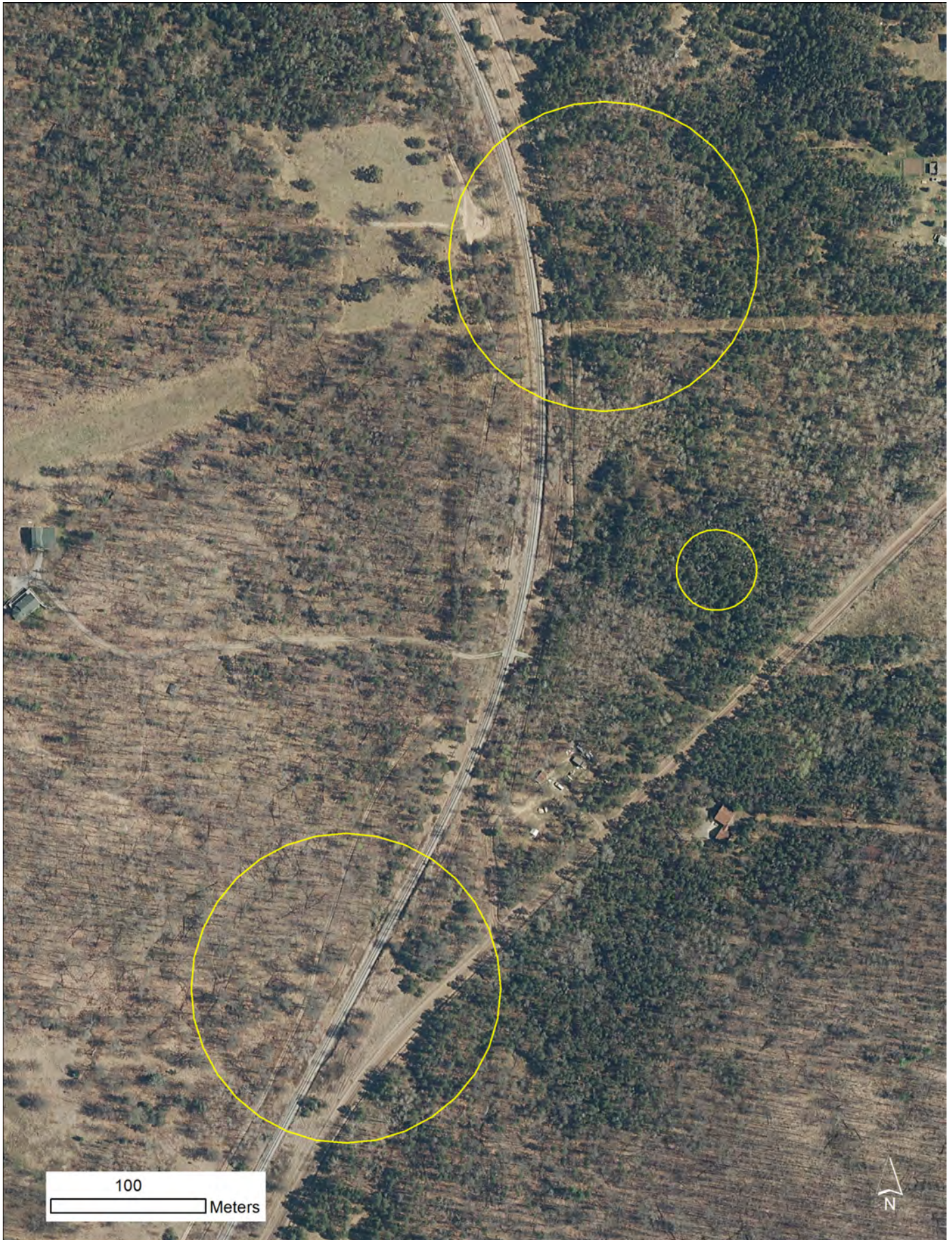




2014 aerial photograph of rough fescue element occurrence (EO ID 22095) in Grayling Compartment 231, Stand 17.



Rough fescue, Grayling Compartment 231, Stand 17. Photo by Joshua G. Cohen.



2014 aerial photograph of Hill's thistle element occurrences (EO ID 1584) in Grayling Compartment 231, Stand 17. The newly mapped polygon documented in 2018 is the small circle in the center.

Grayling Compartment 258

Survey targeted rich conifer swamp (EO ID 8303). No rich conifer swamp was documented within the compartment. Adjacent land on Trout Unlimited property was surveyed and the original rich conifer swamp polygon was remapped. In addition, portions of the site were reclassified as dry-mesic northern forest. Both dry-mesic northern forest (EO ID 22093, C Rank) and rich conifer swamp (EO ID 8303, C Rank) element occurrences were mapped within the adjacent Trout Unlimited property.

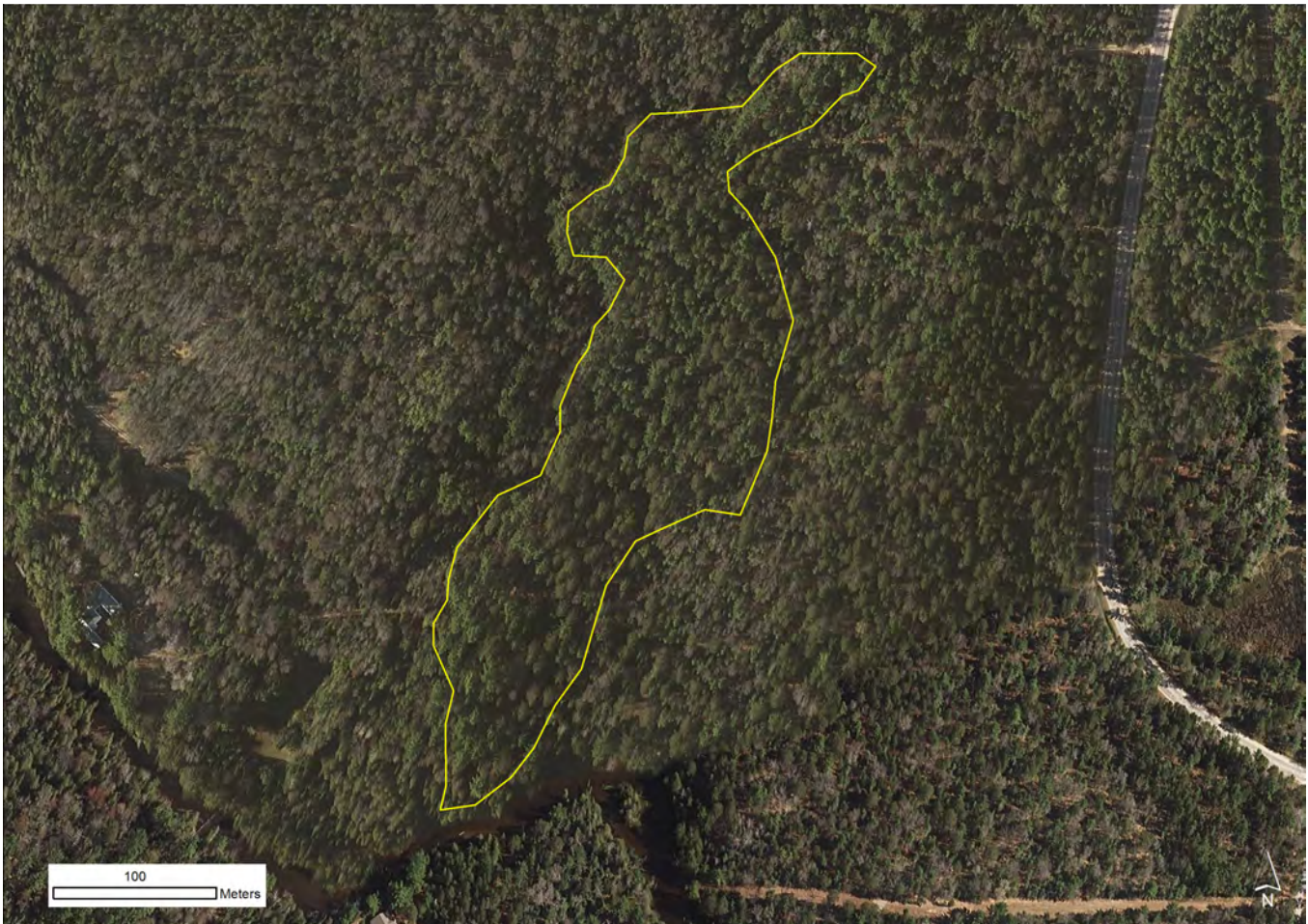


Trout Unlimited rich conifer swamp (EO ID 8303, pictured above) and dry-mesic northern forest (EO ID 22093, pictured below). Photos by Joshua G. Cohen.





2014 aerial photograph of Trout Unlimited rich conifer swamp (EO ID 8303, pictured above) and dry-mesic northern forest (EO ID 22093, pictured below).



Grayling Compartment 271

Surveys targeted dry sand prairie (EO ID 5909) and pine barrens (EO ID 15942). The dry sand prairie element occurrence (EO ID 5909) was reclassified as pine barrens, remapped to include additional acreage to the northeast, and downgraded from an AB Rank to a B Rank due to prolonged fire suppression. The pine barrens element occurrence (EO ID 15942) was remapped and downgraded from a BC Rank to a C Rank due to prolonged fire suppression.



Shupac Lake pine barrens (EO ID 5909) was reclassified from dry sand prairie to pine barrens, remapped, and downgraded from an AB Rank to a B Rank. Photos by Joshua G. Cohen.





2014 aerial photograph of Shupac Lake pine barrens (EO ID 5909).



Shupac Lake pine barrens (EO ID 5909). Photos by Jesse M. Lincoln.



Shupac Lake Barrens pine barrens (EO ID 5942) was remapped and downgraded from a BC Rank to a C Rank. Photo by Joshua G. Cohen.



2014 aerial photograph of Shupac Lake Barrens pine barrens (EO ID 15942).

Gwinn Compartment 201

Surveys targeted Great Lakes marsh (EO ID 11423) and wooded dune and swale complex (EO ID 7311). The element occurrence rank of the Iron River wooded dune and swale complex was confirmed to be BC. The Great Lakes marsh was downgraded from a B to a BC. The Great Lakes marsh was remapped with significant portions of the original polygon along the southeastern portion of Independence Lake being eliminated. The emergent marsh along this portion of Independence Lake is an anthropogenic system that resulted from flooding of rich conifer swamp following the dam installation. During surveys within this polygon a new poor fen was documented (Johnson Creek Fen, EO ID 22090, B Rank).



Areas of flooded rich conifer swamp (pictured above) were eliminated from the Independence Lake Great Lakes marsh (EO ID 11423). High-quality Great Lakes marsh is concentrated at the mouth of the Iron River. Photos by Joshua G. Cohen.





2016 aerial photograph of Independence Lake Great Lakes marsh (EO ID 11423).



2017 aerial photograph of Iron River wooded dune and swale complex (EO ID 7311).

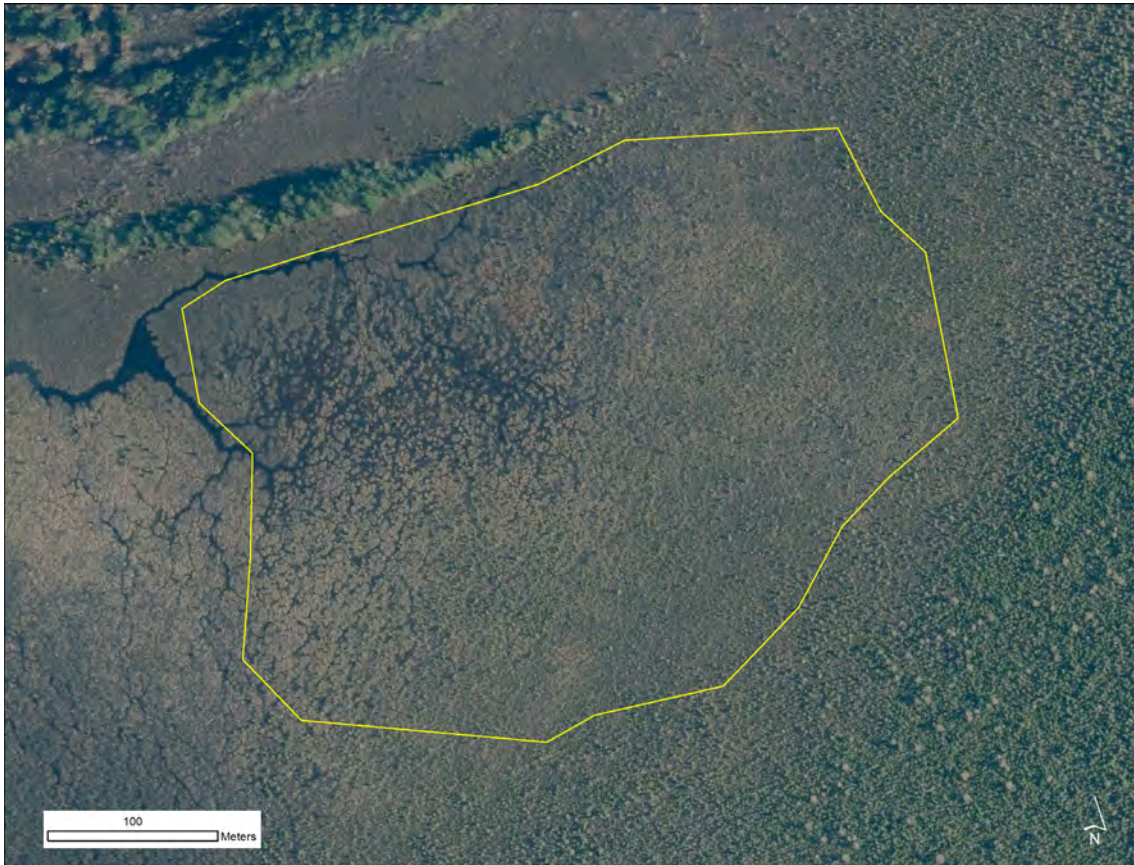


Iron River wooded dune and swale complex (EO ID 7311). Photo by Joshua G. Cohen.



Iron River wooded dune and swale complex (EO ID 7311). Photos by Joshua G. Cohen.





2017 aerial photograph of Johnson Creek Fen poor fen (EO ID 22090).



Johnson Creek Fen poor fen (EO ID 22090). Photo by Joshua G. Cohen.

Gwinn Compartment 247

Surveys in Compartment 247 focused on Stand 53 and documented a new element occurrence mesic northern forest (EO ID 22089). Twin Lakes Forest is a C-ranked mesic northern forest.



Twin Lakes Forest mesic northern forest (EO ID 22089). Photos by Joshua G. Cohen.





2017 aerial photograph of Twin Lakes Forest mesic northern forest (EO ID 22089).



Twin Lakes Forest mesic northern forest. Photo by Joshua G. Cohen.

Newberry Compartments 8 and 10

Surveys targeted four known element occurrences within the compartments: dry-mesic northern forest (EO ID 16924), hardwood-conifer swamp (EO ID 10054), intermittent wetland (EO ID 16921), and muskeg (EO ID 7430). The Beavertown Lakes muskeg occurs in both Compartments 8 and 10. The dry-mesic northern forest, hardwood-conifer swamp, and intermittent wetland occur within Compartment 10. Surveys confirmed the element occurrence ranks for the dry-mesic northern forest (B Rank), hardwood-conifer swamp (AB Rank), intermittent wetland (AB Rank), and muskeg (A Rank). The dry-mesic northern forest and intermittent wetlands element occurrences were remapped and additional acreage for both community types was incorporated into the new mapping. The muskeg element occurrence was also remapped in order to map out areas of high-quality poor fen. Three polygons of high-quality poor fen were identified and incorporated into a new element occurrence (Beavertown Lakes Fen EO ID 22086).

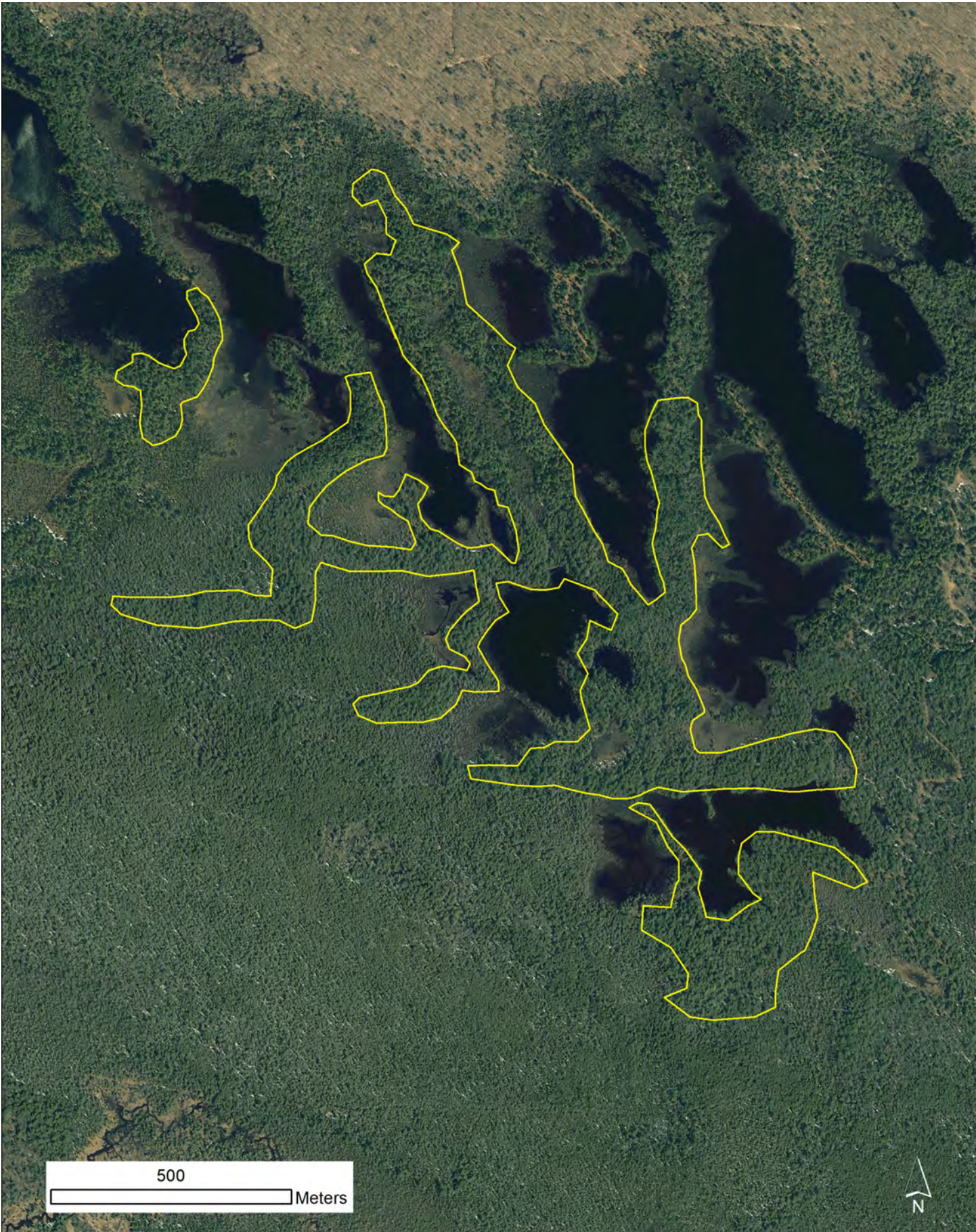


Two-Hearted Lakes dry-mesic northern forest (EO ID 16924). Photo by Joshua G. Cohen.



Two-Hearted Lakes dry-mesic northern forest (EO ID 16924). Photos by Joshua G. Cohen.





2016 aerial photograph of Two-Hearted Lakes dry-mesic northern forest (EO ID 16924).



2016 aerial photograph of Beavertown Lakes hardwood-conifer swamp (EO ID 10054).

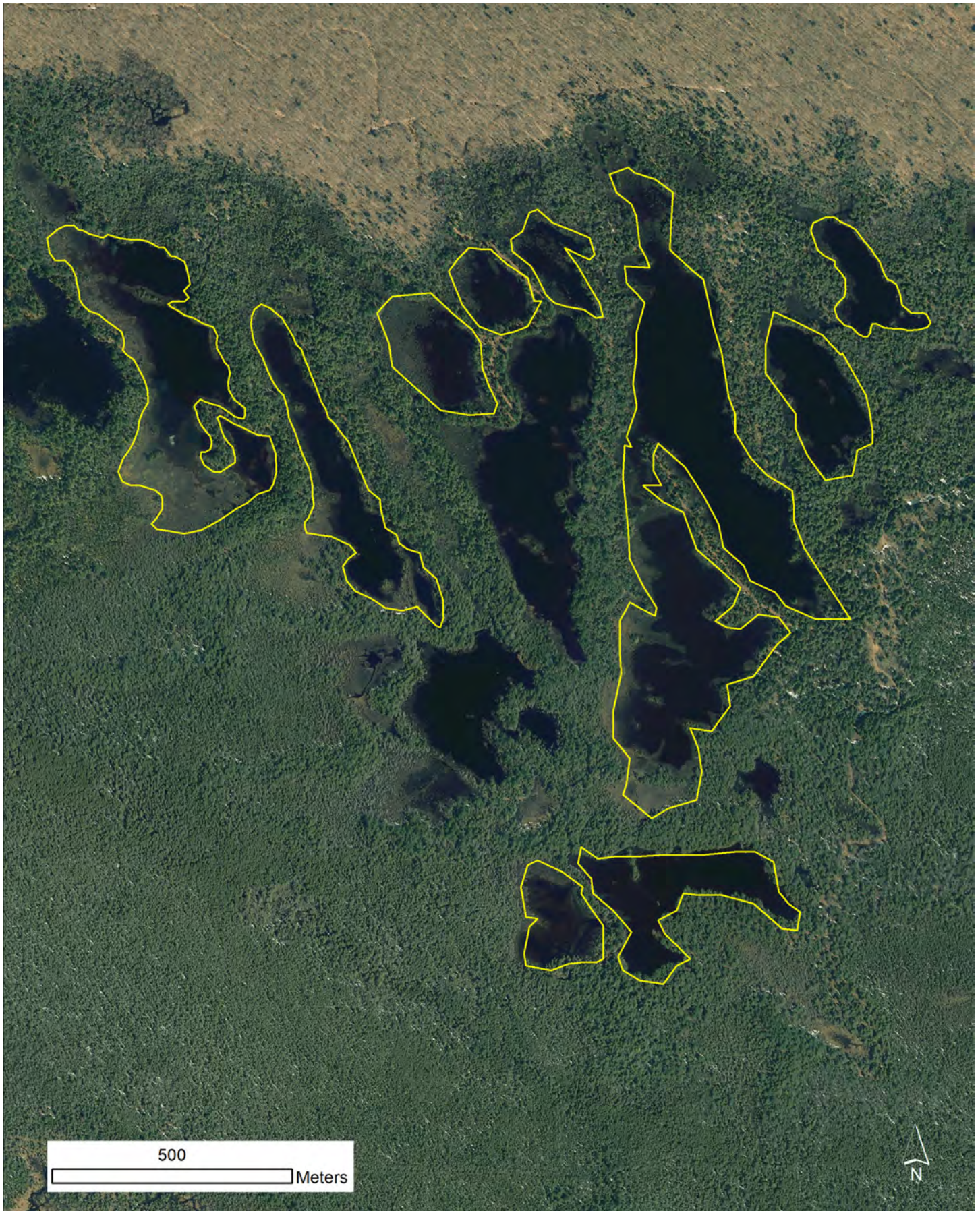


Beavertown Lakes hardwood-conifer swamp (EO ID 10054). Photo by Joshua G. Cohen.



Beavertown Lakes hardwood-conifer swamp (EO ID 10054). Photos by Joshua G. Cohen.



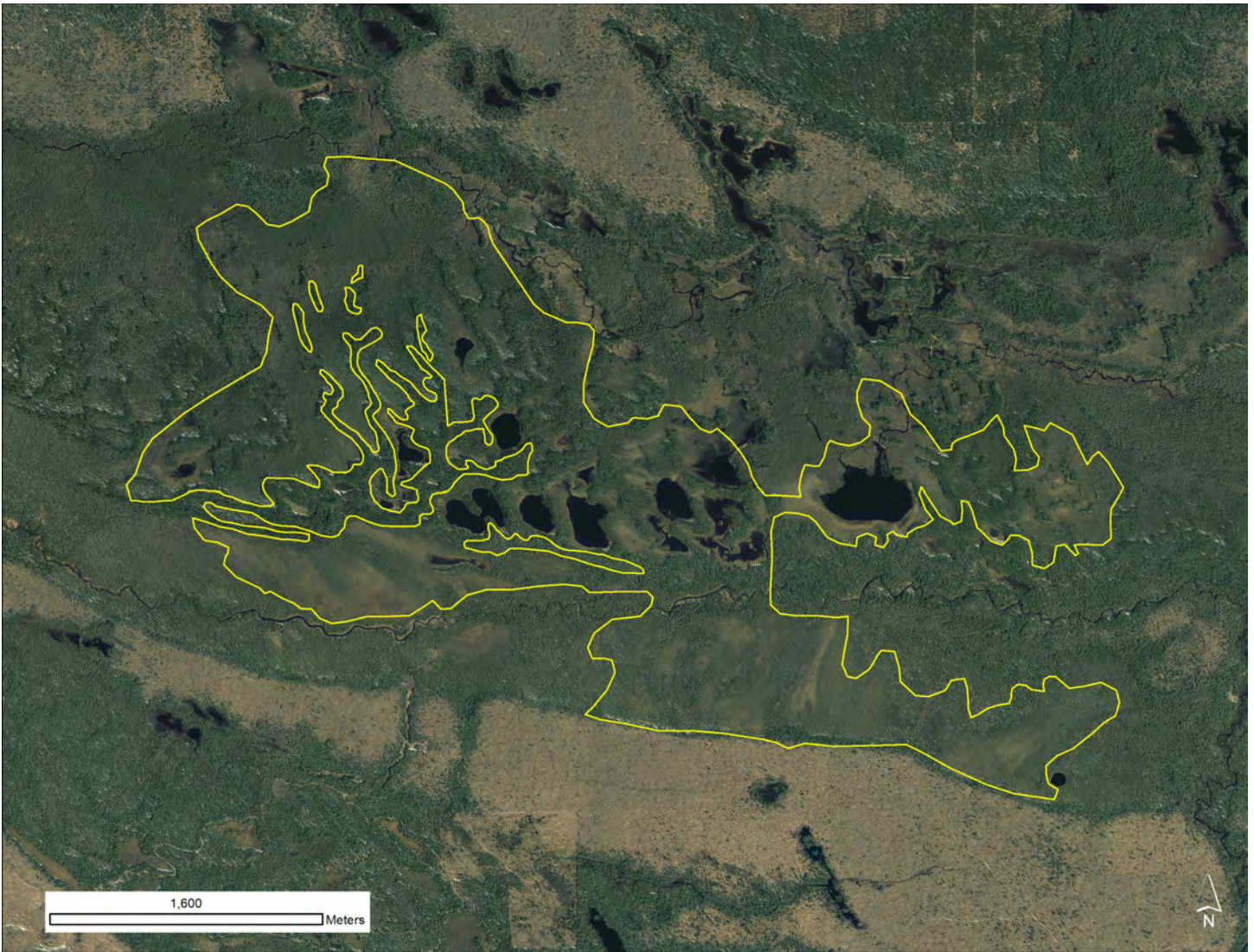


2016 aerial photograph of Two-Hearted Lakes intermittent wetland (EO ID 16921).



Two-Hearted Lakes intermittent wetland (EO ID 16921). Photos by Joshua G. Cohen.





2016 aerial photograph of Beavertown Lakes muskeg (EO ID 7430).

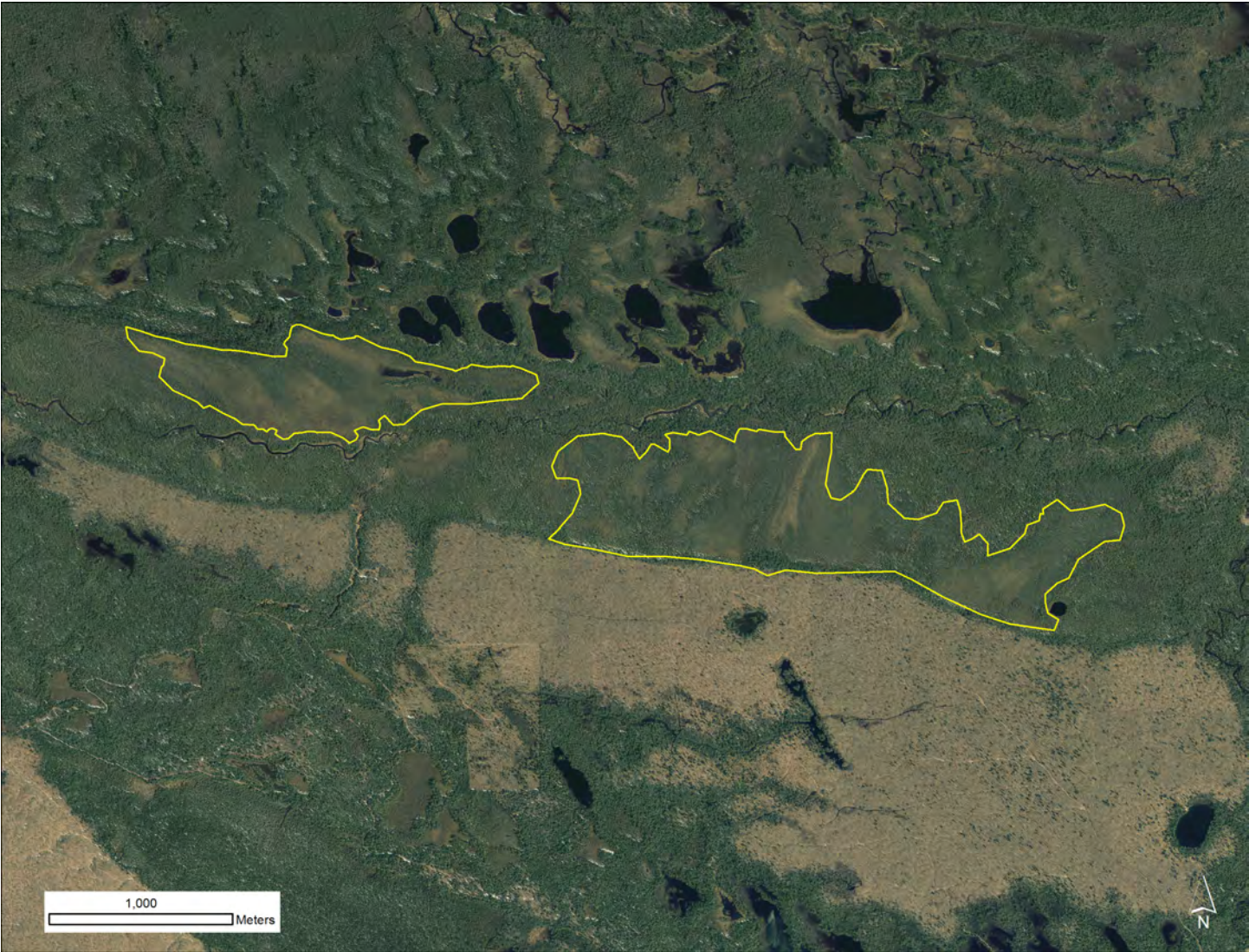


Beavertown Lakes muskeg (EO ID 7430). Photos by Joshua G. Cohen.



Beavertown Lakes muskeg (EO ID 7430). Photos by Joshua G. Cohen.

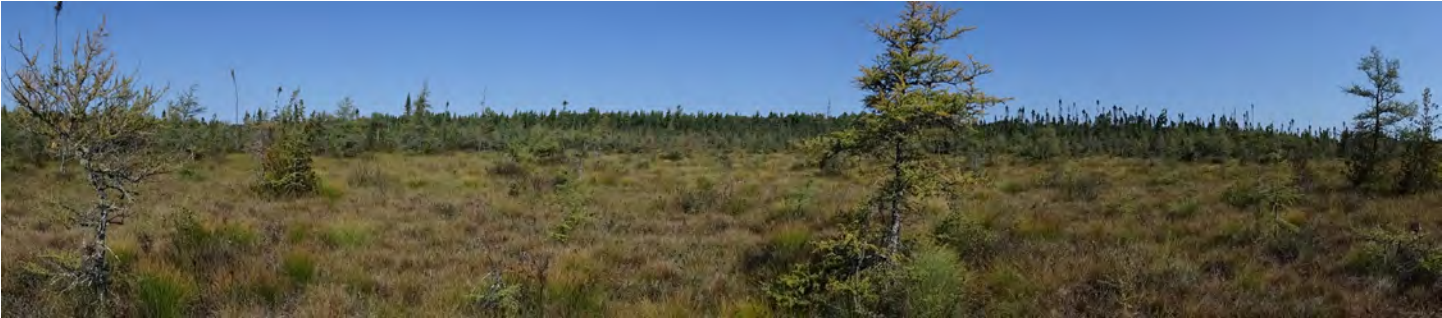




2017 aerial photograph of Beavertown Lakes Fen poor fen (EO ID 22086).



Beavertown Lakes Fen poor fen (EO ID 22086). Photos by Joshua G. Cohen.





Beavertown Lakes Fen poor fen (EO ID 22086). Photos by Joshua G. Cohen.



Newberry Compartment 22

Surveys targeted dry northern forest (EO ID 17342) and rich conifer swamp (EO ID 16923) and confirmed the element occurrence ranks (AB Rank for both element occurrences). The dry northern forest element occurrence was remapped to incorporate additional acreage of high-quality dry northern forest.

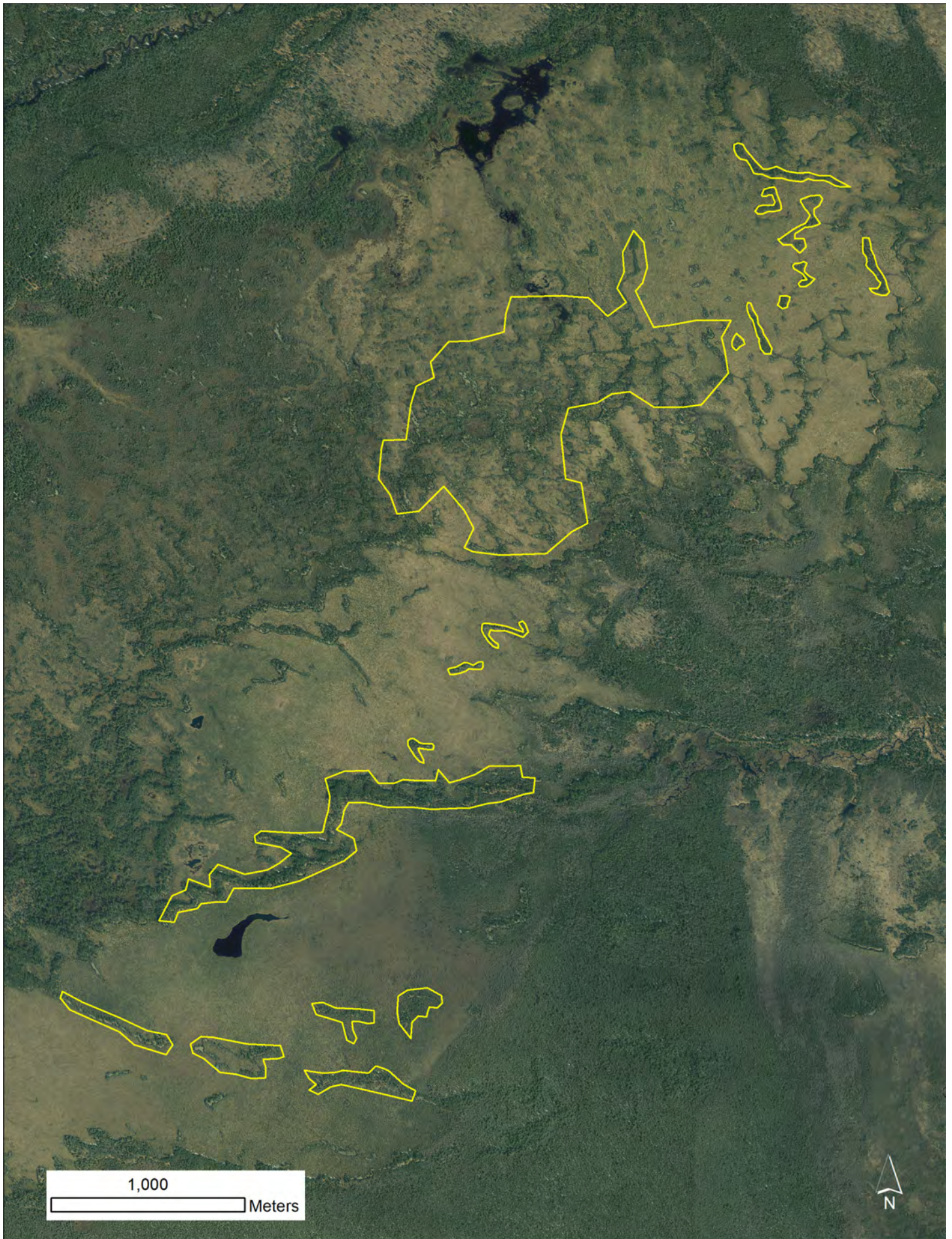


Two-Hearted dry northern forest (EO ID 17324). Photo by Joshua G. Cohen.

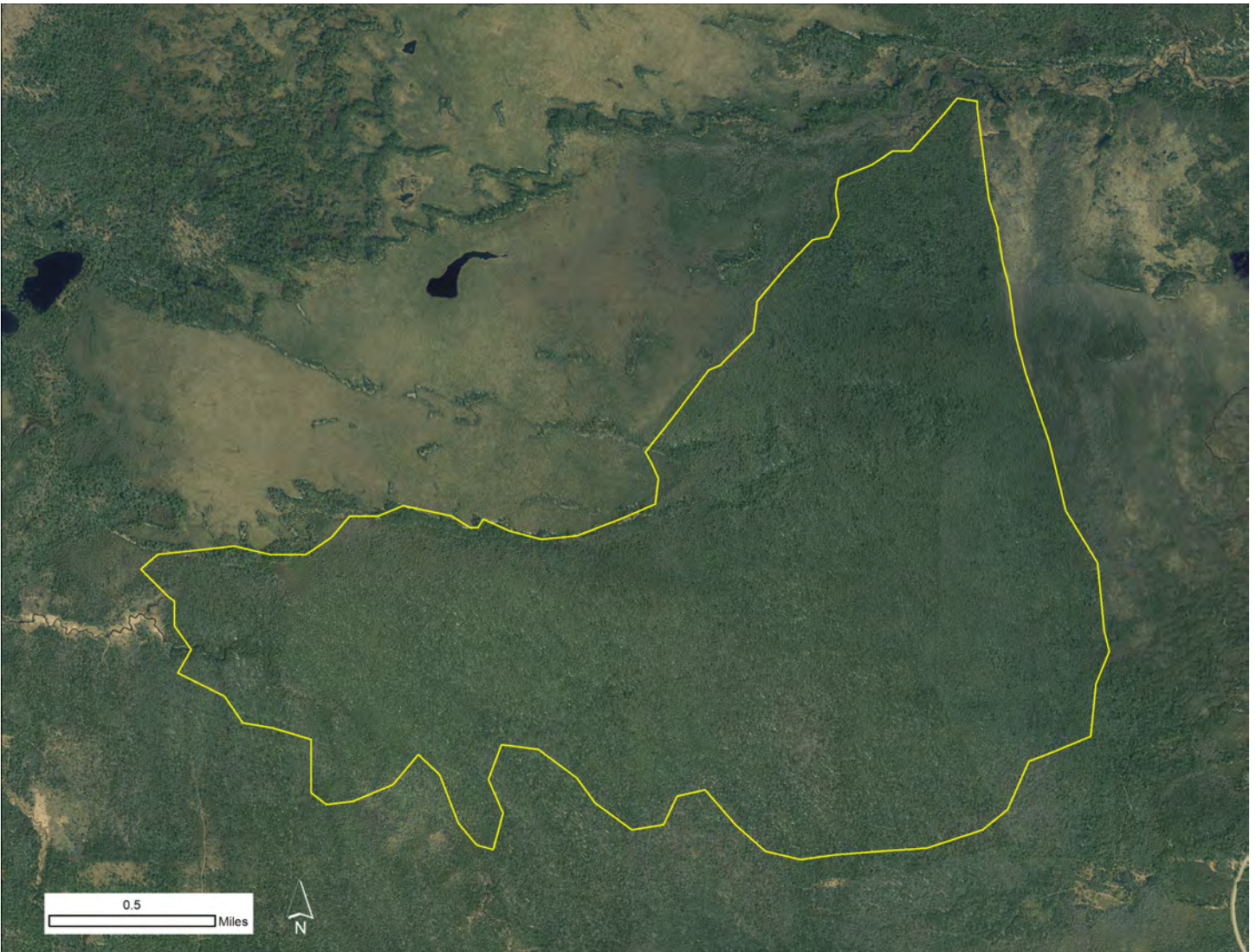


Two-Hearted dry northern forest (EO ID 17324). Photo by Joshua G. Cohen.





2016 aerial photograph of Two-Hearted dry northern forest (EO ID 17342).



2016 aerial photograph of Dawson Creek rich conifer swamp (EO ID 16923).



Dawson Creek rich conifer swamp (EO ID 16923). Photo by Joshua G. Cohen.



Dawson Creek rich conifer swamp (EO ID 16923), pictured above. Islands of high-quality dry-mesic forest (EO ID 16920) occur within the rich conifer swamp, pictured below. Photos by Joshua G. Cohen.



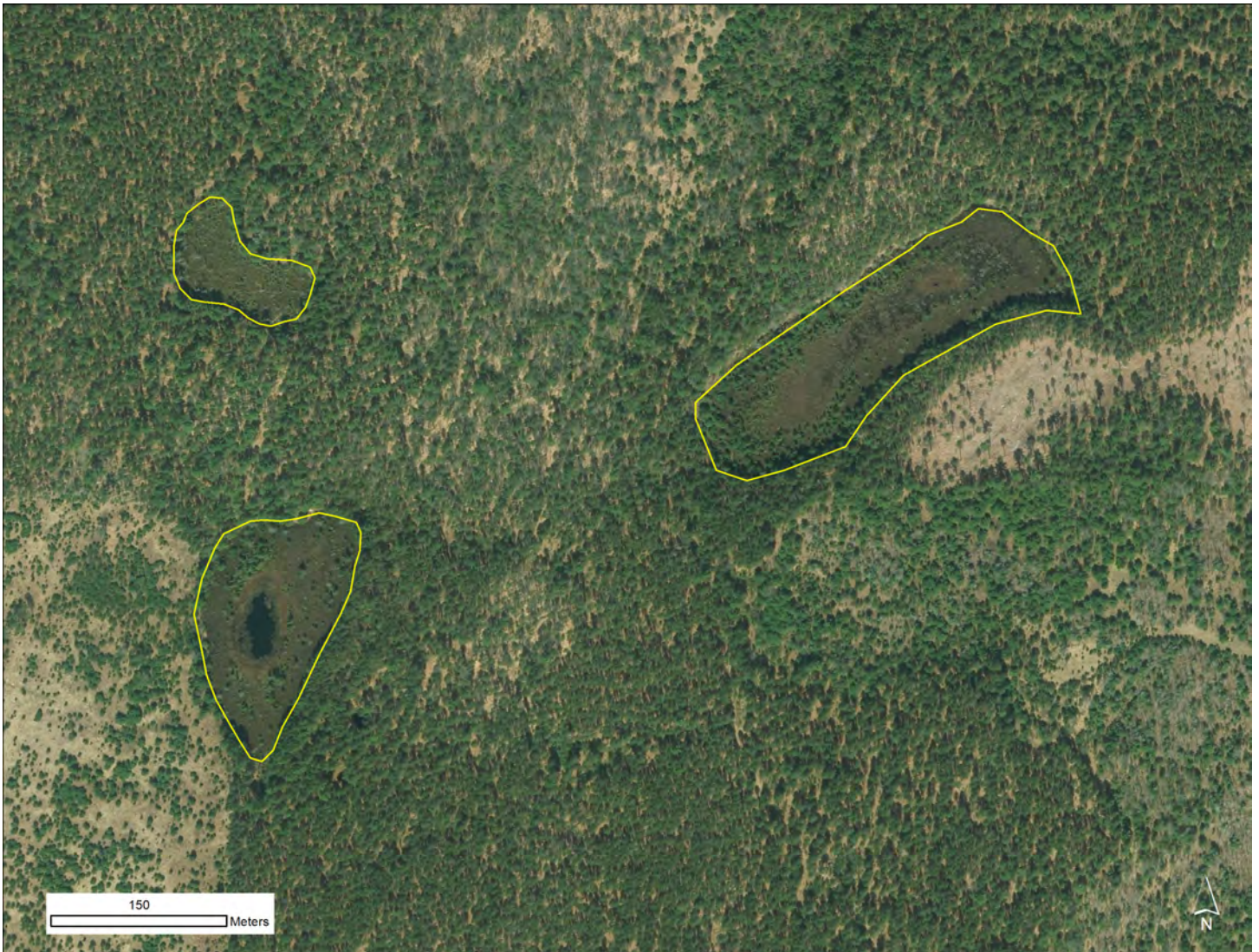
Pigeon River Country Compartment 38

Surveys targeted bog (EO ID 15964) and confirmed the element occurrence rank (BC Rank). Two additional kettle depressions supporting high-quality bog were documented and incorporated into this element occurrence.



Lansing Club Pond East bog (EO ID 15964). Photos by Joshua G. Cohen.





2017 aerial photograph of Lansing Club Pond East bog (EO ID 15964).



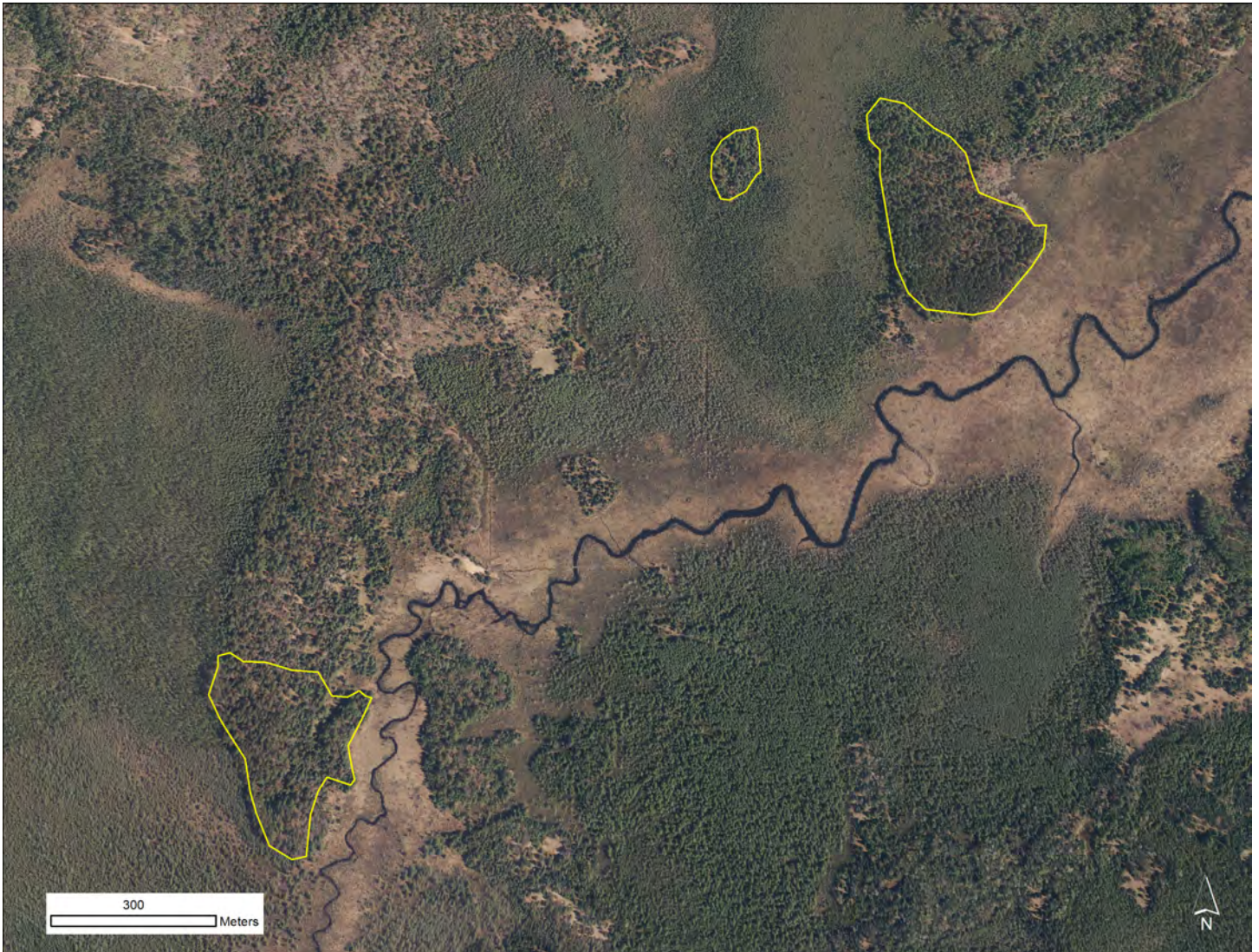
Lansing Club Pond East bog (EO ID 15964). Photos by Joshua G. Cohen.

Roscommon Compartments 35 and 66

Surveys targeted four known element occurrences within the compartments: dry-mesic northern forest (EO ID 18789), northern wet meadow (EO ID 18792), poor conifer swamp (EO ID 18793), and rich conifer swamp (EO ID 18794). Surveys confirmed the element occurrence ranks for the dry-mesic northern forest (BC Rank), northern wet meadow (B Rank), poor conifer swamp (B Rank), and rich conifer swamp (C Rank).



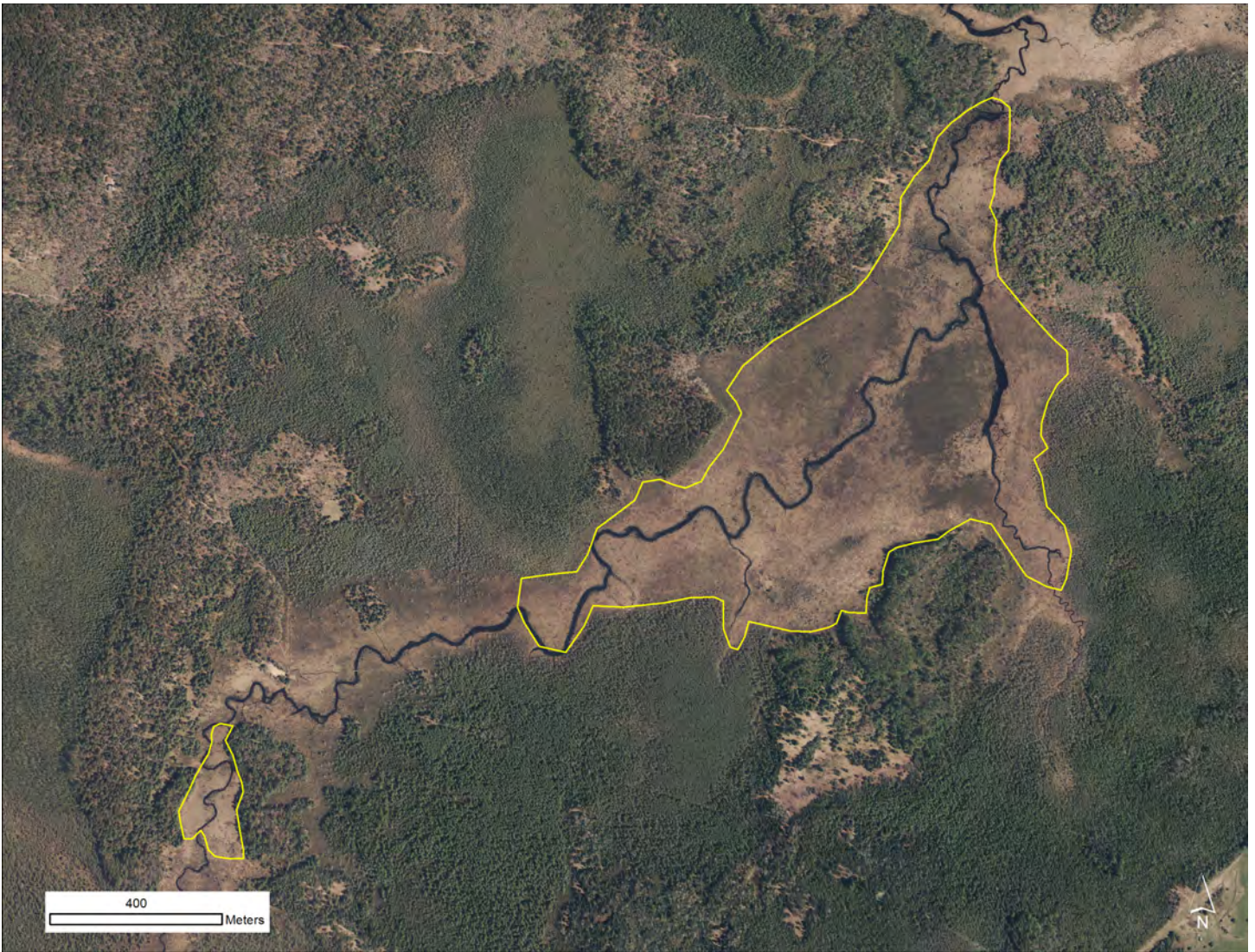
Hudson Creek dry-mesic northern forest (EO ID 18789). Photo by Joshua G. Cohen.



2014 aerial photograph of Hudson Creek dry-mesic northern forest (EO ID 18789).



Hudson Creek dry-mesic northern forest (EO ID 18789). Photo by Joshua G. Cohen.



2014 aerial photograph of Hudson Creek northern wet meadow (EO ID 18792).

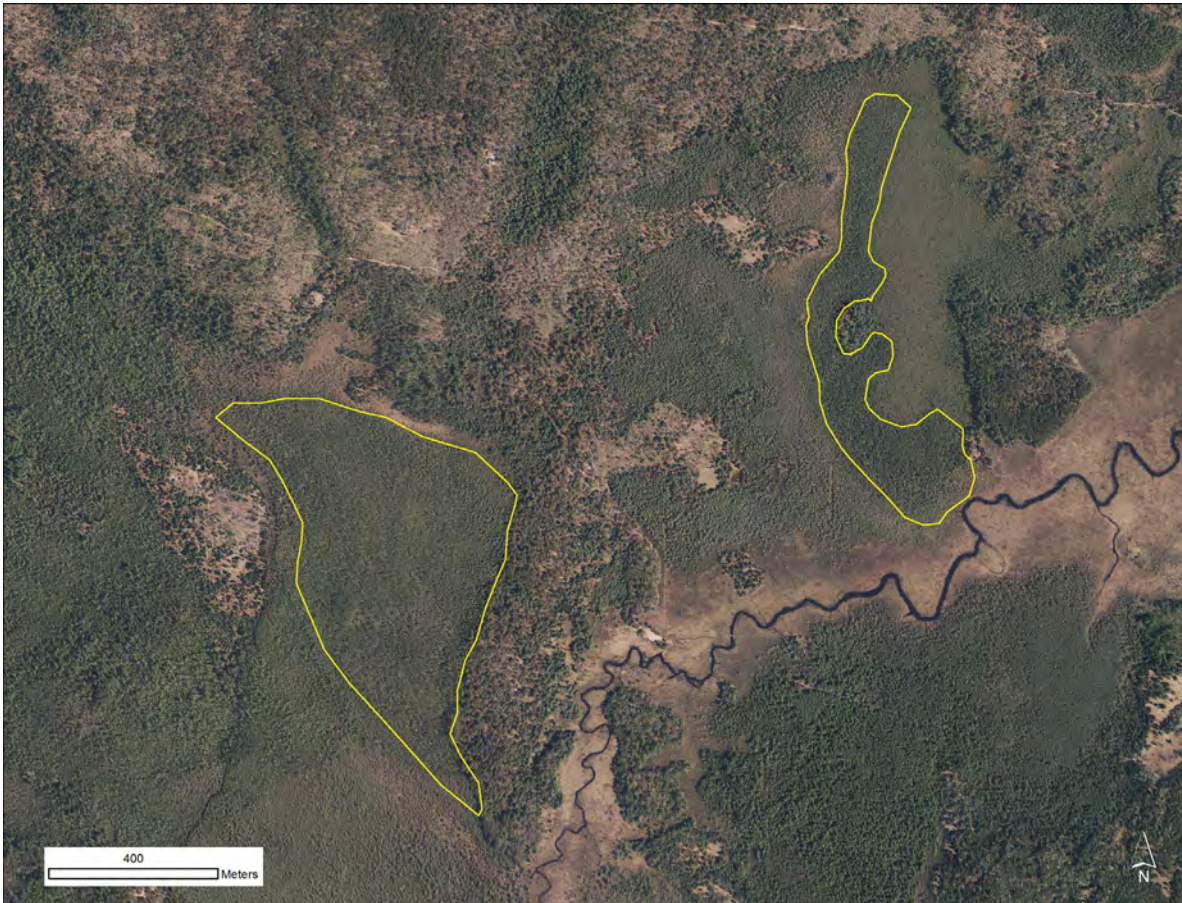


Hudson Creek northern wet meadow (EO ID 18792). Photos by Joshua G. Cohen.



Hudson Creek northern wet meadow (EO ID 18792). Photos by Joshua G. Cohen.





2014 aerial photograph of Hudson Creek Swamp poor conifer swamp (EO ID 18793).



2014 aerial photograph of Hudson Creek Swamp rich conifer swamp (EO ID 18794).



Hudson Creek Swamp poor conifer swamp (EO ID 187923, pictured above) and Hudson Creek Swamp rich conifer swamp (EO ID 18794, pictured below). Photos by Joshua G. Cohen.

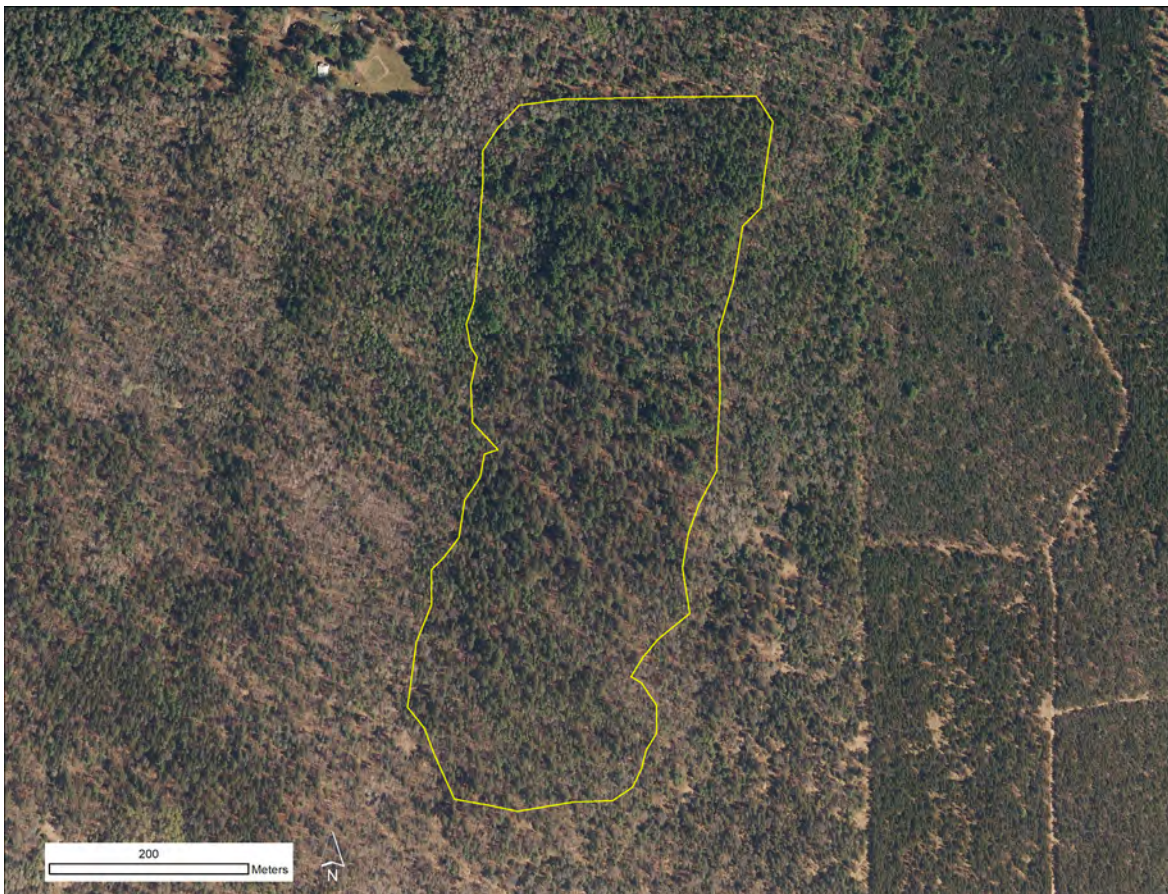


Roscommon Compartment 65

Surveys targeted dry northern forest (EO ID 11065). Downgraded element occurrence rank from AB to B due to fire suppression and deer herbivory.



Roscommon Red Pines dry northern forest (EO ID 11065). Photo by Joshua G. Cohen.



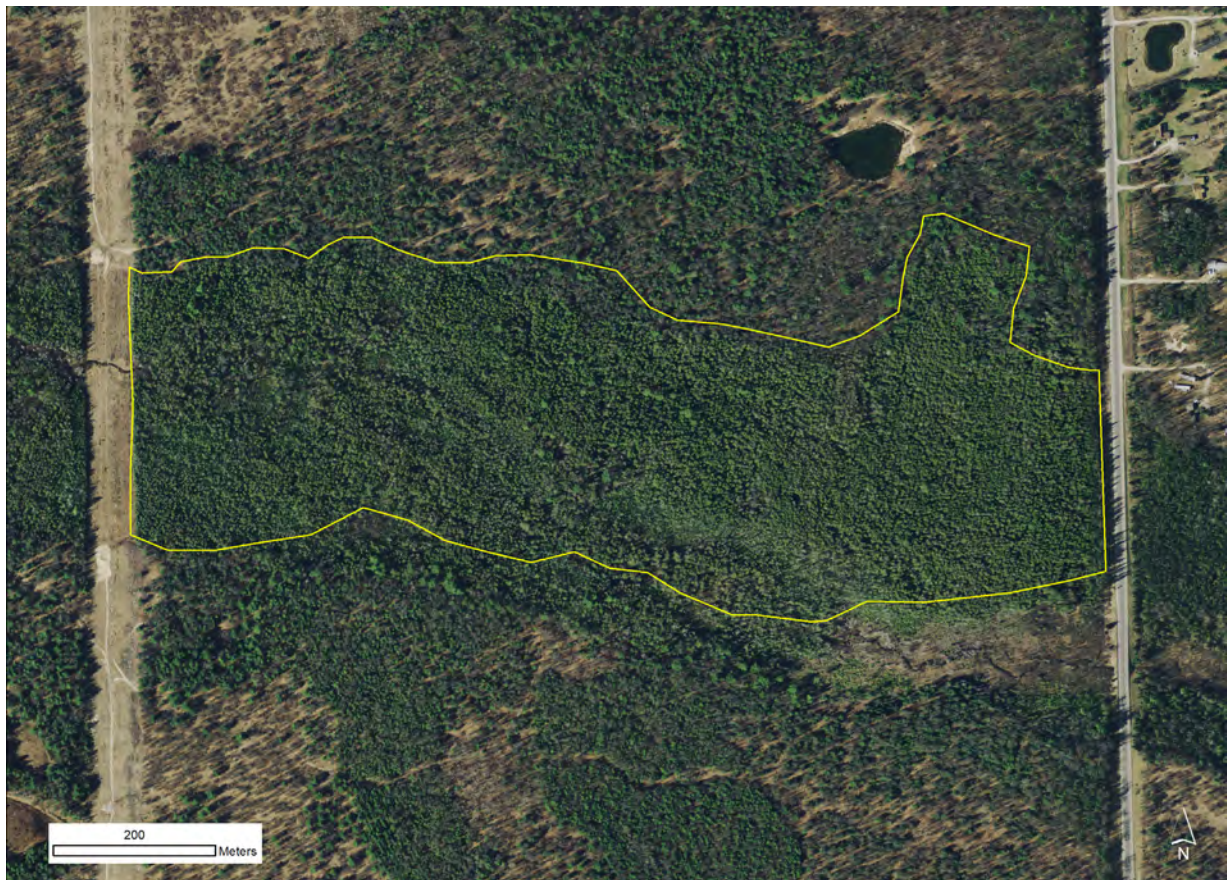
2014 aerial photograph of Roscommon Red Pines dry northern forest (EO ID 11065).

Roscommon Compartment 90

Surveys targeted rich conifer swamp (EO ID 18833) and confirmed C Rank.



Ogemaw Swamp rich conifer swamp (EO ID 18833). Photo by Joshua G. Cohen.



2012 aerial photograph of Ogemaw Swamp rich conifer swamp (EO ID 18833).

Sault Sainte Marie Compartment 15

Surveys targeted Great Lakes marsh (EO ID 13163) and limestone bedrock lakeshore (EO ID 8109). The element occurrence rank of the Bass Cove limestone bedrock lakeshore was downgraded from an A to an AB due to invasive species encroachment and impacts from off-road vehicles. The limestone bedrock lakeshore was remapped with current imagery. During the course of the survey of this stretch of shoreline, high-quality limestone cobble shore was documented (EO ID 22094, A Rank). The Big Shoal Cove Great Lakes marsh was remapped using current imagery. No marsh occurs within the compartment. The Great Lakes marsh is restricted to adjacent private land and was not surveyed.



Bass Cove limestone bedrock lakeshore (EO ID 8109). Photo by Joshua G. Cohen.



Bass Cove limestone bedrock lakeshore (EO ID 8109). Photo by Matthew J. Lewis.



Bass Cove limestone bedrock lakeshore (EO ID 8109). Photos by Joshua G. Cohen.





Bass Cove limestone bedrock lakeshore (EO ID 8109). Photo by Matthew J. Lewis.





Bass Cove limestone bedrock lakeshore (EO ID 8109, pictured above) and Bass Cove limestone cobble shore (EO ID 22094, pictured below). Photos by Matthew J. Lewis.





2016 aerial photograph of Bass Cove limestone bedrock lakeshore (EO ID 8109).



2016 aerial photograph of Bass Cove limestone cobble shore (EO ID 22094).



Bass Cove limestone cobble shore (EO ID 22094). Photos by Joshua G. Cohen.

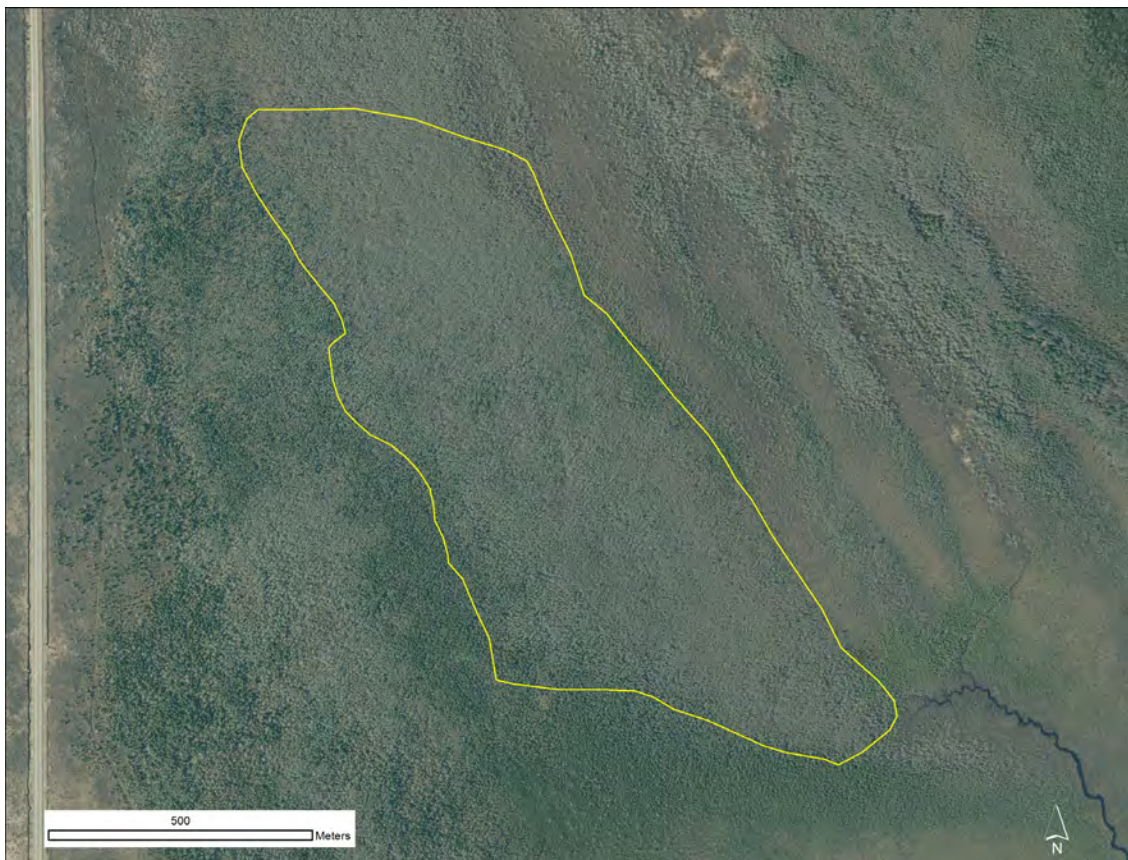


Shingleton Compartment 13

Surveys targeted rich tamarack swamp (EO ID 18684). Following surveys, the element occurrence was remapped and the rank was downgraded from an A to a C due to the widespread mortality of canopy tamarack from invasive larch case-bearer. In addition the swamp is in the early stages of a glossy buckthorn infestation.



East Branch Fox River rich tamarack swamp (EO ID 18684). Photo by Joshua G. Cohen.



2017 aerial photograph of East Branch Fox River rich tamarack swamp (EO ID 18684).