

Natural Community Surveys of State Forest Lands - 2023



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Forest Resources Division

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Park Patterned Fen, Newberry Forest Management Unit. Photo by Joshua G. Cohen.

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Cover Photo: Helen Lake Glade limestone bedrock glade, Sault Sainte Marie Forest Management Unit. Photo by Joshua G. Cohen

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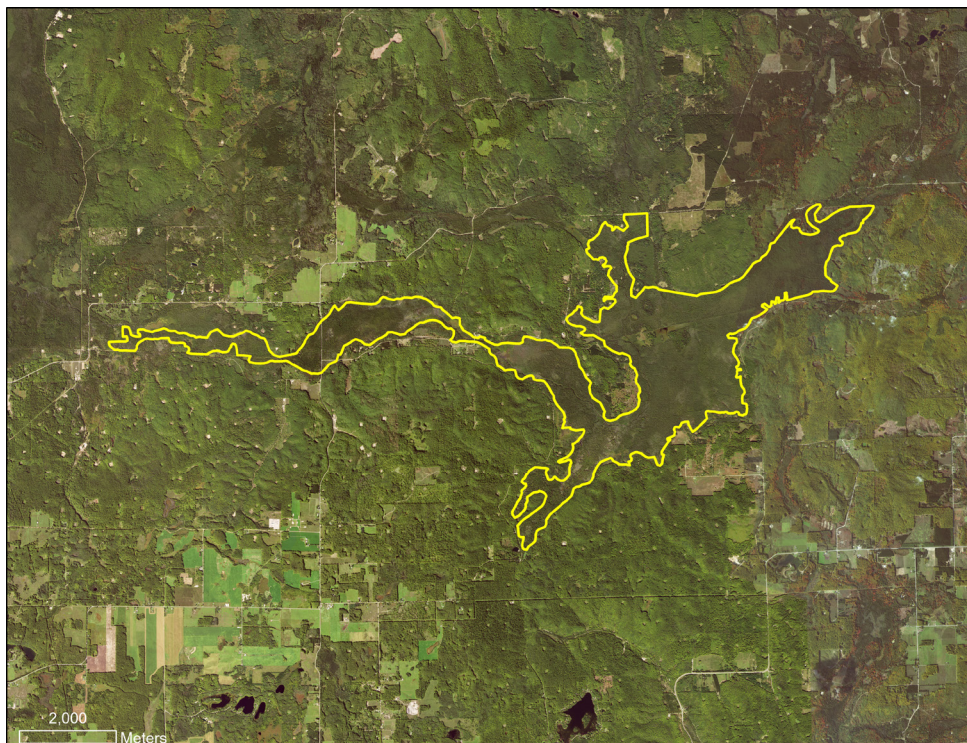
Funding for this project was provided by the Michigan Department of Natural Resources (DNR) Forest Resources Division (FRD). We express our sincere gratitude to the numerous DNR staff that helped administer and guide this project including Keith Kintigh, David Price, and Jeffrey Stampfly. We thank DNR WLD wildlife biologists Angela Kujawa and Rachel Leggett for their assistance during field surveys. For their support and assistance throughout this project, we thank our MNFI colleagues, especially Mike Penskar, Helen Enander, Paul Schilke, Nicole Smith, Courtney Ross,, Rebecca Rogers, Kraig Korroch, Ashley Adkins, Deb Richardson, Sarah Carter, Michael Monfils, and Brian Klatt

Atlanta Rattlesnake Creek Acquisition

Surveyed new land acquisition in Atlanta Forest Management Unit along Rattlesnake Creek. Updated rich conifer swamp element occurrence (EO) (EO ID 12248, Green Swamp), documented a new northern shrub thicket EO (EO ID 26725, Rattlesnake Creek), and a new population of ram's head lady's-slipper (*Cypripedium arietinum*, state special concern; EO ID 26826). Based on the 2023 surveys, the EO boundary of the Green Swamp was updated.



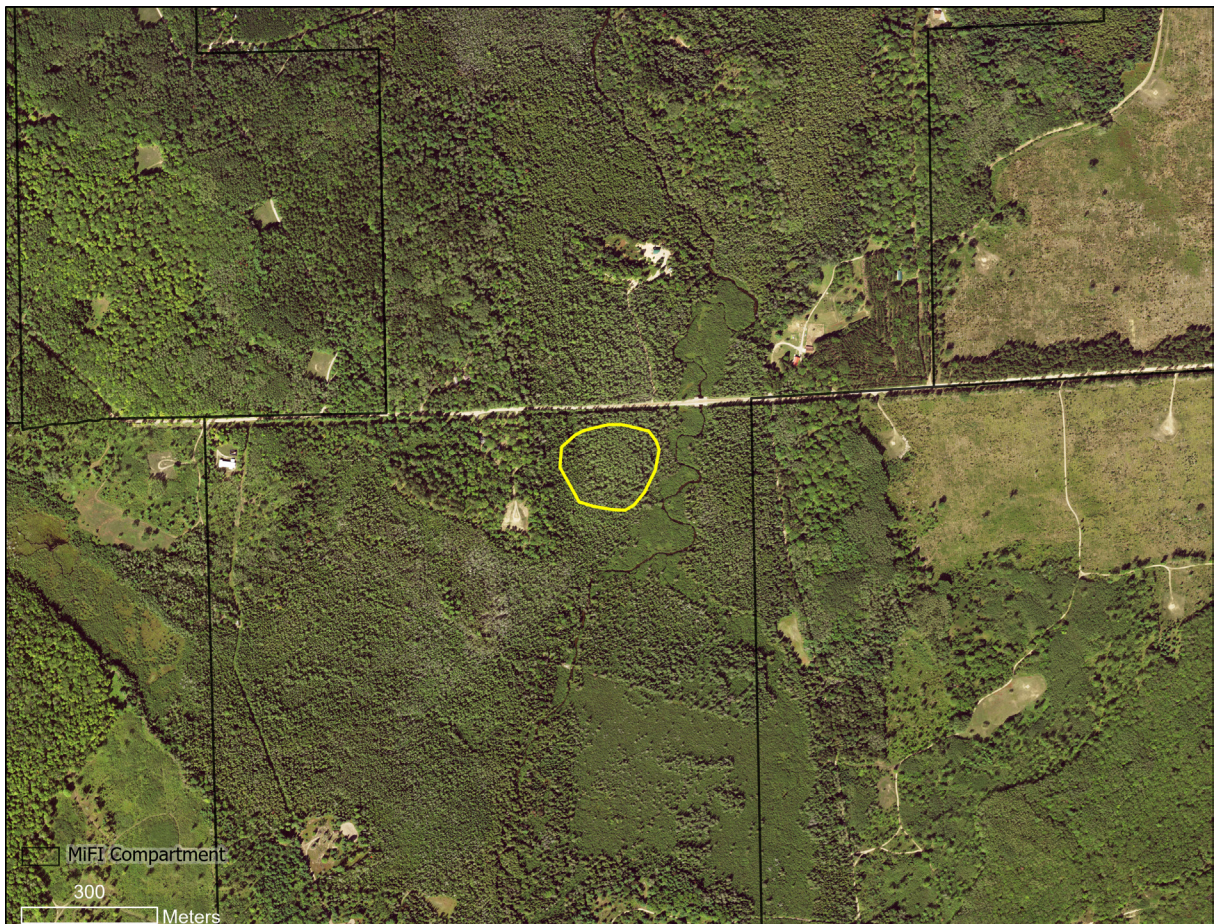
Green Swamp rich conifer swamp (EO ID 12248). Photo by Joshua G. Cohen.



2020 aerial photograph of Green Swamp rich conifer swamp (EO ID 12248).



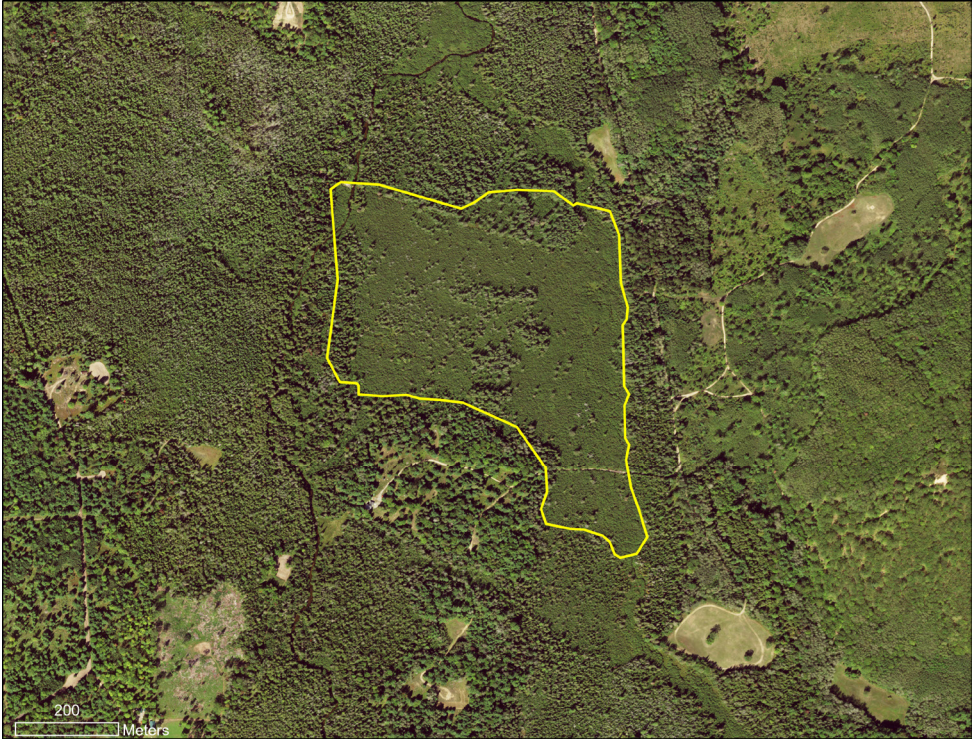
Ram's head lady's-slipper documented in Rattlesnake Creek Acquisition. Photo by Joshua G. Cohen.



2020 aerial photograph of ram's head lady's-slipper element occurrence (EO ID 26826).



Rattlesnake Creek northern shrub thicket (EO ID 26725). Photo by Joshua G. Cohen.



2020 aerial photograph of Rattlesnake Creek northern shrub thicket (EO ID 26725).

Atlanta Compartment 32

Surveys focused on Stand 28. This young, naturally regenerated pine stand does not meet the minimum requirements to qualify as a dry-mesic northern forest element occurrence.



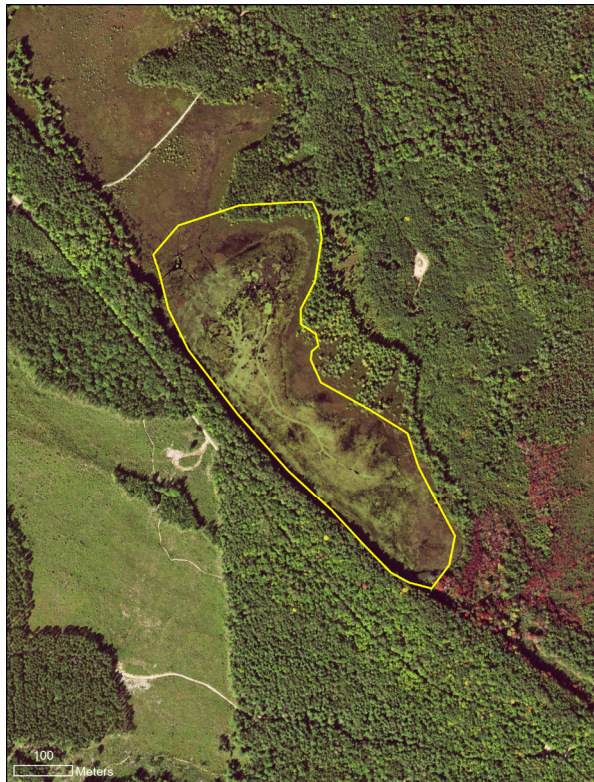
Naturally regenerated pine forest occurs in Stand 28 but does not meet the minimum requirements to qualify as a dry-mesic northern forest element occurrence. Photo by Joshua G. Cohen.

Atlanta Compartment 172

Survey targeted Black Lake Forest Marsh intermittent wetland (EO ID 660, AB rank) and Linsey Muskeg (EO ID 18803, BC rank). Following the 2023 survey, the element occurrence ranks were confirmed.



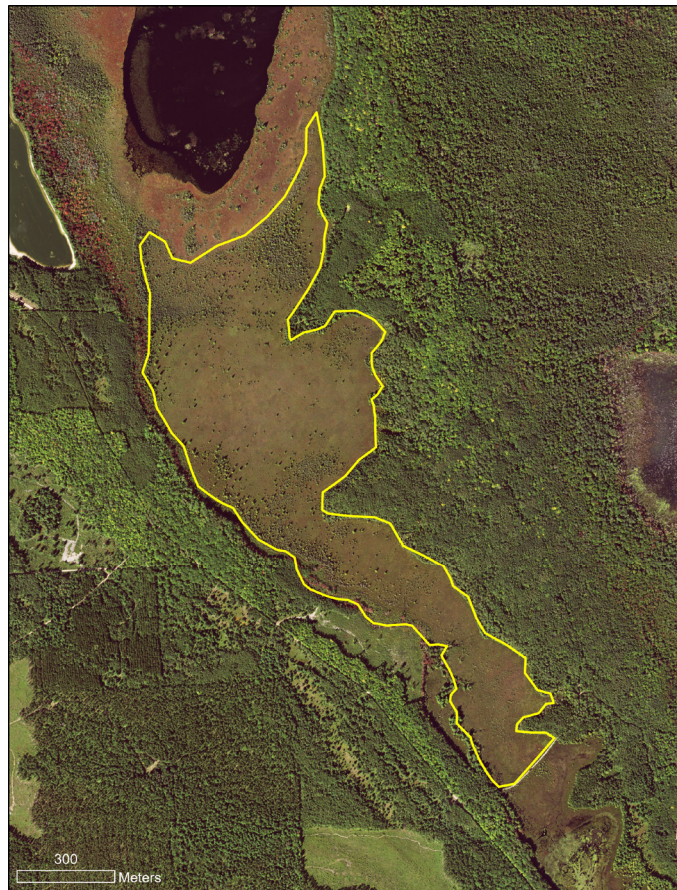
Black Lake Forest Marsh intermittent wetland (EO ID 660). Photo by Joshua G. Cohen.



2020 aerial photograph of Black Lake Forest Marsh intermittent wetland (EO ID 660).



Linsey Muskeg (EO ID 18803). Photo by Joshua G. Cohen.



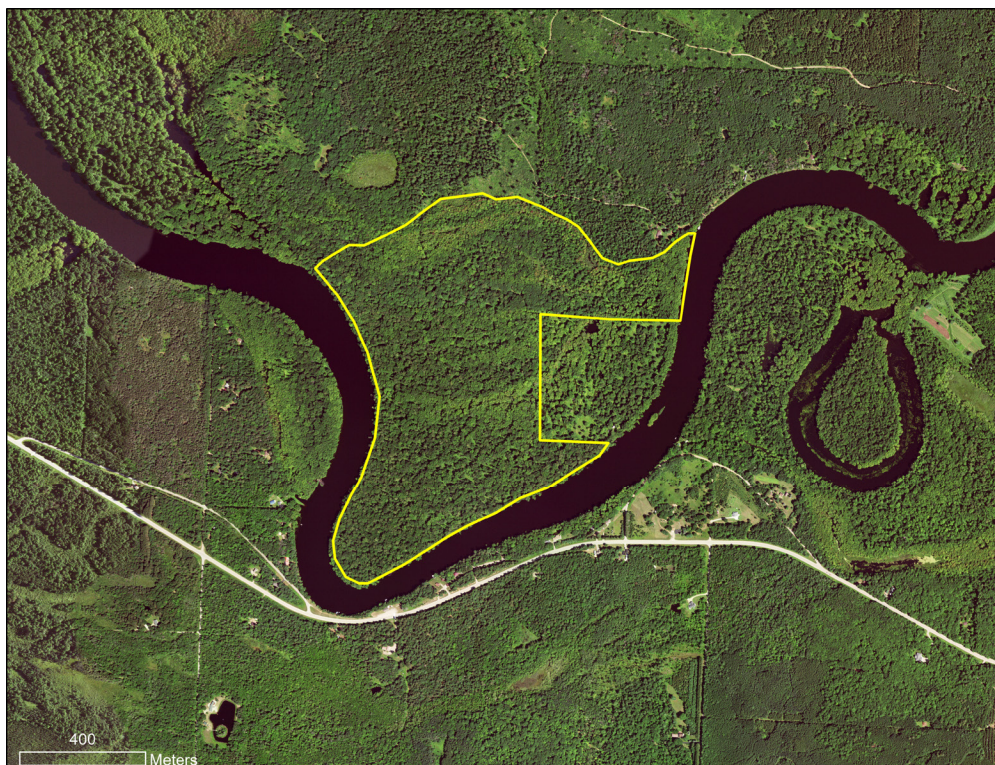
2020 aerial photograph of Linsey Muskeg (EO ID 18803).

Escanaba Compartment 31

Surveys focused on Stands 16 and 17 and documented a new element occurrence floodplain forest (EO ID 26744). Bear Point is a BC-ranked floodplain forest.



Bear Point floodplain forest (EO ID 26744). Photo by Joshua G. Cohen.



2020 aerial photograph of Bear Point floodplain forest (EO ID 26744).

Gaylord Compartment 118

Survey targeted Nebo Trail dry-mesic northern forest (EO ID 13195, B rank) and Sturgeon Bay wooded dune and swale complex (EO ID 8136, AB rank). Following the 2023 survey, the element occurrence ranks were confirmed.



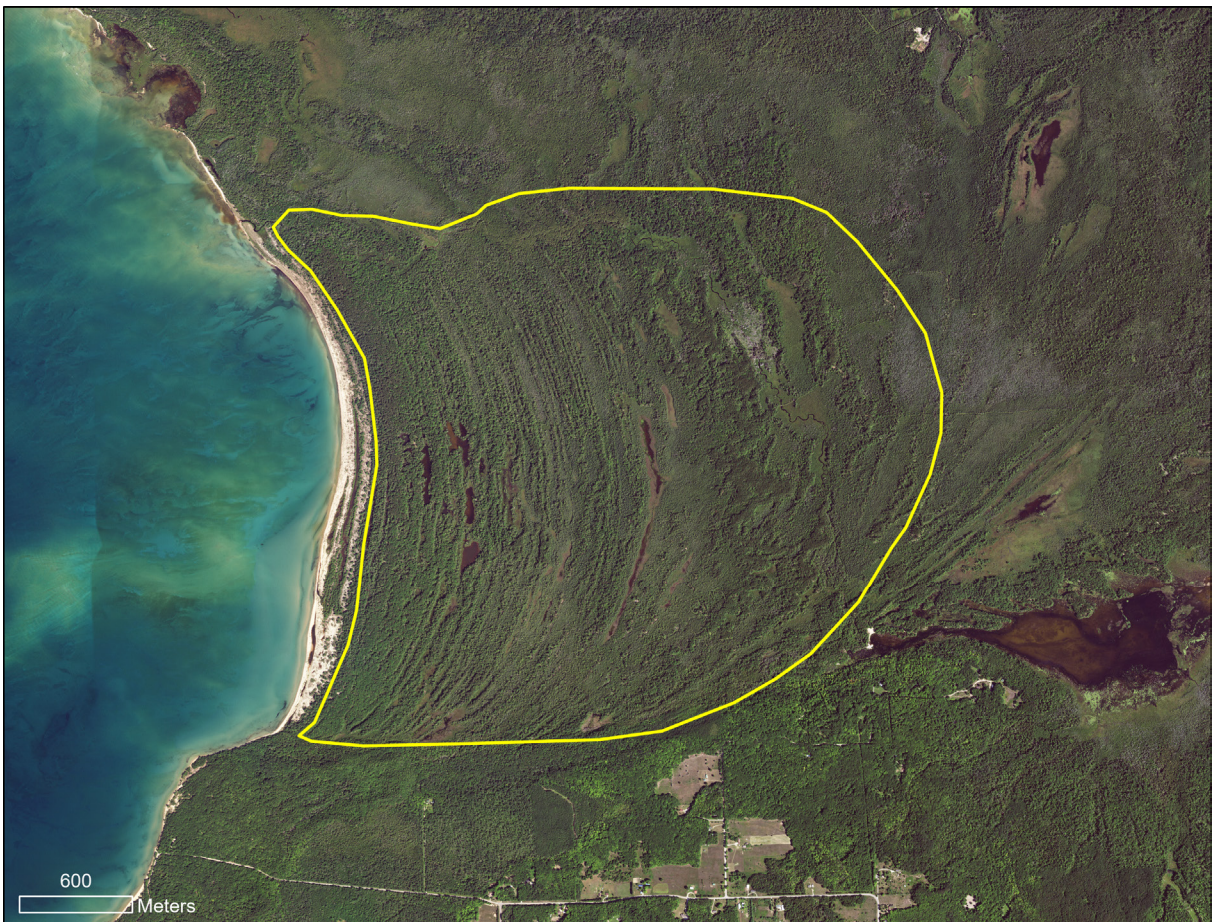
Nebo Trail dry-mesic northern forest (EO ID 13195). Photo by Joshua G. Cohen.



2020 aerial photograph of Nebo Trail dry-mesic northern forest (EO ID 13195).



Sturgeon Bay wooded dune and swale complex (EO ID 8136). Photo by Joshua G. Cohen.



2020 aerial photograph of Sturgeon Bay wooded dune and swale complex (EO ID 8136).

Gaylord Compartment 152

Surveys focused on Stand 36 and documented a new element occurrence wet-mesic sand prairie (EO ID 26745). The Wildwood Prairie is a C-ranked wet-mesic sand prairie.



Wildwood Prairie wet-mesic sand prairie (EO ID 26745). Photo by Joshua G. Cohen.



2020 aerial photograph of Wildwood Prairie wet-mesic sand prairie (EO ID 26745).

Gaylord Compartment 218

Survey targeted Point Detachee Fen coastal fen (EO ID 11602, C rank) Following the 2023 survey, the element occurrence rank of C was confirmed and the mapped boundary of the EO was updated.



Point Detachee Fen coastal fen (EO ID 11602). Photo by Joshua G. Cohen.



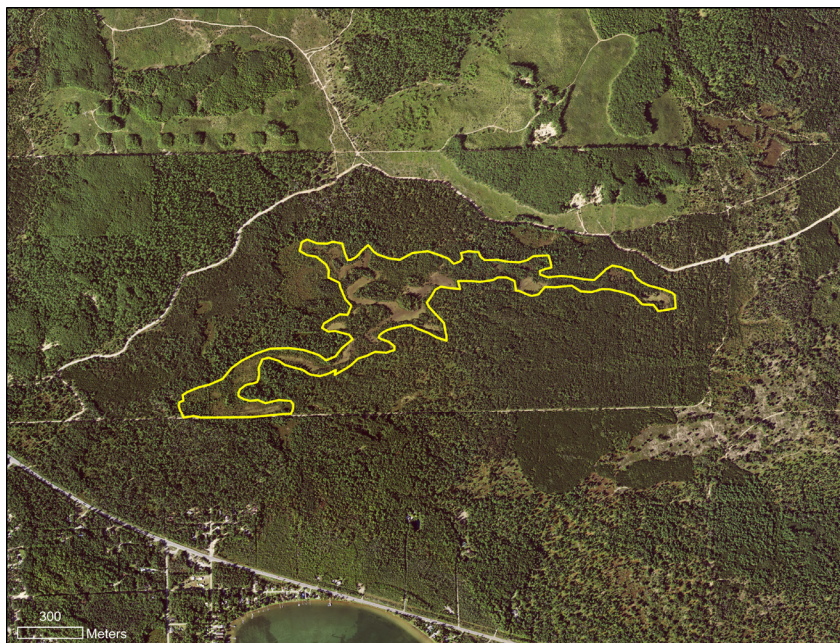
2020 aerial photograph of Point Detachee Fen coastal fen (EO ID 11602).

Grayling Compartment 204

Survey targeted Lake Margrethe North intermittent wetland (EO ID 7851, B rank). Following the 2023 survey, the element occurrence rank of B was confirmed and the mapped boundary of the EO was updated.



Lake Margrethe North intermittent wetland (EO ID 7851). Photo by Joshua G. Cohen.



2020 aerial photograph of Lake Margrethe North intermittent wetland (EO ID 7851).

Grayling Compartment 228

Survey targeted Mud Lake Barrens pine barrens (EO ID 18774, D rank). Following the 2023 survey, the element occurrence rank was downgraded from C to D due to logging and the subsequent reduction of the pine barren's structure and increase in invasive species. The mapped boundary of the EO was also updated.



Mud Lake Barrens pine barrens (EO ID 18774). Photo by Joshua G. Cohen.



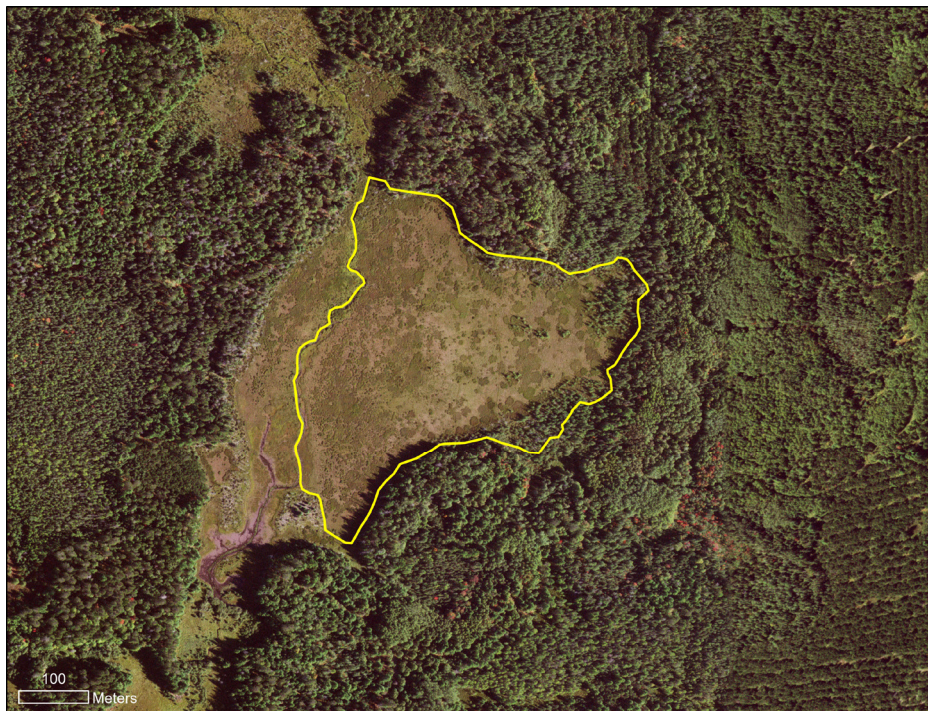
2020 aerial photograph of Mud Lake Barrens pine barrens (EO ID 18774).

Grayling Compartment 279

Survey targeted Barker Creek Fen northern fen (EO ID 4661, B rank). Following the 2023 survey, the element occurrence rank of B was confirmed and the mapped boundary of the EO was updated. During the course of the survey, a new American Bittern (*Botaurus lentiginosus*, state special concern) element occurrence was documented (EO ID 26743).



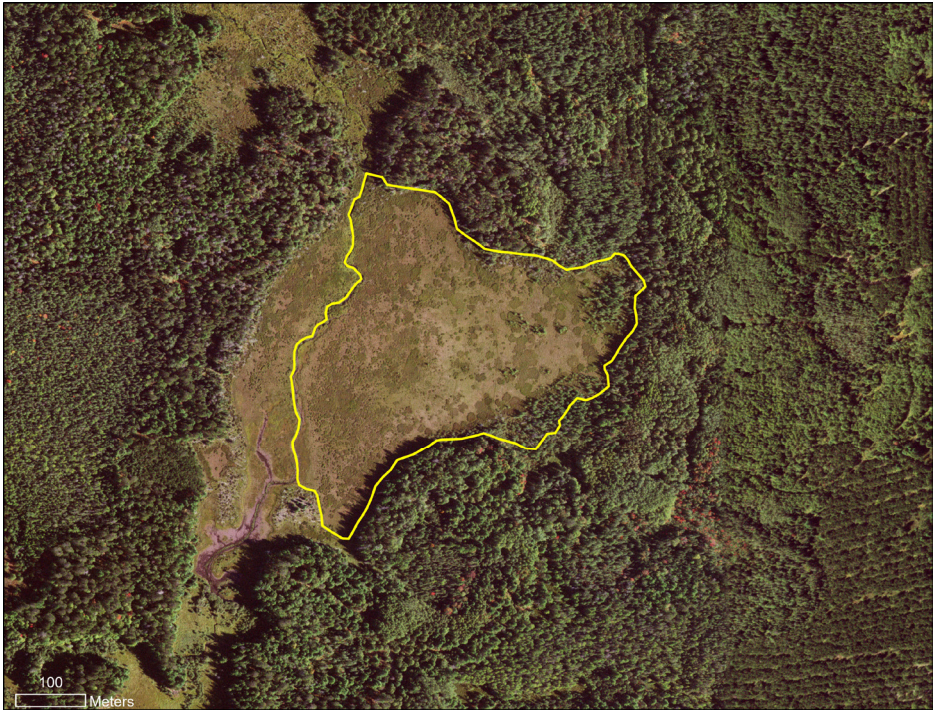
Barker Creek Fen northern fen (EO ID 4661). Photo by Joshua G. Cohen.



2020 aerial photograph of Barker Creek Fen northern fen (EO ID 4661).



Barker Creek Fen northern fen (EO ID 4661) provides habitat for American Bittern (EO ID 26743). Photo by Joshua G. Cohen.



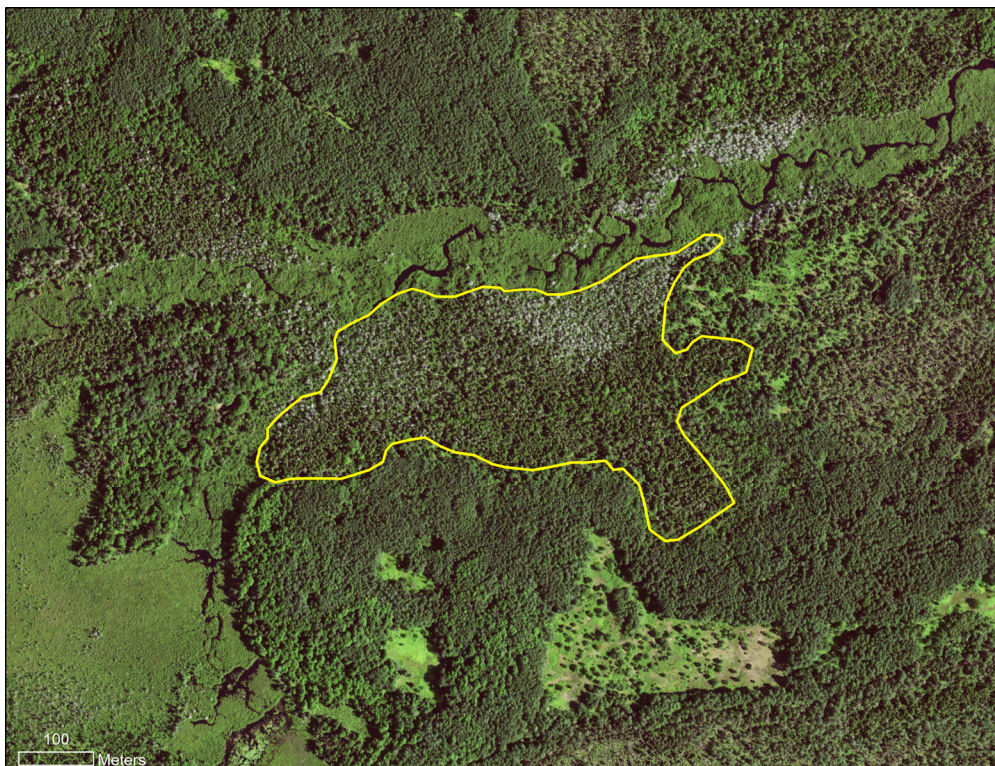
2020 aerial photograph of American Bittern EO (EO ID 26743).

Gwinn Compartment 67

Survey targeted Little West Branch rich conifer swamp (EO ID 14555, BC rank). Following the 2023 survey, the element occurrence rank of BC was confirmed and the mapped boundary of the EO was updated.



Little West Branch rich conifer swamp (EO ID 14555). Photo by Joshua G. Cohen.



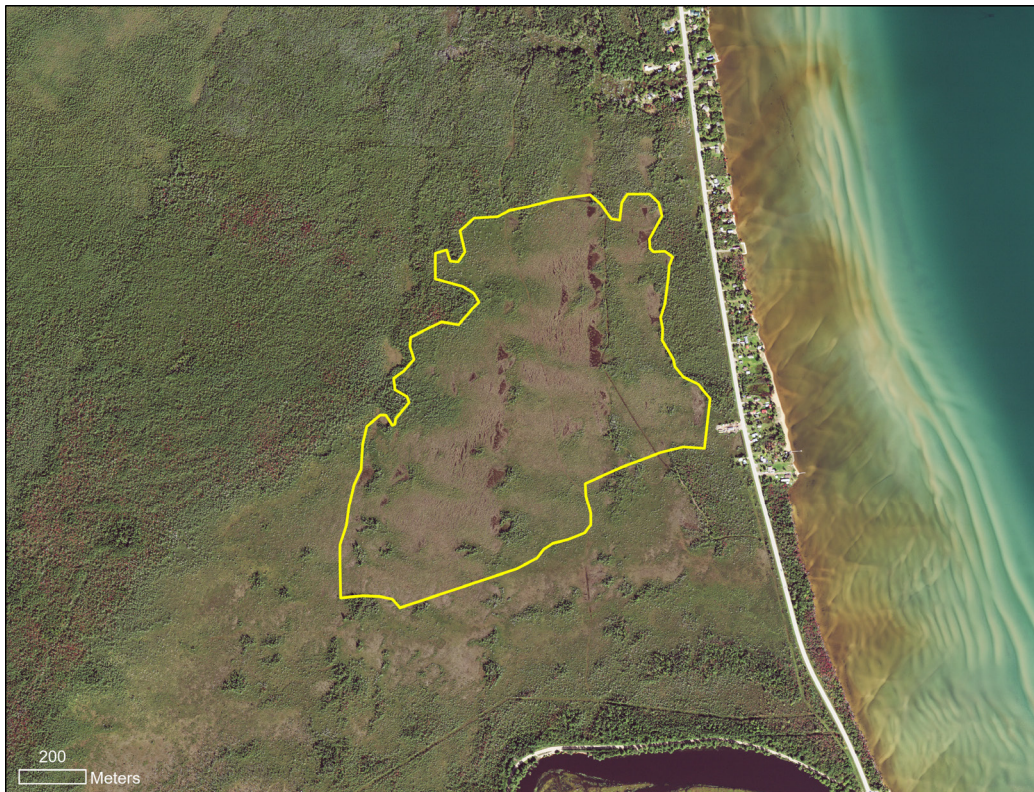
2020 aerial photograph of Little West Branch rich conifer swamp (EO ID 14555).

Newberry Compartment 69

Survey targeted Park Patterned Fen (EO ID 8531, B rank). Following the 2023 survey, the element occurrence rank of B was confirmed.



Park Patterned Fen (EO ID 8531). Photo by Joshua G. Cohen.



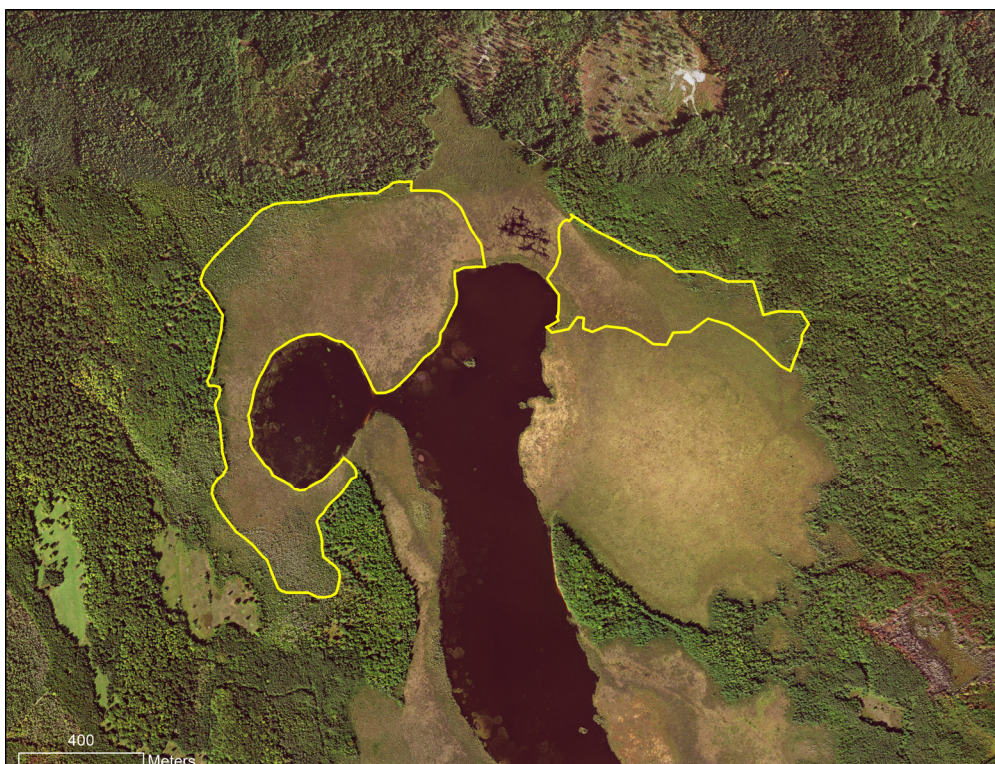
2020 aerial photograph of Park Patterned Fen (EO ID 8531).

Pigeon River Country Compartment 11

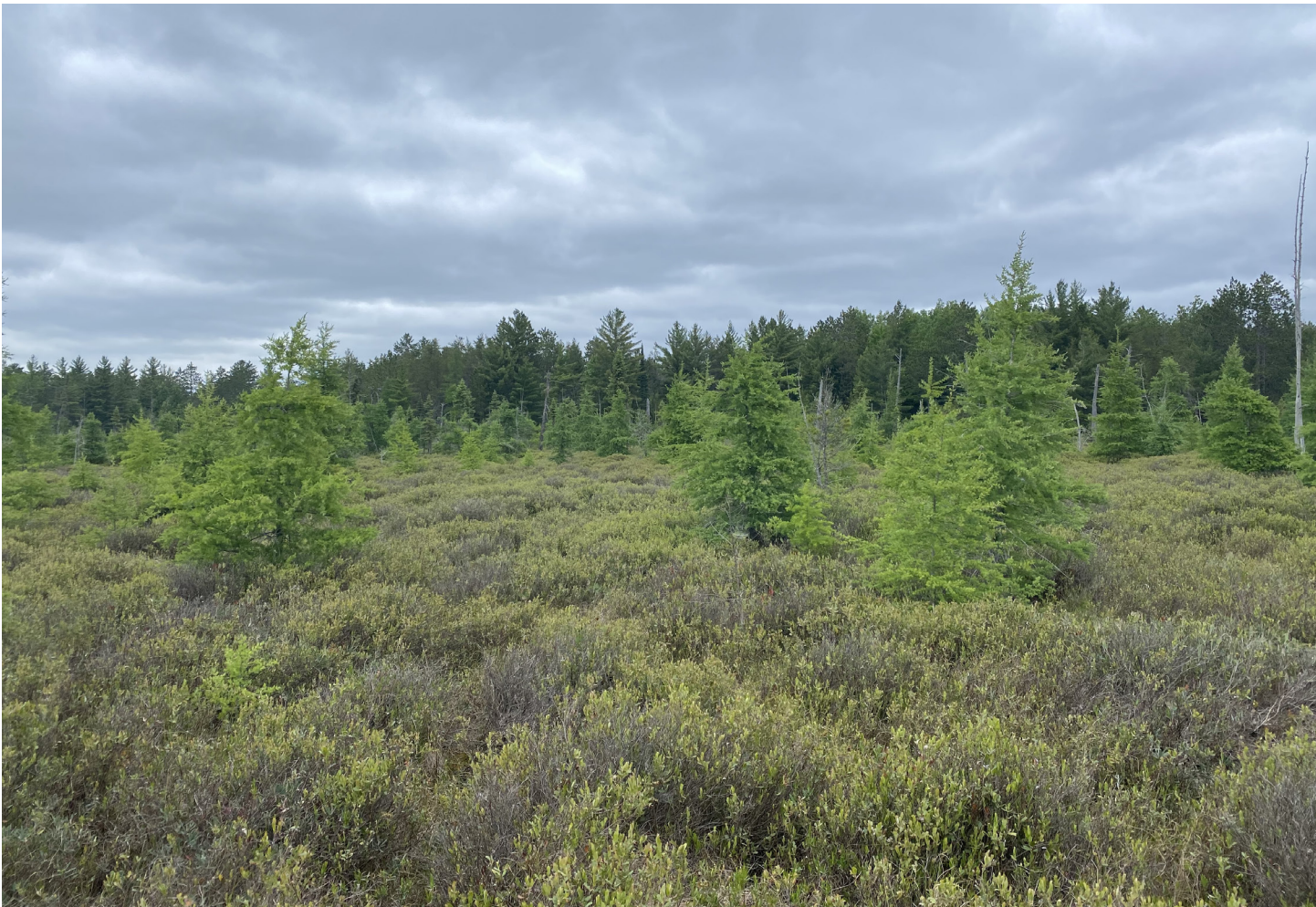
Survey targeted Dog Lake poor fen (EO ID 18840, B rank), muskeg (EO ID 18838, B rank), and bog (EO ID 18837, B rank). Following the 2023 survey, the boundaries for the poor fen, muskeg, and bog were remapped and the element occurrence ranks were confirmed.



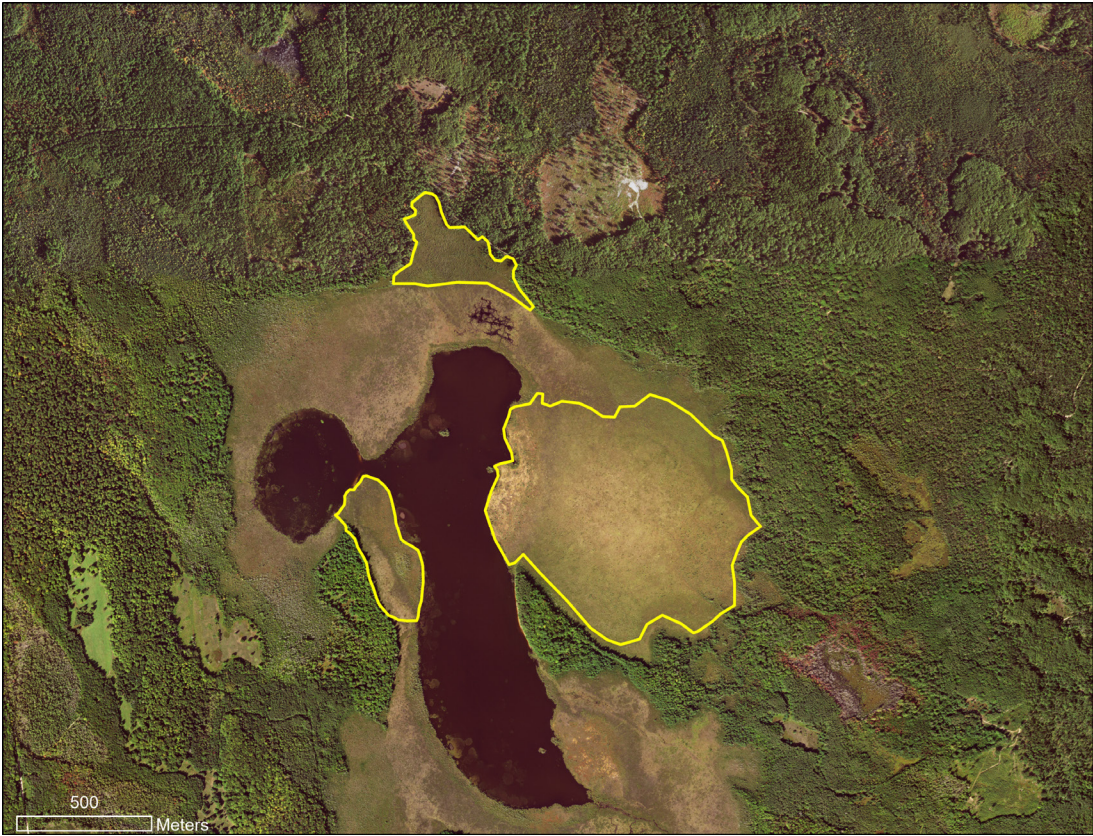
Dog Lake poor fen (EO ID 18840). Photo by Joshua G. Cohen.



2020 aerial photograph of Dog Lake poor fen (EO ID 18840).



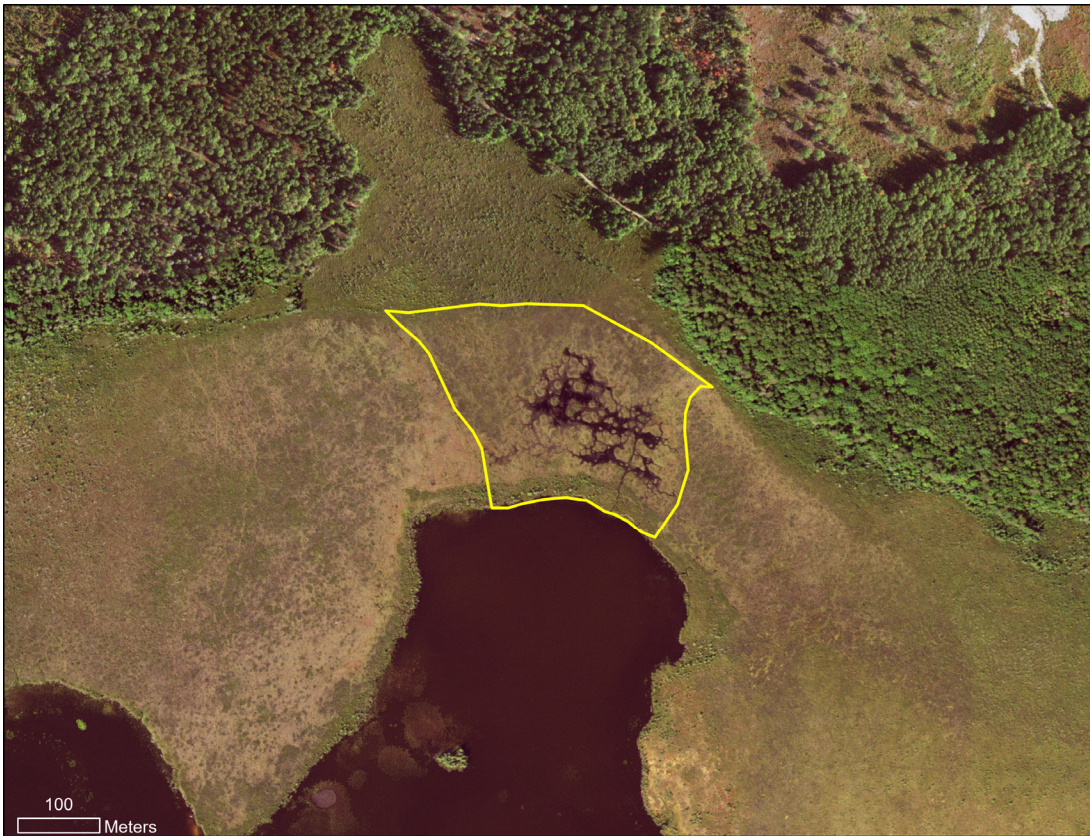
Dog Lake muskeg (EO ID 18838). Photo by Joshua G. Cohen.



2020 aerial photograph of Dog Lake muskeg (EO ID 18838).



Dog Lake bog (EO ID 18837). Photo by Joshua G. Cohen.



2020 aerial photograph of Dog Lake bog (EO ID 18837).

Sault Sainte Marie Drummond Quarry Acquisition

Surveyed new land acquisition in Sault Sainte Marie Forest Management Unit on Drummond Island. Updated rare plant element occurrences including populations of ram's head lady's-slipper (*Cypripedium arietinum*, state special concern; EO ID 19666), Richardson's sedge (*Carex richardsonii*, state special concern; EO ID 1373), bulrush sedge (*Carex scirpoides*, state threatened; EO ID 10303), and Hill's thistle (*Cirsium hillei*, state special concern; EO ID 345). In addition, new B-ranked element occurrences for limestone bedrock glade (Helen Lake Glade, EO ID 26706) and boreal forest (Helen Lake, EO ID 26707) were documented.



Ram's head lady's-slipper (EO ID 19666). Photo by Joshua G. Cohen.



2020 aerial photograph of ram's head lady's-slipper element occurrence (EO ID 19666).



Richardson's sedge (EO ID 1373). Photo by Joshua G. Cohen.



2020 aerial photograph of Richardson's sedge element occurrence (EO ID 1373).



Bulrush sedge (EO ID 10303). Photo by Joshua G. Cohen.



2020 aerial photograph of bulrush sedge element occurrence (EO ID 10303).



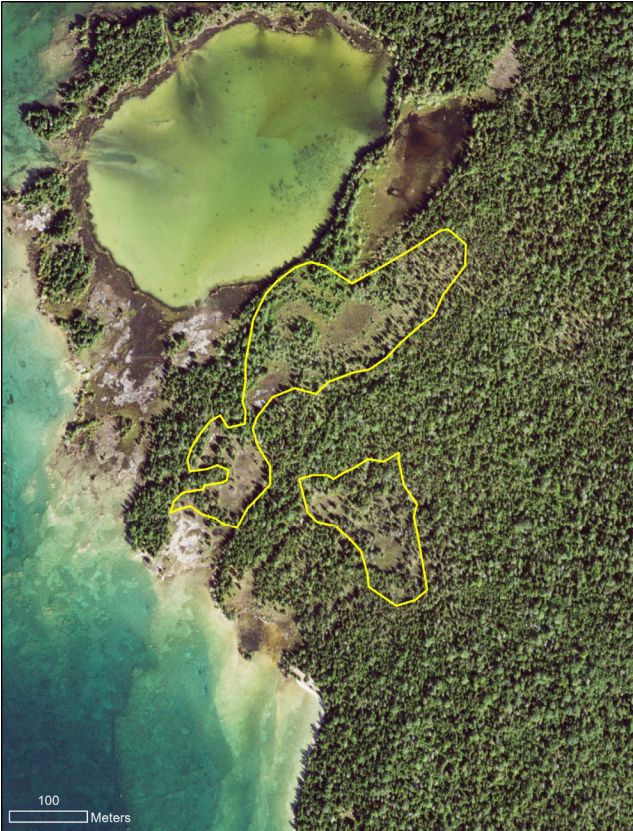
Hill's thistle (EO ID 345). Photo by Paul R. Schilke



2020 aerial photograph of Hill's thistle element occurrence (EO ID 345).



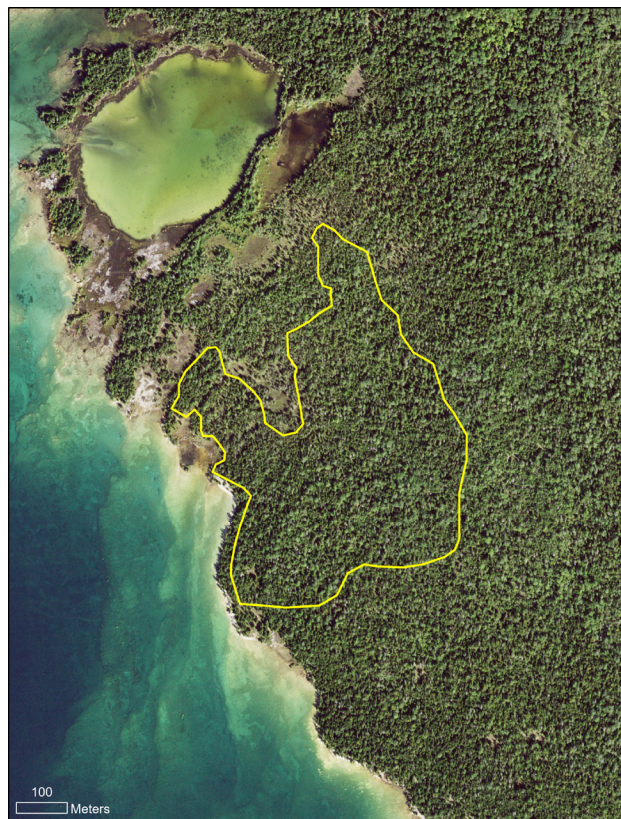
Helen Lake Glade limestone bedrock glade (EO ID 26706). Photo by Joshua G. Cohen.



2020 aerial photograph of Helen Lake Glade limestone bedrock glade (EO ID 26706).



Helen Lake boreal forest (EO ID 26707). Photo by Joshua G. Cohen.



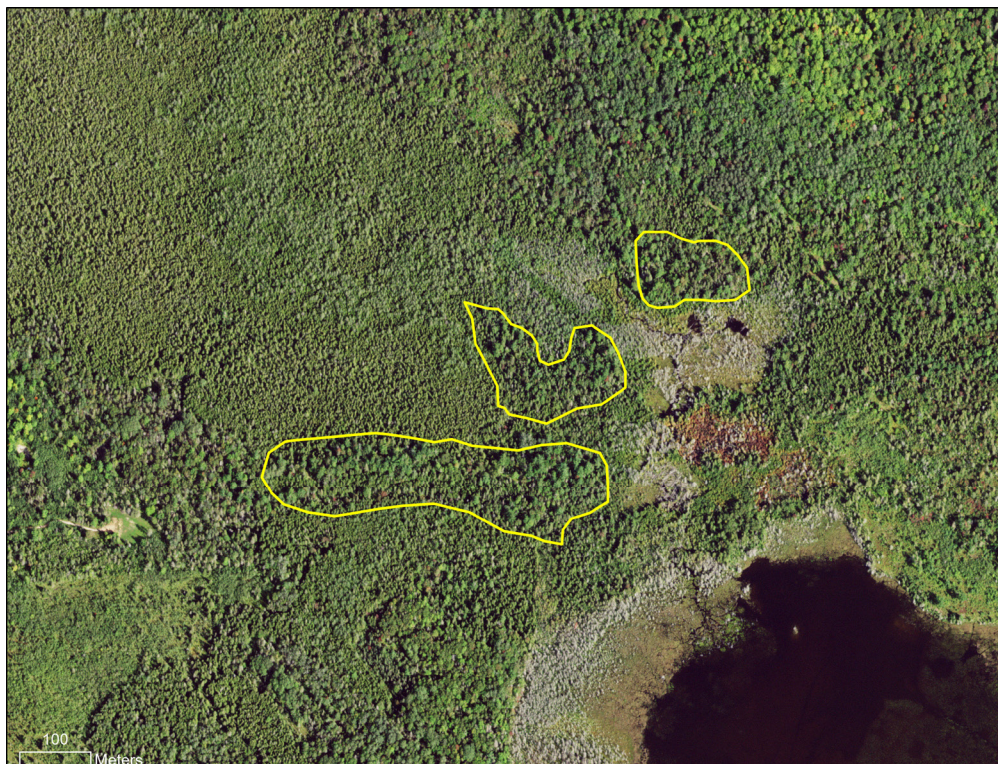
2020 aerial photograph of Helen Lake boreal forest (EO ID 26707).

Sault Sainte Marie Fulmer Acquisition

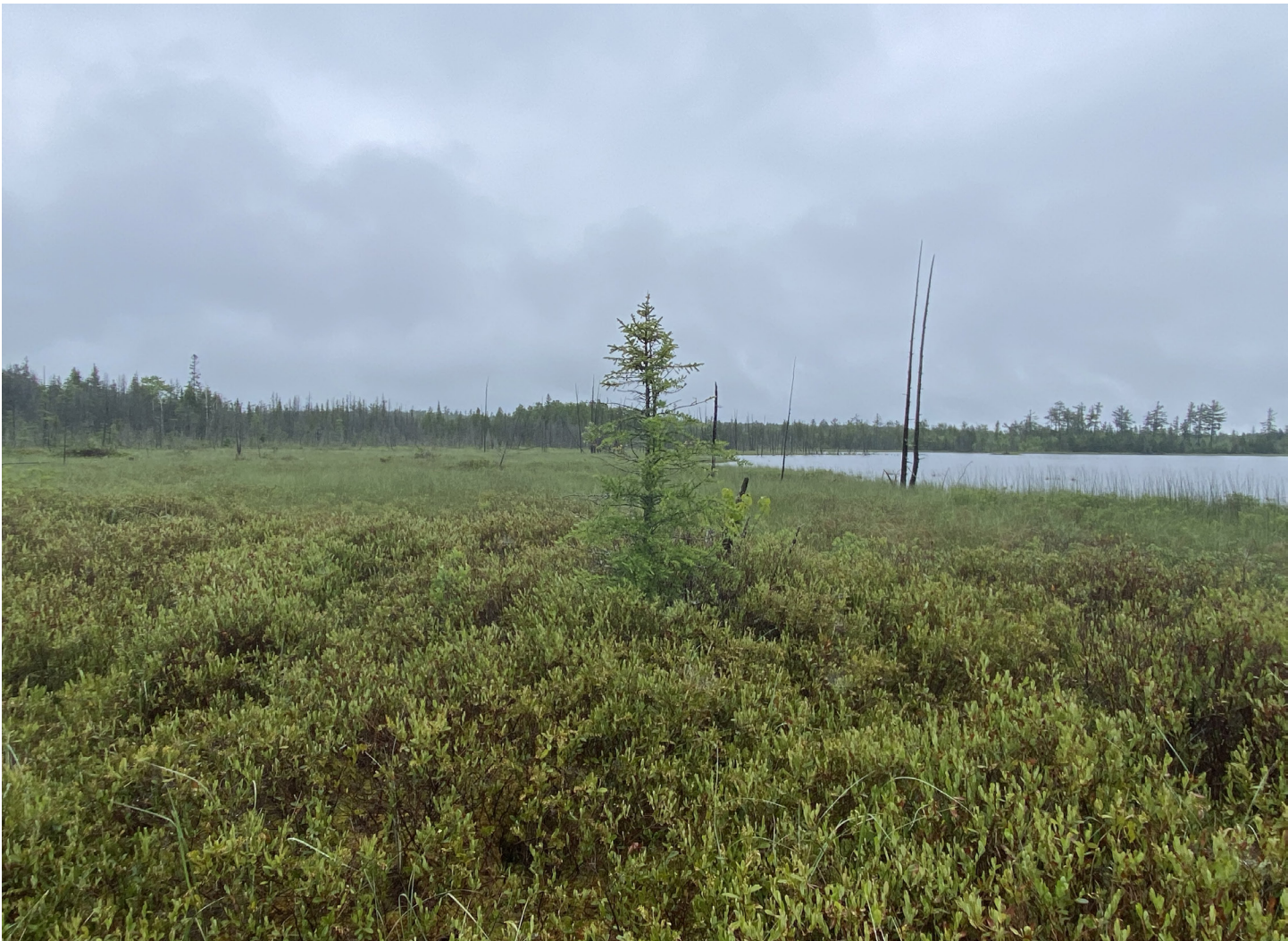
Surveyed new land acquisition in Sault Sainte Marie Forest Management Unit. Surveys evaluated uplands and lowlands associated with Fulmer Lake. Documented new BC-Ranked element occurrences for dry-mesic northern forest (EO ID 26722), poor fen (EO ID 26712), and rich conifer swamp (EO ID 26715).



Fulmer Lake Pines dry-mesic northern forest (EO ID 26722). Photo by Joshua G. Cohen.



Fulmer Lake Pines dry-mesic northern forest (EO ID 26722).



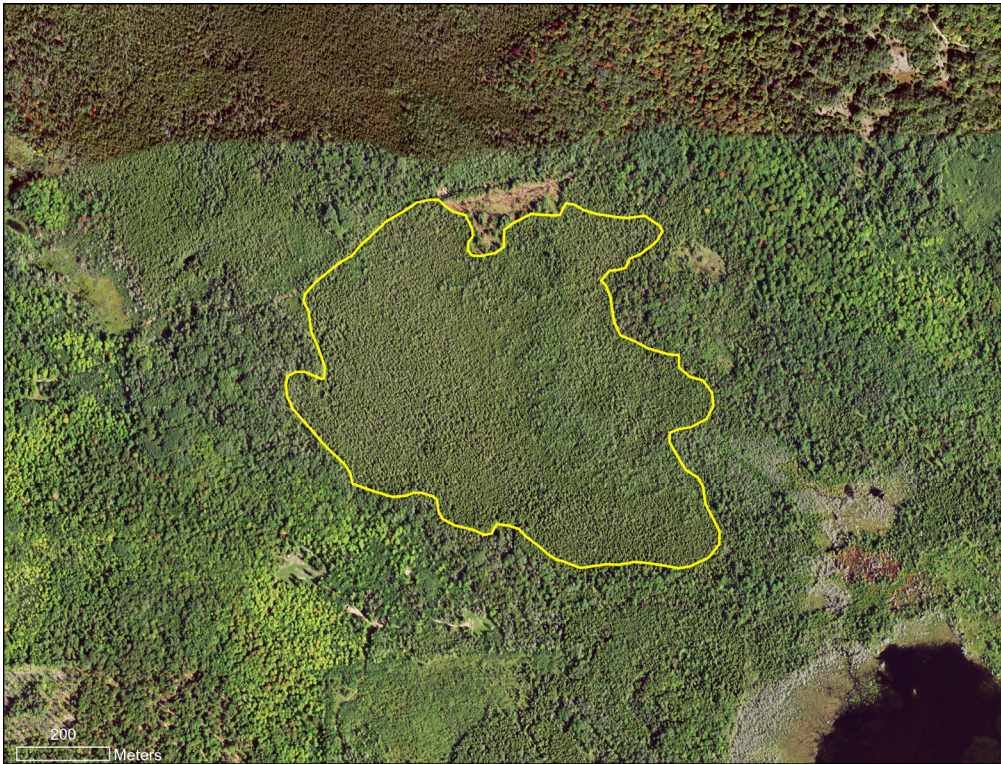
Fulmer Lake Fen poor fen (EO ID 26712). Photo by Joshua G. Cohen.



2020 aerial photograph of Fulmer Lake Fen poor fen (EO ID 26712).



Fulmer Lake rich conifer swamp (EO ID 26715). Photo by Joshua G. Cohen.



2020 aerial photograph of Fulmer Lake rich conifer swamp (EO ID 26715).

Sault Sainte Marie Compartment 14

Surveyed Compartment 14 for rare plants and high-quality natural communities. Documented two new C-ranked limestone bedrock glade element occurrences (EO ID 26709, Beaver Dam Glade; and EO ID 26710, Walding Road Glade) and one new BC-ranked dry northern forest element occurrence (EO ID 26708, Toivala Forest). In addition, we also documented several new rare plant populations including three new populations of Hill's thistle (*Cirsium hillii*, state special concern) (EO IDs 26719, 26723, and 26724), one new population of Cooper's milk vetch (*Astragalus neglectus*, state special concern) (EO ID 26735), and one new population of Richardson's sedge (*Carex richardsonii*) (EO ID 26711).



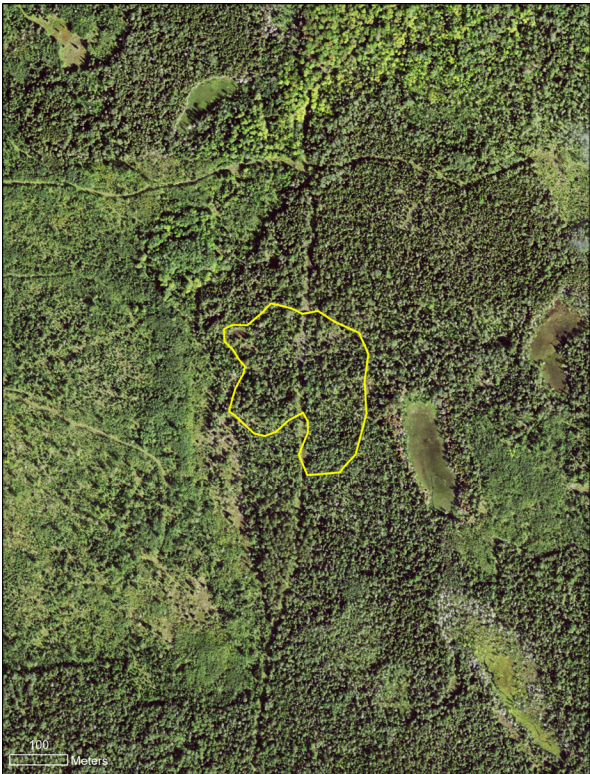
Beaver Dam Glade limestone bedrock glade (EO ID 26709). Photo by Joshua G. Cohen.



2020 aerial photograph of Beaver Dam Glade limestone bedrock glade (EO ID 26709).



Walding Road Glade limestone bedrock glade (EO ID 26710). Photo by Joshua G. Cohen.



2020 aerial photograph of Walding Road Glade limestone bedrock glade (EO ID 26710).



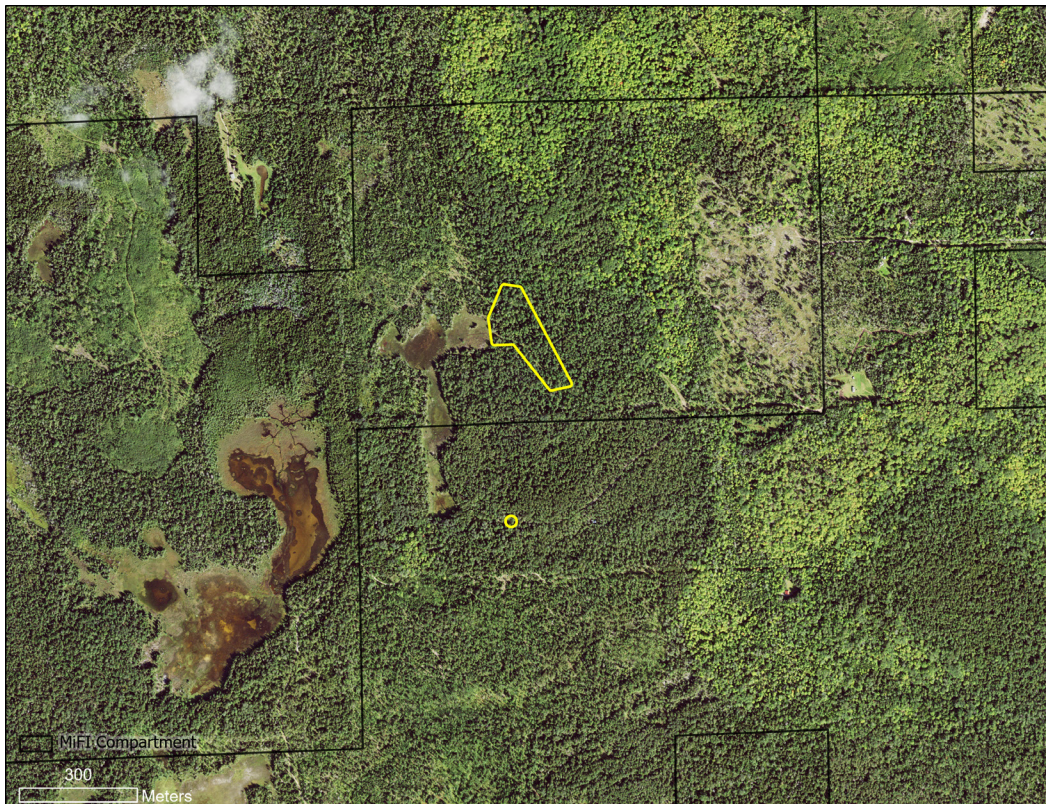
Toivala Forest dry northern forest (EO ID 26708). Photo by Joshua G. Cohen.



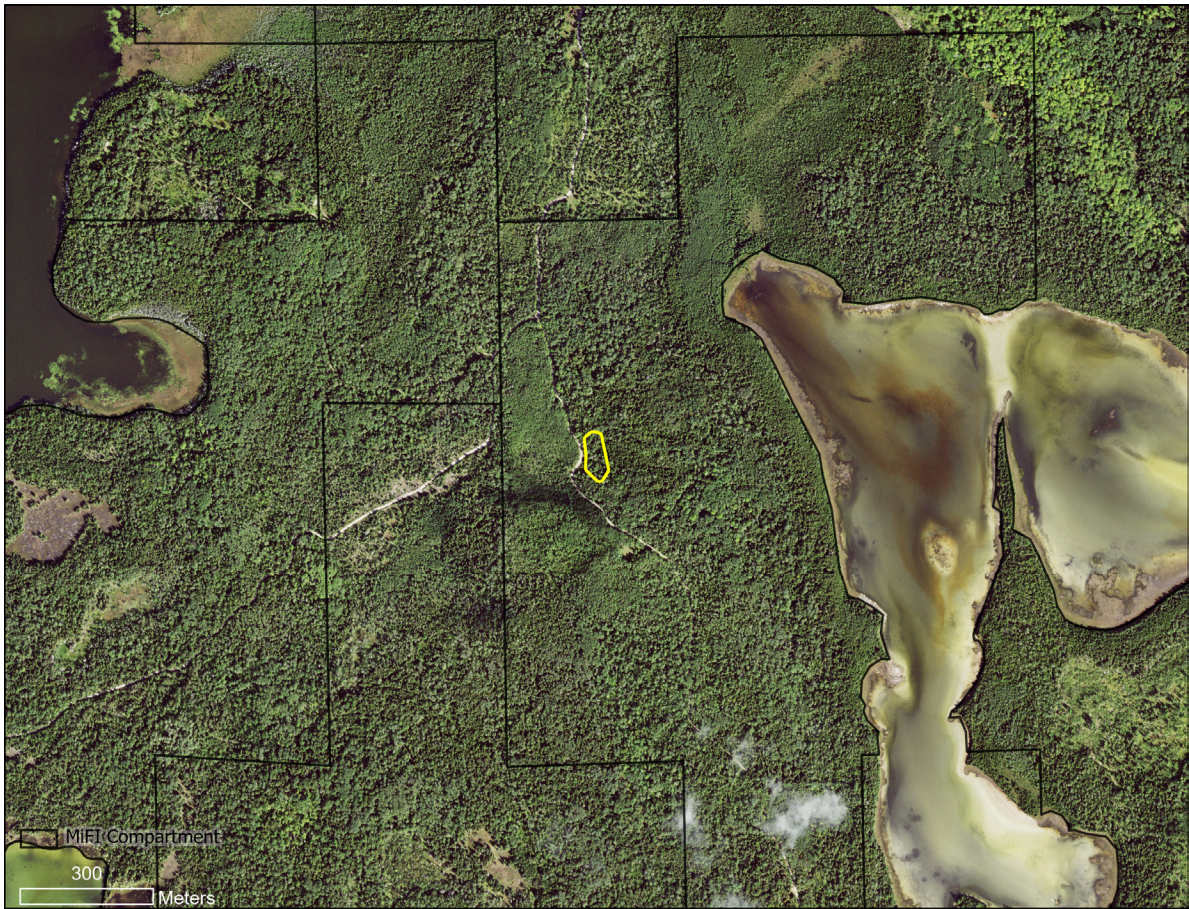
2020 aerial photograph of Toivala Forest dry northern forest (EO ID 26708).



Cooper's milk vetch (EO ID 26735). Photo by Paul R. Schilke



2020 aerial photograph of Cooper's milk vetch element occurrence (EO ID 26735).



2020 aerial photograph of Hill's thistle element occurrence (EO ID 26719).



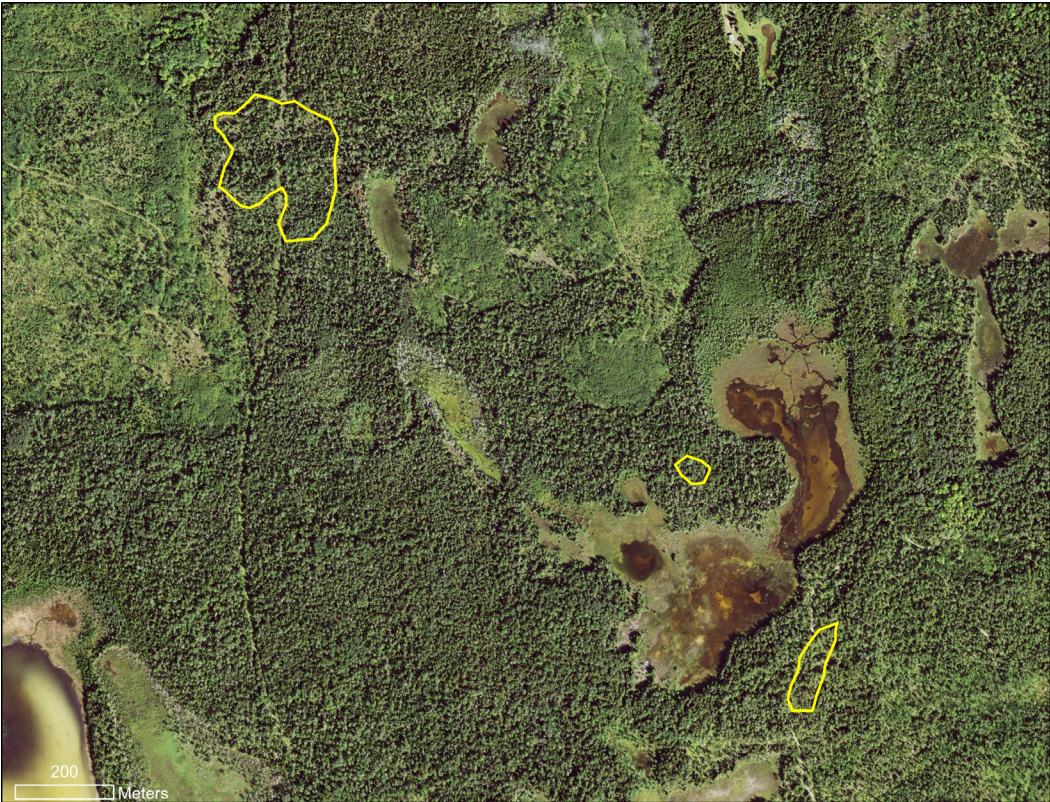
2020 aerial photograph of Hill's thistle element occurrence (EO ID 26723).



2020 aerial photograph of Hill's thistle element occurrence (EO ID 26724).



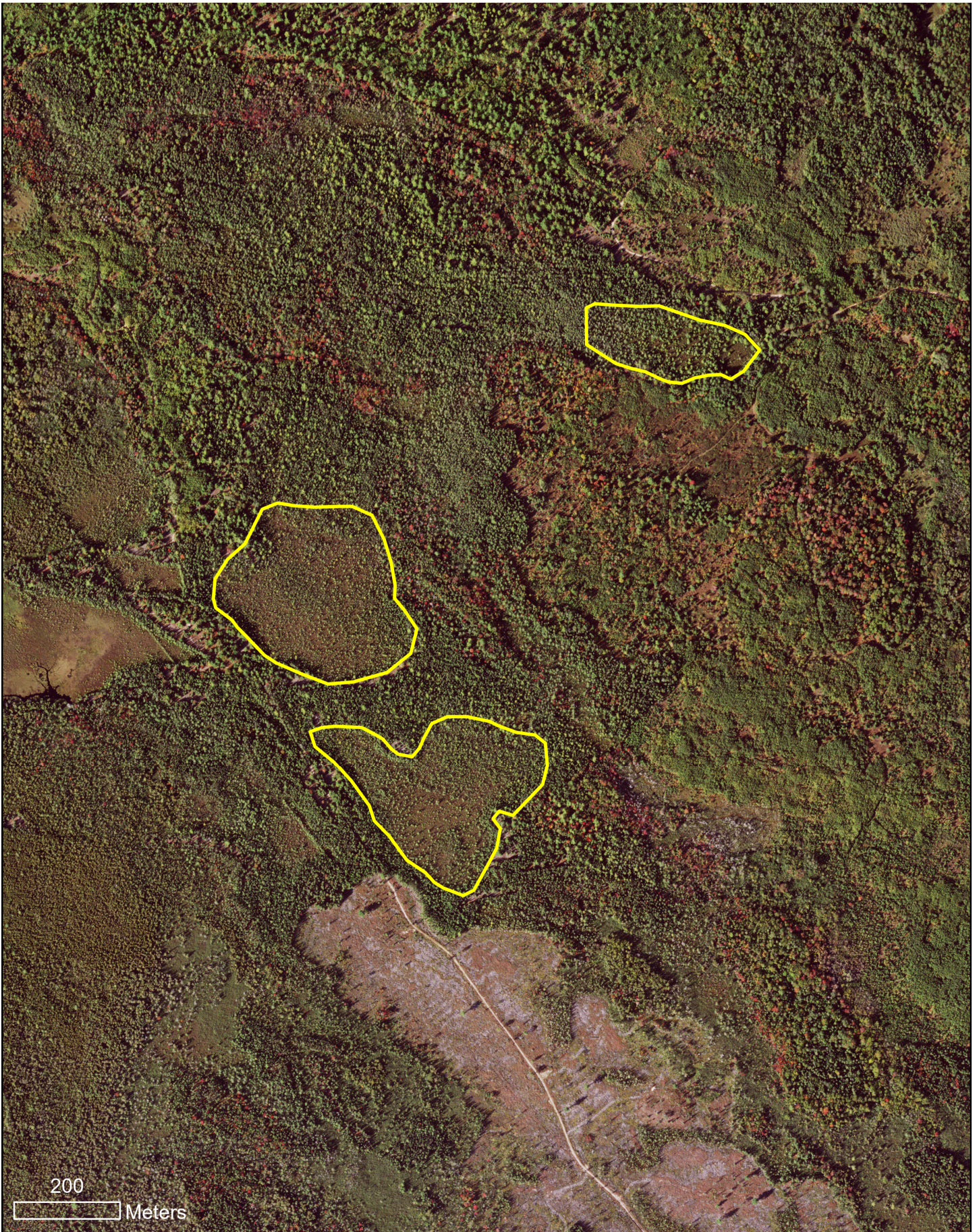
Richardson's sedge (EO ID 26711). Photo by Joshua G. Cohen



2020 aerial photograph of Richardson's sedge element occurrence (EO ID 26711).

Sault Sainte Marie Compartment 107

Revised the mapped boundary of the Jackson Tindle Road Muskeg (EO ID 2367) using recent aerial imagery.



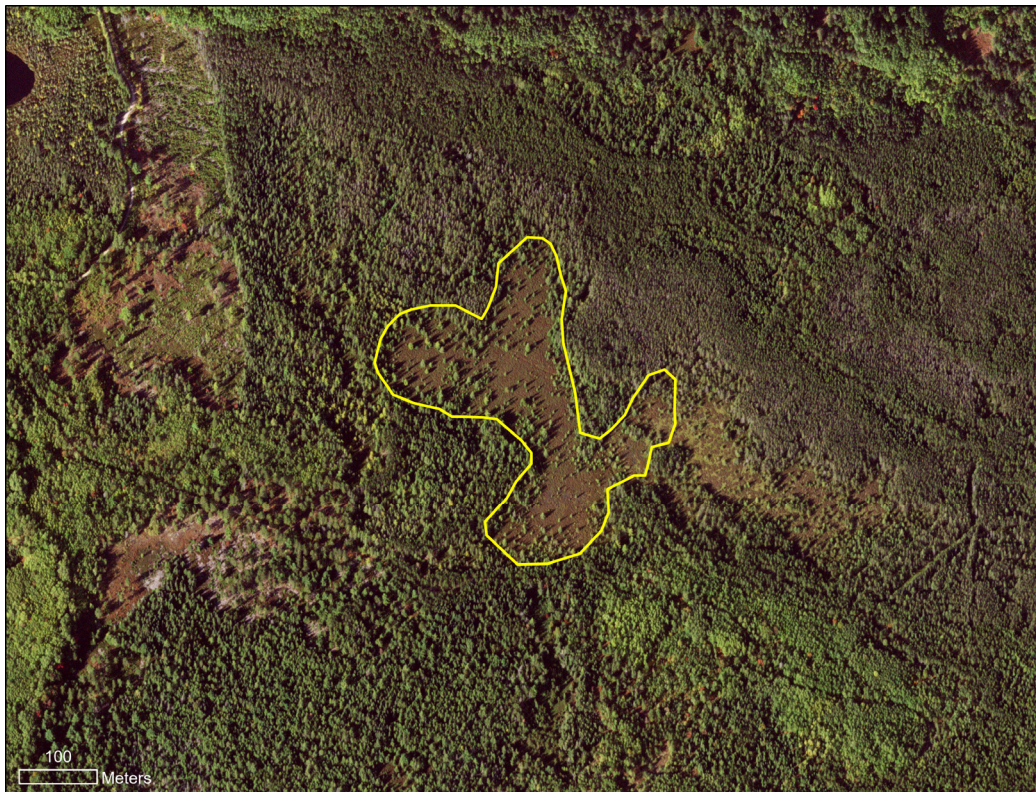
2020 aerial photograph of Jackson Tindle Road Muskeg (EO ID 2367).

Sault Sainte Marie Compartment 108

Survey targeted Huckleberry Lake Muskeg (EO ID 9791, C rank). Following the 2023 survey, the element occurrence rank of C was confirmed and the EO polygon was remapped with recent imagery.



Huckleberry Lake Muskeg (EO ID 9791). Photo by Joshua G. Cohen.



2020 aerial photograph of Huckleberry Lake Muskeg (EO ID 9791).