

# Interagency Information Cooperative: A 2020 Update and Plans for 2021

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November 12, 2020



UNIVERSITY OF MINNESOTA

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# Office of the Revisor of Statutes

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2019 Minnesota Statutes > FORESTRY > Chapter 89A

## 2019 Minnesota Statutes

Authenticate PDF

### CHAPTER 89A. SUSTAINABLE FOREST RESOURCES

Section	Headnote
<a href="#">89A.01</a>	DEFINITIONS.
<a href="#">89A.02</a>	POLICY.
<a href="#">89A.03</a>	MINNESOTA FOREST RESOURCES COUNCIL.
<a href="#">89A.04</a>	PARTNERSHIP.
<a href="#">89A.05</a>	TIMBER HARVESTING AND FOREST MANAGEMENT GUIDELINES.
<a href="#">89A.06</a>	LANDSCAPE-LEVEL FOREST RESOURCE PLANNING AND COORDINATION.
<a href="#">89A.07</a>	MONITORING.
<a href="#">89A.08</a>	RESEARCH ADVISORY COMMITTEE.
<a href="#">89A.09</a>	INTERAGENCY INFORMATION COOPERATIVE.
<a href="#">89A.10</a>	CONTINUING EDUCATION.
<a href="#">89A.105</a>	IMPLEMENTATION.
<a href="#">89A.11</a>	SUNSET.



#### Resources

- [Search Minnesota Statutes](#)
- [About Minnesota Statutes](#)
- [2019 Statutes New, Amended or Repealed](#)
- [2019 Table of Chapters](#)
- [2019 Statutes Topics \(Index\)](#)

#### Chapter 89A

- [Table of Sections](#)
- [Full Chapter Text](#)
- [Version List](#)



# Establishment

- Dean of College of Food, Agricultural and Natural Resource Sciences (CFANS) is encouraged to maintain an Interagency Information Cooperative
- Members must include:
  - UMN CFANS
  - UMN NRRI
  - MN DNR
  - Minnesota Geospatial Information Office
  - MACLC
  - USDA Forest Service
  - Other organizations as deemed appropriate by members



# Purpose

1. Coordinate the development and use of forest resources data in the state
2. Promote the development of statewide guidelines and common language to enhance the ability of public and private organizations and institutions to share forest resources data



# Purpose

3. Promote the development of information systems that support access to important forest resources data
4. Promote improvement in the accuracy, reliability, and statistical soundness of fundamental forest resources data
5. Promote linkages and integration of forest resources data to other natural resource information



# Purpose

6. Promote access and use of forest resources data and information systems in decision-making by a variety of public and private organizations
7. Promote expanding the capacity and reliability of forest growth, succession, and other types of ecological models



# IIC Advisory Body Membership

Organization	Name
UMN - CFANS	Chris Edgar (Director)
UMN - CFANS	John Zobel
UMN - NRRRI	John Duplissis
MN DNR	Doug Tillma
MN DNR	Scott Hillard
MN Geospatial Information Office	Open
USFS	John Rickers
USFS	Mark Nelson
USFS	Joshua Bixby
MACLC	Greg Bernu



# Funding


- Funded by the Minnesota Legislature through an appropriation to the University of Minnesota
  - *\$197,000 in 2009 is for a grant to the University of Minnesota for the Interagency Information Cooperative to develop a common forest inventory format describing key attributes of Minnesota's public forest land base, growth models for managed forest stands, a forest wildlife habitat model format, and an information database on the state's family forest ownership. (MN Session Laws Chapter 363, Article 5, Section 4, Subdivision 4)*



# Communications

- Membership meetings
- Report to MFRC
  - Even years
- Newsletter
  - Odd years
- Webpage
  - <http://iic.umn.edu/>

CFANS

 UNIVERSITY OF MINNESOTA

**CFANS** COLLEGE OF FOOD, AGRICULTURAL AND NATURAL RESOURCE SCIENCES

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**Interagency Information Cooperative (IIC)**  
Enhancing the access and use of forest resources data in Minnesota

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Welcome to the Interagency Information Cooperative (IIC) newsletter. In this newsletter you will find information on IIC direction, activities, and accomplishments.

General information about the IIC, what it is and how it came about, is provided on the [IIC website \(http://iic.umn.edu/about\)](http://iic.umn.edu/about).

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**New Director**

My name is Chris Edgar and I am the new Director of the IIC. I recently joined the Department of Forest Resources as Research Assistant Professor of Forest Biometrics. Previously, I was Forest Resource Analyst with the Texas A&M Forest Service where I managed the Forest Economics and Resource Analysis Program. If my name is familiar to you, it may be because of my years (1997-2001) working for the Minnesota Department of Natural Resources and Minnesota Forest Resources Council. My office is 220C Green Hall on the St. Paul Campus. You can reach me at [cedgar@umn.edu](mailto:cedgar@umn.edu) and (612) 626-1205 and my mailing address is:



Department of Forest Resources  
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1530 Cleveland Avenue North  
St. Paul, MN 55108-6112

As many of you already know, Dr. Alan Ek retired after more than 40 years of service to the Department of Forest Resources. One of Alan's many responsibilities was serving as Director of the IIC. Under his leadership, the IIC was able to develop synergies among projects and organizations that resulted in delivery of a range of products useful from research, policy, and management perspectives. I would like to extend a hearty thank you to Alan for his generous sharing of time and support during this period of transition in leadership at the IIC. Thanks Alan!



# Silvicultural and Forest Health Practices

*Journal of Forestry*, 2020, 1–16

doi:10.1093/jofore/fvaa007

Research Article - silviculture

Received July 26, 2019; Accepted February 7, 2020

Advance Access publication March 27, 2020

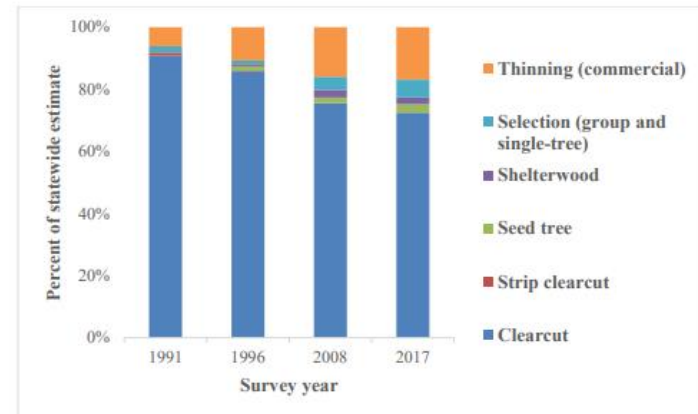
OXFORD

Research Article - silviculture

## The Decline of the Clearcut: 26 Years of Change in Silvicultural Practices and Implications in Minnesota

M.A. Windmuller-Campione, M.B. Russell<sup>o</sup>, E. Sagor, A.W. D'Amato<sup>o</sup>, A.R. Ek, K.J. Puettmann, and M.G. Rodman<sup>o</sup>

M. A. Windmuller-Campione ([mwind@umn.edu](mailto:mwind@umn.edu)), M. B. Russell ([russellm@umn.edu](mailto:russellm@umn.edu)), E. Sagor ([esagor@umn.edu](mailto:esagor@umn.edu)), and A. R. Ek ([aek@umn.edu](mailto:aek@umn.edu)), Department of Forest Resources, University of Minnesota, St. Paul, MN. E. Sagor ([esagor@umn.edu](mailto:esagor@umn.edu)) and M. G. Rodman ([mrodman@umn.edu](mailto:mrodman@umn.edu)), Minnesota Sea Grant, University of Minnesota, Duluth, MN. A. W. D'Amato ([awdamato@uvm.edu](mailto:awdamato@uvm.edu)), Rubenstein School of Environment and Natural Resources, University of Vermont, Burlington, VT. K. J. Puettmann ([klaus.puettmann@oregonstate.edu](mailto:klaus.puettmann@oregonstate.edu)), Department of Forest Ecosystems & Society, Oregon State University, Corvallis, OR.



**Figure 2.** Trends in statewide estimates of silvicultural practices and thinning for four survey years in Minnesota.



# Updated Growth and Yield Models

**Whole stand growth and yield models for major forest types in the Upper Great Lakes Region**

by

David C. Wilson and Alan R. Ek

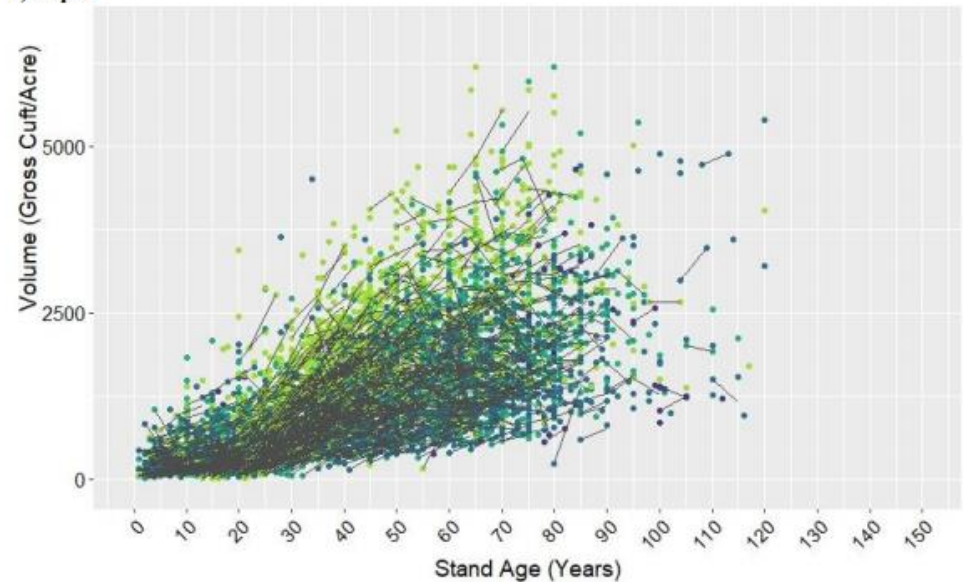
**Staff Paper Series No. 254**

**Department of Forest Resources**

April 8, 2019, Revised October 24, 2019

College of Food, Agricultural and Natural Resource Sciences  
University of Minnesota, St. Paul, Minnesota

a) Aspen



# Coordinated Planning

Research | [Open Access](#) | Published: 26 March 2019

## Potential gains from spatially-explicit coordinated planning between two large public ownerships in Minnesota

[Joshua J. Bixby](#), [Howard M. Hoganson](#)  & [Yu Wei](#)

*Forest Ecosystems* 6, Article number: 11 (2019) | [Cite this article](#)

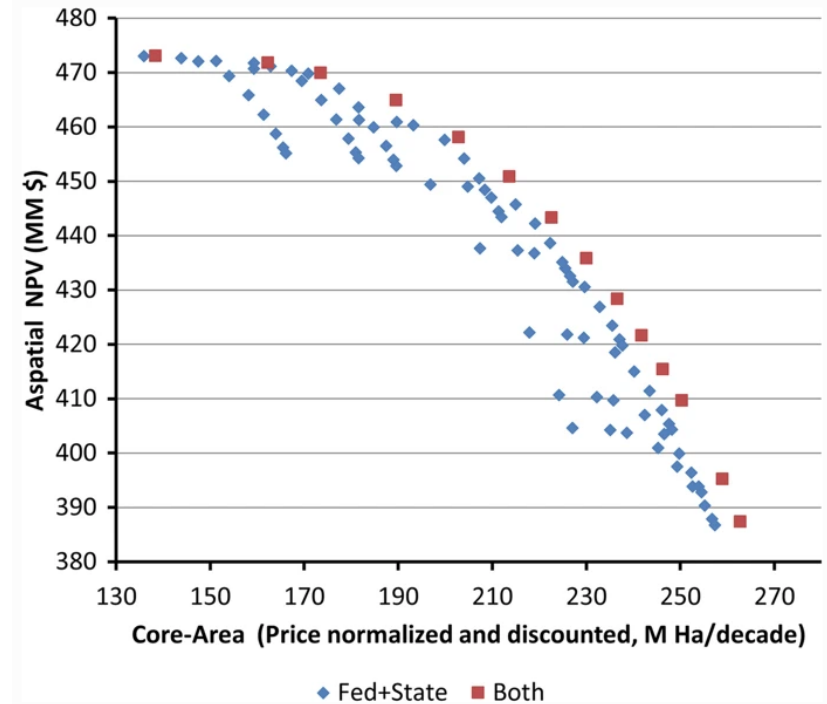
551 Accesses

### Abstract

#### Background

Many forested landscapes throughout the world involve a mix of public forest ownerships. This study explores how coordinated planning between two large public ownerships in Minnesota impact landscape-level trade-offs between timber production and production of core area of older forest (COF) for the region. COF is an important metric for wildlife habitat.

Fig. 8



Production possibilities including scenarios that lack coordination in COF value



# Monitoring Disturbance




Annals of Forest Science

September 2019, 76:78 | [Cite as](#)

## Monitoring disturbance intervals in forests: a case study of increasing forest disturbance in Minnesota

Authors

[Authors and affiliations](#)

David C. Wilson , Randall S. Morin, Lee E. Frelich, Alan R. Ek

Research Paper

First Online: 29 July 2019

11

Shares

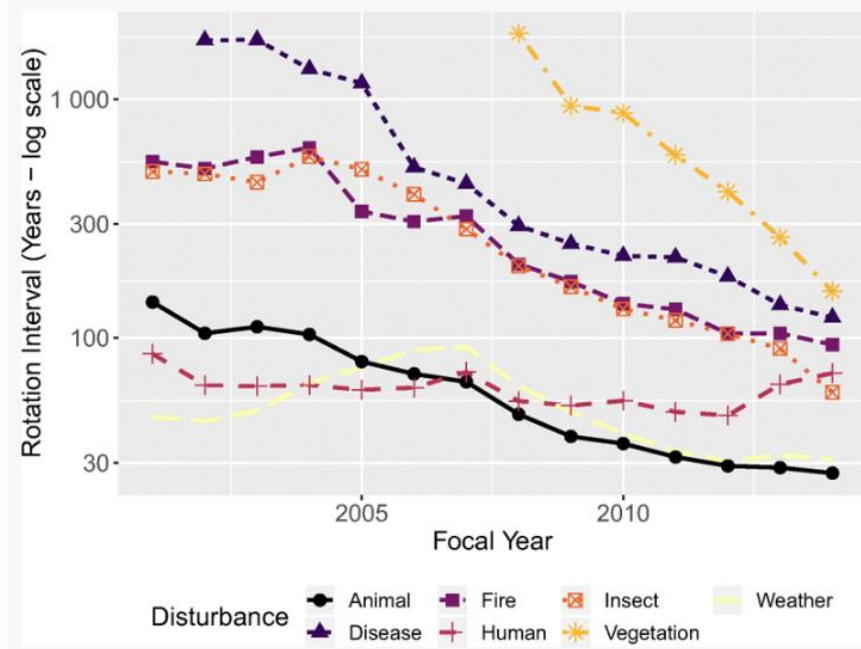
97

Downloads

### Abstract

### Key Message

We develop analytical methods and explore trends in disturbance interval via systematic forest inventory observations at a bioregional scale.



# Shared Stewardship

- Integrated ArcGIS Online spatial data portal
  - USFS, DNR, and St. Louis County
- Wide-array of data
  - Stand inventory, roads, ecological units, etc.
- Data updates
  - Points to owner's instance of data rather than a copy
- Access and privacy
  - Site requires personal login via invite only
  - Data permissions and read/write controlled by owner



# Shared Stewardship

A Collaboration with the Interagency Information Cooperative

## Arrowhead Shared Stewardship

Search data

### Browse Data by Category

or view all



Boundaries



Contours



Imagery/Aerial Photos



Roads



Gravel Pits



Land Ownership



Tax Parcel Info



Water Features



Soils



Vegetation



Insects and Diseases



LIDAR

Home ▾ My Map

Details

Add ▾

Basemap

Analysis

Save ▾

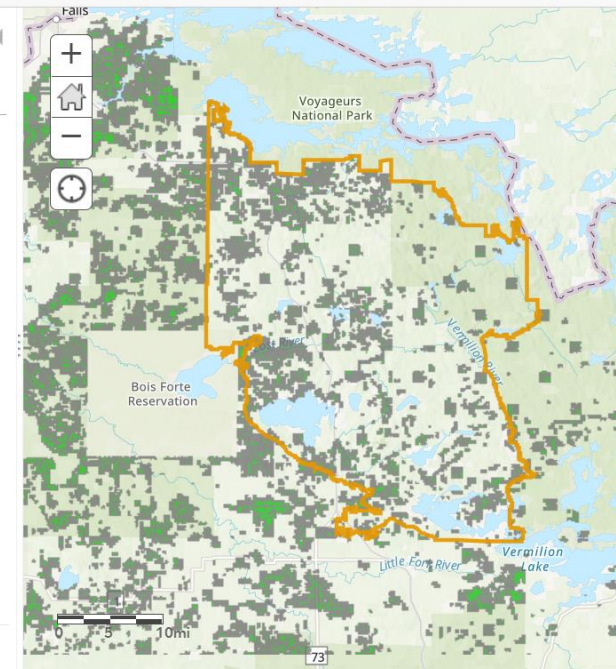
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Directions

Contents

- Arrowhead Project Boundary - Project Area 08232018
- MNDNR Forest Stand Inventory
- Topographic



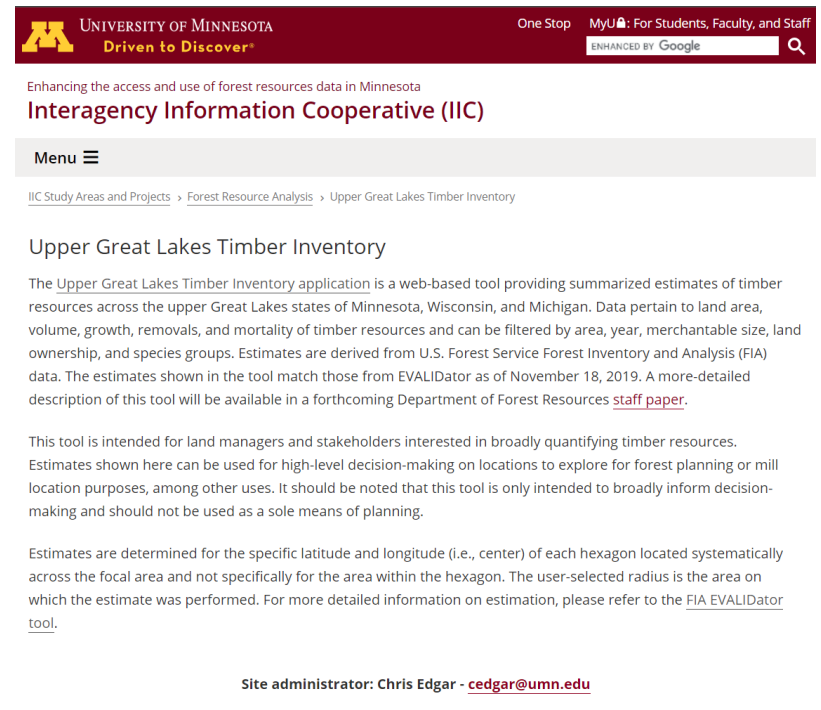
Homepage w/data categories

Project boundary w/DNR stand inventory



# Web Application

- Timber inventory for supply areas in the Lake States
- USDA Forest Service Forest Inventory and Analysis (FIA) data
  - Timberland area
  - Inventory
  - Growth, removals, and mortality
- Highly customizable

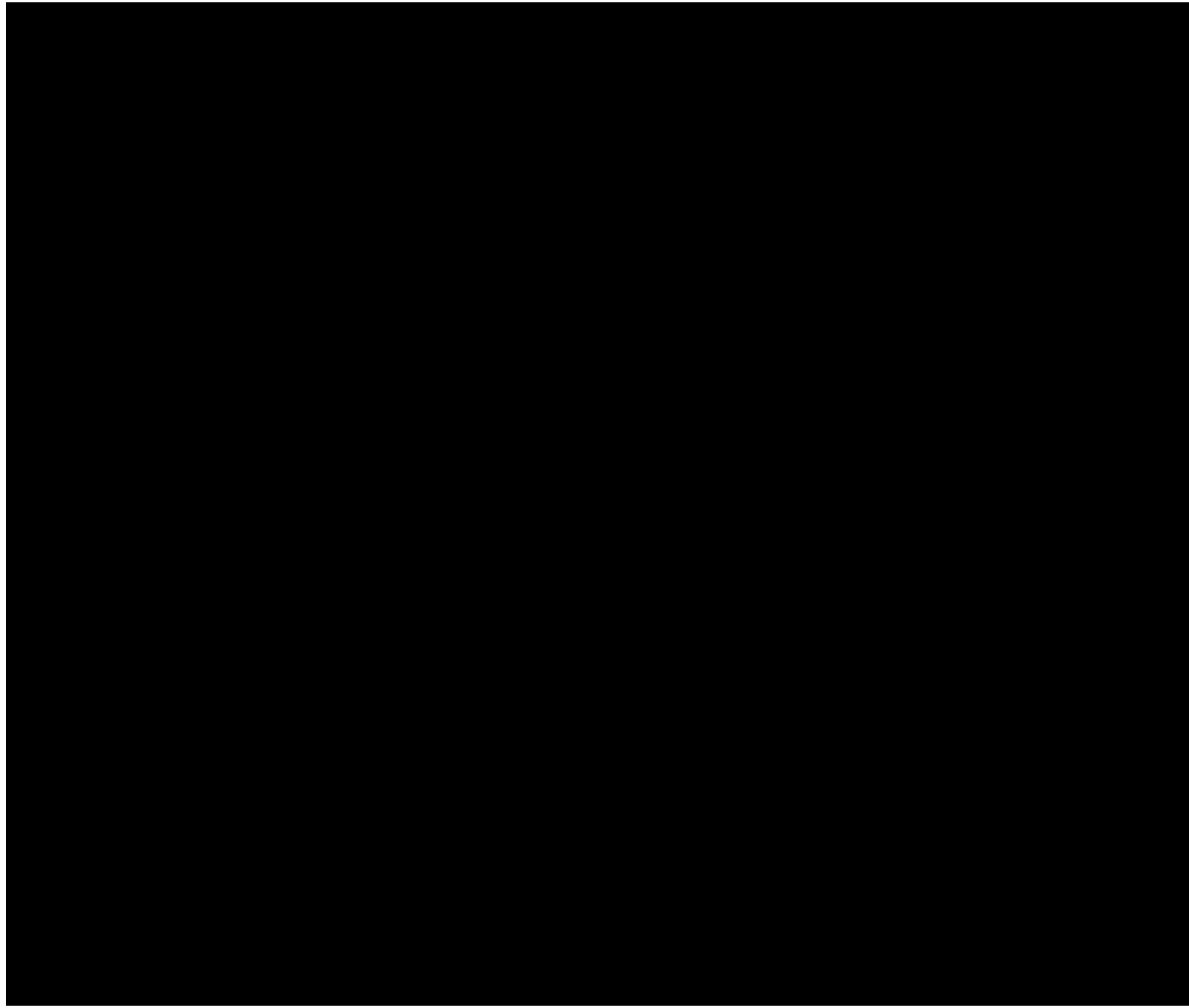


The screenshot shows the top navigation bar of the University of Minnesota website with the logo and the slogan "Driven to Discover". On the right, there is a search bar with the text "ENHANCED BY Google" and a magnifying glass icon. Below the navigation bar, the page title is "Interagency Information Cooperative (IIC)". A menu icon is visible on the left. The main content area has a breadcrumb trail: "IIC Study Areas and Projects > Forest Resource Analysis > Upper Great Lakes Timber Inventory". The heading "Upper Great Lakes Timber Inventory" is followed by a paragraph describing the application as a web-based tool for estimating timber resources in Minnesota, Wisconsin, and Michigan. It mentions that data is derived from U.S. Forest Service FIA data as of November 18, 2019, and provides a link to a staff paper for more details. A second paragraph states the tool is for land managers and stakeholders to quantify timber resources and make high-level decisions on forest planning. A third paragraph explains that estimates are determined for a specific hexagon location and provides a link to the FIA EVALIDator tool. At the bottom, the site administrator is listed as Chris Edgar with the email address cedgar@umn.edu.

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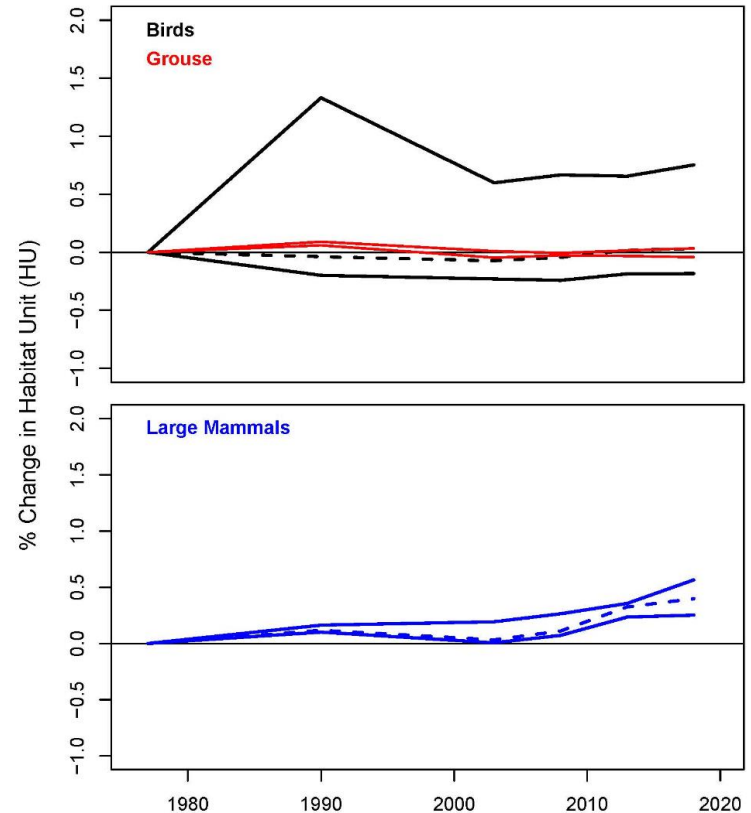
[Report Web Disability-Related Issue](#)





# Wildlife Habitat Modeling

- Wildlife Habitat Indicator for Native Genera and Species (WHINGS)
  - Principal investigator is Dr. John Zobel
- Objectives
  - Facilitate habitat assessment as part of formal or informal environmental review
  - Estimate current conditions and enable comparisons
  - Can be a component of harvest schedule models



# Summary of Recent Deliverables

- Since 2018, IIC supported projects have resulted in:
  - 4 peer-reviewed journal articles
  - 3 staff papers
  - 7 research notes
  - 1 Web application
  - 1 GIS data portal (Arrowhead)
  - 9 presentations/talks/webinars/posters at conferences



# Plans for 2021

- Funding level of \$100,000
  - Wildlife habitat modeling framework
  - Continued web application development (forest health)
  - Arrowhead Project data maintenance and support
- Funding level of \$197,000
  - All the above +
  - Design of a common forest inventory format



# Common Inventory Format

- Early vision of MFRC (ca. 2000)
- Recent request made of IIC was referred to individual public agencies
- With full funding we would propose a three-year effort to build out an accessible common inventory format
  - First year – design system
  - Second year – build architecture
  - Third year – populate with data





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