

# Agenda

Presented by  
Ron Bowen, Scott Milburn and Beth Markhart

## Overview of Restoration and Natural Habitat Areas

### The Presettlement Vegetation of Minnesota and Wisconsin

- Prairies
- Savannas
- Woodlands/forests
- Wetlands

### Overview of the Plant Communities of Minnesota

Gathering the data – The story behind Minnesota's County Biological Survey  
Plant community shifts over time

### Predominant Community Types and Key Species

Discuss key species by primary ecotone –  
· Prairies, savannas, woodlands, and wetlands  
Discuss key species and where they are located

### Native Plant Materials Origins and Production

Historical perspective  
Production techniques

## Applying the International Principles and Standards for Restoration to Human-Built Environments

### Project Examples Part #1

- Prairie example
- Savanna example

### Certified Restorationists and Restructuring Design Contracting

Certified Ecological Restoration Practitioner (CERP)  
Climate change influences

### The Future: Novel Ecosystems

Characterizing the ecological analogue for assembly

### Project Examples Part #2

- Woodlands example
- Wetlands example

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## Restoration of Natural Areas Eagan, MN - Tuesday, March 3, 2020

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## Learning Objectives

### You'll be able to:

**Describe** regional pre-settlement vegetation in Minnesota and Wisconsin, including prairies, savannas, woodlands and wetlands.

**Discuss** Minnesota's County Biological Survey and learn how the native plant community shifts over time.

**Identify** predominant plant communities and native plant material in prairies, savannas, woodlands and wetlands.

**Apply** international principles and standards for restoration of areas that are currently human-built environments.

**Discuss** the challenge of restoration in light of climate change.



# Restoration of Natural Areas

Eagan, MN - Tuesday, March 3, 2020



**Learn** about the presettlement vegetation of Minnesota and Wisconsin

**Discuss** key species in prairies, savannas, woodlands and wetlands

**Apply** international standards for restoring areas that are now human-built environments

**Discuss** the work of certified restorationists

**Consider** climate change influences

**Explore** examples of woodland, wetland, prairie and savanna restorations

## Continuing Education Credits

### Architects

7.0 PDHs (HSW)  
7.0 AIA LU|HSW

### Landscape Architects

7.0 PDHs (HSW)  
7.0 LA/CES HSW PDHs

### Professional Engineers

7.0 PDHs

### International Society of Arboriculture

7.0 Certified Arborist CEUs  
More CEUs listed inside

### Contractors

Non-Credit Continuing Ed.



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# Faculty

**Ron Bowen** *Founder of Prairie Restorations, Inc.*

Mr. Bowen is the founder and principal owner of Prairie Restorations, Inc., a company specializing in native plants and plant community restoration. PRI was founded in 1977 and is likely the oldest full service restoration company in America. Mr. Bowen grew up in West St. Paul, graduated from the University of Minnesota in Forestry and went on to study Philosophy at the University of Wisconsin. He started his life with native plants while working as a gardener at the Bruce Dayton property in Wayzata.

Mr. Bowen considers all of Minnesota to be home. His primary office is in Princeton, but he works on projects far and wide throughout the state. He believes that we are all engaged in a battle to save ecological diversity, and along with other PRI employees and literally thousands of clients and others, he gets up every day to do just that. Mr. Bowen lives in central Minnesota. Prairie Restorations, Inc., has restored thousands of projects during the past four decades. This has been a team effort involving hundreds of employees and thousands of clients. PRI's effort is always focused on species that are authentically native to each site and attempts to restore diversity in the plant community.

**Scott Milburn** *President & Senior Botanist/Ecologist at Midwest Natural Resources*

Mr. Milburn is the owner and principal botanist at Midwest Natural Resources, Inc. (MNR). He holds a B.S. degree in Botany (Iowa State University) and an M.S. degree in Biological Sciences (University of Mississippi) with over 19 years of professional experience in the natural resource consulting field. His responsibilities include managing the day-to-day operations at MNR in addition to fieldwork. Mr. Milburn's natural resource expertise includes rare vascular plant species, vegetation monitoring methodologies/implementation, wetlands and wetland biogeochemistry, and native plant community documentation/mapping. His particular foci of late include calcareous fens and calciphiles, peatland systems, prairie communities, and specialized

rare species work. Mr. Milburn was also behind the development of the floristic quality assessment for Minnesota Wetlands project. He is respected by regulatory agencies for his knowledge and proven results.

Mr. Milburn is both a professional wetland scientist (PWS) and a Minnesota certified wetland delineator (CWD), and he is the president of the Minnesota Native Plant Society (2006-2014, 2016-2019). He additionally volunteers his time in the field and has been privileged to take part in rare plant surveys in the Boundary Waters and surveys via helicopter in the Red Lake peatlands of Northern Minnesota.

**Beth Markhart** *Senior Restoration Ecologist at Western Ecosystems Technology, Inc.*

Ms. Markhart's career spans 40 years of work in terrestrial and freshwater systems principally in the Upper Midwest. She has brought her expertise in botany and plant ecology to interdisciplinary design teams for green infrastructure, wetland mitigation, and other intersections of the natural and built environments. As the science of restoration has advanced in recent years, Ms. Markhart has been involved in training landscape field crews on best practices in ecological restoration. She holds a B.A. degree in Ecology and Evolutionary Biology, an M.S. degree in Plant Physiology, and has maintained her professional wetland scientist certification since 1995.

# Seminar Information

## Holiday Inn Airport SE-Mall Area

2700 Pilot Knob Road  
Eagan, MN 55121  
(651) 454-3434

## Tuition

**\$289** for individual registration  
**\$269** for three or more registrants from the same company at the same time.

**Included with your registration:** Complimentary continental breakfast and printed seminar manual.

## How to Register

- Visit us online at [www.halfmoonseminars.org](http://www.halfmoonseminars.org)
- Mail-in or fax the attached form to 715-835-6066
- Call customer service at 715-835-5900

**Cancellations:** Cancel at least 48 hours before the start of the seminar, and receive a full tuition refund, minus a \$39 service charge for each registrant. Cancellations within 48 hours will receive a credit toward another seminar or the self-study package. You may also send another person to take your place.

Registration  
8:00 - 8:30 am  
Morning Session  
8:30 am - 12:00 pm  
Lunch (On your own)  
12:00 - 1:00 pm  
Afternoon Session  
1:00 - 5:00 pm

## Continuing Education Credit Information

This seminar is open to the public and offers 7.0 professional development hours (HSW) to architects, landscape architects, and engineers in most states, including Minnesota. Educators and courses are not subject to preapproval in Minnesota.

This seminar is approved by the American Institute of Architects Continuing Education System for 7.0 LU|HSW (Sponsor No. J885) and the Landscape Architecture Continuing Education System for 7.0 HSW PDHs. Visit [www.halfmoonseminars.org](http://www.halfmoonseminars.org) for complete AIA/CES information under this course listing. Only full attendance is reportable to the AIA/CES and LA/CES.

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The International Society of Arboriculture has approved this event for the following CEUs: 7.0 Certified Arborist, Utility Specialist, Municipal Specialist, Climber Specialist, Aerial Lift; 3.0 BCMA Science; 2.0 BCMA Practice, BCMA Management.

This seminar is also a non-credit continuing education opportunity to construction contractors. It has not been approved by any state contractor licensing board for continuing education credit.

Attendance will be monitored, and attendance certificates will be available after the seminar for most individuals who complete the entire event. Attendance certificates not available at the seminar will be mailed to participants within fifteen business days.

**Can't Attend? Order the Manual and Audio from the Live Seminar as a Self-Study Package!**  
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# Registration

## Restoration of Natural Areas

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<b>Complete the entire form.</b> Attach duplicates if necessary.		Email address is required for credit card receipt, program changes, and notification of upcoming seminars and products. Your email will not be sold or transferred.
		( )  I need special accommodations. Please contact me.

## Tuition

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( ) **I am not attending.** Please send me the self-study package:  
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 CD/Manual Package for **\$289.00**.       USB/Manual Package **\$289.00**.  
(S&H included. Please allow five weeks from seminar date for delivery)

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