# **Wisconsin Forestry Careers Coalition** *Moving Forestry Forward*



# **Progress Report**

# **Issued July 2023**

for the period covering January-June 2023



WISCONSIN FORESTRY CAREERS

*Front cover:* WFC student staff, Menominee Tribal Enterprises staff, and Ponsse North America staff serve as models at a WFCC marketing photo shoot in June at Treehaven.

# **Grant Summary**

The Wisconsin Forestry Center (WFC) at UW-Stevens Point (UWSP) coordinates the Wisconsin Forestry Careers Coalition to address the urgent need for skilled workers in the forestry industry. With support from an \$8 million state Workforce Innovation Grant from the Wisconsin Economic Development Corp. (WEDC) and in collaboration with many partners, the WFC is developing a forestry education and career pathway program. The program has three focus areas: educating high schoolers through applied curriculum, training entry-level employees through immersion programs, and raising public awareness of the forest industry and its careers.

# **Coalition Goals**

The Wisconsin Forestry Careers Coalition will:

- Expand high school forestry education with a certified skill development curriculum for workforce entry.
- Provide affordable, short-duration, post-high school immersive training programs that lead to stable, well-paying jobs.
- Build career development pathways via credit-eligible certificate programs.
- Develop and implement public outreach that increases awareness of the forestry sector and its careers.

# Acknowledgments

Thank you to all of the partners who are making this Wisconsin forestry workforce recruitment and development program a reality!

## **Coalition Partners**

- UW-Stevens Point College of Natural Resources
- Northcentral Technical College
- Nicolet College
- University of Wisconsin-Madison, Division of Extension
- LEAF Wisconsin's K-12 Forestry Education Program
- Menominee Indian High School
- Tomahawk High School
- Antigo High School
- Merrill High School
- Rhinelander High School
- Cooperative Educational Service Agency (CESA) 8 and 9
- Milwaukee Tool
- Ponsse North America
- Case Construction Tomahawk Customer Center
- Cleereman Industries
- Tigerton Lumber Co.
- Kretz Lumber Co., Inc.
- Menominee Tribal Enterprises
- Wisconsin Department of Natural Resources-Division of Forestry
- · Wisconsin Board of Commissioners of Public Lands
- Great Lakes Timber Professionals Association
- Wisconsin Chapter–Society of American Foresters
- Grow North
- New North

# **Overall Program Accomplishments**

## **Marketing and Outreach**

Gov. Tony Evers, state Rep. Katrina Shankland, and Stevens Point Mayor Mike Wiza visited the Wisconsin Forestry Center (WFC) in March to hear an update on the Wisconsin Forestry Careers Coalition (WFCC). They met with high school and university students who had recently completed the Science of Tree Felling course to hear about their forestry career plans. The event also featured a display of the portable sawmill and opportunities to try the Ponsse timber harvester simulator.

The **grant program name and slogan** were finalized. The grant

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**COALITION** 

initiative is called the Wisconsin Forestry Careers Coalition (shortened as WFCC) and the

slogan is *Moving Forestry Forward*. A program logo also was finalized.

The WFC, Ponsse North America, Case Construction, Milwaukee Tool, Nicolet College, Menominee Tribal Enterprises, and the Board of Commissioners of Public Lands participated in a **marketing photo shoot** to create a library of images that will be used to promote the WFCC. A similar photo shoot is being planned for the Mill Technology program.

The WFC launched a free **forestry jobs board** on its website. The jobs board features full-time, part-time, and seasonal positions in all forestry sectors. It serves as



Gov. Tony Evers visited the WFC in March to learn about the WFCC. He tested out a Ponsse simulator, with instruction from Keith Turnquist, WFC workforce development program manager.

a resource to the forest industry, students, and future participants in the WFCC.

In May the WFCC registered as an Eligible Training Program List (ETPL) user through the Job Center of Wisconsin to promote the immersion training programs. The ETPL facilitates potential access to funding for training participants through the Workforce Innovation Opportunity Act (WIOA).

## **Program Sustainability**

The WFC has been working with the Forest Resources Association on proposed legislation for inclusion in the **2023 Farm Bill** to support workforce recruitment and development in the forest industry. The draft legislation outlines a grant program based on the WFCC, and if passed, the funding could support future WFCC financial sustainability. UWSP Chancellor Thomas Gibson, UWSP College of Natural Resource Dean Brian Sloss, and WFC Director Les Werner are planning to schedule meetings in August with U.S. Rep. Derrick Van Orden and U.S. Sens. Tammy Baldwin and Ron Johnson to provide support for the proposed legislation.

The Wisconsin Council on Forestry proposed \$300,000 in annual funding to support the WFCC beyond the grant period. The recommendation did not pass the Joint Finance Committee. Efforts to secure this funding will ramp up for the next biennial budget cycle.

The WFC met with UWSP Risk Management in May to discuss **insurance** and **matriculation**. The meeting initiated the process of attaching UWSP credits to the high school and immersion programs.

WFC Director Les Werner **presented about the WFCC** at

# **Overall Program Accomplishments**

a Forest Resources Association webinar in March and at the annual meetings of the National Council of Forestry Association Executives and the Midwest Foresters (state DNR foresters) in July. Highlights included the need for sustainable funding and the creation of a regional training hub in Wisconsin.

The NTC Foundation collaborated with the NTC Wood Science Advisory Committee to host the ninth annual **Golf Fore Scholarships** in June at Bass Lake Golf



WFC student employee Brittany Torzala gets hands-on chainsaw training from High School Program Manager Jared Schroeder during the WFCC marketing photo shoot in June at Treehaven.

Course, Antigo. About 131 golfers participated. The event is attended by wood industry employers and raises funds for Wood Science program students and program promotion. NTC President Dr. Jeannie Worden shared an update on the UWSP-NTC collaboration to build the training sawmill in Antigo.

### **Forestry Advancement Center**

Architectural designs for the Forestry Advancement Center at Treehaven near Tomahawk are in development by a Minneapolis design firm. The floor plan and architectural renderings have been developed. Construction is targeted to begin in September or October, with completion in July 2024.

## **Capital Equipment**

Two **leased trucks** were delivered to UWSP in February. The trucks are used to travel to events and for hauling portable sawmills and simulators.

**Equipment trailers** to transport the timber harvester simulators, skid steer, tractor and UTVs were delivered in February. The trailers have enabled showcasing the WFCC at career fairs and conferences.

## Staff Hired

Keith Turnquist started in January as the WFC **workforce development program manager** to oversee the immersion training programs. Keith earned a B.S. in forestry from UWSP and worked as an arborist before returning to UWSP to earn an M.S. in natural resources in 2012. Following graduation, Keith was a conservation genetics researcher and a facility manager.

**Outreach specialist** Susan Barrett started at the WFC in January and is assisting with recruitment for the immersion programs and high school program. Susan earned a B.S. in conservation biology at UW-Madison and a M.S. in experiential education from Minnesota State

University-Mankato. She comes to the WFC from the UWSP Continuing Education department where she was the program manager for the conference unit.



Keith Turnquist



Susan Barrett

# **High School Program Accomplishments**

## **Curriculum Development**

- » Teachers and administrators from two pilot schools attended a **focus group** in January to review the first two modules of the high school curriculum (Module 1: Tree ID and Biology and Module 2: Forest Health).
- » High school program manager Jared Schroeder has continued to revise Modules 1 and 2 and has begun developing



Modules 3 (Forest Products) and 4 (Silviculture). The full curriculum is on track for release in 2024. Curriculum materials will be shared via the Google platform,

Jared Schroeder

which is commonly used by teachers, and will facilitate ongoing sharing of ideas for lessons.

- » Tomahawk High School tested activities from Module 1 and provided helpful feedback.
- The Center for Inclusive Teaching and Learning at UWSP reviewed Modules
   1 and 2 this spring and approved the instructional design.
- » The WFC is collaborating with a UWSP student videography group to produce a series of instructional videos that will prepare students and teachers for using forestry equipment such as the portable sawmills.
- » In May the WFC hired a student employee, Brittany



WFC Director Les Werner demonstrated use of a portable sawmill at the Wisconsin Technology Education Association conference in March in Wisconsin Dells.

Torzala, to assist with curriculum development. She is majoring in environmental science and management at UWSP.

- » Construction of portable dehumidifying kilns for use in the high school curriculum and public outreach events is underway, with completion expected in August.
- » Jared Schroeder has been accepted into the UWSP Doctor of Education (Ed.D.) in Educational Sustainability program. His dissertation will be related to the applied forestry curriculum development and implementation.

### **Recruitment and Outreach**

 » WFC staff exhibited and presented at the Wisconsin Society of Science Teachers (WSST) and Wisconsin Technical Education Association (WTEA)

# High School Applied Curriculum Modules

- Tree Identification
  and Biology
- Forest Health
- Forest Products
- Silviculture
- Skills Camp

conferences in March and the **Wisconsin Association of Agricultural Educators** conference in June. A total of 170 teachers expressed interest in the high school curriculum by joining a mailing list. Joe Salzer of Ponsse also attended WTEA to assist with the debut of the WFC simulator.

» In March, the WFC coordinated the Science of Tree Felling course. This class covers directional felling, teaching students how to safely and efficiently hand-

# **High School Program Accomplishments**

fell trees. Twenty-four UWSP students completed the course, including five high-school students who attended thanks to support from the Great Lakes Timber Professionals Association, Wisconsin Department of Natural Resources-Division of Forestry, Husqvarna, Milwaukee Tool, and Aspen Fuel. The tree felling course model will be incorporated into the high school Skills Camp.

- » The WFCC exhibited at high school career fairs this spring in Merrill, Oconto Falls, and Necedah, reaching 750 teachers and students with information about forestry careers. Staff also demonstrated the portable sawmill and Ponsse simulators.
- » Jared Schroeder taught hands-on tree biology experiments for students in grades 7-8 at the STEAM Point Day for Boys and Girls in February at UWSP. The event focused on topics and careers in science, technology, engineering, arts, and math.
- » Northcentral Technical College (NTC) hosted the Wood Olympics in April, attended by 42 high school students. The event increases awareness of forest industry and wood manufacturing careers.
- » NTC hosted the Central Wisconsin Science
  & Engineering Festival featuring Michigan



High School Program Manager Jared Schroeder led experiments to demonstrate how trees move water during a STEAM Point Day for Boys in February at UWSP.

Technological University's Mind Trekkers in April. About 3,300 students and 700 community members attended. Wood science instructor Logan Wells hosted a table to share information about forestry and offered an interactive activity using a wooden puzzle that showcases various wood species (puzzles were made by NTC's Wood Science program students).

» Youth Conservation Congress delegates learned about forestry careers and got experience with the harvester simulator as part of a tour of the UWSP College of Natural Resources in March.



Science of Tree Felling course students and instructors, many of whom work in the forest industry and volunteer to help teach the course, gathered at the end of the weekend class in March at Treehaven near Tomahawk.

## **Building Design and Equipment**

- » NTC is working with Cleereman Industries to finalize the equipment layout around the chipper room and byproduct handling. Once finalized, the building design will be completed with the architect. Plans are to release the **bid** in late July and award the project to a construction contractor in August, with construction beginning in September.
- In May, NTC submitted a \$510,430 grant proposal to the U.S. Economic Development Administration focused on support for sawmill equipment, with a required 1:1 cash match. Application pending, as grant awards will be made in December.
- » The NTC Foundation was awarded an Emberg Charitable Trust grant to purchase a sawmill training simulator; \$40,000 was requested to cover half of the \$80,000 cost and the funder awarded the full \$80,000. The simulator should be delivered by early July. Faculty training on the new simulator will occur in July.
- » The NTC Property Foundation is exploring construction of student housing at NTC's

Antigo campus to support program students and continuing education learners, as well as WFCC mill technology immersion training participants.

- » The NTC Foundation submitted a \$42,000 grant proposal to Emberg Charitable Trust to purchase a dehumidification dry kiln. Application pending.
- » The NTC Foundation submitted a \$28,050 grant proposal to Emberg Charitable Trust to purchase personal protective equipment for students and visitors to the sawmill (safety goggles, face shields, hard hats, communication and safety headsets, gloves, safety jackets and vests). Application pending.

## **Staffing and Administrative**

» Jonathan Robbins has been hired as a full-time wood science instructor at NTC. Instructor Logan Wells will shift his teaching responsibilities so he can take on the role of project manager fulltime and develop curriculum for the Mill Technology program.



Logan Wells



Renderings for the sawmill facility addition at the NTC Wood Technology Center for Excellence in Antigo.

# **Mill Technology Immersion Program Accomplishments**

- The WFCC subaward agreement between NTC and UWSP was signed.
- » NTC submitted a \$200,000 grant proposal to the U.S. Forest Service to offset employer costs for sending employees to wood science continuing education classes, which usually last 4-8 weeks. Application pending.
- » The NTC Foundation Executive Committee identified the need for forestry representation

on the Board of Directors. In June, the NTC Foundation Board unanimously approved the nomination of Rainer Shooter for a three-year term as a Foundation board of director. Shooter is chief operating officer at Menominee Tribal Enterprises in Keshena.



Rainer Shooter

# **Forest Operations Immersion Program Accomplishments**

#### **Curriculum Development**

» Curriculum development is underway for the three elective courses to be added to the UWSP timetable for the Forest Operations certificate. These courses are specifically designed for the Forest Operations program and are integral to awarding a UWSP certificate to participants.

**Course 1: Introduction to Forestry**, a 40-hour immersive course, encompasses the basics of forestry, including tree identification and biology, compass/map reading and public land survey, forest management and silviculture, forest and tree measurements, and forest harvesting systems.

**Course 2: Forestry Equipment Maintenance** will be a 40-hour overview of hydraulics, DC electrical, and metal welding/ cutting. Dan Linsmeyer at Nicolet College will teach this course.

**Course 3: Forestry Equipment Operations** will be a fourweek, 160-hour immersive training in:



Dan Linsmeyer of Nicolet College demonstrated forestry equipment maintenance procedures during the marketing photo shoot in June.

- » Module 1: Hand felling with chainsaws.
- » Module 2: Mechanical felling with Ponsse simulators and harvesters.
- » Module 3: Log loading and transport with Ponsse simulators, Ponsse forwarder(s), cable skidding, and tractor/log bunk operation.
- » Module 4: Forest road construction and maintenance with dozer

operation, including BMPs for water quality.

» Optional experience for obtaining a commercial learners permit (CLP) needed prior to obtaining a commercial driver's license (CDL). The Entry Level Drivers Training (ELDT) theory will be offered as time allows. The online FISTA transportation training is being explored see how it could be incorporated.

# **Forest Operations Immersion Program Accomplishments**

- » A spring 2024 first offering of the immersion program is scheduled at Treehaven, beginning March 2024.
- » Case Construction has agreed to provide up to 5 trainers for about a week in April 2024 during the first offering of the immersion program.
- » Student employee Cole Hager was hired in May to work with Keith Turnquist on program logistics, equipment inventory, and curriculum development. He is majoring in forest recreation at UWSP.

## Equipment

» Two Ponsse timber harvester and forwarder simulators were delivered to UWSP in February. Joe Salzer and Matt Godard of Ponsse North America met with WFC staff to conduct training sessions on their use and

staff to conduct training sessions on their use and application in the classroom.

» Two Polaris UTVs were secured for transportation to and from work sites at Treehaven.



Matt Godard of Ponsse North America taught WFC Workforce Development Program Manager Keith Turnquist how to use a timber harvester simulator during a training in February at UWSP.

- » A Case skid steer was purchased and arrived in April along with multiple attachments for forest operations including a log grapple, cable winch for skidding, and high-flow Fecon mulcher.
- » A **Case tractor** with **Anderson Group log loader** were secured for management of logs harvested from the chainsaw hand-felling module.

# Next Steps: July-December 2023

Upcoming priorities include:

## **Overall Program Goals**

- » The annual WFCC partners meeting will be Sept. 20 at Treehaven in Tomahawk. Save the date!
- » The WFC will be meet with the Forestry Advancement Center design firm in July to discuss the building finishes. Construction is targeted to begin in September/October, with completion in July 2024.

## **High School Program**

- » Recruitment and outreach will continue through attendance at career exploration opportunities for high school students and attending professional educator organization conferences.
- » Modules 3 (Forest Products) and 4 (Silviculture) will be fully outlined and development of the activities will begin. Once the outlines are complete, partners will

be asked to review the entire curriculum to evaluate it for desired skill development.

» Modules 1 and 2 will be developed into an online format (Google Slides) for easier teacher access. This will allow teachers to begin piloting lessons from these modules during the 2023-24 school year. Feedback from piloting will be used to enhance the lessons to make them more user-friendly and effective.

# Next Steps: July-December 2023

- » Exploration of articulation agreements with Nicolet College and NTC will begin once the curriculum outline is complete.
- » Teacher trainings will be developed this fall/ winter and offered in spring 2024. Teachers will be surveyed about the format and content they would like to see for training on equipment and information used in the curriculum. Once survey results are available, development and scheduling of teacher training session



WFCC partners gathered for the marketing photo shoot in June at Treehaven.

teacher-training sessions will begin.

» The Skills Camp curriculum will be outlined in partnership with the Central Wisconsin Environmental Station, a UWSP field station near Amherst Junction. WFC staff will explore the potential of offering the camp for college credit.

## **Mill Technology Training Program**

- » Plans are to release the sawmill building bid in July/August and award the project to a construction contractor in late August. Construction will tentatively begin in September and will be complete by April/May 2024.
- » Curriculum development will begin in the fall. NTC will be hiring an additional wood science instructor in July, freeing up staff time to begin outlining curriculum for the mill technology program.
- » Articulation agreements between UWSP and NTC will be developed.
- » **State and professional certifications** to include in the program will be explored.

## **Forest Operations Training Program**

- » Curriculum development—including course outlines, lesson plans, and assessments—will continue this fall and winter.
- » New-course applications for all three courses will be submitted to UWSP in September, with the review process continuing through the winter.
- **» Trainer recruitment** and **curriculum review** will begin in fall.
- » Recruitment and marketing for the Forest Operations certificate will begin in fall. Ten participants will be selected for the initial offering beginning in March 2024.
- **» Train the Trainers curriculum development** will begin in fall 2023.
- » Articulation agreements between UWSP and Nicolet College will be developed.
- » **Fall 2024 dates** for the immersion training program will be scheduled at Treehaven.
- » The WFC plans to purchase a feller-buncher head to be used with the skid steer for the forest operations immersion program



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