

COMMUNITY FORESTRY Connections



CFRC PASSES THE TEST: FOREST STEWARDSHIP COUNCIL CERTIFICATE RENEWED

By Katie Rojas-Jahn

What's the Big Deal about Forest Certification?

Forest certification recognizes forest lands which are managed for the long-term to protect and provide the social, aesthetic, and economic values of forests. Forest Stewardship Council (FSC) certification ensures that forests are well-managed using internationally-recognized criteria developed by independent third parties and that they will be productive and beautiful for future generations to enjoy.

But FSC forest certification also presents a number of challenges for the owners of small, private forests. At the top of the list is the high cost of certification – which often deters landowners from participating.

CFRC developed a model of FSC certification called the "Group Umbrella Certificate" to address the high costs of certification. CFRC's Group Umbrella Certificate allows private woodland owners in a four state region to obtain FSC certification for a low-cost annual fee (additional costs are sometimes necessary). Currently, the certified pool consists of 32 properties, totaling 2400 acres.



Five-Year Anniversary with FSC

CFRC has offered group certification to private woodland owners for the past five years. Early in 2008 it was time to hit the books and the woods for a review and renewal of our certificate issued by SmartWood.

In January, Don Arnosti, Program Director, and Katie Rojas-Jahn, Program Assistant, took on the cold winter weather (and snow!)

and traveled to Ashland, Wisconsin, and Cook County, Minnesota to meet with an independent SmartWood auditor who reviewed our written policies and real world practices by visiting some of our certified member properties.

In order to ensure that FSC certification standards are met, CFRC undergoes annual audits during each year of a five year certificate. In the fifth year, a thorough recertification audit is undertaken.

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LINKING HABITAT RESTORATION TO BIOENERGY

By Barb Spears, MN DNR Woody Biomass Project Coordinator



Central Minnesota's native prairie, savanna and woodland habitats are being taken over by trees and shrubs that don't belong there, altering these habitats in such a way as to make them unsuitable for some native species.

For example, oak savanna is one of the most critically endangered ecosystems in the world and was once common in parts of east-central and southern Minnesota. Over 99 percent of these habitats have disappeared or become dominated by invasive native and non-native species. Sixty of the animal species designated in Minnesota's Comprehensive Wildlife Conservation Strategy as "species in greatest conservation need" depend upon these habitats.

IATP's staff saw the opportunity to link the need for ecological restoration with the growing interest in renewable energy, and suggested a test program to the Minnesota legislature. In July 2007, the Minnesota Department of Natural Resources (DNR) Ecological

Resources Division received \$500,000 from the state legislature to follow through on IATP's suggestion. "Linking Habitat Restoration to Bioenergy" is an innovative new project that is helping to implement habitat restoration plans on public and private lands within 75 miles of St. Paul while providing the by-product of the restoration activities to local biomass-fueled facilities. The objective is to remove any undesirable woody plants, native or exotic, tree or shrub, and make this material available for use as fuel for energy.

Implementation of this project began in earnest in January by identifying four sites to serve as Phase 1 pilot projects. Two of these projects proceeded this winter: Pilot Knob Hill, owned by the City of Mendota Heights; and Hastings Sand Coulee Scientific and Natural Area (SNA), owned by the DNR. The two other sites are in progress: City of St. Paul Indian Mounds Park (buckthorn in oak savanna) and Zumbro Falls SNA (pine plantations in oak savanna/oak woodland).

Pilot Knob Hill is a unique site of significant cultural, historic and natural importance with many groups, including the DNR Metro Greenways program, involved in purchasing the land and working to restore its varied features.

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BIOMASS HARVESTING FOR LAND MANAGEMENT

By Don Arnosti
and Katie Rojas-Jahn

Interest in sustainable biomass as a source of renewable energy has been growing at the local and national levels. In 2005, IATP received a Healthy Forest Restoration Biomass Utilization Grant (BUG) from the United States Forest Service to conduct test biomass harvests in the Superior National Forest in northeastern Minnesota. The study was designed to gain insight into the economic and operational issues faced by loggers, and the environmental concerns of land managers, scientists and policy makers in the process of biomass harvests. During the course of the study, research and test harvests revealed insight into administra-



Key Recommendations

Administrative Issues

Planning & Strategy	Biomass management activities must be considered and incorporated at early phases of the planning process in order to successfully utilize biomass harvest as a management tool.
Site Prescription	Whenever possible, prescriptions should be flexible and allow operator input on harvest techniques and reserve areas.
	Combining roundwood and biomass harvest is one strategy to improve on-site maneuverability and harvest efficiency.

tive systems and constraints as well. Partners in the project included the Laurentian Energy Authority (LEA), Forest Management Systems (FMS), a logger's cooperative, and the Superior National Forest (SNF). Biological and physical research and analysis was led by a team from the University of Wisconsin – Stevens Point, while economic analysis was handled by researchers from the University of Minnesota.

There is still much work to be done in developing biomass harvest techniques and markets that are conducive to using biomass harvesting as a tool of well-managed forests. This study puts forth a number of recommendations to guide the development of these markets in a way that promotes local, sustainable and responsible uses of woody biomass for energy.

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Key Recommendations

Operations

Equipment	Select equipment suitable to the terrain and forest conditions, carefully considering visibility from the cab, maneuverability, and flexibility of use such as a dual harvester/forwarder.
Techniques	Learning the techniques necessary to search for, harvest and recover smaller biomass material is a new practice for loggers in Minnesota. Operator proficiency is expected to improve over time, leading to increased efficiencies and reductions in the cost of operations.
Season of Operation	Summer forwarding improves visibility of smaller biomass piles resulting in more efficient and complete recovery of harvested biomass.
	Forwarding of materials should take place right after material is cut to improve speed and total recovery of material forwarding: snow or vegetative regrowth can obscure smaller biomass piles.

IT'S FOR THE BIRDS: CFRC SUPPORTS PROJECT TO DEMONSTRATE BIRD-FRIENDLY FOREST PRACTICES

*By Gigi La Budde (Introduction & IA Team Update)
& Claudia Nanninga (WI Team Update)*

In northeast Iowa, the songs of the Cerulean Warbler, Indigo Bunting, and Wood Thrush will be more prominent, thanks to funding from the National Fish and Wildlife Foundation and support from the Institute for Agriculture and Trade Policy's Community Forestry Resource Center (CFRC). Neotropical migratory songbirds such as these spend their summer months in the forests of the Driftless Area, and require healthy forests to feed, shelter, and reproduce.

Better management to protect and enhance forest habitat within the Driftless Area of northeastern Iowa, southwestern Wisconsin, and southeastern Minnesota is critical because of its unique position as a major branching-off point on the Mississippi River flyway. The rugged physical characteristics of this unglaciated region and its diverse forest ecosystems provide important habitat for nesting and migrating birds. Most of the region's forests are in private ownership. Landowners are often eager to learn about conservation and habitat requirements for area-sensitive birds, and about opportunities for long-term economic gain through sustainable forest management.

Iowa Team Update

A team composed of natural resource professionals, forest landowners, and volunteers from organizations such as Prairie's Edge Sustainable Woods Coop (PESWC), are providing private forest landowners with a local model for developing "bird-friendly" forestry plans and practices. The team has selected a "demonstration property" in Allamakee County owned by Jack Knight to serve as an ongoing example of the benefits of incorporating bird habitat priorities into forest management plans and activities.

Development of a Forest Stewardship Council (FSC) forest management plan has already begun. Saturday, May 10 marked the first Field Day on the property. Participants had the opportunity to actively learn from local and regional natural resource professionals about: the landscape and the site, bird identification and inventory, forest ecology, and prairie/savanna restoration. District Forester Bruce Blair (Iowa DNR) and FSC certified forester Peter Bundy of Minnesota led a forest tour.



The field day was open to the public, with the hope that those who attend will consider how they can coordinate their land management activities to reduce fragmentation while improving interior forest conditions for birds.

For more information on this project and future field days, please contact: Gigi La Budde at: bbf.gigi@earthlink.net, or Katie Rojas-Jahn (CFRC office) at krojas-jahn@iatp.org.

Wisconsin Team Update

The CFRC is also concentrating its efforts on protecting migratory and nesting bird species in Northwestern Wisconsin. The Kinnickinnic River Region is a priority watershed area that serves as a migratory channel for neo-tropical songbirds during the warmer seasons. The landscape offers not only breathtaking beauty, but also a variety of diverse habitats for wildlife. Among the key bird species found here are the Blue-winged Warbler, the Cerulean Warbler and the Bell's Vireo. Unfortunately, fragmentation, invasive species and loss of biological and structural diversity have diminished the quality of woodlands in the region.

Like in most of the Driftless Area, the majority of forests around the Kinnickinnic River are privately owned by landowners who often don't have the resources or the time to manage them effectively.

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WHAT SMELLS DEAD, KEEPS ITSELF WARM, AND IS A SURE SIGN OF SPRING?

By Gigi La Budde

Spring has arrived! Birds are often the first to remind us of the changing seasons. Even as pockets of snow persist, a Cardinal proclaims his availability from atop the tallest tree, Sandhill Cranes reappear in open fields, and we hear the welcome trill of a Red-winged Blackbird: all serve as examples of phenology: the study of periodic biological phenomena such as flowering, breeding, and migration.

As the days grow longer and the sun stronger, I observe the myriad changes with a sense of personal e..x..p..a...n...s...i...o...n. I feel my mind and spirit stretching. Who would not be moved knowing that that the Horned Lark, pausing in a nearby field, in a few days will continue its migration to the arctic tundra? I delight in spotting a Mourning Cloak—one of the few butterflies that over-winter as hardy adults—sipping energy-rich sap from a tree trunk drilled by woodpeckers during the winter.

A sure sign of Spring is finding Skunk Cabbage (*Symplocarpus foetidus*) in a low woods swamp or along the border of a stream. This wetland plant is distinguished by its mottled purple spathe that envelops the fleshy flower cluster and by the rank odor emitted when its large broad leaves are bruised.

Skunk Cabbage is the earliest flowering plant in the Midwest. As the flower buds enlarge, they increase in temperature, often melting the snow around them. When the surrounding ground and air warm to just above freezing, the respiration of the spadix interior maintains a constant temperature of 72 degrees F., thus creating a near-tropical microclimate! Pollinators include a variety of small flies—early season scavengers attracted by the plant's liver-colored streaks and fetid odor. This is an example of "corpse mimicry," which evolved as an attractant for these pollinators.

This same species appears in Japan and parts of Eastern Asia. Paleo-botanists believe that the plant migrated to North America via the Pleistocene land bridge between Siberia and Alaska—making both humans and Skunk Cabbage relative newcomers to our continent. But Skunk Cabbage rhizomes have a life span longer than humans. Some have apparently remained viable for centuries!


My personal list of phenological signs isn't complete without mention of Adam and Eve (*Aplectrum hyemale*), a member of the orchid family. It is also called Putty Root—for the glutinous matter within the corms that was used by early settlers as a glue. When the snow melts from the south slopes of the woods, it's time to search for its distinctive, pleated leaf.



Photo Credit: USDA

Unlike most woodland wildflowers, the single leaf of each Adam and Eve plant actually becomes increasingly fresh and green as winter progresses! Here's how it works: A single leaf pushes up in autumn, growing over the winter to a length of 4 to 7 inches, and unfolding into a broad oval. By late spring the leaf is almost spent; it withers and disappears, but the corm that it has been nourishing sends up a stalk in early summer with tiny, yellow, orchid-like flowers. The corm that gives rise to the flower

stalk remains attached to the corm from the previous year, giving the plant its other common name: Adam and Eve. I feel especially fortunate to come upon this plant in my woodland wanderings, as it is now critically imperiled in much of the Northeastern United States.

Whether it's a muskrat foraging for his first spring salad, the "Chur-r-r-r!" of a Red-bellied Woodpecker, or the chorus of Spring Peepers in the ditch, witnessing spring's events elicits an "awakening" in all of us. Noting the variations in nature's annual displays will provide you with great conversation starters, and advance your career as a budding phenologist! 

CFRC PASSES THE TEST (CONTINUED FROM PAGE 1)



The recertification audit entails a comprehensive review of CFRC's written policies to ensure compliance with all of the Principles and Criteria that govern FSC certification, and site visits to a number of member properties to ensure that CFRC's policies are put into practice in the field.

Though we might have chosen milder weather for our visits to forests in northern Wisconsin and Minnesota, we couldn't have asked for a better reception from our members! We were hosted by Charly Ray and Thomas Wyse of the Living Forest Cooperative

in Ashland, Wisconsin, and Mark Adams and Nick Wharton of the Cook County Sustainable Forestry Cooperative in Cook County, Minnesota. Both groups are regional partners whose members have sought FSC certification through the CFRC group umbrella.

The site visits provided an opportunity for the auditor to meet with some of our certified landowners and observe how the principles of well-managed forests are put into practice on a small scale to meet the needs of individuals, families, and communities. One particularly innovative method of generating income for landowners (and cooperatives) undertaken by the members of the Cook County Sustainable Forestry Cooperative is the use of the by-products of fire thinning work (balsam fir trees and boughs) to produce and sell Christmas trees and wreaths. By working with CFRC, the Coop obtained approval from FSC and SmartWood staff to allow a label which recognizes the origin of these Christmas products in FSC certified forests.

The Good News:

CFRC passed our audit in March 2008; and our new five-year SmartWood certificate began on April 1, 2008. There is no better time than now to consider certifying your private woodland under FSC!

If you would like more information on the certification process, feel free to visit our website (www.forestrycenter.org) or give Katie a call at 612-870-3407 with questions. 🌿

HABITAT RESTORATION (CONTINUED FROM PAGE 2)

The City of Mendota Heights received funding to remove overgrown mixed hardwoods from 3 acres that will be restored to oak savanna. Cutting, stacking, grinding, and transport of the material was completed on March 8 with a total of 16 semi-trucks carrying 320 tons of wood chips for use by District Energy to heat, cool and power St. Paul.

The Hastings Sand Coulee SNA site involved the removal of pine and spruce plantations, plus invading red cedar, from approximately 6 acres of rare sand-gravel prairie. The cutting and stacking of the trees has been completed. District Energy contractors will grind and transport the material when soil conditions allow later this spring.

Using information obtained from the Phase 1 pilot projects, site criteria will be developed and a process will be determined to provide funding for future projects. An initial survey identified well over 7,000



acres of habitat in need of similar restoration work within 75 miles of St. Paul. Combined with a growing need for alternative sources of biomass for energy, this is a great opportunity to link habitat restoration to bioenergy! 🌿

Photos for this article courtesy of MN DNR.

BIOMASS HARVESTING *(CONTINUED FROM PAGE 3)*

Harvesting biomass to reduce fuel, improve forest health and supply material for energy production is a new practice in Minnesota. Fuel reduction prescriptions need to be adjusted to address operational challenges and planning and coordination concerns. Once biomass harvest is identified as a management option, incorporating an early understanding of production logistics into harvest plans and prescriptions can reduce fuel management and biomass production costs. Site prescriptions, distance to market, size and efficiency of operations and equipment all influence the economic viability of biomass harvests as a tool to manage forests. Environmental effects of biomass removal on soils, wildlife habitats and other natural features can be mitigated in Minnesota by following the Minnesota Forest Resource Council's Biomass Harvesting on Forest

Key Recommendations	
Environmental Considerations	
Biomass Harvest Guidelines	In Minnesota, where guidelines were recently developed, following the Biomass Harvesting on Forest Management Sites should mitigate concerns about soil nutrients, structure and wildlife habitat.
Market Considerations	
Transport Distance	Distance to biomass markets should be no greater than 100 miles; preferably considerably less.
Moisture	Payment should be per ton and should be adjusted for moisture content to reward a supply of drier, and therefore superior, biomass materials.
Storage	If bundles are desired for biomass storage reasons, payments must reflect this value.

Management Sites. Under the right circumstances, biomass harvest can reduce forest management costs. **Be sure to look for the finalized report on the Community Forestry Resource Center website: forestrycenter.org!** 🌿

IT'S FOR THE BIRDS *(CONTINUED FROM PAGE 4)*

With funding from the National Fish and Wildlife Foundation and the Wisconsin DNR, the CFRC and the Kinnickinnic River Land Trust (KRLT) are working to change that trend by building a network of forestry and wildlife experts and landowners to sustainably manage these forests and to create a suitable habitat for birds and other wildlife. One FSC-certified property already serves as a demonstration site of sustainable high-end forestry.

Currently, three landowners with parcels of land constituting approximately 500 acres of forest adjacent to the demonstration site have committed to restoring their forests in cooperation with this project. As a first step, a team of experts is creating a management plan for a portion of that land which will focus on restoring the properties' floodplain area, which serves as a major habitat for the migratory and nesting birds. Having been left unmanaged for a time, the floodplains are now dominated by invasive species, such as black locust, buckthorn and Reed Canary Grass. The team of experts and the landowners are excited to start restoration work this year to create conditions suitable for wildlife.



On Saturday, May 31st, CFRC and KRLT are organizing a field day just west of River Falls, WI for anyone who is interested in learning about regional forest plant and animal species and how to protect them. Foresters, understory and bird experts will actively involve the participants in beginning and advanced bird watching, invasive species identification and removal, forest management and understanding of understory species. This program is free of charge and open to anyone interested in any or all of the stations.

For more information about the field day, or to keep informed about the progress of this project, please contact Claudia Nanninga at 612-987-8450 or cnanninga@gmx.de. 🌿 forestrycenter.org

Know your invasives: **Buckthorn!**

In the wild, Common Buckthorn outcompetes native plants for light, nutrients, and moisture, degrades wildlife habitat, serves as a host for other pests, contributes to erosion, can dramatically alter nitrogen levels in the soil, and quickly forms an impenetrable layer of vegetation, thereby preventing the growth of native plants and trees. Without any natural means of control, Common Buckthorn has implications for both the natural environment and forestry activities in areas to which it has spread.

Common (European) Buckthorn is a relatively tall understory shrub that can grow to 25 feet, with a diameter of 4 inches. Since Common Buckthorn leaves remain green well after most native trees and shrubs have shed their leaves, the species is especially easy to spot in the fall. The small flowers of Common Buckthorn are bell-shaped, with four greenish-yellow sepals, and are visible in late spring. The black fruit is found in large, round, berry-like clusters, and ripens in August or September.

Once established, Common Buckthorn is difficult to eradicate. Individual seedlings and small plants can be pulled by hand or with the aid of tools. Large plants greater than 2 inches in diameter are best controlled by cutting the stem at ground level, and then immediately covering or treating the freshly-cut specimen. Late fall is the ideal time for herbicide treatment of cut stumps because the applied chemical is then drawn into the roots along with the natural sap flow.

For more information on Common Buckthorn, read the CFRC's guide on "Invasive Plant Species of Minnesota":

► <http://www.forestrycenter.org/library.cfm?refID=76483>

