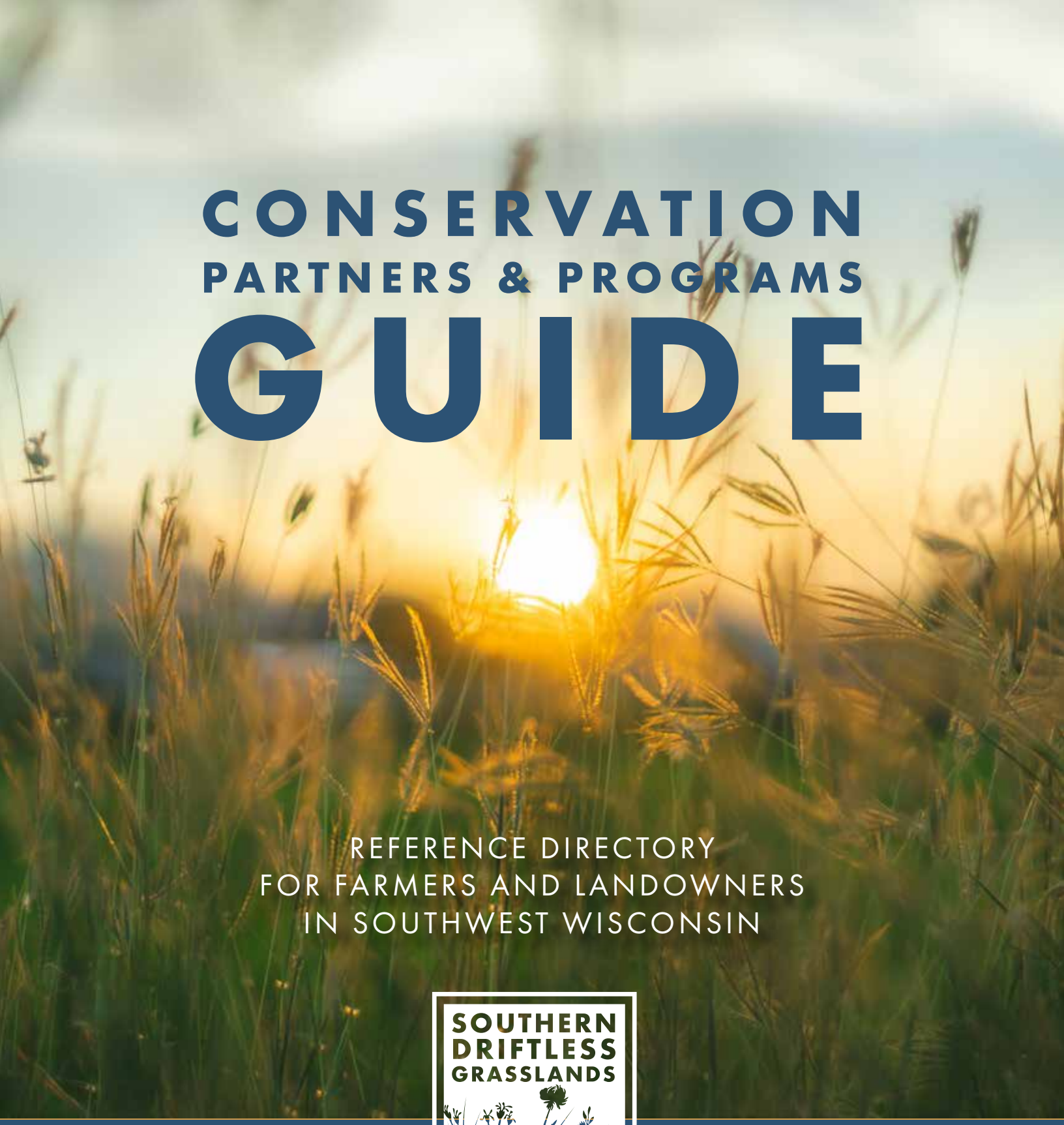


CONSERVATION PARTNERS & PROGRAMS GUIDE

REFERENCE DIRECTORY
FOR FARMERS AND LANDOWNERS
IN SOUTHWEST WISCONSIN

SOUTHERN DRIFTLESS GRASSLANDS

BECAUSE GRASS IS GOOD

TABLE OF CONTENTS


David Wifneske

Carolyn Byers

YOUR SLICE OF RURAL BEAUTY

Regardless of your reason for owning land, your property has its own values—biologically and practically—that influence its potential uses and, subsequently, your overall goals and success. Take time to get to know the land before making land use and management decisions. Along the way you will get to know your property's assets, habitats and land stewardship needs.

All land comes with its own unique history, natural and human, that impacts future potential. Compare your goals for the land with what you are "reading" around you on the landscape. What wildlife is important to you? What tools do you have to accomplish your goals? What are the habitats on your land? Are they in good health? What uses and values do they support that interest you?

All properties require attention and management. Care-taking or stewarding land typically involves controlling invasive species and managing vegetation growth to improve the health of the land. Depending on your objectives, your management may include prescribed burning, grazing and/or mowing, and in wooded situations, harvesting trees for firewood or lumber.

Help. There are numerous organizations and agencies in Southwest Wisconsin that provide resources and one-on-one technical assistance to landowners. This guide is designed to help you identify the organizations, agencies and programs best suited to help you meet your goals and needs.


© akkraraj


Gigi LaBudde


Mayme Keagy


Mark Hirsch

THE GEOLOGIC AND HUMAN HISTORY OF THE SOUTHERN DRIFTLESS LANDSCAPE

The Driftless Area is a 24,000-mi2 region in southeastern Minnesota, southwestern Wisconsin, northwestern Illinois, and northeastern Iowa that was spared the erosional and depositional effects of glaciation. In this region, erosion of bedrock over millions of years and the lack of glacial deposits, or drift, have resulted in a rugged landscape of rolling hills, rock formations, plateaus, and deeply carved river valleys.

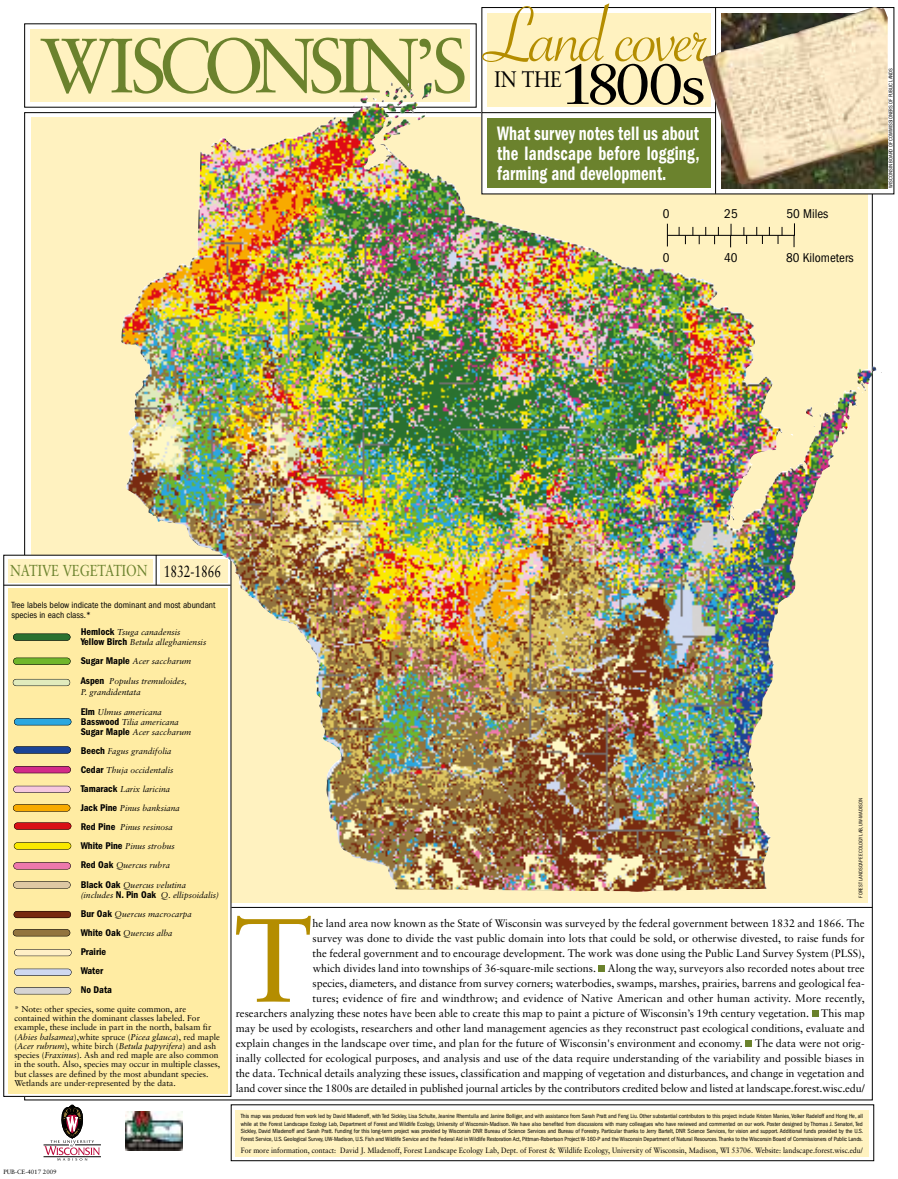
People have inhabited the Driftless Area landscape for a long time; researchers have traced evidence of early cultures in the upper Midwest and in the Driftless Area back to at least 12,000 years. The earliest residents left evidence in rock shelters, pictographs, petroglyphs, effigy mounds and artifacts.

In the 1600s and 1700s, several groups of Native Americans occupied the area, including Sauk, Ho-Chunk and Potawatomi. This land that we stand on today was their land. Early people were a part of their landscape, managing natural resources to produce goods for trading, food and natural medicines. This management affected the landscape, especially its vegetation. For example, throughout southern and central Wisconsin, human's historic use of fire helped to maintain the open prairie and savanna

Cindy Becker

landscape that we think of as pre-settlement. There were vast expanses of prairie interspersed with savanna and oak woodlands. The region was not an untouched landscape, but rather one used and managed by the Indigenous people who inhabited it.

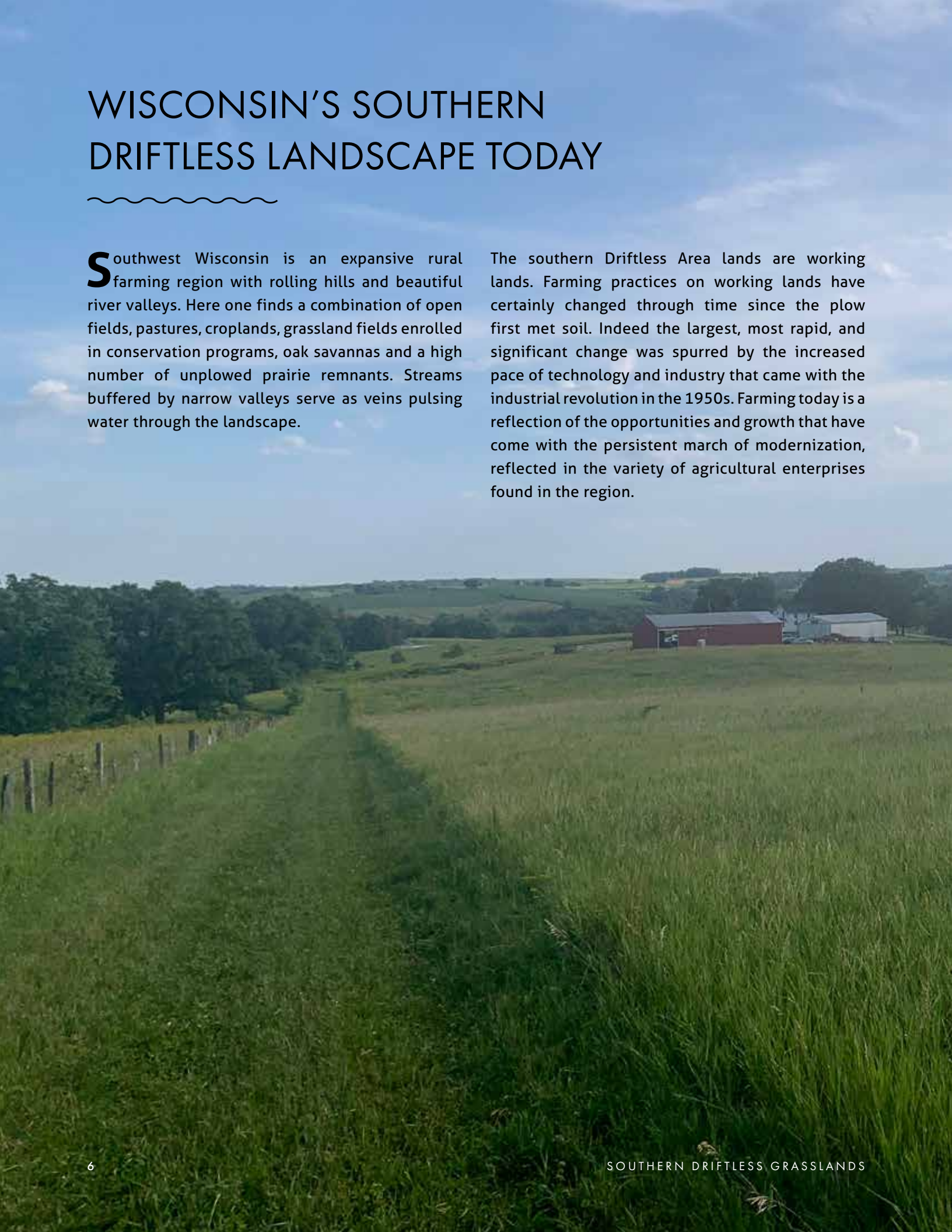
French fur traders first arrived in the late 1600s and were followed by increasing numbers of English and American traders. The early 1800s discovery of lead and galena (the chief ore of lead) in the southern and central region of Wisconsin was a pivotal moment for the area. It prompted land claims and territorial treaties that displaced Indigenous people from their ancestral lands in Wisconsin as well as from tribes that had been moved here from the increasingly crowded eastern regions of the United States. These actions spurred an influx of settlers from Cornwall, Scandinavia, Switzerland and Germany. The ensuing challenges created local and regional conflicts over land rights, bitter marks of Indigenous mistreatment still carried over to today. The mining boom was short lived: by the 1840s, the land had been exhausted of much of its accessible lead, and in came the next wave of industry—farming. Small family dairies with diversified land use—grazing lands, hay fields, and crop land—dominated the Southwest Wisconsin landscape until recently. The green revolution of the 1950s and 1960s and the introduction of industrialized farming and chemical dependence has built the landscape we see around us today.



WISCONSIN'S SOUTHERN DRIFTLESS LANDSCAPE TODAY

Southwest Wisconsin is an expansive rural farming region with rolling hills and beautiful river valleys. Here one finds a combination of open fields, pastures, croplands, grassland fields enrolled in conservation programs, oak savannas and a high number of unplowed prairie remnants. Streams buffered by narrow valleys serve as veins pulsing water through the landscape.

The southern Driftless Area lands are working lands. Farming practices on working lands have certainly changed through time since the plow first met soil. Indeed the largest, most rapid, and significant change was spurred by the increased pace of technology and industry that came with the industrial revolution in the 1950s. Farming today is a reflection of the opportunities and growth that have come with the persistent march of modernization, reflected in the variety of agricultural enterprises found in the region.



We now see that legacy come full circle as healthy grassland-consistent farming styles such as prescribed grazing practices of old, backed with the science of new, gain momentum in our area as farmers look to protect and conserve their working lands while still profiting from them.

This area is known as one of the best regions in the Upper Midwest for grassland habitat. Why? Our topography, geology and climate all lend a hand to growing healthy pastures and prairies.

Tom Kelly

Today, grassland habitats across our landscape include:

- Conservation Reserve Program (CRP) prairie, cool season grass, and pollinator plantings
- Pastures, hay fields and idle fields

We call these surrogate grasslands. This grass on the ground benefits wildlife, water and our farms and communities.

Also found across the landscape are prairie and savanna remnants. A remnant is a site that was never plowed and contains native plant species that have been determined to be associated with specific site and disturbance characteristics. These are very special, for they can be banks of genetic and species diversity. Your land could feature this special landscape and you might not even know it!

Taylor Scott

SURROGATE GRASSLANDS

PRESCRIBED GRAZING LANDS

The Driftless Area is a perfect environment for integrating conservation and grass-based agriculture. Well managed grazing on perennial grasslands can support profitable livestock farming of all sizes while restoring many critical functions of the original prairie that are key to our welfare and well being. Grasslands build soil, sequester carbon, reduce water runoff and create more drought-resilient ecosystems.


© yvonne


Cindy Becker


Cindy Becker


Cindy Becker

IDLE GRASSLANDS AND PASTURES

Idle grasslands and pastures are working lands that have been taken out of production, whether because of a farmer retiring, a shift in farming practices and/or a change in ownership. Keeping an idle, or non-working pasture healthy includes controlling brush and invasive weeds. This is accomplished with a variety of tools that will include annual and/or spot mowing, herbicide and, if appropriate, periodic prescribed fire. Keeping idle pastures healthy allows for a smooth transition of the pasture back into a grazing rotation or interseeding with prairie wildflowers and maintenance with prescribed fire.

LANDS IN SET-ASIDE PROGRAMS

CRP. You may hear this acronym often, but truly, what does it stand for? CRP is a Federal set-aside program called the Conservation Reserve Program (CRP). This program provides annual payments for land owners to convert and then maintain crop fields in a perennial grass planting for 10-15 years. The grass planting can be prairie plants and grasses or non-native pasture-type mixes. CRP can help balance the need to protect grasslands and provide financial stability to land owners. It has played an important part in maintaining grass in this area, and is a viable alternative to crop farming steep and erodible land.

We call these surrogate grasslands. This grass on the ground benefits wildlife, water and our farms and communities.

ARE YOU A LANDOWNER WHO RENTS OUT YOUR CROPLAND OR PASTURES?

You have a right to integrate conservation practices into your lease agreements.

DID YOU KNOW?

The reproductive success of rare grassland birds, such as the Henslow's sparrow, depend upon large swaths of uninterrupted grassland habitat.

Britta Petersen

RESOURCES

Dairy Grazing Apprenticeship (DGA) partners with established grazing dairy farmers, universities and other stakeholders to deliver high quality work-based training in managed-grazing dairy production in multiple states.
dga-national.org

GrassWorks, Inc. links farmers with the resources they need to be successful graziers.
grassworks.org

Wisconsin School for Beginning Dairy and Livestock Farmers
cias.wisc.edu/new-farmer

UW Extension Grazing Resources and Research, providing grazing information & research from UW-Madison Division of Extension and collaborators.
fyi.extension.wisc.edu/grazres

Grasslands 2.0 is a research-driven public-private partnership committed to promoting restorative agriculture.
grasslandag.org

NATIVE PRAIRIE

Hidden within the farmlands and hills of Southwest Wisconsin are pockets of unplowed soil that contain prairie plants. We call these remnant prairies. These sites are exceedingly rare and also potentially home to a variety of rare and/or endangered plants, wildlife and insects.

Prairies are characterized by a lack of trees and tall shrubs. The plant community is dominated by grasses and sedges, but within these prairie communities lots of different flowering plants exist. Over 400 species of native plants are found across the different types of Wisconsin prairies, and most of these plants are specialists, or restricted to prairie or savanna community types. In addition to a varied plant community, prairies have a diverse and specialized animal community, especially among insects, reptiles and birds.

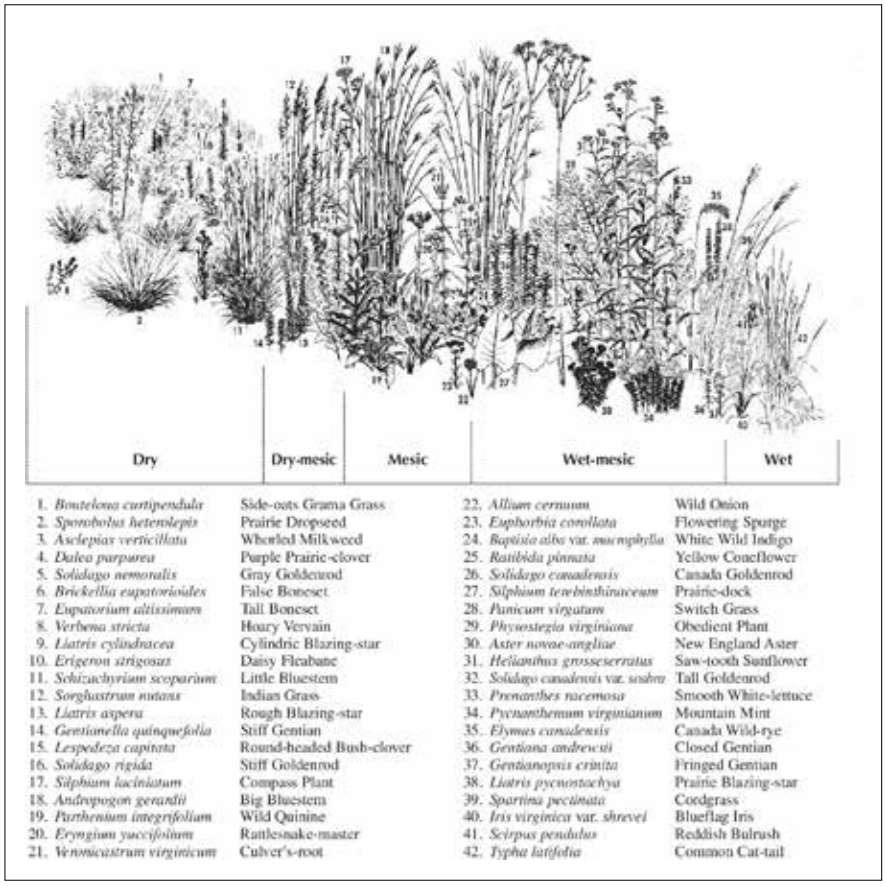
Prairies occur on a wide variety of slopes, soil types and moisture regimes — from dry sandy soils to water-covered peat soils. Five native types of prairie are recognized: dry, dry-mesic, mesic, wet-mesic and wet prairie.

Dry and dry-mesic prairies are found on dry, sometimes sandy, rocky soils.

Mesic prairies inhabit medium-moisture, deep soil environments like clay loams on broad uplands and expansive valley bottoms.

Wet and wet-mesic prairies are typically found along valley bottoms.

Michigan Lily / Cindy Becker



1. *Bouteloua curtipendula*	Side-oats Grama Grass	22. *Allium cernuum*	Wild Onion
2. *Sporobolus heterolepis*	Prairie Dropseed	23. *Euphorbia corollata*	Flowering Spurge
3. *Asclepias verticillata*	Whorled Milkweed	24. *Baptisia alba* var. *macrophylla*	White Wild Indigo
4. *Dalea purpurea*	Purple Prairie-clover	25. *Ratibida pinnata*	Yellow Coneflower
5. *Solidago nemoralis*	Gray Goldenrod	26. *Solidago canadensis*	Canada Goldenrod
6. *Brickellia eupatorioides*	False Boneset	27. *Silphium terebinthinaceum*	Prairie-dock
7. *Eupatorium altissimum*	Tall Boneset	28. *Panicum virgatum*	Switch Grass
8. *Verbena stricta*	Hoary Vervain	29. *Physostegia virginiana*	Obedient Plant
9. *Liatris cylindracea*	Cylindric Blazing-star	30. *Aster novae-angliae*	New England Aster
10. *Erigeron strigosus*	Daisy Fleabane	31. *Helianthus grosseserratus*	Saw-tooth Sunflower
11. *Schizachyrium scoparium*	Little Bluestem	32. *Solidago canadensis* var. *scabra*	Tall Goldenrod
12. *Sorghastrum nutans*	Indian Grass	33. *Prenanthes racemosa*	Smooth White-lettuce
13. *Liatris aspera*	Rough Blazing-star	34. *Pycnanthemum virginianum*	Mountain Mint
14. *Gentianella quinquefolia*	Stiff Gentian	35. *Elymus canadensis*	Canada Wild-rye
15. *Lespedeza capitata*	Round-headed Bush-clover	36. *Gentiana andrewsii*	Closed Gentian
16. *Solidago rigida*	Stiff Goldenrod	37. *Gentianopsis crinita*	Fringed Gentian
17. *Silphium laciniatum*	Compass Plant	38. *Liatris pycnostachya*	Prairie Blazing-star
18. *Andropogon gerardii*	Big Bluestem	39. *Spartina pectinata*	Cordgrass
19. *Parthenium integrifolium*	Wild Quinine	40. *Iris virginica* var. *shrevei*	Blueflag Iris
20. *Eryngium yuccifolium*	Rattlesnake-master	41. *Scirpus pendulus*	Reddish Bulrush
21. *Veronicastrum virginicum*	Culver's-root	42. *Typha latifolia*	Common Cat-tail

Citation: Cochrane, T.S., & Iltis, H.H. (2000). Atlas of the Wisconsin Prairie and Savanna Flora. Original drawing by Nancy R. Halliday.

Birds Foot Violet / Carolyn Byers

Whorled Milkweed / Mike Engel

IDENTIFYING A REMNANT PRAIRIE

Remnant natural community habitat is scattered throughout the landscape, and possibly on your own property. It just may not look pristine and instead be overgrown with invasive shrubs and brush. Even a lesser quality remnant can be ecologically significant. It may be missing some components of its natural character but these habitats, though degraded, are restorable with the proper management.

Look for:

- Steep, rocky slopes that were too difficult to farm, openings in woods or never-plowed pastures (especially areas furthest from the barn).
- Thin soil pasture that was never plowed (dry and dry mesic prairie)
- Valley sites with stable hydrology (wet, wet mesic and mesic prairie)

Dry Prairie Remnant in bloom / Jenn Simons

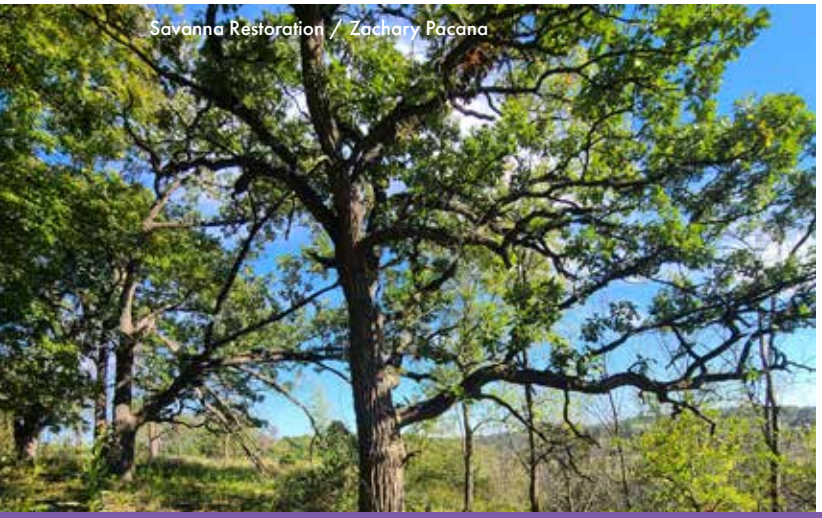
A CLIMATE SMART TIP: Wet mesic prairie, wet prairie and southern sedge meadows together make up the prairies of the valley, or wetlands. Wetlands act as nature's surface water storage systems. During high water events, wetlands catch surface water runoff and hold it in place. Simply put, they slow the flow. When wetlands slow the flow of water, accumulated sediments drop out of the water column. With sediments come nutrients. This influx of nutrients feeds a host of microbes and plants that are adapted to thrive on nutrient-rich and even polluted water. Wetland plants further filter water as they uptake nutrients to feed their growth. In this way, wetlands filter runoff before it moves into groundwater or other surface water systems. In return for cleaning water, the nutrients carried into the system by surface water and taken up by wetland plants provide the building blocks for abundant and diverse life. This also reduces downstream erosion and flooding, and recharges groundwater supplies.

Wetlands are home to some of Wisconsin's most diverse ecological communities. If there is a wetland on your property, the best thing you can do is to value that wetland for performing vital ecosystem services. Invest in keeping that wetland resilient and resist any temptations to convert the land to another function.

Side note: Sadly, due to land conversion, Wisconsin has lost 4.7 million acres of the 10 million of wetlands recorded as present in 1848.

OAK SAVANNA

Oak Savanna or oak opening is a plant community found across the upland landscape. It is characterized by scattered large trees surrounded by warm-season grasses, wildflowers and some low-growing brush. The canopy of the overstory trees shades less than 50% of the ground. The dominant tree species are bur and white oaks, although black oak, shagbark hickory, large-toothed aspen and black cherry are also found. The trees are generally open-grown with characteristically large, low, relatively horizontal branches on all sides of the tree indicating that sunlight was available on all sides throughout most of its development. Savanna grasses include big bluestem, little bluestem, prairie dropseed, silky wild rye and Virginia wild rye. The key to the diversity within a savanna is the variety of light conditions that allows wildflowers of all levels of light preference to find a niche. Some characteristic flowers include kitten tails, wild hyacinth, shooting star, yellow star grass, purple milkweed, tall anemone, prairie alum-root, small sundrops, seneca snakeroot, yellow pimpernel and goat's rue.


Savanna Restoration / Zachary Pacana

HOW TO IDENTIFY

For prairie and oak savanna, this will depend on whether or not useful disturbance, such as fire or light grazing, has maintained the open structure, or whether there have been other negative alterations, such as overgrazing or invasive species.

Some clues to locate remnant savanna communities on your property are:

- Stands of old trees, especially open-grown oak trees with widely spreading branches.
- The overall structure and type of plants, shrubs and trees that make up the composition of a site, especially conservative or specialist plants.
- Signs of specialist wildlife species or returning breeding birds
- Evidence of disturbance such as fire, wind-throw or grazing


Purple Milkweed / Cindy Becker


Shooting Star / Jenn Simons


Columbine / Barb Barzen


Red Headed Woodpecker / Barb Barzen

Tall grass prairie and oak savanna are two of the most threatened plant communities in the midwest and among the most threatened in the world!

SOUTHERN DRY AND SOUTHERN DRY MESIC FORESTS

WILDLIFE, BOTH GAME AND NON-GAME, UTILIZE PRAIRIE, SAVANNA AND WOODLAND HABITAT.

Oak trees are keystone species of many forest habitats in the southern Driftless landscape.

SOUTHERN DRY FORESTS

White oak (Quercus alba) and black oak (Quercus velutina) are dominant, often with northern red and bur oaks and black cherry. In the well-developed shrub layer, brambles (Rubus spp.), gray dogwood, and American hazelnut are common. Frequent herbaceous species are wild geranium, false Solomon's-seal, hog-peanut and rough-leaved sunflower.

SOUTHERN DRY MESIC FORESTS

Red oak (Quercus rubrum) is a common dominant tree of this upland forest community type. White oak (Quercus alba), American basswood (Tilia americana), sugar and red maples (Acer saccharum and A. rubrum), white ash (Fraxinus americana), shagbark hickory (Carya ovata), and wild black cherry (Prunus serotina) are also important. The herbaceous understory flora is diverse; look for jack-in-the-pulpit (Arisaema triphyllum), enchanter's-nightshade (Circaea canadensis), large-flowered bellwort (Uvularia grandiflora), interrupted fern (Osmunda claytoniana), lady fern (Athyrium filix-femina), tick-trefoils (Desmodium spp.) and hog-peanut (Amphicarpaea bracteata).

The Wisconsin Initiative on Climate Change Impacts have developed habitat vulnerability ratings given the predicted changes to come. This has been further developed for our forested communities through a collaborative effort spearheaded by the USDA Northern Forests Climate Hub into a great publication, "Climate Change Field Guide for Southern Wisconsin Forests: Site level considerations and adaptation." **forestadaptation.org/field-guide-southern-wisconsin**

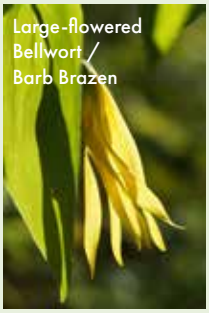
Both Southern Dry Forests and Southern Dry Mesic Forests are common in southwest Wisconsin today. However, to the detriment of the oaks and the wildlife that depend on them, oak forests are more mesic species (e.g., central and northern hardwood forest types), or to brush without active management that includes fire disturbance as a tool.


Oak / © hcast


Showy Orchis / Barb Brazen


Southern Oak Forest Restoration / Cindy Becker


Wild Geranium / Barb Brazen


Large-flowered Bellwort / Barb Brazen


Trout Lily / Jen Filipiak

GRASSLAND BIRDS

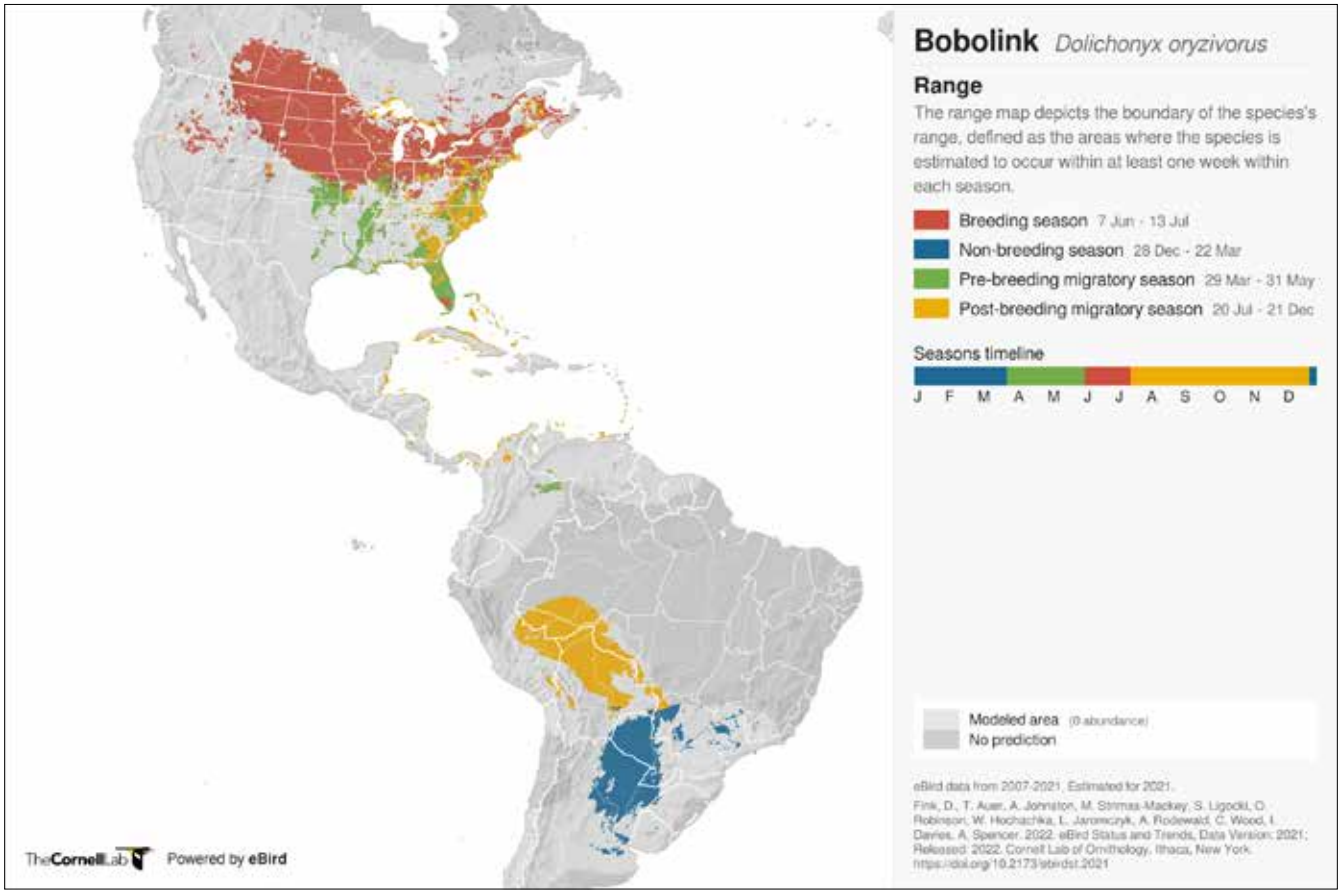
Have you ever heard a melodic bird song drift across an open field in spring? Or noticed a cheerful black, yellow and white bird fluttering around a pasture? These are examples of grassland birds—birds that need fields of grass, rather than trees or forest, to nest and survive.

Grassland birds visit Wisconsin every breeding season because our rich habitat provides the food they need to raise young. They arrive each spring, stay the summer, and most leave in the fall. Find them in prairie, oak savanna and many other habitat types that have open grassy areas.

OBLIGATE grassland bird species require grasslands during the breeding season. Their fates are inextricably tied to this habitat.

GENERALIST grassland bird species are able to use grassland habitat for nesting, foraging, or loafing around. We love them too! It's important to protect grasslands for ALL birds, because they each fill an important role in this ecosystem.

Populations of obligate grassland birds are in steep decline in part because grasslands themselves are a declining habitat across their range. More locally, here in Wisconsin, less than 1% of tallgrass prairie remains—a habitat type that used to be quite common. Additional stressors to success include threats such as habitat loss and predation where they overwinter, and challenges during migration.



WHAT GRASSLAND BIRDS NEED

More quality habitat is needed to restore our grassland bird populations. More grass on the ground will give birds the space they need to find food and raise young. More grass will also support other plants and animals: deer, turkeys, badgers, ground squirrels, wildflowers and butterflies.

IN PLANTED AND REMNANT PRAIRIES

Management like burning, mowing and grazing can help keep woody vegetation out of prairies and promote a wide variety of plant species and a wide variety of wildlife.

IN WORKING LANDS

A variety of best management practices can be employed on a working farm to provide bird habitat. Each farm is unique and may employ different strategies to provide habitat for birds.

Examples include:

- reducing stocking rates of grazing animals
- providing refuge areas for nesting and foraging birds
- manipulating hay harvest dates to accommodate bird activity
- keeping fence lines clear of brush and trees

Henslow's Sparrow / Chrissy McClarren, Andy Reago

Upland Sandpiper / Adobe Stock

Bobolink / Adobe Stock

Dickcissel / Brian Wulker

RESOURCES

Websites/organizations::
Wisconsin Bird Conservation Partnership supports the conservation and restoration of endangered, threatened and rare bird species and their habitats, educates Wisconsin citizens about birds and bird conservation issues, and promotes bird-based recreation and the enjoyment of birds. Learn more about Important Bird Areas at **wisconsinbirds.org**.

Madison Audubon Society works to protect and improve habitat for birds and other wildlife through land acquisition and management, education, and advocacy. **madisonaudubon.org**

All About Birds website is All about birds! Resources on bird identification, songs, and life history. **allaboutbirds.org**

Help with your fork! Audubon Conservation Ranching Program connects consumers with bird-friendly grass-fed beef producers. **audubon.org/conservation/ranching**

Books:
Managing Habitat for Grassland Birds: A Guide for Wisconsin (1997). David Sample and Michael Mossman. The book describes habitat requirements and landscapes for all Wisconsin grassland birds.

Grassland Birds: Fostering habitats using rotational grazing. Access a free pdf download through the UW Extension Learning store.

Brown Thrasher nest / Kevin Ellison

POLLINATORS

Pollinators are everywhere! Pollinators are a general term for native and honey bees, butterflies, moths, beetles and the multitudes of other insects, bats and birds that assist plants in pollination. They bring pollen from the male part of the flower (stamen) to the female part of the same or another flower (stigma).

DID YOU KNOW THAT THE US IS HOME TO OVER 3,500 NATIVE BEE SPECIES?

There are many ways to improve habitat for pollinators in your backyard, as well as prairie, woodlands and savanna. Think of habitat as food (pollen and nectar), water and shelter.

FOOD: Pollinators depend upon pollen and nectar as a key feature of their diets. Different pollinators have different needs, and different flowers fit those needs in different ways at different times. So...plant diverse species of flowering plants. That means different species, sizes, shapes and colors. Think about what time of year plants bloom, and plant to have blooms from early spring through late fall.

CONTACT YOUR LOCAL PHEASANTS FOREVER FARM BILL BIOLOGIST OR YOUR COUNTY NRCS OFFICE TO LEARN ABOUT COST-SHARE PROGRAMS FOR POLLINATOR HABITAT ON YOUR FARM AND PROPERTY.

SHELTER: Many bee species nest in dead wood (as do other insects, birds and bats). Leave dead snags standing and keep downed logs on the ground. Many other species, including butterflies and moth caterpillars and larvae, often overwinter underground at the base of the plants they pollinate.

Plant edges and otherwise unspoken for spaces with pollinators' preferred species to promote the connectivity pollinators need to access food, disperse and, in some cases, migrate

Black and Gold Bumble Bee/ Ali Lorenz

Pollinator Protection Plan for Farms contains best management practices for maximizing pollinator health and pollination series on farms.

datcp.wi.gov/Documents/PPPFarms.pdf

Rusty Patched Bumble Bee / ©Heather Holm

Regal Fritillary Butterfly / Ray Moranz

HELP PROTECT AND NOT HARM

Pollinators are everywhere around you. Some species are experiencing rapid decline in populations. Major threats to our butterflies and bees include disease, pesticides, habitat destruction, fragmentation and degradation of remnant prairies that provide both nectar and host plants.

- Rusty-patched bumblebee—listed as federally endangered.
- Regal fritillary—state listed as critically imperiled.
- Monarch butterfly—on the watch for federal and state listing status.

Monarch Butterfly / © David

RESOURCES

Monarch Joint Venture is a public-private partnership working to protect the monarch migration across the United States. **monarchjointventure.org**

Get involved with citizen science—Join the Bumble Bee Brigade! **wiatri.net/inventory/BBB/**

Find an on-line guide, information and on-going resources: **wisconsinbumblebees.entomology.wisc.edu/**

The Xerces Society for Invertebrate Conservation. Catch the buzz! **xerces.org**

Books:

Farming with Native Beneficial Insects: Ecological Pest Control Solutions. Authors Eric Lee-Mäder, Jennifer Hopwood, Mace Vaughan, Scott Hoffman Black, and Lora Morandin

Attracting Native Pollinators, coauthored by Eric Mader, Matthew Shepherd, Mace Vaughan, and Scott Black in collaboration with Gretchen LeBuhn, a San Francisco State University botanist and director of the Great Sunflower Project.

PRESCRIBED FIRE

The Southwest Wisconsin prairies, savannas and oak forests, and the plants and animals that live in them, were strongly influenced by fire. In order for fire to continue to shape our land today, prescribed fire must take the place of historic wildfires.

PRESCRIBED FIRE IS AN IMPORTANT TOOL

Restores fire dependent natural communities—periodic fire is beneficial for the regeneration of the trees and wildflowers in these communities

Maintains and improves wildlife habitat—fire can improve habitat for wildlife through increasing plant growth and seed production, availability of growth and creating specific habitats needed by unique wildlife, such as dead snags and hollow downed wood.

Gigi LaBudde

Controls competition between species—fire can reduce the encroachment of undesirable shrubs and trees into restored prairies, savannas and southern oak forests.

Prepares sites for seeding and replanting—fire can be an excellent method for removing built-up thatch in a cool season grass pasture, preparing it for interseeding with native wildflowers.

Jenn Simons

Cindy Becker


Honeysuckle / Adobe Stock


Canada Thistle / Adobe Stock


Invasive Brush in Savanna / Cindy Becker


Common Teasel / Adobe Stock

INVASIVE SPECIES MANAGEMENT

INVASIVE SPECIES: SLOW THE SPREAD

Familiarize yourself with invasive species of concern to the Driftless Area by visiting the WDNR's Invasive Species Website.

The very core of an invasive species is the ability to colonize disturbed land and squeeze itself opportunistically into many different types of places. Southwest Wisconsin already harbors healthy populations of invasive species such as common and glossy buckthorn, different species of bush honeysuckles, barberry, wild parsnip, Japanese hedge parsley and garlic mustard. All of these will be elbowing their way onto your land if they are not there already.

As climate changes, invasive species are predicted to get increasingly more aggressive with their interest to expand their territories as the climate changes. Longer growing seasons, more humidity, warmer night temperatures and warmer winters may open the door to new pests and pathogens to move into the region.

Invasive species cause systems to fall out of balance, so community structure gets weighted towards a few aggressive species rather than a diverse mix of species that play individually important roles within the ecological system. A best management strategy to get ahead of pathogens, pests and invasive species is to encourage a diverse mix of community types, age classes and stand structures.


Garlic Mustard / Adobe Stock


Common Buckthorn / Adobe Stock


Common Buckthorn / Adobe Stock


Japanese Barberry / Adobe Stock


Yellow Wild Parsnip Flower Meadow / Shutterstock

CLIMATE SMART TIPS

When thinking about how well your land will cope with the predicted changes as our climate shifts, there are some basic tools you can use to help.

There are certain climate change impacts that we cannot shift through our individual actions alone. These are impactful and predicted to happen.

They include:

- Temperature increases
- Precipitation increase
- Longer growing season
- Soil moisture and drought stress.


Gerald Hemmerich


Mark Hirsch

The good news is that there are **land stewardship practices** we can use to lessen other impactful and predicted stressors to the habitats on our land. The climate change impacts listed above reflect changes in climate that are global in extent, but there are those that we can roll up our sleeves and work to prevent. And, they are actually activities that most landowners are familiar with anyway.

CLIMATE SMART ACTIONS YOU CAN TAKE:

Be aware of forest pests and diseases. Keeping abreast of the science when problem insects or fungi are identified is our responsibility as landowners. From there, reach out to federal, state or county help for advice and lean heavily on them to learn. Once aware, seek best practices most suitable for your property.

GRASSLANDS AND CARBON—Grasslands are habitats dominated by herbaceous (non-woody) vegetation. Carbon is stored in the roots and soil. Perennial grasses have extensive fibrous root systems that often make up 60 to 80% of the biomass carbon in these ecosystems! This belowground biomass may extend several meters below the surface. As the roots break down, they release abundant carbon to the soil, resulting in deep, fertile soils with high organic matter content. Because of this, soil carbon makes up approximately 81% of total ecosystem carbon found in grasslands. Gen. Tech. Report WO-95 2017

Shutterstock

Control deep populations to control deer browse damage. As climate shifts, it is understood that the white-tailed deer populations will increase. Deer love native plants and shrubs almost as much as they love corn! So, in the seasons when a corn crop is not available, our local deer turn to your favorite wild shrubs and wildflowers for sustenance.

However! Managing deer is crucial AND solvable. Wisconsin has programs that help landowners find hunters, and professionals to help landowners create a win-win relationship with hunters. Offering up private property to hunters creates invaluable experiences for members of your community seeking a place to hunt. Or maybe you'll harvest that trophy buck yourself?

Cindy Becker

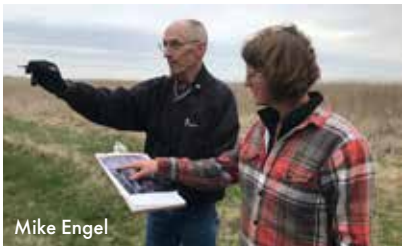
Use prescribed fire as your disturbance tool. Southwest Wisconsin's ecosystems are fire dependent or fire tolerant, meaning the plants and trees flourish with fire as a disturbance. The absence of fire is detrimental to the health of these communities. With more precipitation during spring when most people conduct prescribed burns, the solution is to think differently about when and how to burn. Burning in the late fall and dormant winter season can accomplish goals similar to those achieved with spring burns.

Cindy Becker

LAND MANAGEMENT PLANNING

No matter what your goals are for owning rural property, developing a management plan will help you achieve them. As a landowner, you are faced with a multitude of situations specific to your property. There are choices to make about management and maintenance. It is easy to become overwhelmed by the number of present and future exotic species to contend with, pasture improvement or restoration projects and cropland decisions. Set broad and specific goals, and track results after selecting the management and implementation strategies. In this way, you'll be able to evaluate and adjust your annual activities for maximum results.


Mark Hirsch


Mike Engel


Prairie Bush Clover / Taylor Scott

In setting priorities for yourself, remember:

- Choose quality over quantity, and don't overwhelm yourself by trying to do too much too fast. Don't be afraid to change your goals over time.
- Be realistic about the energy, time and money you have available. Owning land involves weekly, monthly and seasonal maintenance. This may include keeping up your part of property fences, controlling weeds, and protecting soil, water and wildlife resources.

See the pull out guide to conservation programs for an up-to-date listing and description of technical and financial assistance available in the region.


Taylor Scott

Maps help put everything into perspective. Even in today's world of online technology, sketching on paper an outline of your property is a great exercise. Add in features you use as landmarks. Keep scale in perspective. With this one exercise, you will gain perspective on what it is about your property that is important to you at this moment, and aspects or areas of the land that you have yet to explore. Tailor it to suit your interests and needs.

Excerpt taken from the publication "Reading the Driftless Landscape" by Cindy Ramseyer and Carroll Schaal (2013). It is available online as a free download through bluemounds.org.

PROTECTING YOUR LAND FROM DEVELOPMENT

As a private landowner, you have the ability to permanently protect your property from any future subdivision or development. Land trusts work with landowners, communities and partners to explore how to achieve their conservation goals.

What is a Land trust? A land trust (or Conservancy) is a term used to describe organizations that, in pursuit of conservation missions, work to permanently protect important natural, recreational, scenic, historic and working lands in their communities.

Land trusts use a variety of tools to help private landowners who opt to protect the conservation values of their property. Land trusts both 1.) purchase land with significant conservation and recreation value; and 2.) work with a landowner to develop a legal restriction (an easement) on the land that limits future development.

THESE LAND TRUSTS AND ORGANIZATIONS PROTECT LAND IN SOUTHWEST WISCONSIN.

Driftless Area Land Conservancy (DALC) is committed to maintaining and enhancing the health, diversity and beauty of Southwest Wisconsin's natural and agricultural landscape through purchase and conservation easements educational events, and field trips. **driftlessconservancy.org**

Groundswell Conservancy works in Dane County to protect land through easements, forever. **groundswellwisconsin.org**

Adobe Stock

STATE AND FEDERAL PROGRAMS

DNR stream bank easements provide public access for angling, wildlife observation, and hiking and in exchange a landowner receives financial compensation through easement payments. Select streams in our area are eligible. dnr.wisconsin.gov/topic/Fishing/streambank/index.html

Agricultural Conservation Easement Program, run through NRCS, helps protect, restore, and enhance wetlands or protect working farms and ranches through conservation easements. Contact your local NRCS office to learn more.

The Prairie Enthusiasts (TPE) work with landowners, farmers, and other organizations to save prairie and oak savanna remnants which have persisted on the land since before European settlement. TPE uses several options, including legal protection through purchase or easements, to preserve remaining native prairie and oak savanna sites. **theprairieenthusiasts.org**

WORKING WITH A LAND TRUST IS A GREAT WAY TO LEAVE A LASTING LEGACY THAT CAN BE PASSED ON TO FUTURE GENERATIONS. PROTECTING LAND FROM FURTHER DEVELOPMENT IS AN OPTION AVAILABLE TO LANDOWNERS.

ORGANIZATIONS EXIST TO HELP YOU EXPLORE WHAT THOSE ARE.

SOUTHERN DRIFTLESS GRASSLANDS

BECAUSE GRASS IS GOOD

Southern Driftless Grasslands is a partnership of government agencies, non-profit organizations and other stakeholders who actively support the conservation of grasslands in Southwest Wisconsin to benefit the region's wildlife, water, farms and communities. We envision Southwest Wisconsin to be a place rich with healthy grasslands, successful working farms, clear flowing streams, diverse wildlife and people who value and enjoy this landscape.

The partnership assists landowners of working and non-working lands to create, steward and protect grassland, prairie and savanna habitat in Southwest Wisconsin.

Collaborative conservation at the grassroots level—**because grass is good.**

Our learning hub: **driftlessgrasslands.org** is a resource for landowners wanting to create, steward and protect grassland habitat on working and non working land in Southwest Wisconsin.

FOR MORE INFORMATION

WWW.DRIFTLESSGRASSLANDS.ORG

CINDY BECKER, COORDINATOR • SOUTHERN DRIFTLESS GRASSLANDS

CINDY@DRIFTLESSCONSERVANCY.ORG • (608) 930-3252

FALL 2022

This publication was designed and produced by Cindy Becker and Mayme Keagy.
Second edition design updates were done by Kristin Mitchell Design, Inc.

Special thanks to: Natural Resource Foundation of Wisconsin

Natural Resources FOUNDATION of Wisconsin