



PLEASE VISIT OUR NEW WEBSITE!

Visit us at our website, www.siosa.org, to find more information concerning our organization and how you can help raise awareness, preserve, and conserve Iowa's oak savanna and prairie ecosystem. Also on the website:

- Newsletter Archive
- Blog
- Membership Information
- Upcoming Events & Workshops

What to look for in the next months:

Landowner workshop



SIOSA President Update

Casey Campbell

In 1874 my Great Grandfather Duncan Campbell purchased a few acres of timber directly south of what is now Nine Eagles State Park. For the past couple of years it has been my privilege to caretake those oak/hickory acres. Awhile back I got with Gregg Pattison of the USFWS and we came up with a plan to start restoring those acres to oak savanna. About a month ago 10 acres were machine thinned.

My name is Casey Campbell and I'm the new President of SIOSA. The other officers are Mark Erke, Vice President, Dick Hillyard, Secretary/Treasurer, and Jennifer Abraham, Administrative Assistant (Jen does all the work). The following are board members: John Orvis, Paul Gunzenhauser, Dick Hillyard, Rich Erke, Dave Whittlesey, Mark Erke and myself. We have space for a couple more board members, so if your interested please let me know.

My vision for SIOSA includes:

- 1) Getting more land owner's and interested people involved by:
- 2) Understanding the benefits of savanna restoration (plants, animals, hunting, etc.)
- 3) Explaining what resources are available (money, equipment, and people)
- 4) Showing how to restore the land by watching and doing burning:
 - A) Why it's important
 - B) When to do it and how to do it safely
 - C) Work with local volunteer fire departments and members to get acres burned

We have some teaching and training resources available within SIOSA. We have partnerships with other land use organizations for additional resources. We have some money to spend on restoration in 2011. What we could use is your help. Help getting the word out, help getting a neighbor involved, or help with your ideas, experience, or time.

Our next meeting of 2011 is February 10th, 7:00 pm at the Decatur County Court house. We have some great events and outings in the works but we would like to here from you so please come if you can!

The website is now up please give it a visit.

Then check back to see our upcoming events and outings. www.siosa.org

See you out in the woods...

Casey

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Oak Savanna Restoration

Mark Erke

Owner, Midwest Land Restoration, LLC

High quality oak savannas can be found scattered across the landscape of southern Iowa and northern Missouri. These extremely rare ecosystems are somewhere in the middle of the continuum between the tallgrass prairie and deciduous forests.. Fires started by both lightning and Native Americans allowed these areas to develop a thick vegetative mat composed of sedges, forbs, and grasses dotted with giant, fire-tolerant oak trees. Due to the westward movement of pioneers, fire was suppressed from these landscapes allowing for invasive vegetation to encroach. However, with patience and hard work, these pristine sites can be returned to their original state.



Selectively cutting larger diameter trees and "bucking" them so they lay as close to ground as possible

Since fire has been absent from the majority of these sites for such a long period of time, restoration typically starts with removing undesirable, woody vegetation from the understory. This step can be done through prescribed burning or by mechanical removal. Prescribed fire works by producing heat which kills the invasive woody vegetation while desirable, fire-tolerant vegetation will remain unharmed. This method is the most "natural" technique but may take several years of burning to accomplish your goal. The alternative, mechanical clearing, is typically accomplished by using a tractor/skidloader mounted forestry mower or by a specialized brush saw. When this method is used in restoration efforts, undesirable woody vegetation is cut and all cut stumps **MUST** be treated with chemical to reduce resprouting. Although mechanical clearing is often times more costly and labor intensive than burning alone, results can be seen in days rather than years.



Forestry Mower Mounted on Skidloader

Once the undesirable, woody vegetation has been eliminated from the understory, larger diameter trees can be selectively cut to reduce canopy cover on the restoration site. During this step, all invasive trees such as ironwood, locust, etc. should be cut or girdled, treated with chemical, and "bucked up" so that all debris lays as close to the ground as possible. After the invasive trees have been eradicated, remaining trees should be selectively cut to accomplish the desired canopy cover. This process often times varies between project sites based on the wishes of the

siosa

landowner or contracting agency. In some instances the desired canopy cover is accomplished all in one cutting, while other times the canopy is opened through several cuttings spanning 2-3 years.

Finally and most importantly, a prescribed burn plan for your restoration site must be developed to keep invasive vegetation from encroaching, return nutrients to the soil, and allow the dormant native seed to once again flourish. Burning typically is recommended to be done every 1-3 years and often times a “patchy” burn accomplished. This patchwork of burned and non burned areas assures some habitat will be left for both vertebrate and nonvertebrates inhabitants of these rare oak savanna ecosystems.



A cut stump treated with Pathway to prevent regrowth



Kobville County Park before restoration work



Kobville County Park after restoration work

Restoration Efforts Move forward in Wet 2010

Gregg Pattison

Private Lands Biologist, U.S. Fish and Wildlife

The year did not end as the wettest year on record, but 2010 started with heavy snow cover through mid-March, a long wet spring and early summer before finally giving way to nice dry fall and early winter. Despite the environmental conditions, work proceeded on several projects in the SIOSA focus area of south central Iowa. Savanna restoration projects were completed in 7 counties on 22 project sites totaling 450 acres of restoration. The total acres impacted by SIOSA for savanna restoration is now nearing 1000 acres.

Decatur County is still the primary focus of much of the work SIOSA has completed. In 2010, restoration work was completed on 14 sites in Decatur County, impacting over 325 acres of wildlife habitat. In addition to Decatur County work was completed in Lucas, Madison, Ringgold, Taylor, Union, Van Buren and Wapello Counties. Funding sources for the project include Private Stewardship Grant dollars administered by SIOSA and Partners for Fish and Wildlife Funds administered by the U.S. Fish and Wildlife Service.

In addition to the savanna restoration work, and additional 82 acres of prairie habitat were established on old cropland or cool season grasslands on 4 project sites.

Project sites worked on in 2010 include: (Sites in italics are public sites – all other sites are privately owned sites, please respect the rights of private landowners)

Decatur County:

Erke, Vik, Orvis, Timberhill, Tone, Campbell, Hawkeye Acres, *Springer Woods, Kobville Park, Saxton, Buckingham, Little River Recreational Area, Bishop Woods, Beardsley, Slip Bluff Park*

Taylor County: *Sands Timber* and Little

Ringgold County: Jerome

Lucas County: Richman

Madison County: Henrichs, Paule

Union County: Fowler

Wapello County: *Pioneer Ridge Nature Center*

Van Buren County: Knox

High Expectation for 2011

A strong partnership between SIOSA, the National Wild Turkey Federation, Iowa DNR and the USFWS in the Stephens Forest Bird Conservation Area (BCA), interest in the Sand Creek BCA and continued interest and expansion of participation in Decatur County could lead to high numbers of landowners and acres treated in 2011. Weather will play a big role in accomplishments, but acres treated could more than double in 2011.

For additional information on how you can restore savanna on your property please visit siosa.org or contact Gregg Pattison, USFWS biologist at (641) 784-5356.

Highlights from 2010: Orvis Prairie/Savanna Ridge



Before and after – the area in the fore ground was cleared of locust and overstocked hickory, the area in the background was typical on this slope. The site has highly diverse native prairie remnant and was open prairie in the 1930s.



This photo is looking from the creek bottom up the slope toward the ridgeline. Large white oaks were opened to full sun mainly near the base of the slopes. (photos by John Orvis)

SPECIES SPOTLIGHT Short-eared Owl

Scientific Name: *Asio Flammeus*



IDENTIFICATION The short-eared owl is a medium-sized bird. It has mottled brown plumage on its back and has a pale color on its breast. The head of this owl is round and it tends to fly low to the ground with a distinctively floppy flight.

HABITAT It can be found nesting year-round in Iowa during its breeding and non-breeding seasons. It can also breed in Canada and in the northern most states during the summer months and may winter in the more southern states and northern Mexico. In the midwest, this particular owl usually nests and incubates its eggs between mid-April and the end

of May. The short-eared owl prefers open landscapes where it can easily search for ground dwelling prey. Included in the variety of open landscapes it inhabits are prairies and grasslands (as it prefers to nest in dense herbaceous cover). Loss of this species in Iowa is directly linked to the loss of the tall-grass prairie.

DIET Since the short-eared owl is a diurnal owl species, it hunts both day and night. Many sources cite that in North America, the short-eared owl selectively feeds on the meadow vole. It also feeds on other types of voles, deer mice, shrews and small birds.

PREDATORS Larger birds like the great horned owl, snowy owl and the rough-legged hawk, are known to prey on the short-eared owl. Badgers, gulls and other ground predators are especially a threat to the short-eared owl's eggs.

FIRE EFFECTS Most adult birds are able to escape fire. If a fire occurs before *fledging, young birds are probably killed by fire. Eggs that are damaged by burns may still hatch however, owlets have been found to have developmental problems, such as a visual impairment. Fires that burn over nests that contain eggs burn and remove vegetative cover thus making eggs more vulnerable to predators. Burning after the fledging stage is a good way to ensure that populations of ground-nesting birds like the short-eared owl, reproduce successfully. Fire is also beneficial to the short-eared owl if used carefully as fire can create a more open landscape. Although much of the short-eared owl's habitat loss is attributed to urbanization, at least some of the habitat loss is due to fire suppression and the consequential succession to closed landscapes.



***Fledging** When young bird develops wing feathers that are large enough for flight
 Young short-eared owls fledge at approximately 29 days of age

SPECIES SPOTLIGHT Wild Geranium

Other Common Names: *Spotted cranesbill, wild cranesbill, alum bloom, crowfoot, love knot, rock weed*

Scientific Name: *Geranium maculatum* L.

Blooms April to June.



IDENTIFICATION Wild geranium is a perennial forb with a stem that can grow up to 2 feet tall. It grows from a branched thick and knobby *rhizome. The stem is hairy and sometimes branched. Leaves that grow from stem appear to be lobed into 3-5 sections and the leaves are toothed. Leaves are arranged in an opposite formation along the stem. Brown and white spots usually appear on the leaves. The flower color may vary but is typically rose-lavender and is 1-1^{1/2} inches across, usually solitary. The fruit is described as an “erect capsule resembling a bird’s beak” roughly a half inch long. Each capsule is divided into five sections, with each section containing a single seed.

DISTRIBUTION/SITE CHARACTERISTICS The wild geranium grows across eastern North America including the states of Iowa, Missouri and Kansas. It is associated with oak savanna and oak-hickory forests among other plant communities. Wild geranium is found throughout the state of Iowa in rich, moist, open woodlands. It prefers clay loam to sandy clay loam and sandy loam soils. It grows well in slightly alkaline, neutral and slightly acidic soils (pH 6.5 - 7.5). Wild geranium is moderately shade tolerant and is most abundant in dense patches in natural openings in *mesic woodlands and on sites protected from strong winds.

WILDLIFE USE White-tailed deer are known to eat the flowers of the wild geranium and birds eat their maturing fruit. Butterfly and moth larvae have been found feeding on both the flower and fruit.

HUMAN USE Historically, Native Americans and pioneers made tea from the crushed roots of the wild geranium to treat diarrhea. Native Americans also used the plant to treat facial and oral pain.



Wild geranium fruit capsules

FIRE EFFECTS Although there is little documentation about the direct effects of fire on the wild geranium, it has been observed that the plant increases in abundance after a prescribed fire has reduced the presence of surrounding invasive species (black cherry and multiflora rose). It has also been deduced that in sites where rhizome lies deeper beneath soil surface (open canopies) it is less likely that the wild geranium is killed by fire.

***Rhizome** Continuously growing horizontal underground rootstock that puts out lateral shoots and adventitious roots at intervals

***Mesic** Ecological term that refers to “containing a moderate amount of moisture”

Southern Iowa Oak Savanna Alliance Membership Form

Annual Membership Rates

Student Member \$10
Savanna Friend \$25
Supporting Member \$100
Sustaining Member \$250
Savanna Steward \$500

Name: _____

Email Address: _____

Home Address: _____

Phone Number (optional): _____

If you would like your contribution to specifically support one of the following SIOSA divisions/ services, please indicate which one:

- ▶ Habitat and Restoration
- ▶ Outreach and Education
- ▶ Annual Meeting
- ▶ Membership Recruiting

Print and mail the completed form with check or money order payable to SIOSA to:

SIOSA
c/o Richard Hillyard
21654 295th Ave
Leon, IA
50144

THANK YOU for your support!

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SIOSA newsletters are published quarterly.

Submissions to the newsletter should be sent to the editor: Jennifer Abraham at SIOSA@me.com