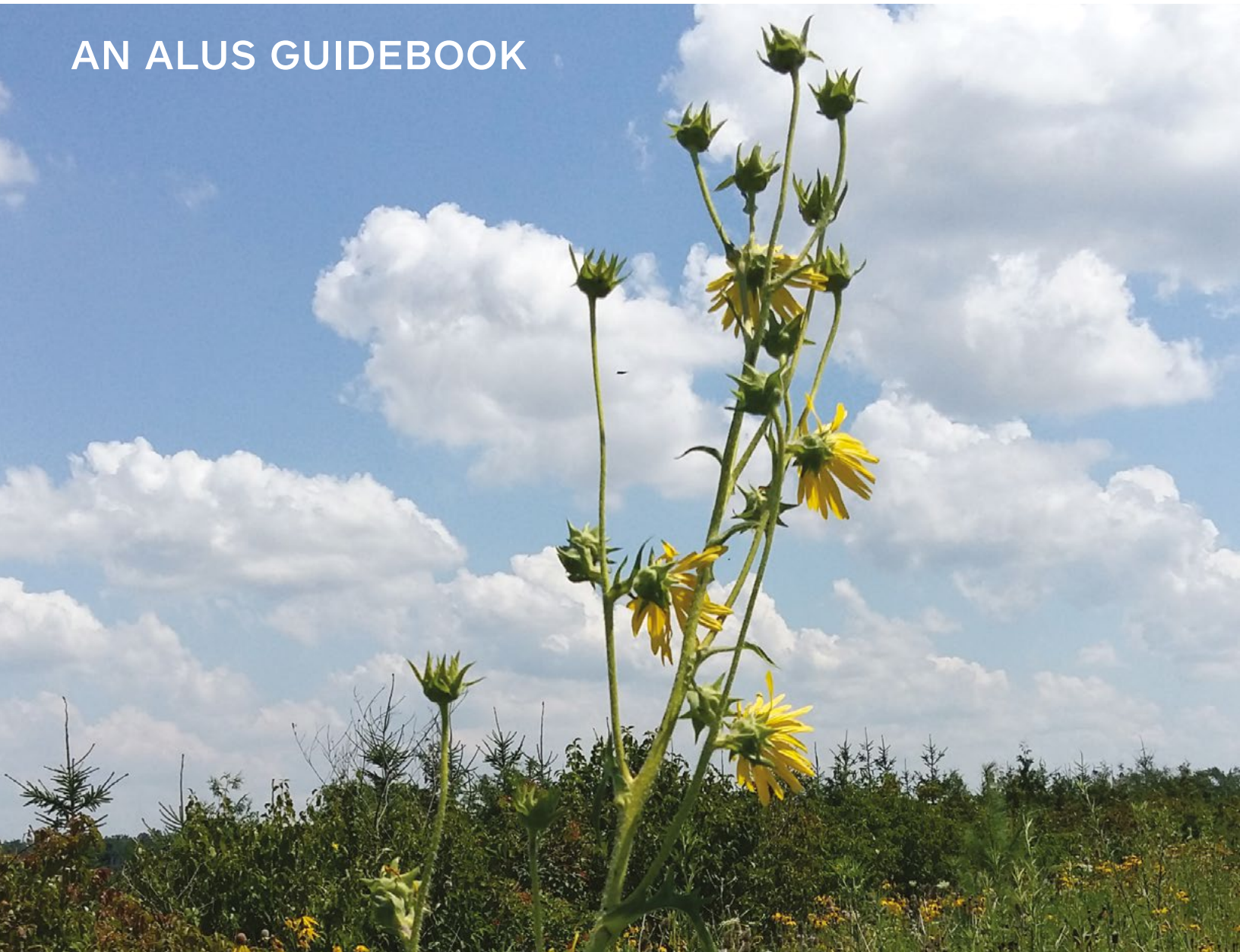
ALUS

Monitoring ALUS Grassland Projects

How to monitor grassland projects in ALUS' Eastern Hub

AN ALUS GUIDEBOOK



When, Why and How to Monitor your Projects

Congratulations on establishing an ALUS grassland project on your farm! This project will provide numerous benefits for the environment, your family and your community, including cleaner air, cleaner water, soil retention and more habitat for pollinators and wildlife.

As an ALUS participant, you are responsible for maintaining your ALUS projects in good working order, producing ecosystem services that benefit the land, the community and the planet. In recognition of the investment of time and effort required to manage your projects, ALUS will provide an annual, per-acre payment.

It is recommended that you incorporate the monitoring practices described in this ALUS Guidebook. Regularly inspecting ALUS projects will help identify any areas of concern and trigger the appropriate management and maintenance activities. The early detection of any problems is key to ensuring projects remain fully functional for years to come: Timely interventions will help prevent small problems from growing and requiring major maintenance work in the future.

As a bonus, regular monitoring will also allow you to witness biodiversity increasing on your farm, as you spot new evidence of interesting native plants, birds, mammals and insects in and around your ALUS project. Many participants find great satisfaction in witnessing the increase in wildlife on their properties after an ALUS project has been established.

If you note any issues with your ALUS projects, or if you have any questions, please contact your ALUS Program Coordinator.

About this Guide

This booklet is part of the ALUS Guidebook series, illustrating the types of ALUS projects available to participating farmers and ranchers.

The ALUS program provides planning advice and technical expertise for the design and implementation of each project through its local ALUS Partnership Advisory Committees. ALUS participants receive an annual, per-acre payment to manage and maintain their ALUS projects over the duration of their contract. ALUS projects are also independently monitored, verified and audited to ensure they are producing ecosystem services for the community.

For more information, please contact your closest ALUS Program Coordinator. See **ALUS.ca** for contact details.

Monitoring Basics

Walk both the perimeter and the interior area of your project, looking for:

- Visible trees and shrubs in the project
- Invasive and non-native species – particularly along the perimeter of the project
- Areas of exposed soil. For clump-forming TGP grasses, note if the clumps are far apart.

Pay special attention to:

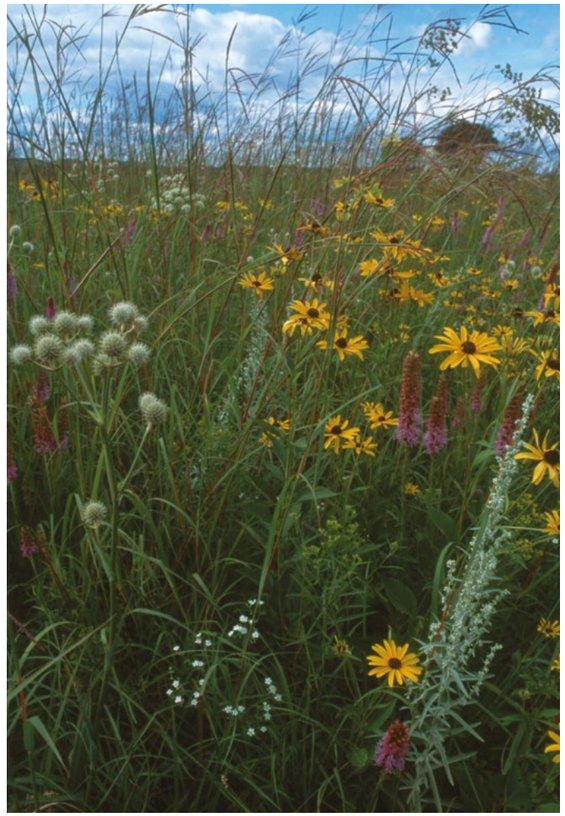
- Native plant growth (see **"Desirable Plants,"** page 4).
- Invasive plant species (see **"Undesirable Plants,"** page 5).
- Evidence of wildlife activity (See **"Wildlife Monitoring,"** page 6).

If you find any areas of concern, you should visually mark the area with flags or stakes and contact your ALUS Program Coordinator for guidance.

Your ALUS Program Coordinator is here to help. They can meet you on site to inspect the areas of concern, provide helpful resources such as the "Success with ALUS Grassland Projects" guidebook, and connect you with third-party contractors that are available to help with any major maintenance tasks.

Your Program Coordinator may also connect you with an ALUS Farmer Liaison, an active farmer participant with knowledge of both farming practices and ALUS projects. ALUS Farmer Liaisons can give you particular advice about project management, such as what type of equipment to use for certain maintenance tasks, or when to conduct certain maintenance tasks, based on your farming operation and the type of ALUS projects you have.

Native Tallgrass Prairie ALUS Projects



A Tallgrass Prairie (TGP) is a diverse, open landscape native to southern Ontario that is bursting with life. TGP projects should be monitored in the spring and summer, when species are in peak growth. Desirable species will be most present in the warm summer months, while undesirable species may be easier to spot when the native vegetation is not actively growing. Native, warm season species will be dormant in spring, while non-native cool-season species will be green.

Non-native, agricultural or cool-season grassland ALUS Projects

Well maintained and diverse pastures and hayfields are important habitat for many grassland bird species, mammals and pollinators. Cool-season grasses, may be planted in ALUS grassland projects as field setbacks, grassed waterways, or buffers.

Desirable Plants in Grassland Projects

Your ALUS grassland project will function most effectively when appropriate vegetation is growing in and around the project. Below are some desirable grassland plant species you may see in your ALUS project.

Wild Bergamot
(Monarda fistulosa)

Blue Vervain
(Verbena hastata)

Grey-headed Coneflower
(Ratibida pinnata)

Big Bluestem
(Andropogon gerardii)

Indian Grass
(Sorghastrum nutans)

Brown-eyed Susan
(Rudbeckia triloba)

Round-headed Bushclover
(Lespedeza capitata)

New England Aster
(Symphyotrichum novae-angliae)

Evening Primrose
(Oenothera biennis)

Undesirable Plants in Grassland Projects

Invasive, non-native plant species are undesirable in ALUS grassland projects. Controlling invasive species is critical to the success of your project. Common annual weeds may be present, but it is important to look out for aggressive and invasive species such as the plants featured below. If you see these species, contact your ALUS Program Coordinator for information on how to remove them from your project.

Queen Anne's Lace
(Daucus carota)

Giant Ragweed
(Ambrosia trifida)

Wild Teasel
(Dipsacus fullonum)

European Common Reed
(Phragmites australis)

Wildlife Monitoring

One of the many benefits of ALUS grassland projects is that they increase and improve wildlife habitat on your land. Many ALUS participants enjoy discovering what animals start visiting their ALUS project once it is established. You may enjoy setting up a trail camera to catch photos of the wildlife visiting your ALUS project. Your local ALUS Program Coordinator is always interested to see photos and evidence of wildlife in and around projects, and can help you identify the animals based on the signs you have found.

Tracks—Wet soil is the perfect place to check for any animal or bird tracks. In the Eastern Hub, you are most likely see tracks left by deer, turkeys, coyotes, raccoons and squirrels.

Nests—Many bird species use ALUS projects. Nests are usually well-camouflaged, but you may be lucky enough to find one in the spring, or in fall when the vegetation has died back. Look to see if there are shell fragments that may help identify the type of nest.

Fur & Feathers—Wildlife may lose fur and feathers as they move through your ALUS project. Some birds have distinctive feathers that make it easy identify the species.

Ecosystem Services Produced by ALUS Grassland Projects

Cleaner Air All ALUS grassland project can help to sequester (store) carbon in the soil. Tallgrass Prairie (TGP) specifically captures carbon from the air to develop its vast root system that extends 3 to 4 metres (10 to 13 feet) into the ground.

Cleaner Water ALUS grassland projects help to keep streams, rivers and lakes cleaner by reducing soil runoff caused by wind and water erosion. The deep root systems of TGP particularly increase organic matter, improve water infiltration and strengthen the structure of the soil to help curb erosion.

More Biodiversity ALUS TGP projects support an otherwise declining ecosystem in Canada, providing year-round wildlife habitat for a wide variety of pollinating insects, birds and small mammals.

Pollinators ALUS TGP projects feature native flowering plants that attract pollinators and provide nectar from spring to fall. And because the grasses grow in clumps or bunches rather than a solid carpet, they preserve some bare ground and provide important habitat for Ontario's native ground-nesting bee species.

Monitoring ALUS Grassland Projects

How to monitor your grassland projects in ALUS' Eastern Hub

The ALUS program helps farmers and ranchers produce cleaner air, cleaner water, and more habitat for wildlife and pollinators in their communities. Brought to you by ALUS—a recognized leader in sustainability that is revolutionizing the way Canadians support the environment—ALUS makes it easy for agriculture to be part of the solution, by producing ecosystem services to benefit us all. Learn more at ALUS.ca.

ALUS.ca

The ALUS Guidebook Series is made possible by funding from an Ontario Trillium Foundation Grow Grant.

Ontario Trillium Foundation / Fondation Trillium de l'Ontario

An agency of the Government of Ontario
Un organisme du gouvernement de l'Ontario

ALUS