

# the Bluestem Banner



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# **Tallgrass Ontario**

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Tallgrass Ontario will identify and facilitate the conservation of tallgrass communities by coordinating programs and services to provide assistance to individuals, groups and agencies.

### **Tallgrass Ontario thanks:**

The Ontario Trillium
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### Can America's Grasslands Be Saved?

Go to www.tallgrassontario.org to download the Bluestem Banner in colour.

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# <u>Can America's Grasslands Be Saved?</u> By TOM KENWORTHY

This article was published by the Center for American Progress Action (<u>www.americanprogressaction.orq</u>) and is reprinted here with permission.

BISMARCK, NORTH DAKOTA — to the uneducated eyes of a visitor traveling along secondary roads in central North Dakota, it seems like farmers there are harvesting boulders. But the big rock piles frequently seen at the edges of new agricultural fields are actually signs of a massive change in land use in recent years. Dramatic alterations to this region's lands have important implications, not just for wildlife in a place vital for waterfowl and other birds, but also for climate change.



Photo -Edwin Olson

As climate change projections become more dire, cutting carbon emissions becomes ever more crucial. While more efficient buildings and vehicles, rapid deployment of clean energy, and reduced dependence on fossil fuels are common solutions, an important piece of the carbon sequestration puzzle lies in protecting the ability of natural systems to store carbon.

Here in the northern reaches of America's Great Plains, vast areas of grasslands have in recent years been converted to the production of corn and soybeans, a dramatic change that is eating away at our carbon storage reserves. Driven by rising prices that reflect increased worldwide demand for food and energy crops, as well as federal farm policies and new crop technology that has allowed the corn belt to march west into more arid country, farmers and ranchers in the northern Great Plains have undertaken one of the great land conversions in recent U.S. history.

"We are looking at rates of conversion that exceed the rates of [tropical] rain forest loss at their peak," said Joe Fargione, science director for the North American region of The Nature Conservancy. "It is a globally significant hot spot of habitat loss."

# "Most people don't realize how much carbon is stored in a prairie"

A <u>study</u> published early this year in the Proceedings of the National Academy of Sciences, found that 1.3 million acres of grassland had been converted to corn and soybeans between 2006 and 2011 in North Dakota, South Dakota, Nebraska, Minnesota and Iowa. Native prairie — whose plants have deep and extensive root systems — is a very effective carbon sink if not cultivated, but plowing and converting that land to annual row crops leads to the emission of 20 to 75 metric tons of carbon dioxide equivalent per acre. For comparison, a typical passenger car emits about 5.1 tons of carbon dioxide a year. Even if that converted land is devoted fully to the production of corn for ethanol that replaces fossil fuels, the study found it would take 30 years to make up for the loss in carbon sequestration.

Most people don't realize how much carbon is stored in a prairie," said Fargione. "It's in the roots of the plants and also in the soil. When you look at a prairie, you see grasses waving back and forth. But there's five times as much biomass below ground in the roots. So there is a lot more carbon in the roots and even more in the soil. When that soil is plowed up you lose about 40 percent of the carbon in the top foot of soil."

High commodity prices — propelled in part by China's demand for soybeans and a federal ethanol mandate that results in nearly 40 percent of the nation's corn crop being used for fuel — have also helped drive farmers away from the Agriculture Department's Conservation Reserve Program, which pays producers not to plant marginal agriculture land and instead preserve it for wildlife habitat and other values. But getting paid about \$40 an acre under the CRP doesn't compare to what farmers can get for producing corn or soybeans in recent years. According to US Department of Agriculture there were nearly 37 million acres enrolled in the CRP at its height in 2007; since then, the number has fallen by 10 million acres.

In an attempt to slow the rate of grassland loss in the northern plains, a coalition of groups including Ducks Unlimited, the Department of Agriculture's Natural Resource Conservation Service, The Climate Trust, The Nature Conservancy and Environmental Defense Fund have launched a program designed to pay landowners to not convert grasslands and keep stored carbon in the ground.

So far, the Avoided Grassland Conversion Carbon Project has signed up more than 100 landowners and about 50,000 acres. When fully operational, the program plans to sell the carbon offset credits to companies and organizations that want to demonstrate they are environmentally sustainable.

USDA funded the project with a \$161,000 grant to Ducks Unlimited that sparked development of a credible model for quantifying the amount of carbon emissions that can be avoided through not converting grasslands. The model takes into account a number of parcel-specific factors like weather, type of soil, and vegetation. The program has been certified by the American Carbon Registry.

"We think agriculture can play a leading role in solving our climate problems," said Ashley Rood, a project manager at the Environmental Defense Fund who worked on the project. "Farmers get it. They want to participate in market-based solutions, in voluntary opportunities so they can do good environmental practices on their lands."

Lisa Irby, director of conservation services at Ducks Unlimited's Great Plains office in Bismarck, said in addition to providing income to ranchers and farmers and helping to sustain rural economies, the program has a range of environmental benefits beyond storing carbon. "The landowner gets some specific benefit, but there is also an increase in wildlife habitat, in breeding grounds for migrating waterfowl, in clean water, and reduced runoff."

"There is a public benefit to have these intact prairies"



Photo -Edwin Olson

Much of the area where the grassland conversion rate has been so high overlaps with what is known as the "prairie pothole" region, where thousands of shallow wetlands in depressions left by retreating glaciers provide vital wildlife habitat, including breeding and feeding grounds for about half of North American migratory ducks and other waterfowl. Since white settlement, about half of the pothole wetlands have been lost, much of it through draining for agricultural use.

The Ducks Unlimited program could make a dent in the loss of those vital public resources in the northern Great Plains.

"We're bringing payments for a service that these ranchers are providing that otherwise would be lost," Fargione said. "There is a public benefit to have these intact prairies, to have the carbon sequestered and the wildlife habitat."

**Tom Kenworthy** is a Senior Fellow at American Progress. Tom spent more than three decades as a newspaper reporter, the majority of that time with The Washington Post and USA Today. His environmental reporting has won awards from the Society of American Foresters and the Sierra Club.

Page 1 Photo credit- Environmental Protection Agency



Please visit the Tallgrass Ontario web site at <a href="http://www.tallgrassontario.org/index.html">http://www.tallgrassontario.org/index.html</a>

We provide comprehensive information about the creation and care of tallgrass prairie - how to plant, establish and maintain and information on Ontario native plants.

**Pollinator Packs:** Please help our bees. The pollinator crisis is caused in part by loss of habitat and lack of floral diversity. You can make a difference by planting native bee friendly flowers in your garden and encouraging your friends to do so as well.

Support Monarch Butterflies – Buy a TgO Pollinator Pack today
TALLGRASS ONTARIO SELLS POLLINATOR SEED PACKS –INDIVIDUAL SPECIES OR SPIECES MIXES. PLEASE VISIT
OUR WEBSITE AND PLACE YOUR ORDER ON-LINE.







### **Tallgrass Ontario's Goals**

- 1. Ensure Organizational Capacity;
- 2. Facilitate the creation and restoration of tall grass communities;
- 3. Increase public awareness and stewardship of tall grass communities;
- 4. Identify and secure existing and potential tallgrass communities across the province;
- 5. Promote research and knowledge transfer of tall grass communities.

## Membership

Tall Grass Ontario is always actively seeking individuals that would like to learn the roles of a TgO board director and work to achieve a position on the board.

The first step in the TGO volunteer path is to become a member. A General Membership is \$20 per calendar year, a Student Membership is \$10.00 annually and a Lifetime Membership is \$100.00. All memberships entitle the member to voting rights in the organization.

You can donate to Tallgrass Ontario by visiting <a href="https://www.canadahelps.org/dn/13376">https://www.canadahelps.org/dn/13376</a>
You can become a member by visiting our website at <a href="http://www.tallgrassontario.org/memberships.html">http://www.tallgrassontario.org/memberships.html</a>



### Tallgrass Ontario - What we do - How you can help

Tallgrass prairies and savannas, also known as Tallgrass Communities are a globally imperiled ecosystem and one of the most endangered ecosystems in Canada. These ecosystems provide habitat for a large number of wildlife species, including many that are officially designated as rare at the global, national or provincial level. Tallgrass prairies are home to species such as Northern Bobwhite which is in danger of disappearing from Canada. Some tallgrass species, like the greater prairie chicken and the Karner blue butterfly, have already disappeared from Canada.



Iron weed (Vernonia) at Kenesserire Prarie. Photo - Steve Rankin

Tallgrass prairies and savannas – are natural grasslands with a great diversity of grasses, wildflowers and animal life. In Southern Ontario, tallgrass once covered approximately 1000 km² – less than 3 percent remains today. Most tallgrass communities have been lost over the past 200 years due to human use of the land for agriculture and urbanization.

The Ontario Tallgrass and Savanah Association – Tallgrass Ontario (TgO) - was established in 1999 to coordinate work by groups that wished to undertake conservation programs that would implement the Recovery Plan for grassland communities in Southern Ontario. The Recovery plan lists hundreds of tallgrass and savanna species many of which are identified as threatened, endangered or extirpated.

### **Our Mission Statement:**

"Tallgrass Ontario will identify and facilitate the conservation of Tallgrass communities by coordinating programs and services to provide assistance to individuals, groups and agencies".

### Who's involved?

Conservation clubs, Conservation Authorities, Municipalities, Naturalist Clubs, Ontario Ministry of Natural Resources, Environment Canada, Academic Institutions, Schools, Landowners and citizens, You????

### What We Do:

- 1. Contact groups and individuals engaged in recovery efforts
- 2. Promote scientific research
- 3. Implement landowner contact and stewardship Projects
- 4. Raise public awareness
- 5. Develop and transfer information about conservation and restoration
- 6. Generate funds for recovery efforts
- 7. Undertake on-the-ground grassland reconstruction projects.

### How you can help:

- 1. Donate to TgO
- 2. Become a member of Tallgrass Ontario
- 3. Volunteer your time.

Tallgrass Ontario is looking for new members able to volunteer a couple days per month and join our Board of Directors.

You can become a member by visiting our web site at <a href="http://www.tallgrassontario.org/memberships.html">http://www.tallgrassontario.org/memberships.html</a>

You can donate to Tallgrass Ontario buy visiting <a href="https://www.canadahelps.org/dn/13376">https://www.canadahelps.org/dn/13376</a>

