Savanna Restoration Projects in Toronto

There is a growing interest in the protection and restoration of tallgrass ecosystems. In 1998, a recovery plan for these habitats was published by the Ontario Ministry of Natural Resources and World Wildlife Fund Canada. This was followed by the creation of Tallgrass Ontario, a network of organizations and individuals who share their expertise and experience.

Oak savanna restoration involves planting of native savanna species, control of invasive plants, and prescribed burns. Projects currently underway in Toronto include:

South Humber Park. *The "Humber Savanna Project" is an initiative of the Association for Biodiversity Conservation in cooperation with the City of Toronto and the Toronto and Region Conservation Authority. It involves local community action to restore a small oak savanna remnant and to protect or enhance other degraded habitats in this park.*

High Park. *The City of Toronto Urban Forestry Services and the High Park Citizens' Advisory Committee are working to restore one of the largest oak savanna remnants in the Province. The project has included planting of savanna species, controlled burns, and control of invasive exotic plants.*

Lambton Park. *Further up the Humber River, Lambton Park has some remnant tallgrass features that the City of Toronto has an interest in restoring. Community involvement will be an important part of the project.*

Other remnant tallgrass communities continue to be discovered in the City.

Community planting event. **(photo S. Smith)**

For further information, or to find out how you can get involved, please contact:

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Cover photo shows typical Oak Savanna in Toronto. Inset photos are Wild lupines (left) and Sassafras (right). Photos credit K. Towle.

Association for Biodiversity Conservation

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Helping communities create a healthy environment
Aider les collectivités à créer un environment sain

Conservation Toronto and Region

Toronto's Savannas

... a very special kind of habitat.

WHAT ARE SAVANNAS?

Before the arrival of the first European settlers, the landscape that is now Southern Ontario was dominated by vast areas of forest. The forest cover was occasionally interrupted by two principal types of tallgrass ecosystems - prairie and savanna.

Although these open habitats characterised the landscape in the Midwestern United States and parts of the prairie provinces, only scattered patches were found further east, primarily in the south-central and southwestern parts of Ontario.

Because they were already open, relatively dry, and attractive sites, prairies and savannas were prime targets for settlement. The great expanses of prairie on the great plains and most of the smaller patches in the northeast were rapidly converted to agriculture or urban land uses. Now, only very small isolated remnants of the original habitats remain. Coincidentally, some of these have survived in older urban parks, and Toronto is blessed with several of these rare treasures.

The two tallgrass community types are quite distinctive. Prairies are open treeless areas dominated by grasses and forbs (wildflowers). In contrast, a savanna (also spelled savannah) is essentially an open woodland that combines prairie and forest features. Technically speaking, a savanna is a tallgrass community with 25-35 percent tree cover, according to the Ecological Land Classification System for Southern Ontario.

The type of savanna is defined by the dominant tree species. In North America the most common types are pine and/or oak savannas, since these trees tolerate dry sandy soils and are fire-resistant.

Exotic plant removal.
(photo K. Towle)

WHAT'S SO SPECIAL ABOUT OAK SAVANNAS?

Oak savannas were never abundant in Canada, but now that so few of the original sites remain, they have become one of the rarest ecosystem types in the country.

Many plants and animals associated with these habitats are now threatened. For example, in Ontario at least 156 tallgrass plant species are officially listed as rare, representing a large percentage of the total number of rare plants in the province.

Red-headed Woodpecker
(photo B. Dyer, Cornell Laboratory of Ornithology.)

Many insects that specifically depend on savanna grasses and forbs may also be in trouble. For example, the tiny Karner Blue butterfly, which feeds on rare wild lupines, can no longer be found in Ontario. Intensive land use has isolated remaining savanna fragments, making it difficult for plants and animals to disperse to new locations. Maintenance and restoration of savannas throughout their former range will help to connect populations of many other rare species, and increase their chances of survival.

In addition to direct loss, habitat degradation has been a major problem facing savannas. Much damage has resulted from intensive recreational use, the disruption of original soils by clearing or filling, and invasions by aggressive exotic plants. Fire suppression has caused some remnants to revert to forests or thickets containing many plant species not characteristic of savannas. Because of their extreme rarity, savannas should be considered priority habitats for protection, restoration, and maintenance.

THE IMPORTANCE OF FIRE

It is often necessary to use fire as a management tool if savannas are to continue to exist both as a component of a healthy landscape, and as an important part of our natural heritage. Historically fires occurred across the landscape of southern Ontario on a regular basis either as a result of lightning, or as a form of land clearing practised by aboriginal peoples. Fire helped maintain biodiversity, in part by ensuring that the dominant forest cover was a mix of tree ages, but also by creating a landscape mosaic composed of forest, prairie, and savanna. This diversity of communities results in a high diversity of species.

Most tallgrass plants benefit from the occasional ground fires that are characteristic of natural prairie and savanna ecosystems. Mature savanna trees such as oak and pine have thick, fire-resistant bark, and the native grasses and wildflowers tend to be deeply rooted, allowing them to recover vigorously shortly after a burn has occurred. In tallgrass systems, fire is a rejuvenating, rather than destructive force.

Prescribed burn operations at High Park in spring 2000.
(photo D. Barnett)