



— Tallgrass ecosystems need fire

Wildfire Resilience Consortium of Canada and Tallgrass Ontario —

Fire is natural and necessary for maintaining tallgrass ecosystems in Southern Ontario

Without periodic fire, tallgrass ecosystems such as prairies and savannas are often outcompeted by cool season grasses and/or shrubs and forests, reducing biodiversity. Prescribed burns safely reintroduce fire to restore and protect these globally imperiled and endangered ecosystems.

Fire maintains tallgrass prairie landscapes

Historically, fires occurred from lightning and intentional human use (including Indigenous fire stewardship). Fire was more common on dry, sandy soils and sand plains, where prairies and savannas developed. These fire-maintained systems included:

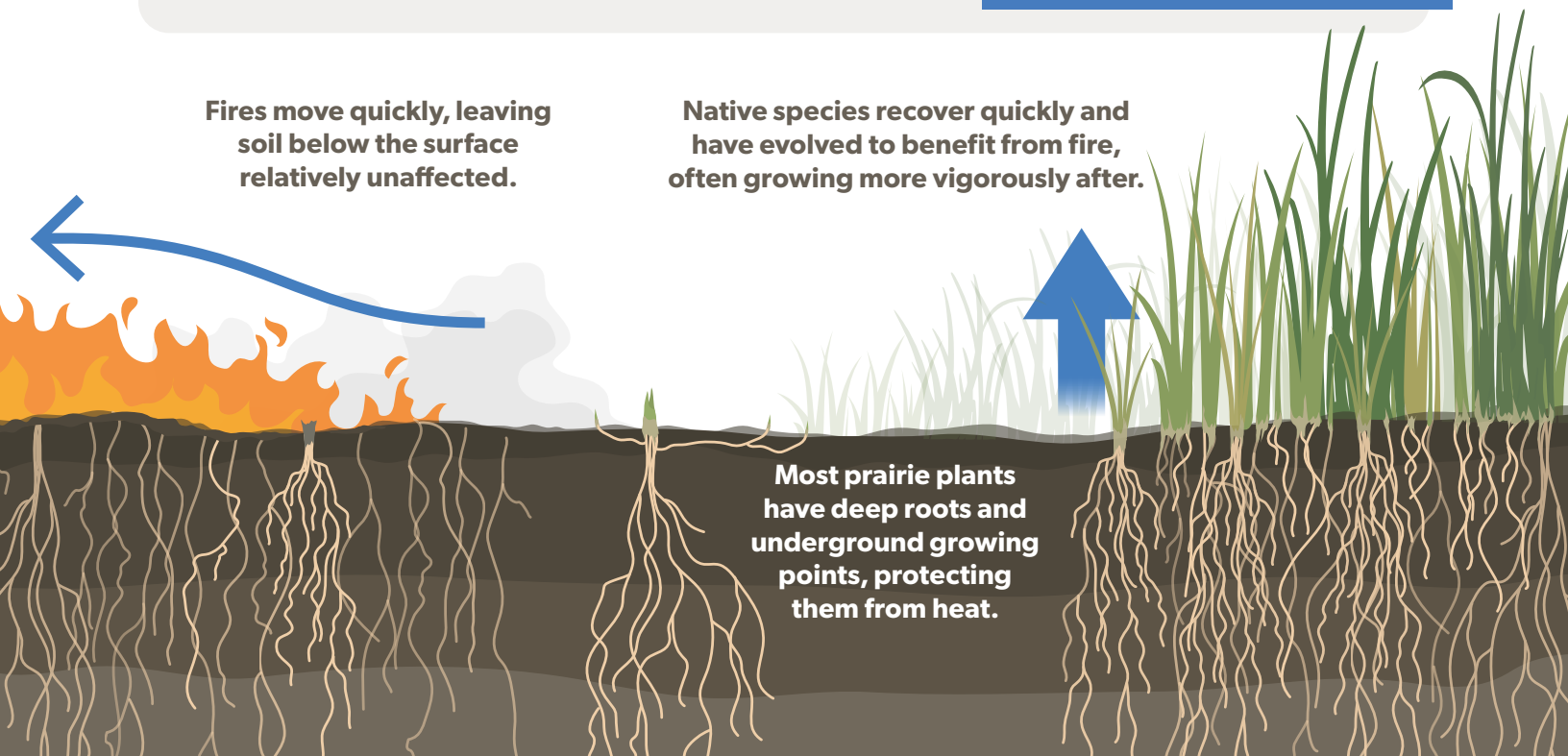
- › Tallgrass prairies
- › Oak savannas
- › Oak woodlands

Note: not all grasslands benefit from fire. For example, meadows are not fire-dependent.

Fires move quickly, leaving soil below the surface relatively unaffected.

Native species recover quickly and have evolved to benefit from fire, often growing more vigorously after.

Most prairie plants have deep roots and underground growing points, protecting them from heat.



Fire suppression has disrupted natural cycles

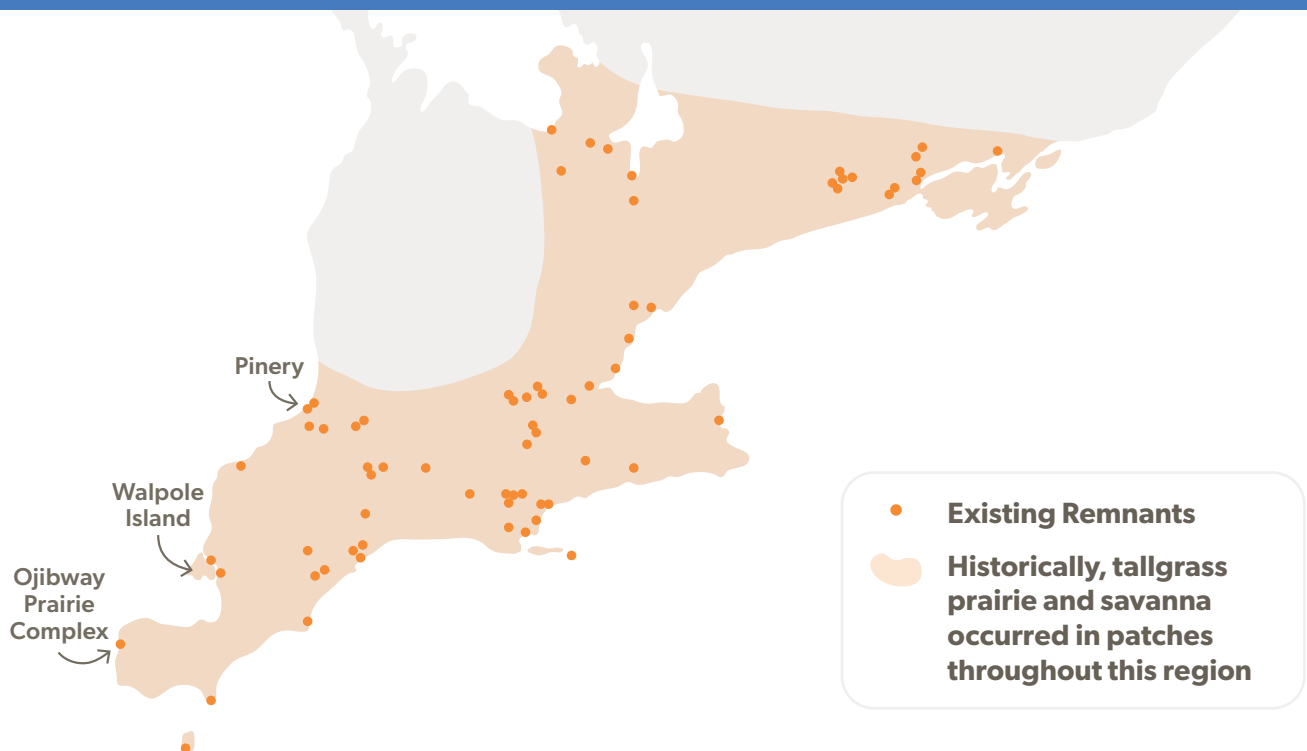
Settlement and agriculture disrupted natural fire cycles, and fire suppression increased to protect people and property. Historically, First Nations coordinated and implemented significantly more cultural burns. As a result, fire has been largely removed from the Southern Ontario landscape.

Without fire, prairies and savannas rapidly convert into shrublands or forests. Tree species (poplars, sumacs, buckthorns, and autumn olive) invade and dominate former grasslands, and ecosystems become less diverse and less productive over time.

Only 3% of Ontario's tallgrass prairie remains intact

Today, only small remnants totalling less than 3% of the original range remain, primarily in areas with sandy or well-drained soils and continued disturbance (including fire). Examples include:

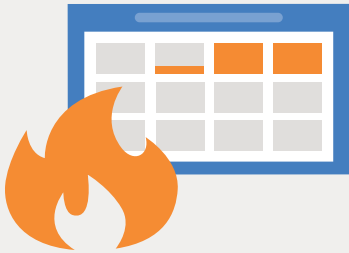
- › Walpole Island
- › Ojibway Prairie Complex in Windsor region
- › Pinery–Port Franks area



Prescribed burns: restoring a natural process

Prescribed burns are carefully planned and controlled fires that reintroduce fire to maintain and restore local prairie habitats. They are a key tool in recovery strategies for species-at-risk.

- Prescribed burns are often conducted in early spring when prairie plants are dormant.



- Burns are patchy, leaving some areas unburned as refuges. This allows:

- Insects and small animals to survive
- Recolonization of burned areas



- Fire helps maintain high biodiversity and complex habitat structure.



Fire benefits tallgrass species such as big bluestem, little bluestem, yellow prairie grass (*Sorghastrum nutans*), purple coneflower, wild bergamot, and more.

This WRCC infographic was written and developed in collaboration with Tallgrass Ontario. For more information and resources on prescribed fire in tallgrass ecosystems, visit their website at tallgrassontario.org.