

Heating up the sanctuaries: Gardens' prescribed burns 2006

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THIS SPRING ROYAL BOTANICAL GARDENS' natural lands staff performed not one, but two (that's right, two!) prescribed burns on our properties — the first time that we've succeeded in having more than a single burn in a year.

These prescribed burns are vital for the restoration of The Gardens' tallgrass remnants — prairies and savannahs — patches of what is probably the most imperiled habitat in Ontario. The burns help control invasive species and shrubs, while promoting the native tallgrass species that originally occurred in these habitats.

Both burns were great successes. Our first, on April 21, was at the Princess Point Savannah on the western edge of Princess Point, on the south shore of Cootes Paradise. This savannah remnant, a new addition to our prescribed burn program, is rich in burn-loving tallgrass species like black oak (*Quercus velutina*), fern-leaved false foxglove (*Aureolaria pedicularia*), showy tick-trefoil (*Desmodium canadense*) and whorled looserife (*Lysimachia quadrifolia*). Unfortunately, the savannah is being heavily invaded by shrubs — particularly Japanese barberry (*Berberis thunbergii*), black alder (*Alnus glutinosum*), and non-native honeysuckles (*Lonicera tatarica*, *Lonicera maackii*, etc.) — and non-native grasses like orchard grass (*Dactylis glomerata*), all of which are sensitive to fire.

Over the course of the afternoon, we were able to foster a nice back burn (where the burn front moves into the wind, and thus the heat lasts longer at each location) over nearly the entire site, with the exception of the early patches of Virginia waterleaf (*Hydrophyllum virginianum*) diligently protected by our volunteers. And we timed it perfectly — the burn was just ending as the rain started to fall. The rain was a welcome arrival, both for our tired and smoky staff, and for the freshly burned savannah.

Our second burn was at the York Boulevard Prairie, on May 3. This site features tallgrass species like little bluestem (*Schizachyrium scoparium*), big bluestem (*Andropogon gerardii*), and Indian grass (*Sorghastrum nutans*). These attractive prairie grasses are joined by the rare stiff goldenrod (*Solidago rigida*), another burn-friendly species. We have burned the York Boulevard Prairie three times before, and the area covered by the tallgrass species has increased significantly. This year we concentrated on three sections of the

prairie that were either in need of particular attention, or which had not been burned last year. As with the Princess Point Savannah burn, this prescribed burn went perfectly according to plan. The burn front was able to move slowly into the wind, fueled by the dry dead grass leaves from the year before. Hopefully it will have a similar effect as last year's burn, and help control the smooth brome (*Bromus inermis*), Siberian elm (*Ulmus pumila*), and staghorn sumac (*Rhus typhina*).



Royal Botanical Gardens' staff and volunteers oversee a very pretty back burn at the Princess Point Savannah.

The success of these burns is due to the enthusiasm of the volunteers (especially Shari Wiseman from the Hamilton Conservation Authority), and staff at Royal Botanical Gardens, and to the co-operation and support of Hamilton Emergency Services Fire Prevention Division. Thanks everyone!

We encourage Royal Botanical Gardens' members to visit these tallgrass habitats over the summer — they are fascinating areas in themselves, and are particularly interesting to watch as the tallgrass species respond to the burn. If you do visit, please remain on the paths so as to avoid damaging these sensitive habitats as they recover.

Note: Royal Botanical Gardens' prescribed burns are planned in advance by experienced ecologists, prescribed burners, and the fire department, and are performed under highly controlled conditions. Please do not be cavalier with fire or cigarettes in our nature sanctuaries. We've had at least four wild fires this spring caused by careless visitors, some of which have been very destructive. Please leave the burning to the professionals. ✨