
Recommended Citation


Introduction

The final Recovery Strategy for the Eastern Prickly Pear Cactus (*Opuntia humifusa*)\(^1\) in Canada was posted on the Species at Risk Public Registry on November 30, 2010. The recovery strategy included objectives for the species and approaches to attain the objectives. Under section 46 of the *Species at Risk Act* (SARA), the competent minister must report on the implementation of the recovery strategy and on the progress towards meeting its objectives five years after it is included on the registry and in every subsequent five-year period, until its objectives have been achieved or the species’ recovery is no longer feasible. This document, prepared with support from Ontario Parks - Southwest Zone, reports on the implementation of the Recovery Strategy for Eastern Prickly Pear Cactus (*Opuntia humifusa*) in Canada from 2010 through 2017, and the progress towards meeting its objectives.

Implementation of the Recovery Strategy and Progress towards Meeting its Objectives

The Recovery Strategy for the Eastern Prickly Pear Cactus (*Opuntia humifusa*) in Canada identified objectives focused on the two known naturally-occurring sites in Canada - *to maintain and increase the number of microsites (345) of the Eastern Prickly Pear Cactus in Point Pelee National Park; and to maintain the population size (five microsites) at Fish Point Provincial Nature Reserve on Pelee Island*. Both objectives, and their supporting approaches, are successfully being addressed, respectively by Parks Canada (Point Pelee National Park), and by Ontario Parks (Fish Point Provincial Nature Reserve).

Objectives for the Fish Point population include maintenance of suitable habitat conditions around each of the microsite locations, and a halt in species declines within the nature reserve, or an increase in growth and distribution. The five known microsites have been monitored and continue to persist over the ten-year monitoring period (2004-2013). Detailed pad counts have been initiated at all five microsites as of 2013, however a repetition of the detailed survey will not be conducted until 2018, so a relative understanding of any potential increase or decrease of the population since that time is not yet available. One cactus clump in one of the five

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\(^1\) The species *Opuntia humifusa* recognized as a Schedule 1 species under SARA has now been revised to *Opuntia cespitosa* and native Ontario plants belong to it rather than *O. humifusa* (Majure *et al.* 2017). This revision is accepted, however in this report all references to the specific level of the cactus are to the published recovery strategy of 2010, so the nomenclature herein has not been altered.
microsites, last observed in 2004 and located in overgrown savannah, was not observed during 2011 or 2013 surveys and is presumed extirpated.

Threat abatement has been initiated at all of the five microsites at Fish Point Provincial Nature Reserve. The recovery strategy notes that optimal growth for the species occurs with 50 to 70 percent lighting, and management has targeted the succession of the Red Cedar-Oak Savannah communities supporting the cactus, within the surrounding Common Hackberry (*Celtis occidentalis*) forest. Removal of encroaching woody vegetation was conducted in 2012 and 2013 at these five locations to improve habitat conditions surrounding remaining plants. This was achieved by reducing impacts from tree and shrub encroachment (including invasive species), specifically targeting Tree of Heaven (*Ailanthus altissima*), Norway Maple (*Acer platanoides*), Black Locust (*Robinia pseudoacacia*), and White Mulberry (*Morus alba*); and promoting an increase in vigour and natural regeneration.

Direct threat from all-terrain vehicle (ATV) access along the beach at Fish Point has also been identified from Ontario Parks monitoring efforts to date. Prohibitive signage and interpretive panels highlighting the sensitive nature of the habitat area have been installed on site in an effort to address this threat. The proximity of hiking trails at Fish Point, to cactus microsites, has been assessed and strategic re-routing has been implemented where necessary to reduce the threat of plant collection. Ontario Parks continues to monitor trail use in proximity to the cactus microsites and has reached out to the Township of Pelee Island and the municipal Environmental Advisory Committee for assistance to communicate the negative impacts of ATV use in the area to the general public.

Specific measures and timelines for recovery implementation of the Eastern Prickly Pear Cactus are identified in the Management Plan for Fish Point Provincial Nature Reserve.

Point Pelee National Park has developed a monitoring program for Eastern Prickly Pear Cactus, using protocols established for measuring both the number of microsites as well as cladodes (or pads). Data have been collected for two survey periods (2005 and 2015-17) and analysis is on-going.
Parks Canada is actively addressing the restoration of critical habitat for Eastern Prickly Pear Cactus within the park by focusing on the most urgent recovery approach to restore early successional stages of the Lake Erie Sand Spit Savannahs ecosystem to improve the quality and quantity of critical habitat available for Eastern Prickly Pear Cactus. This savannah restoration program at Point Pelee National Park has restored 26.6 hectares (ha) of degraded Red Cedar Savannah since 2010 and has used a variety of management techniques including manual cutting of dogwood thickets, removal of invasive alien plants, planting of native savannah species, and the reintroduction of prescribed fire to 3.05 ha of degraded habitat.

Public outreach is a component of the savannah restoration program with communication initiatives being delivered annually at Point Pelee National Park. For instance, a short hiking trail with interpretive signage describing the Eastern Prickly Pear Cactus and its habitat needs was developed to provide visitors access to one of the richest cactus areas of the park. An enhanced interpretive exhibit is planned for this site, with text outlining the restoration work of the Lake Erie Sand Spit Savannahs Program, and featuring cactus recovery objectives. Interpretive signage is also being used to re-direct visitors away from sensitive savannah habitat undergoing vegetation restoration. These outreach and communication initiatives, coupled with regular monitoring and enforcement of existing legislation by park staff, has encouraged compliance, with no known cases of collection occurring in the park since 2010.

In 2016, Parks Canada posted the final version of the Multi-species Action Plan for Point Pelee National Park. The plan took a holistic approach, incorporating all species at risk in Point Pelee National Park that required an action plan under s.49 of SARA. Actions that are beneficial to multiple species were identified and prioritized, to maximize the effectiveness of species at risk recovery efforts in the park. Specific to Eastern Prickly Pear Cactus, three recovery measures focus on monitoring, restoration of savannah habitat (for multiple species), and relocation of cactus pads.

**Literature associated with Implementation of the Recovery Strategy**

The following list presents a selection of reports and papers that have been completed during implementation of the Recovery Strategy for the Eastern Prickly Pear Cactus (*Opuntia humifusa*) in Canada.

