



November 2015

The Honourable Speaker
of the Legislative Assembly of Ontario

Room 180, Legislative Building
Legislative Assembly
Province of Ontario
Queen's Park

Dear Speaker:

In accordance with Section 58 of the *Environmental Bill of Rights, 1993*, I am pleased to present the 2014/2015 Annual Report of the Environmental Commissioner of Ontario for your submission to the Legislative Assembly of Ontario.

Sincerely,

A handwritten signature in blue ink, appearing to read "E. Schwartzel".

Ellen Schwartzel

Environmental Commissioner of Ontario




Habitat Regulations and Recovery Strategies

Under the *ESA*, recovery strategies must include recommendations on the area that should be considered in developing a habitat regulation and the Minister of Natural Resources and Forestry is required to consider the applicable recovery strategy and government response statement when making a habitat regulation. In addition, MNRF policy states that the government will also consider: the area protected under the general definition of habitat; the best available scientific information on the species; and the social and economic implications of habitat regulation.

New Habitat Regulations for Five Species

On January 1, 2015, the MNRF amended O. Reg. 242/08 (General) under the *ESA* to define habitat for the following species:

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- eastern sand darter (*Ammocrypta pellucida*), an endangered fish;
 - Hine's emerald (*Somatochlora hineana*), an endangered insect (dragonfly);
 - Hungerford's crawling water beetle (*Brychius hungerfordi*), an endangered insect;
 - Pitcher's thistle (*Cirsium pitcheri*), a threatened plant; and
 - wavy-rayed lampmussel (*Lampsilis fasciola*), a threatened mollusc.

The key aspects of these new regulated habitat definitions include:

- Geographic restrictions – habitat is limited to specific municipalities and waterbodies and, sometimes, specifically excludes certain areas;
- Specific habitat features and uses – habitat is defined in reference to certain environmental features and/or species uses;
- Historical habitat – some areas that have been occupied by the species in the past, but are not currently occupied; and
- Buffer zones – protection, in varying forms, for areas in close proximity to primary use areas.

IMPLICATIONS OF THE DECISION

Gains and Losses in Scope of Protection

Relative to the general habitat definition, the areas protected under the new regulation are broader in some respects, but narrower in others. The potential implications of the shift to regulated habitat definitions are set out below. However, it can be difficult to predict the impacts of these changes on species at risk because of knowledge gaps regarding species' distribution, habitat needs and other ecological requirements.

New Protection for Historical Habitat

The new regulated habitat definitions all include some historical habitat. In some cases, this includes habitat occupied at any time in the past and, in other cases, it includes only habitat occupied within the last few years. This allowance could provide species the space to re-establish themselves within ideal habitat environments.

New Protection for Buffer Zones

The new regulatory provisions protect buffer zones around areas that are, or have been, used by the species. For example, some areas near locations used by the wavy-rayed lampmussel are also considered habitat. Protecting buffer zones could allow populations room to grow, and helps ensure that primary use areas are not damaged by nearby activities.

Narrowed Protection Based on Geographic Area

The regulated habitat definitions are each limited to specific geographic areas. Generally, this does not exclude areas where the species is known to occur. However, for two species there is reason to believe that undocumented populations may occur outside of the defined geographic areas. An eastern sand darter population was iden-

tified in 2013 far away from previously known habitat locations, suggesting other populations may also exist elsewhere. Additionally, the recovery strategy for the Hine's emerald dragonfly notes that "there is a high likelihood of extant Hine's emerald populations at least at some of 28 locations identified [by the Committee on the Status of Endangered Wildlife in Canada] as having appropriate habitat." Many of these locations are outside the geographic areas in the habitat regulation. If populations of these species are discovered outside the areas listed in the regulation, amendments will be required before those habitats are protected.

Narrowed Protection Based on Habitat Features and Uses

The new regulatory provisions all define habitat in reference to certain environmental features and/or particular uses. In some cases, these clauses merely specify the environments the species tends to inhabit and, thus, are unlikely to exclude any areas where the species occurs. In other cases, however, such restrictions may exclude areas that were included in the general habitat definition. For example, Pitcher's thistle habitat is restricted in part to sand dunes with less than 25 per cent tree cover (and associated buffer areas). Although the recovery strategy says that Pitcher's thistle prefers open dune habitat, there is no mention of the 25 per cent threshold. The ministry offered no explanation for why it decided to restrict the habitat definition in this way.

Consideration of Recovery Strategy Recommendations

The habitat recommendations set out in each species' recovery strategy vary widely. In some cases, the recommendation is only that the Minister consider the approach used to identify critical habitat; in other cases, there is a detailed description of what areas and features should be considered. The Minister is not required or expected to follow all recovery strategy habitat recommendations when making the habitat regulation. However, these recommendations offer important insight on the best available scientific information about a species' habitat protection needs.



Photo credit - Fritz Flohr Reynolds (left)

There are several recommendations in the recovery strategies for Hungerford's crawling water beetle, Pitcher's thistle and Hine's emerald that are not incorporated into the species' habitat definition. Most significantly, the regulation does not incorporate the recommendation that the Snow Valley Uplands areas be prescribed as part of Hine's emerald habitat. The recovery strategy explains that this area is critical to maintaining groundwater flow to the wetland area inhabited by the Hine's emerald dragonfly. Despite this, the regulatory habitat definition only includes a small portion of the Snow Valley Uplands areas.

ECO COMMENT

Overall, the areas inhabited by known populations of eastern sand darter, Hine's emerald, Hungerford's crawling water beetle, Pitcher's thistle and wavy-rayed lampmussel are better protected by their regulatory habitat definitions than they were by the general habitat definition.

One advantage of regulated habitat definitions is that the geographic area restrictions offer specificity about

where a species might be present, providing some certainty to both the MNRF and proponents. However, when there is good reason to believe that populations exist outside of the geographic area defined in regulation – as with eastern sand darter and the Hine’s emerald – this approach leaves the habitat of any such populations without protection, and potentially misleads stakeholders about where the species might be present. While it is the MNRF’s stated practice to amend habitat regulations as needed to address newly discovered habitat, this takes time during which habitat could be lost. For this reason, the ECO suggests that, for species believed to have undocumented populations outside of the regulated habitat areas, the ministry include a clause protecting other, outside areas relied upon for life processes by the species.

In the case of Hine’s emerald, the failure to protect the Snow Valley Uplands areas is troubling. The importance of such protection was explained and expressly recommended in the species’ recovery strategy. The MNRF’s decision is particularly disconcerting because the Snow Valley Uplands are under pressure from development, as noted in the recovery strategy. This makes protecting the area all the more important, although possibly more controversial. Given the specificity of this recommendation in the recovery strategy, and with no explanation of the ministry’s decision provided, the ECO concludes that the MNRF opted to favour development, rather than to prioritize the protection of this species at risk habitat.

The ECO is pleased with the MNRF’s effort to identify stakeholders in this decision and to directly engage with them by: placing notices in local papers; alerting local governments and organizations; and sending letters to landowners identified as possibly having species at risk habitat on their properties. Despite this effort, however, many of the Environmental Registry comments indicated serious misunderstandings about how habitat regulations operate and what types of activities are prohibited in regulated habitat. These misconceptions could be partially addressed through a more comprehensive Registry proposal notice. The notice should have explained the relationship between recovery strategies, government response statements and habitat regulations, as well as provided an overview of how the habitat regulation interacts with the section 10 prohibition on damaging or destroying habitat. Furthermore, hosting consultation meetings in communities with a significant interest (in this case, the area affected by the Hine’s emerald provision), would likely improve public understanding of the proposal and also present an opportunity to engage community members in the protection of species at risk.

For a more detailed review of this decision, please refer to Section 1.3.8 of the Supplement to this Annual Report.

Comments from the MNRF

MNRF recognizes the importance of clearly describing the habitat protected for a species to facilitate the effective implementation of protection. These habitat regulations protect the areas that are necessary for the protection and recovery of the five species at risk in a way that is practical and reasonable to implement.

The inclusion of information in habitat regulations about where they apply provides increased certainty and clarity for the public. These areas include locations where the species is likely to expand or be found due to increased survey effort. MNRF remains committed to updating regulations as necessary to incorporate new occurrence information.

Although the regulation for Hine’s Emerald does not include all of Snow Valley Uplands, it does include a 500 m area around the habitat used by the species. This area helps to protect the flow of groundwater into the wetlands and aquatic areas used by the species. In addition, if activities outside this area are likely to have an adverse effect on the habitat they may still require authorization under the Endangered Species Act to consider the needs of the species.