

# General Habitat Description for the Piping Plover (*Charadrius melodus*)

A general habitat description is a technical document that provides greater clarity on the area of habitat protected for a species based on the general habitat definition found in the Endangered Species Act, 2007. General habitat protection does not include an area where the species formerly occurred or has the potential to be reintroduced unless existing members of the species depend on that area to carry out their life processes. A general habitat description also indicates how the species' habitat has been categorized, as per the policy "Categorizing and Protecting Habitat Under the Endangered Species Act", and is based on the best scientific information available.

## HABITAT CATEGORIZATION

1	Nest scrape and the terrestrial area within 50 m (lengthwise) of the scrape
2	The Open Beach / Bar or Open Sand Dune ELC community series between 50 m and 500 m (lengthwise) of the nest scrape
3	Not applicable to this species

### Category 1

The nest scrape and the terrestrial area within 50 m of the scrape, lengthwise, parallel to the water's edge, are highly sensitive features supporting the species' reproduction life cycle and will be considered to have the lowest level of tolerance to alteration. Piping Plover nests are cup-like scrapes located above the high water mark in the sandy areas of the beach. The scrape and the area immediately surrounding the scrape are areas that the species depends on for nesting, feeding, cover from predators, resting and rearing of young and includes the species' territory. Although nest are rarely reused since they are typically blown over with sand, Piping Plovers show high site fidelity (Haig and Oring 1988, Elliott-Smith and Haig 2004).

Studies have found that plovers defended territories up to 0.4 ha (i.e., the area within 50 m of a nest/scrape (Cairns 1982, Whyte 1985). Parents and chicks may move away from the nest scrape a day or two following hatching, however they frequently remain on the same territory unless disturbed (Elliott-Smith and Haig 2004). Young plovers are able to walk within hours of hatching (Environment Canada 2006). During this time, the chicks are particularly vulnerable and will utilize the beach habitat surrounding the nest site. Sparse, low-lying vegetation and cobble are important features which provide cover from predators (Whyte 1985) and help to conceal the nest site (USFWS 2003). Young typically attain sustained flight within 21 – 35 days following hatching (Cairns 1982, Elliott-Smith and Haig 2004).

## Category 2

The Open Beach/Bar or Open Sand Dune Ecological Land Classification (ELC) community series between 50 m and 500 m of the nest scrape, lengthwise, parallel to the water's edge will be considered moderately tolerant to alteration. Piping Plovers depend on this area for feeding and rearing of young.

In Ontario, Piping Plovers have been documented to use up to 1,000 m of linear shoreline (Environment Canada 2013). Similar observations have been recorded along the Atlantic coast (USFWS 1996). Haffner *et al.* (2009) found that Piping Plover on Lake Michigan travelled up to 1,435 m, and averaging 475 m ( $\pm$  53 m). The species may forage in a variety of areas including wet sand in the wash zone, open beach, shallow pools, mud, sand, algal flats, shorelines of streams, ephemeral pools, ponds, lagoons, and within dunes (Elias 2000, Whyte 1985).

In southern Ontario, suitable habitat where historical and current nesting occurrences of Piping Plovers have been located includes the Open Beach/Bar and Open Sand Dune community series under the ELC System for Southern Ontario (Lee *et al.* 1998). The majority of historical records for Piping Plover in Ontario correspond with the Sea Rocket Sand Open Beach Bar vegetation type (Bakowsky pers. comm. 2012).

## Category 3

Not applicable to this species.

## Activities in Piping Plover habitat

Activities in general habitat can continue as long as the *function of these areas for the species is maintained and individuals of the species are not killed, harmed, or harassed.*

### Generally compatible:

- Recreational use of the water from a distance, such as swimming and boating.
- General use of beach areas outside of symbolic/visual fencing.
- General beach maintenance activities that do not impair the function of the habitat.
- Use of existing human-made features such as roads, and parking lots.

### Generally not compatible\*:

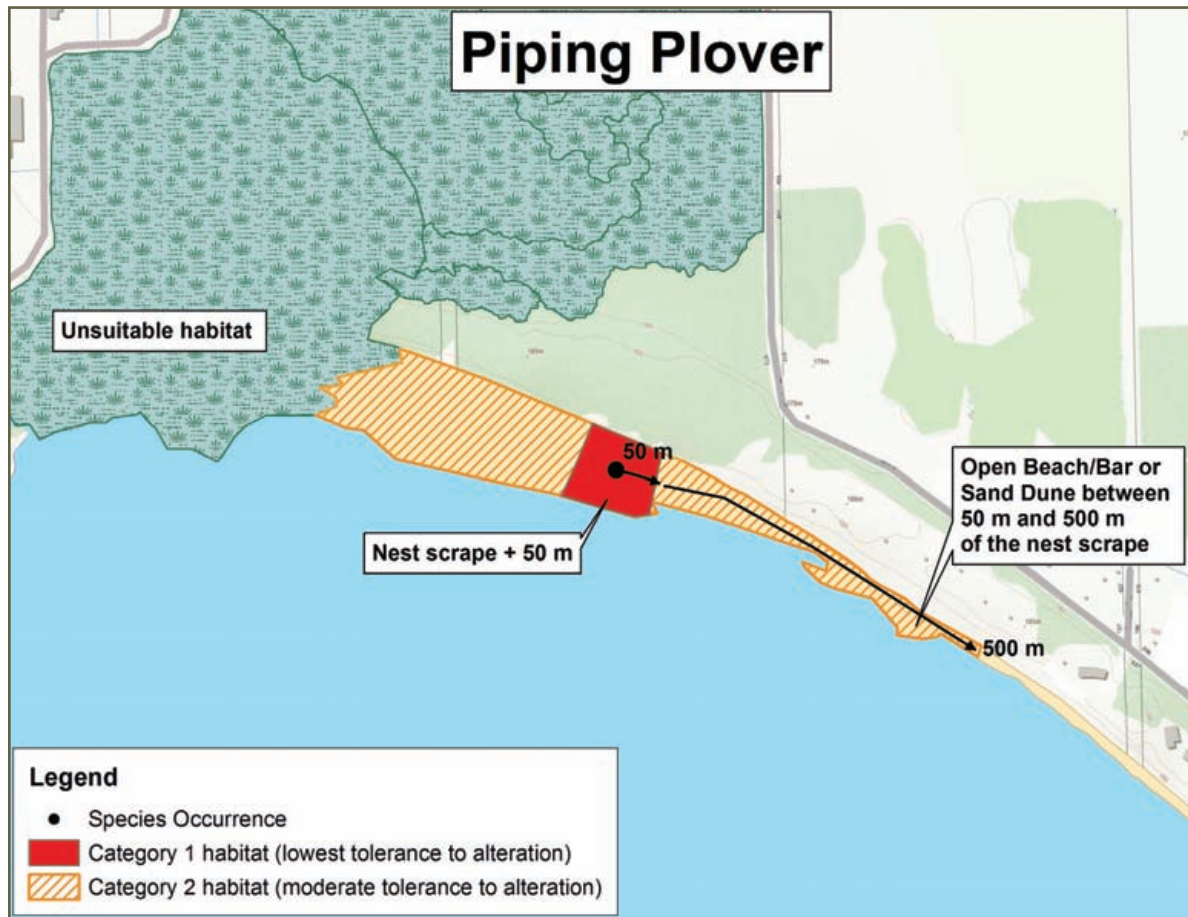
- Beach maintenance activities such as grading, grooming and removal of vegetation and debris if not performed in a manner that maintains habitat function.
- Significant alteration of watercourses within habitat.
- Activities that compact soils resulting in hardened soils that inhibit nest creation.

\* If you are considering an activity that may not be compatible with general habitat, please contact your local MNR office for more information.

## Key terms:

- **Community series:** Ecological Land Classification (ELC) Community Series are groups of similar vegetation stands that share common characteristics of vegetation, structure, and soils, as described in the document entitled Ecological Land Classification for Southern Ontario: First Approximation and its Application, dated September, 1998 and published by the Ontario Ministry of Natural Resources.

Sample application of the general habitat protection for Piping Plover



## References

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