

PEREGRINE FALCON HABITAT MANAGEMENT GUIDELINES

ONTARIO MINISTRY OF NATURAL RESOURCES

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Introduction

The peregrine Falcon (*Falco peregrinus*) is an endangered species in Ontario. The species and its habitat are protected by Ontario's *Endangered Species Act, R. S. O. 1980*.

Most of these guidelines apply to existing nest sites. Several recommendations are also made for potential eyries and may be applied at the manager's discretion. As the number of peregrines released to the wild in eastern North America increases, the probability of peregrines reinhabiting some of the historical eyries and nesting at other suitable sites increases.

The Peregrine Falcon is sensitive to disturbance during the breeding season, but, as in other species of raptors, reaction to human disturbance is highly variable among individuals. Peregrines seem to be more sensitive to disturbances occurring above or at the same level as cliffside eyries, than to disturbances occurring below eyries. Therefore, **buffer zones above the cliff should generally be wider than those at the base of the cliff**. The buffer zones recommended in the guidelines can be increased or decreased, as appropriate, taking into consideration the following: behaviour of the pair; history and current levels of human activity in the area; topography and vegetation cover; and resulting line-of-sight from the eyrie to areas of disturbance. **Be conservative** if some or all of the above information is unknown. A management plan describing buffer zones above and below the nest site, restrictions within the buffer zones and scheduling of activities should be prepared for each nest site (guideline #1).

Peregrine Falcons prey on smaller birds, which they catch in flight. Although peregrines prey on a large number of species, from small sparrows to waterfowl, their principal prey items tend to be medium-sized birds, particularly pigeons, doves and birds of blackbird and flicker size. Peregrines will hunt up to sixteen and one half (16.5) km from the eyrie, but they take most prey within three (3) km of the eyrie.

Secondary poisoning of urban-nesting peregrines is a concern if chemicals are used to control pigeons and other birds. Attempts should be made to restrict bird control by chemical means in urban areas where peregrines are nesting.

Guidelines

- | | | |
|--|----|---|
| Nest Site Management Plan | 1. | Develop a nest site management plan for the area within a three kilometre radius of any site used for nesting (suggested outline for management plan attached). |
| Confidentiality of Site Locations | 2. | Whenever possible, information on nest site locations should be treated confidentially and provided only to those who are involved in management. The location of a nest site may become known to the public as a result of visibility of the site, or management restrictions or prohibitions affecting the use of the area. In such situations, it may be necessary to monitor the nest site throughout the breeding season to prevent disturbance or vandalism. |
| Human Disturbance | 3. | <p>If human activities are likely to disturb nesting peregrines:</p> <ul style="list-style-type: none"> a) Close existing trails, roads and recreational facilities within 0.6 to 0.8 km of a nest site, and do not establish new trails, roads or recreational facilities within the buffer zone. b) During the breeding season, March 15 to August 31, prohibit recreational activities, such as hiking, picnicking, camping, hunting and wildlife viewing within 0.6 to 0.8 km of the nest site. The buffer zones for rock climbing and trail bike or ATV use should be wider - 0.9 to 1.2 km. |
| Approach of Aircraft | 4. | Aircraft should not approach the nest site closer than a minimum of 400 m. Unless it is dangerous to do so, aircraft should approach the cliff from the direction that allows peregrines at the nest site to see the aircraft from a distance; this avoids sudden surprises that may "spook" the birds. Because peregrines may attack slow moving aircraft, pilots of such aircraft, particularly helicopters, should be cautioned about the danger of flying too close to peregrine eyries. |
| Habitat Management for Active Nest Sites | 5. | If a pair of nesting peregrines is established at an eyrie, efforts should be made to identify hunting areas (e.g., lakes, wetlands, forest openings, forest canopy) and the prey of the peregrines. This information can then be used to assess the impacts of habitat alteration on the prey base. As long as the prey habitat is left undisturbed, it may be possible to change some components of the habitat without affecting the peregrines. If |

the prey base and prey habitat are not known, **no component** of the habitat within three (3) km of the eyrie should be altered at any time.

6.
 - a) During the breeding season, March 15 to August 31, all major disturbances (e.g., construction, logging) should be prohibited within a buffer zone extending one (1) to two (2) km from the nest site. The top of the nest cliff requires the greatest buffering distance.
 - b) In the two (2) to three (3) km zone around the nest site, it is advisable to schedule extremely disruptive activities (e.g., blasting and use of heavy equipment) from September 1 to March 14. It may be necessary to extend this buffer zone to four (4) or five (5) km, if a pair of peregrines is particularly sensitive to disturbance.

- Habitat Management for Potential Nest Sites 7. In the three (3) km zone around **potential** eyries, creation of openings (early succession vegetation) in the forest may be beneficial if the manager considers that openings will increase the relative abundance of suitable prey. If an area is to be managed for this purpose, the following guidelines should be implemented:
 - a) Openings should not be situated at the immediate top (i.e., edge) of the potential nest cliff, or at its base, and such openings should not significantly increase access to the potential nest site.
 - b) If safety concerns permit, leave snags standing in the openings to increase the abundance of cavity-nesting birds as potential peregrine prey.
 - c) To increase the likelihood of nesting at a potential eyrie, disturbances associated with the creation of openings, such as logging, should be prohibited within a buffer zone extending one (1) to two (2) km from the potential eyrie in all directions during the initial part of the breeding season, March 15 to June 30. If a pair of peregrines does nest at the site, these restrictions should be extended to August 31.

- Peregrines in Urban Areas 8. Many peregrine falcons have been released in urban settings in Ontario and adjacent provinces and states. Some surviving adults return to the vicinity of release sites. In these situations, the

following two (2) management strategies are recommended:

- a) To provide nest sites for peregrines that have returned, securely install wooden nest boxes on suitable building ledges. Boxes should be 60 cm x 90 cm x 15 cm (deep). The boxes should be filled with sand to a depth of ten (10) cm. Drainage holes should be one and a half (1.5) cm in diameter and can be covered with screen to prevent the sand from escaping. A partial "hood" and sides should be placed on the box for shelter in exposed situations.
9. From March 15 to September 30, ensure that chemicals used for bird control -- such as strychnine, fenthion (Rid-a-Bird perches), and 4-amino-pyridine (Avitrol) -- are not used within a **minimum distance** of three (3) km from the nest site. A distance of five (5) to ten (10) km is recommended. In addition, these chemicals should not be used within a minimum three (3) km radius of peregrine falcon release sites, or in any urban release area in which peregrine falcons are observed.

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- December 1987

Peregrine Falcon Nest Site Management Plan
Confidential

Nest No _____

Date _____

Prepared by _____

MNR District _____

Location	
County/R.M./District:	
Township:	
Concession(s): Lot(s):	
Crown Land:	Private Land:
Topographic Name and No.:	
Owner's Name, Address, Telephone No.:	
Nest Site	
Height of cliff: _____ m	Height of Eyrie: _____ m
Directional orientation of breeding ledge:	
Description of breeding ledge:	
Eyrie substrates:	
Accessibility: D _____	M _____ E _____
Remarks:	

*D-difficult to reach; M-moderately easy to reach; E-easy to reach

Nest Habitat (0-3 Km Radius)	
Description Above Eyrie (Include timber type, size, density, distance to rivers or lakes):	
Description Below Eyrie (Include timber type, size, density, distance to rivers or lakes):	
Development	
Distance to Nearest Main Road:	km
Timber Cutting in Area?	
Distance to Logging Road:	km
Distance to Hiking Trail:	km
Structural Developments Nearby:	
Wild _____	Moderately Developed _____
	Well Developed _____
Remarks:	
Feeding Areas (Prey Habitat):	
Prey:	
Pair Behaviour And Biology	
Response to human intrusion, if known:	
Summary of nesting history:	
Research and Study Data:	

Management Considerations		
Buffer zones:		
Activity*	Width of buffer Zones above cliff	Width of buffer Zones below cliff
.....		
Hiking		
Camping		
Rock climbing		
Trail clearing		
Wildlife viewing		
Aircraft flight Lane (low altitude)		
Off-road-vehicle use		
Logging		
Road construction		
Building construction		
Mining		
Other		

Creation of forest openings/feeding areas:		
Roads and trails to be closed or re-routed:		
Modification of existing or proposed developments:		
Special hazards (e.g., powerlines):		

*Buffers should be in effect from March 15 to August 31.