

COASTAL FISH & WILDLIFE HABITAT RATING FORM

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Name of Area: **Point Peninsula**

Designated: **August 15, 1993**

County(ies): **Jefferson**

Town(s): **Lyme**

7½' Quadrangle(s): **Point Peninsula, NY; Cape Vincent South, NY**

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<u>Score</u>	<u>Criterion</u>
<b>0</b>	Ecosystem Rarity (ER) A large mosaic of active farmland and fallow old fields, with occasional woodlots and conifer plantations; not a rare ecosystem type.
<b>33</b>	Species Vulnerability (SV) Supports wintering populations of northern harrier (T) and short-eared owl (SC). Additive division: $25 + 16/2 = 33$ .
<b>0</b>	Human Use (HU) No significant fish or wildlife related human uses of the area.
<b>16</b>	Population Level (PL) The most significant concentration of wintering raptors documented in New York State.
<b>1.2</b>	Replaceability (R) Irreplaceable

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SIGNIFICANCE VALUE = [( ER + SV + HU + PL ) X R]

= **59**

## DESIGNATED HABITAT: POINT PENINSULA

### HABITAT DESCRIPTION:

Point Peninsula is a eight square mile tongue of land, including an area northwest of The Isthmus, located approximately eight miles south of the Village of Cape Vincent, in the Town of Lyme, Jefferson County (7.5' Quadrangles: Cape Vincent South, NY; and Point Peninsula, NY). The fish and wildlife habitat is an approximate 2000 acre mosaic of active farmland, old field, and some woodlots and conifer plantations. In some areas, tracts of red cedar mixed with various shrubs are present. The area is characterized by poor shallow soils which are more suited to pastureland and hay production rather than row crops.

### FISH AND WILDLIFE VALUES:

Point Peninsula is a large, diverse area of human-influenced covertypes that form a mosaic of habitat types, which combine to provide ideal wintering habitat for large concentrations of several raptor species. Favorable farming practices, which include hay production and the associated hedgerows and fencerows, have contributed to the overall habitat diversity of the area. The area experiences relatively little human activity during winter months. High meadow vole populations are the main food source for the wintering raptors. Point Peninsula is regularly used by many raptor species such as, northern harrier (T), short-eared owl (SC), long-eared owl (SC), rough-legged hawk, red-tailed hawk, and snowy owl. These birds overwinter and roost here in large numbers. For example, 493 northern harriers (T), 240 short-eared owls (SC), 444 red-tailed hawks, and 1,516 rough-legged hawks were observed during 19 field visits in the winter of 1987-88. Other raptors, including bald eagle (E), sharp-shinned hawk, Cooper's hawk (SC), northern goshawk, American kestrel, and northern shrike, have also been observed at Point Peninsula, but the extent to which these species use Point Peninsula is not well documented.

### IMPACT ASSESSMENT:

A **habitat impairment test** must be applied to any activity that is subject to consistency review under federal and State laws, or under applicable local laws contained in an approved local waterfront revitalization program. If the proposed action is subject to consistency review, then the habitat protection policy applies, whether the proposed action is to occur within or outside the designated area.

The specific **habitat impairment test** is as follows.

In order to protect and preserve a significant habitat, land and water uses or development shall not be undertaken if such actions would:

- destroy the habitat; or,
- significantly impair the viability of a habitat.

*Habitat destruction* is defined as the loss of fish or wildlife use through direct physical alteration, disturbance, or pollution of a designated area or through the indirect effects of these actions on a designated area. Habitat destruction may be indicated by changes in vegetation, substrate, or hydrology, or increases in runoff, erosion, sedimentation, or pollutants.

*Significant impairment* is defined as reduction in vital resources (e.g., food, shelter, living space) or change in environmental conditions (e.g., temperature, substrate, salinity) beyond the tolerance range of an organism. Indicators of a significantly impaired habitat focus on ecological alterations and may include but are not limited to reduced carrying capacity, changes in community structure (food chain relationships, species

diversity), reduced productivity and/or increased incidence of disease and mortality.

The *tolerance range* of an organism is not defined as the physiological range of conditions beyond which a species will not survive at all, but as the ecological range of conditions that supports the species population or has the potential to support a restored population, where practical. Either the loss of individuals through an increase in emigration or an increase in death rate indicates that the tolerance range of an organism has been exceeded. An abrupt increase in death rate may occur as an environmental factor falls beyond a tolerance limit (a range has both upper and lower limits). Many environmental factors, however, do not have a sharply defined tolerance limit, but produce increasing emigration or death rates with increasing departure from conditions that are optimal for the species.

The range of parameters which should be considered in applying the habitat impairment test include but are not limited to the following:

1. physical parameters such as living space, circulation, flushing rates, tidal amplitude, turbidity, water temperature, depth (including loss of littoral zone), morphology, substrate type, vegetation, structure, erosion and sedimentation rates;
2. biological parameters such as community structure, food chain relationships, species diversity, predator/prey relationships, population size, mortality rates, reproductive rates, meristic features, behavioral patterns and migratory patterns; and,
3. chemical parameters such as dissolved oxygen, carbon dioxide, acidity, dissolved solids, nutrients, organics, salinity, and pollutants (heavy metals, toxics and hazardous materials).

Although not comprehensive, examples of generic activities and impacts which could destroy or significantly impair the habitat are listed below to assist in applying the habitat impairment test to a proposed activity.

All species of wildlife may be adversely affected by waste disposal, and discharges of sewage or stormwater runoff containing sediments or chemical pollutants (including fertilizers, herbicides, or insecticides). The use of chemical pesticides or herbicides could adversely affect the wintering raptors at Point Peninsula. Significant changes in land use may result in a decrease of available habitat. Conversion of open fields to residential development would directly reduce the amount of available wintering and roosting habitat, especially if development introduced year-round residents to the area. Elimination of red cedar, forest, and hedgerow habitats, or significant human encroachment into the area through construction of roads could reduce habitat values to the raptors. Activities that would subdivide this large, undisturbed area into smaller fragments should be restricted. Existing woodlands within and bordering Point Peninsula should be maintained for their value as cover, perching sites, and buffer zones.