

## SPECIES PROFILE

# Palm Warbler

*Dendroica palmarum*

Federal Listing: Not listed

State Listing: Not listed

Global Rank: G5

State Rank: S3B

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### ELEMENT 1: DISTRIBUTION AND HABITAT

#### 1.1 Habitat Description

Palm warblers nest in bogs and fens in boreal forests, usually on the ground beneath a short conifer (Richards 1994, Wilson 1996). Shrub openings, sphagnum, and a spruce or tamarack canopy are key habitat characteristics (Welsh in Richards 1994).

#### 1.2 Justification

The palm warbler reaches the southern extent of its nesting range in northern New Hampshire, which may explain its absence from several apparently suitable nesting habitats. Peatlands are rarely altered and palm warblers are less likely to be affected by habitat fragmentation than are forest dwelling birds in the northeastern and central United States (Wilson 1996). However, the fragmentation of forested uplands adjacent to peatlands may provide egg and nest predators, such as common grackles (*Quisculus quiscula*) and raccoons (*Procyon lotor*), with greater access to palm warbler nests (Wilson 1996).

Palm warblers are nocturnal migrants. They are one of the most frequently killed migrants in collisions with television towers and other tall and lighted buildings and structures. Over a 25-year period, a single television tower in Florida was responsible for 2,305 palm warbler deaths, mostly during the fall migration. This number represents 5.4% of all birds killed by the tower (Wilson 1996).

#### 1.3 Protection and Regulatory Status

Palm warblers are protected under the Federal Migratory Bird Treaty Act (1918).

#### 1.4 Population and Habitat Distribution

Palm warblers are among the most northerly of the *Dendroica* warblers, nesting mostly in bogs and fens in boreal forests across much of Canada and the northern United States (Wilson 1996). In New England, palm warblers nest in central and northern Maine and in northern New Hampshire (Richards 1994). Richards documented the first likely breeding record for New Hampshire in 1957 by observing 2 palm warblers, one of which was carrying food to Floating Island Bog at Harper's Meadow in Errol. In August 1980, Richards recorded the first observation of a juvenile with remnant down at the same bog as an adult (Richards 1994). Richards (1994) identified no 'confirmed' or 'probable' breeding records for palm warblers in New Hampshire, although single birds were seen in a stand of northern white cedar on a low ridge near Floating Island Bog in Errol and Dummer.

#### 1.5 Town Distribution Map

*Not completed for this species.*

#### 1.6 Habitat Map

*See Peatlands Habitat Mapping (element 1.6)*

#### 1.7 Sources of Information

NatureServe (2005) was used for status and ranking information. Recent distribution data are from the NHBR database, maintained by NHA, and from Richards (1994). Distribution, habitat, and life his-

tory information were taken from published literature including Richards (1994).

### 1.8 Extent and Quality of Data

Palm warblers appear to be limited to a few semi-open bogs in northern New Hampshire, mostly because the species reaches the southeastern edge of its breeding range here. Much of the preferred bog habitat is barely accessible to observers and the species may occur more often than records indicate (Richards 1994). In addition, palm warblers are difficult to relocate even if they are close to previous nesting sites (Richards 1994).

### 1.9 Distribution Research

Since palm warbler records are few in New Hampshire, known breeding locations can be checked annually. Palm warblers can be included in comprehensive peatland habitat inventories and monitoring.

## ELEMENT 4: CONSERVATION ACTIONS

See Peatlands profile for conservation actions. Maintaining intact uplands around peatlands may prevent increased nest mortality from predators associated with fragmentation.

## ELEMENT 5: REFERENCES

### 5.1 Literature

NatureServe. 2005. NatureServe Explorer: An online encyclopedia of life [web application]. Version 4.2. NatureServe, Arlington, Virginia. Available <http://www.natureserve.org/explorer>. (Accessed: 17 March 2005).

Richards, T. 1994. Palm warbler. Page 385 in Atlas of breeding birds in New Hampshire, C.S. Foss, editor. Arcadia, Dover, New Hampshire, USA.

Wilson, W.H., Jr. 1996. Palm warbler (*Dendroica palmarum*). In *The Birds of North America*, No. 238, A. Poole and F. Gill, editors. The Academy of Natural Sciences, Philadelphia, PA, and The American Ornithologists' Union, Washington, D.C. USA.

### 5.2 Data Sources

New Hampshire Bird Records database. Maintained by New Hampshire Audubon, Concord, New Hampshire, USA. (Accessed 30 March 2005)

## Distribution of Palm Warbler in New Hampshire

**Distribution**  
Known  
Potential  
Historic



0 10 20 40 Miles

Known = confirmed breeding observations reported in the NH Natural Heritage Bureau's Element Occurrence Database and obtained from NH Bird Records and the NH Breeding Bird Atlas, Audubon Society of New Hampshire.  
Potential = possible breeding and other observations from the same data sources.  
Historic = observations greater than 20 years old.

