

## SPECIES PROFILE

# Sedge Wren

*Cistothorus platensis*

**Federal Listing:** Not listed  
**State Listing:** Endangered  
**Global Rank:** G5  
**State Rank:** S1  
**Author:** Pamela D. Hunt, New Hampshire Audubon

### ELEMENT 1: DISTRIBUTION AND HABITAT

#### 1.1 Habitat Description

In the core of its breeding range, the sedge wren uses wetlands dominated by sedges or grasses. Such areas include wet hayfields, sphagnum moss bogs, and the margins of ponds (Herkert et al. 2001), and in these habitats, they prefer shrub cover. The species does not use wetlands with sparse vegetative cover or those dominated by cattails (*Typha* sp.). Historically, coastal populations in the Northeast also occurred in salt marshes.

Recent verified reports from New Hampshire come from several habitat types. Three or 4 (depending on definition) are from wet shrubby areas at the margins of marshes or wet meadows, 2 are from weedy grass fields, and 1 or 2 are from tussock marshes.

Historic sites with a clear pattern of occupancy may provide clues as to the species' habitat preferences in New Hampshire. Such sites include Cherry Pond (Jefferson), Danbury Bog (Danbury), and Merrymeeting River (Alton/New Durham). Habitat at the first 2 locations is characterized by shallow, emergent, grassy wetland with high shrub density. There may also be bog-like vegetation at all 3 sites, here defined as floating or partially floating mats of sphagnum that support a mix of heaths and herbaceous species typical of bogs and fens. Similar habitat is present along Turee Brook in Concord and Bow, where the species was common in the early 1900s (White 1924, 1937).

Sedge wrens tend to breed earlier in the west than

in the east (Herkert et al. 2001), and most documented breeding happens in the Northeast between July and September. This phenological difference makes many records from New Hampshire problematic, since early-season sightings may represent transients rather than potential breeders.

#### 1.2 Justification

The sedge wren has never been common in New Hampshire, which is generally considered the edge of its range in North America. In the late 1800s and early 1900s, it was recorded in Rye (Dearborn 1903) and Bow Bog and in other areas around Concord (White 1924, 1937), where it was relatively common. Additional localities in the early 1940s included sites in Andover, Hanover, Fitzwilliam, Manchester, and Sutton (Records of New England Birds). From the late 1940s onward, sedge wren reports in New Hampshire have dwindled, with the largest decrease occurring from the late 1960s to the early 1970s (figure 1). Since 1980, there has been an average of only 1 report every 3 years.

#### 1.3 Protection and Regulatory Status

- Migratory Bird Treaty Act (1918)
- New Hampshire Endangered Species Conservation Act (RSA 212)
- Sedge wren habitat is protected by wetland statutes administered by the New Hampshire Department of Environmental Services.

#### 1.4 Population and Habitat Distribution

A map of sedge wren locations in the state (figure 2) shows several clusters appearing in different times. Clusters are defined as areas with at least 5 historical records in an area roughly 24 km in diameter (with

the exception of the Squam cluster). These clusters are listed in table 1. Smaller clusters include Colebrook (4 records), southern Merrimack County (Concord/Dunbarton, 4 records), Androscoggin River (Errol/Dummer, 3-4 records), Fitzwilliam (3 records), and Merrymeeting River (Alton/New Durham, 3 records, 1949-50).

Sedge wrens have historically been uncommon in the region - here including New England, New York, the Mid-Atlantic States, and eastern Canada. Within this region, populations appear to be concentrated to the south (Chesapeake and Delaware Bays) and west (Great Lakes/St. Lawrence Valley) (Gibbs and Melvin 1992). In the latter region, data from the New York State Breeding Bird Atlas do not appear to indicate any change in range from the early 1980s to the present (New York State Department of Environmental Conservation 2004), although some data indicate that the population has declined from historic levels (Andrle and Carroll 1988). Similar declines have been noted in Massachusetts (Veit and Petersen 1993).

In contrast, populations appear to be increasing at the core of the species' range, including in parts of the Midwest and eastern Great Plains (Sauer et al. 2004). Data from Christmas Bird Counts suggest that winter populations (which presumably reflect breeding populations) in the southern United States increased between 1980 and the early 1990s, at which point they leveled off or declined slightly (National Audubon Society 2002). Irrespective of local population status, it appears that the sedge wren has always been at the periphery of its range in New England.

### 1.5 Town Distribution Map

*See figure 2.*

### 1.6 Habitat Map

*N/A*

### 1.7 Sources of Information

Basic natural history information in this profile was largely gathered from the literature cited in element 5. Data on sedge wren distribution in New Hampshire were compiled from New Hampshire Bird Records (NHBR), a database maintained by New Hampshire Audubon.

### 1.8 Extent and Quality of Data

Given the species' recent scarcity in the state, the available data are probably insufficient to fully warrant conservation should action be desired. In addition, the potential for confusion with the similar marsh wren (*Cistothorus palustris*) makes even evaluation of historic records problematic.

### 1.9 Distribution Research

Although sedge wrens are too scarce in New Hampshire to warrant any species-specific inventory or monitoring projects, there may be value in searches of recently active sites to determine if the species is still present. Any broad wetland bird monitoring project should include this species, and should ensure that observers can identify it.

## ELEMENT 2: SPECIES/HABITAT CONDITION

### 2.1 Scale

Given the inconsistent temporal and spatial nature of sedge wren records in New Hampshire, it is probably inappropriate to address the species' conservation at any scale smaller than the entire state. Even locations with a history of records (table 1) have rarely hosted the species for more than 2 years in a row, so it is essentially impossible to determine which factors – if any – were responsible for the species' disappearance. The species is somewhat nomadic, so its absence should not be construed as evidence for poor habitat quality.

### 2.2 Relative Health of Populations

Data provide no clear evidence for the presence of a persistent sedge wren population in New Hampshire. The species has not been present for more than 1 year at any location for the last 30 years, and although populations are known to shift locations, this paucity of records suggests that most, if not all, sedge wrens in the state originate beyond our borders. There are 9 sites known to support the species in the state. One of the once more reliable locations in the state is Danbury Bog (6 records 1950-1964 and one in 1990). One other site of interest is the Pondicherry Refuge in Jefferson and Whitefield, which hosted wrens be-

tween 1958 and 1964.

### 2.3 Population Management Status

Sedge wren populations are not currently managed in New Hampshire.

### 2.4 Relative Quality of Habitat Patches

The ephemeral nature of site occupancy for this species makes evaluation of habitat quality difficult, if not impossible. Since large areas of potential habitat are unoccupied, even the presence of sedge wrens may not be a good indicator of suitable habitat. More data are needed on actual breeding status at occupied sites.

### 2.5 Habitat Patch Protection Status

Many older records of this species lack information on specific locality, so the analysis that follows is based primarily on sites known to support the species since 1979. Of 9 such locations for the species, 6 (67%) are protected in whole or in part by easement or fee-simple (e.g. Danbury bog and Pondicherry Refuge).

### 2.6 Habitat Management Status

No habitat management has occurred for sedge wrens in New Hampshire.

### 2.7 Sources of Information

Data on site occupancy were compiled from NHBR. Limited data on habitat quality and management were obtained from the literature.

### 2.8 Extent and Quality of Data

Data on sedge wrens and their habitat in New Hampshire is spatially and temporally inconsistent.

### 2.9 Condition Assessment Research

Data on sedge wren distribution are not sufficient to determine potential habitat or the condition of habitat at historic locations.

## ELEMENT 5: REFERENCES

### 5.1 Literature

- Andrle, R.F., and J.R. Carroll. 1988. The atlas of breeding birds in New York state. Cornell University Press, Ithaca, New York, USA.
- Dearborn, N. 1903. The birds of Durham and Vicinity. Contrib. Zool. Lab. 6. New Hampshire College of Agriculture and Mechanical Arts, Durham, New Hampshire, USA.
- Gibbs, J.P., and S.M. Melvin. 1992. Sedge wren, *Cistothorus platensis*. Pages 191-209 in Migratory nongame birds of management concern in the Northeast, K.J. Schnieder and D.M. Pence, editors. U.S. Department of the Interior, Fish and Wildlife Service, Newton Corner, Massachusetts, USA.
- Herkert, J.R., D.E. Kroodsma, and J.P. Gibbs. 2001. Sedge wren (*Cistothorus platensis*). In The Birds of North America, No. 582, A. Poole and F. Gill, editors. The Birds of North America, Inc., Philadelphia, Pennsylvania, USA.
- Records of New England Birds. Refers to data from a succession of publications: Bulletin of New England Bird Life (published bimonthly 1936-1944 by the New England Museum of Natural History, Boston), Records of New England Birds (published monthly from 1945 to 1955 by the Massachusetts Audubon Society in their "Bulletin of the Massachusetts Audubon society"), and Records of New England Birds (published monthly as a separate publication from 1956 to 1960 and from 1964 to 1968).
- Sauer, J.R., J.E. Hines, and J. Fallon. 2004. The North American breeding bird survey, results and analysis 1966-2003. Version 2004.1, U.S. Geological Survey Patuxent Wildlife Research Center, Laurel, Maryland, USA.
- Veit, R.R., and W.R. Petersen. 1993. Birds of Massachusetts. Massachusetts Audubon Society, Lincoln, Massachusetts, USA.
- White, F.B. 1924. A preliminary list of the birds of Concord, New Hampshire. Rumford Press, Concord, New Hampshire, USA.
- White, F.B. 1937. Local notes on the birds at Concord and vicinity. Rumford Press, Concord, New Hampshire, USA.

## 5.2 Data Sources

National Audubon Society 2002. The Christmas Bird Count Historical Results [Online]. <http://www.audubon.org/bird/cbc>. Accessed 18 January 2005

New Hampshire Bird Records. New Hampshire Audubon, Concord, New Hampshire, USA.

New York State Department of Environmental Conservation. 2004. New York State breeding bird atlas website. [www.dec.state.ny.us/apps/bba/results](http://www.dec.state.ny.us/apps/bba/results). Accessed 18 January 2005.

### ELEMENT 6: LIST OF FIGURES

Figure 1. Relative abundance of sedge wrens in New Hampshire, 1946-2003. Numbers represent the total numbers of reports in a given five year period, without correction for multiple records from the same location within the time period.

Table 1. Distribution of historical records of sedge wren in New Hampshire, 1937 to 2003. Only clusters (see text) with at least 5 records are included.

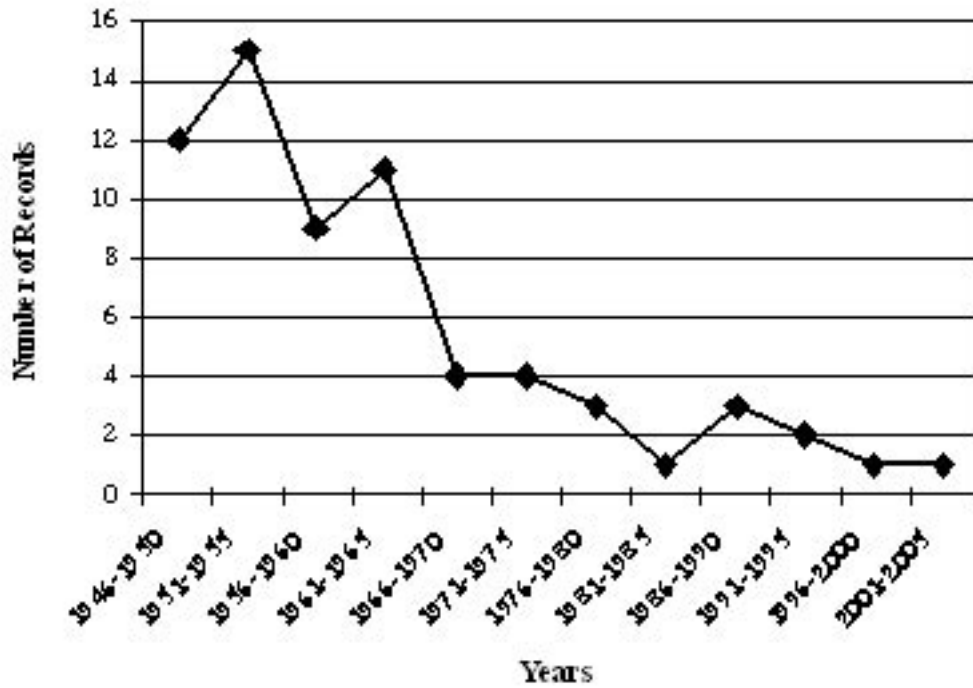


Figure 1. Relative abundance of sedge wrens in New Hampshire, 1946-2003. Numbers represent the total numbers of reports in a given five year period, without correction for multiple records from the same location within the time period.

Cluster	Towns included	# of records	Dates of sedge wren records	Records with breeding evidence*
nw Merrimack County	Danbury, Andover, Wilmot, Sutton	13	1938, 1949-52, 1954, 1960, 1964, 1989, 1990?	Andover: June 1938
				Danbury: Jul 1954
Squam Lake area	Sandwich, Meredith, New Hampton	10	1947-49, 1952, 1957, 1959, 1973, 1979, Atlas (early 1980s)	
Cherry Pond	Jefferson, Whitefield	7	1958, 1960-1964	Summer 1958
Southwest	Walpole, Marlow, Westmoreland, Keene	7	1949, 1955, 1958, 1960, 1963, 1968	Roxbury: Sept 1968
Seacoast	Durham, Newmarket, Kensington, E Kingston	7	1954, 1963, 1967, 1969, 1985, 1994, 2001	Newmarket: Jun 1985
				Kensington: May-Jun 1994
				Durham: Jul-Aug 2001

Table 1. Distribution of historical records of sedge wren in New Hampshire, 1937 to 2003. Only clusters (see text) with at least 5 records are included.

\* “breeding evidence” is defined as one of the following: 1) present on territory for at least 2 weeks, 2) multiple singing males, 3) evidence of a mated pair, 4) nest building, or 5) young.

## Distribution of Sedge Wren in New Hampshire

Distribution  
■ Known  
■ Potential



0 10 20 40 Miles

Known = confirmed breeding observations 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.

