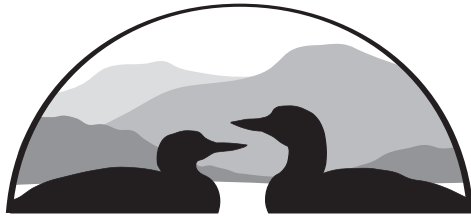


New Hampshire **Bird Records**



Summer 2007

Vol. 26, No. 2



New Hampshire Bird Records

Volume 26, Number 2

Summer 2007

<i>Managing Editor:</i>	Rebecca Suomala 603-224-9909 X309, bsuomala@nhaudubon.org
<i>Text Editor:</i>	Dorothy Fitch
<i>Season Editors:</i>	Pamela Hunt, Spring; Tony Vazzano, Summer; Stephen Mirick, Fall; David Deifik, Winter
<i>Layout:</i>	Kathy McBride
<i>Production Assistants:</i>	Terry Bronson, Kathie Palfy, Diane Parsons
<i>Assistants:</i>	Marie Anne, Jeannine Ayer, Julie Chapin, Lynn Edwards, Margot Johnson, Susan MacLeod, Carol Plato, Dot Soule, Jean Tasker, Tony Vazzano
<i>Photo Quiz:</i>	David Donsker
<i>Photo Editor:</i>	Bill Baird
<i>Where to Bird Feature Coordinator and Maps:</i>	William Taffe

Cover Photo: *Female Common Nighthawk on Grantham Mountain in Grantham by Dick Hocker, 6/7/07. A male sat nearby (see page 17) and this female engaged in a broken wing display, indicating that a nesting attempt was underway. This is the first confirmed nesting at a natural site in New Hampshire in many years. The Ossipee Pine Barrens is the only other area in the state with a population of nighthawks currently believed to be nesting in a non-urban setting.*

New Hampshire Bird Records (NHBR) is published quarterly by New Hampshire Audubon. Bird sightings are submitted by volunteer observers and edited for publication. All rarity records are subject to review by the New Hampshire Rare Birds Committee and publication of reports here does not imply future acceptance by the committee. A computerized printout of all sightings in a season is available for a fee. To order a printout, purchase back issues, or submit your sightings, contact the Managing Editor, or visit our web site.

New Hampshire Bird Records © NHA December, 2007
www.nhbirdrecords.org

Published by New Hampshire Audubon



Printed on Recycled Paper



IN MEMORY OF

Sally Elizabeth Merrill Sutcliffe

T*his issue of New Hampshire Bird Records, with its color cover, is sponsored by Carol Foss. It is dedicated to Sally Sutcliffe, in honor of her friendship and her contributions to bird conservation in New Hampshire through her work as New Hampshire Audubon's Breeding Bird Atlas Coordinator.*

In This Issue

From the Editor 2

Summer 2006 Correction - Stilt Sandpiper graph 2

Photo Quiz 3

Summer Season: June 1 through July 31, 2007. 4
by Tony Vazzano

2007 Common Loon Monitoring Results 34
by John Cooley

2007 Bald Eagle and Peregrine Falcon Breeding Season Summaries. 35
by Chris Martin

Upland Sandpiper Status at Pease International Tradeport 2006 and 2007. 38
by Diane De Luca

The Great Ossipee Whip-poor-will Round-up. 42
by Pamela Hunt

Project Nighthawk Summary. 44
by Rebecca Suomala

Backyard Birder – Northern Goshawk Story. 46
by Nicole Murphy

Photo Gallery – My Summer of the Common Nighthawk 48
by Kathie Palfy

Birding Concord's Lakes, Ponds, Marshes, Fields and Woodlands 50
by Robert A. Quinn

Volunteers and Research – NestWatch 55
by Liz Burton

Answer to the Photo Quiz 57
by David B. Donsker

Corrections. 60

Upland Sandpiper Status at Pease International Tradeport 2006 and 2007

by Diane De Luca

Introduction

The Upland Sandpiper (*Bartramia longicauda*) has an interesting history in New Hampshire. After European settlement converted unbroken eastern forests to extensive agricultural lands in the late 1700s and early 1800s, the continent's Upland Sandpiper population expanded eastward from the prairie states into the newly available habitat. At their peak in New England during the mid 1800s, these birds were abundant migrants and locally common during the breeding season in central and southern New Hampshire. Silver (1957) surmised that they were probably most abundant in New Hampshire between 1860 and 1880.

The population declined dramatically during the next several decades as gunners decimated this and other shorebird species for market hunting. The Upland Sandpiper was uncommon, rare, or entirely absent in former New Hampshire breeding areas by the early 1900s.

Pease International Tradeport, formerly the Pease Air Force Base, currently supports the only confirmed nesting population in New Hampshire. Two pairs of Upland Sandpipers were confirmed to nest at the Great Bay Wildlife Refuge in 1997 and 1998, but have not been confirmed since. Sightings from Dover, Manchester, and southern Coos County in the last decade imply that birds are still visiting appropriate habitat elsewhere in the state.

Biologists conducted single status surveys of the Pease population during 1987 and 1988. A 1989 Upland Sandpiper project constituted the first effort to monitor this population throughout the breeding season, and also included an investigation of suitable nesting habitat elsewhere in the seacoast region. The 1990 through 1996 fieldwork allowed for the continued monitoring of this population throughout the breeding season. Less intensive breeding season visits occurred from 1997 through 1999, 2002, and 2003. With the potential for continued changes on the Pease Airfield Upland Sandpipers were once again monitored through the breeding season in 2006 and 2007.

Regionally, the Upland Sandpiper is of conservation concern in every northeastern state where it occurs, largely a result of population declines similar to that observed in New Hampshire. Many historic locations in New England were large dairy farms, and these have been gradually disappearing. Breeding Bird Survey data indicate population declines since 1966. Steeper declines since 1980 coincide with the period of greatest decrease in the New Hampshire breeding population. Correspondingly, there is evidence of significant decline on the wintering grounds as well.

Habitat

Upland sandpipers occupy a wide range of grassland habitats across their range. In the East, these include airfields, blueberry barrens (Maine), and mixed agricultural areas. The species needs a mix of short (< 20 cm) and tall (up to 60 cm) grasses, for foraging and nesting habitat, respectively. Another important habitat feature is the

presence of taller structures that can be used as singing perches; these can include fence posts, runway lights or signs, and taller vegetation. Upland sandpipers tend to avoid grasslands with high densities of legumes or with a dense litter layer.

Upland sandpipers require very large areas of grassland for breeding. Ideally, such fields should be over 60 ha (150 acres), and even fields as large as 120 ha (300 acres) may not necessarily support the species. Territories average 8–12 ha (20–30 acres), and the species is often loosely colonial where it reaches higher densities.

Sites historically used by sandpipers in New Hampshire include large airfields (Pease, Manchester, and Nashua) and large agricultural mosaics (Dover, Rochester, and Haverhill).

Upland sandpiper habitat at Pease exists on the airfield, including three grassy “islands” surrounded by the runway and connecting taxiways. The grassy islands are 800 feet wide and vary in length, but collectively total 10,700 feet. Acreage of the islands is 60, 62, and 74 acres. Overrun areas in both the north and south ends of the runway add approximately 40 acres of grass. An additional grassy area between the runway and Lowery Lane is about 10,000 feet long and 150 to 200 feet wide.

The airfield is mowed annually in compliance with FAA requirements. Grass in the safety zones (250 feet from the runway and taxiway centerlines), including areas along the runway and all taxiways, is mowed throughout the spring and summer. In accordance with management recommendations, mowing of the other areas is delayed until after July 31 to minimize the chances of destroying nesting adults, eggs, or pre-flight young.

Results

Surveys during the 2006 and 2007 breeding season continue to document Upland Sandpiper use of the Pease International Tradeport airfield. Observations from April 21 through August 31 documented continued breeding activity. Twelve to 16 pairs of Upland Sandpipers were estimated to nest at Pease in 2006 with slightly lower estimates of 11 to 14 pairs in 2007. This is a significant increase from the high of 6 to 10 pairs estimated to nest in 2004 and 2005 (Figure 1). Nesting activity occurred on all the grassy islands and along the west side of the runway. Approximate locations of the nesting sites were determined through regular observations and the behaviors of the nesting pairs.

Results of the 2006 and 2007 monitoring of the Upland Sandpiper population at the Pease International Tradeport show a marked increase in both the number of breeding pairs and the estimated number of fledged chicks since 2002. The estimate of 12–16 breeding pairs and 20–25 fledged chicks equals the highest numbers recorded back in 1997. Preliminary indications from the more cursory monitoring that had taken place from 2002–2005 were that this population was in a decline. Estimates of breeding pairs fell from a high of 12–16 pairs in 1997 back to eight to twelve pairs in 2002, and declined even further with an estimate of six to ten pairs in 2004 and 2005. In addition, the number of migrating sandpipers using the Pease airfield as a stopover has been falling steadily since 1993, perhaps indicating a more regional decline.

It is also of interest to note that Upland Sandpiper breeding was confirmed at other seacoast locations in 1997 and 1998, the same years that the Pease population peaked. Since then, there has been no breeding confirmation, although they have been noted at other locations on a sporadic basis. This continued in 2006 and 2007.

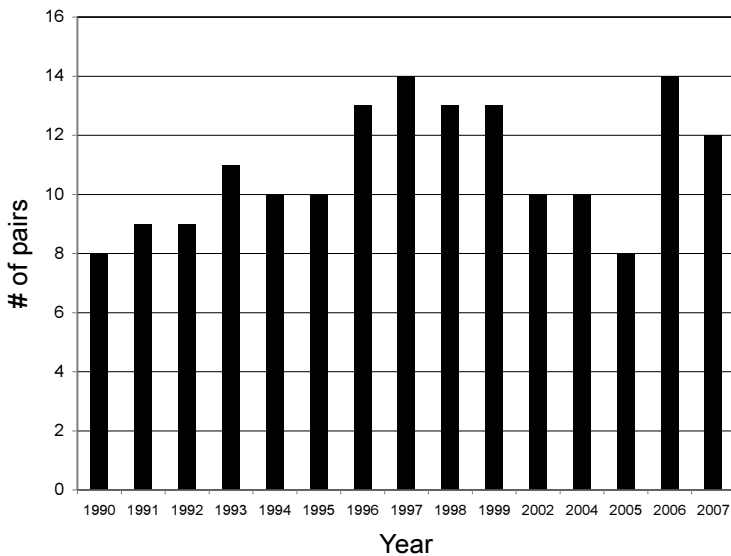


Figure 1. Number of Upland Sandpiper breeding pairs at Pease International Tradeport, NH 1990–99; 2000–07.

Although the 2006 data showed an increase in the number of fledged chicks, the estimate of fledged chicks had also been falling steadily since 1996. One variable that may be important to nesting success is the presence of predators on the airfield. An electric fence was installed around the perimeter of the airfield in 1992 to keep deer off the runway. This fence also acted to deter many other mammals from entering the airfield areas. In 1995, the transition was made to an interior chain link fence. Discussions with airfield operations personnel indicate that fox and coyote have become much more prevalent on the airfield in recent years. Both can cause significant predation problems for sandpipers.

Habitat changes have been significant at the Pease Airfield since the decommissioning of the Air Force facility began in 1992. Upland Sandpipers have gradually shifted their usage of island habitats from the Middle and South Islands to the North Island and overrun areas. This shift continued in 2006 with high breeding use along the south end of Lowery Lane. In 2007, with the Lowery Lane area kept mowed throughout the breeding season, the Upland Sandpiper pairs again shifted back to the Middle and South Islands. This is important data as pressures to change mowing regimes on airports continues.

Management

During the 1990s through 2007, the following agencies worked together to allow safe airfield operations to proceed with consideration for Upland Sandpiper breeding needs: New Hampshire Audubon, New Hampshire Fish and Game Department, Air Force Base Conversion Agency, New Hampshire Air National Guard, Department of Environmental Services, United States Department of Agriculture–Wildlife Services, and Pease Airfield Management. Coordination among these agencies, prior to and during the breeding season, provided protection for the Upland Sandpiper. Of critical

importance is the timing of mowing on the airfield. A mowing regime has been developed that meets airport safety requirements and protects the sandpipers during the vulnerable early stages of nesting (incubation and pre-flight chick stage). Specifically, mowing of safety areas begins by May 1 so as to discourage nesting attempts in these areas, and all other areas of the airfield are not mowed until after July 31. In addition, airport personnel are regularly informed of active nesting areas (when monitoring is being done) so that disturbance to such areas is minimized as much as possible. It is through this collaborative effort that Upland Sandpipers have continued to breed successfully at Pease.

References

- Andrle, R., and J. Carroll. 1988. *The Atlas of Breeding Birds in New York State*. Cornell University Press, Ithaca, NY.
- Carter, J. 1992. *Upland sandpiper. Migratory Nongame Birds of Management Concern in the Northeast*. U.S. Department of the Interior Fish and Wildlife Service.
- De Luca, D. 2002. *2002 Upland Sandpiper Status at Pease International Tradeport. Report to the New Hampshire Fish and Game Department*. Audubon Society of New Hampshire, Concord, NH.
- De Luca, D. 2004. *Upland Sandpiper Monitoring Protocol for New Hampshire. Report to the New Hampshire Fish and Game Department*. Audubon Society of New Hampshire, Concord, NH.
- Forbush, E. 1925. *Birds of Massachusetts and other New England States*. Norwood Press, Norwood, MA.
- Foss, C. 1994. *Atlas of Breeding Birds of New Hampshire*. Audubon Society of New Hampshire. Concord, NH.
- Houston, C. and D. Bowen, Jr. 2001. Upland Sandpiper (*Bartramia longicauda*). In *The Birds of North America*, No. 580 (A. Poole and F. Gill, eds.). The Birds of North America, Inc., Philadelphia, PA.
- Hunt, P. and D. De Luca. 2005. *Upland sandpiper species profile in the New Hampshire Wildlife Action Plan*. New Hampshire Fish and Game Department.
- Jones, A. and P. Vickery. 1997. *Distribution and Population Status of Grassland Birds in Massachusetts*. Pp. 187-199 in *Grasslands of Northeastern North America: Ecology and Conservation of Native and Agricultural Landscapes* (P. D. Vickery and P. W. Dunwiddie, eds.). Massachusetts Audubon Society, Lincoln, MA.
- Jones, A., G. Shriver, and P. D. Vickery. 2001. *Regional Inventory of Grassland Birds in New England and New York, 1997–2000*. Report to National Fish and Wildlife Foundation. Massachusetts Audubon Society, Lincoln, MA.
- Laughlin, S. and D. Kibbe. 1985. *The Atlas of Breeding Birds of Vermont*. University Press of New England. Hanover, NH.
- Silver, H. 1957. *A History of New Hampshire Game and Furbearers*. New Hampshire Fish and Game Department Survey Report 6. Concord, NH.
- Veit, R. and W. Petersen. 1993. *Birds of Massachusetts*. Massachusetts Audubon Society, Lincoln, MA.
- Vickery, P., M. Hunter, Jr., and S. Melvin. 1994. Effects of Habitat Area on the Distribution of Grassland Birds in Maine. *Conservation Biology* 8: 1087–1097.
- White, F., 1937. *Local Notes on the Birds at Concord, New Hampshire*. Rumford Press. Concord, NH.
- White, R., 1988. *Wintering Grounds and Migration Patterns of the Upland Sandpiper*. *American Birds* 42 (5): 1247–1253.