

*Rare, Local, Little-known,
and Declining North American Breeders*

A Closer Look: Henslow's Sparrow

Dan L. Reinking*



LANG ELLIOTT

Henslow's Sparrow (*Ammodramus henslowii*) is receiving increased scrutiny despite its unobtrusive plumage and modest song. Recent population declines and significant ongoing changes in distribution have called special attention to this species, while grassland birds as a group have entered the collective conservation consciousness. This sparrow was discovered in Kentucky by John James Audubon in 1820, and was later named for Cambridge University botany professor Reverend John Stevens Henslow. But even 164 years after its discovery, the "whys and wherefores of population fluctuation, or perhaps more accurately the long-term gradual but consistent population decline in the Henslow's Sparrow throughout its range, are very poorly understood, and the species remains somewhat of an enigma" (Knapton 1984). Today, another 18 years have passed and much more is known about both the breeding and wintering biology of the species, but questions remain as to its overall population trend and the meaning of observed distribution changes.

One of the *Ammodramus* group of seven sparrows distinguished by large heads, short tails, and generally drab but intricately-patterned plumages, the Henslow's Sparrow has much in common with its congeners Grasshopper, Baird's, and Le Conte's Sparrows. A

short, spiky tail, upperparts streaked with browns and rufous, a buffy wash and dark streaking on the breast, and a large, flat head are all characteristics shared to some extent by these species. Henslow's Sparrows show more rufous on the upperparts and wings than the other species and have an olive-green head and nape. The song of this sparrow is at once easy to miss and yet easy to hear after it is learned because of the persistence with which it is given. A dry, insect-like, two-syllable *ts-LIK* is repeatedly broadcast from the tops of tall grasses or forbs throughout the day and even during the nighttime hours of the breeding season, when most other species are rather quiet (Walk et al. 2000).

Taxonomy and Distribution

Three subspecies of Henslow's Sparrow have been proposed. The nominate form, sometimes called the western Henslow's Sparrow, was recorded as breeding from eastern South Dakota through the upper Midwest and south through central Kansas, central Missouri, northern Kentucky, and northeastern Texas (American Ornithologists' Union 1957). The eastern form, *A. h. susurrans*, was said to breed from central New York south to North Carolina (American Ornithologists' Union 1957). Bull (1974) did not consider this eastern form as separate from the nominate form; regardless, it exists only in small numbers (Rosenburg and Wells 1995, Wells and Rosenberg 1999). A third proposed subspecies, *A. h. houstonensis*, was later described from a small population in Houston, Texas, but has been rejected as a separate subspecies and is now extirpated (Arnold 1983, Pruitt 1996).

Students of the Henslow's Sparrow have long commented on their uncertainty of its distribution. A. Sidney Hyde (1939) wrote, "Its susceptibility to alterations in the environment, its apparently innate tendency toward irregularity in occurrence, and its great seclusiveness

combine to make impossible the full interpretation of the historical record." Hyde goes on to note that the first authenticated breeding records in the Northeast and Midwest generally occurred earliest in states with extensive coastal marshes and prairies, and occurred later in states that were at one time almost entirely forested. Clearing of these extensive forests created habitat for Henslow's Sparrows in the nineteenth century. Broad patterns of habitat change undoubtedly continue to influence Henslow's Sparrow distribution today.

The map on page 148 shows the approximate current distribution of Henslow's Sparrow. The northwestern and eastern portions of the breeding range have contracted in recent years (American Ornithologists' Union 1998). No recent evidence of nesting in South Dakota exists (South Dakota Ornithologists' Union 1991, Peterson 1995), and nesting reports from Minnesota have become scarce in recent years (Hanson 1994). Henslow's Sparrow is extirpated from much of New England (Smith 1992, Pruitt 1996). Other states within its historic breeding range also have shown declines in distribution and population (e.g., Illinois; see Population Trends).

In contrast, the breeding range of Henslow's Sparrow appears in recent years to be expanding to the west and southwest. Although the species was described as a rare transient in Oklahoma by Nice (1931), Sutton (1967) later considered the few sight records of Henslow's Sparrows in Oklahoma unconvincing. Goard (1974) provided the first photographic documentation of Henslow's Sparrow in Oklahoma. More recently, Verser (1990) documented multiple sightings as well as nesting in 1987, and Reinking and Hendricks (1993) and Reinking et al. (2000) documented a large population (perhaps several thousand birds) and widespread sightings in northeastern

*George M. Sutton Avian Research Center

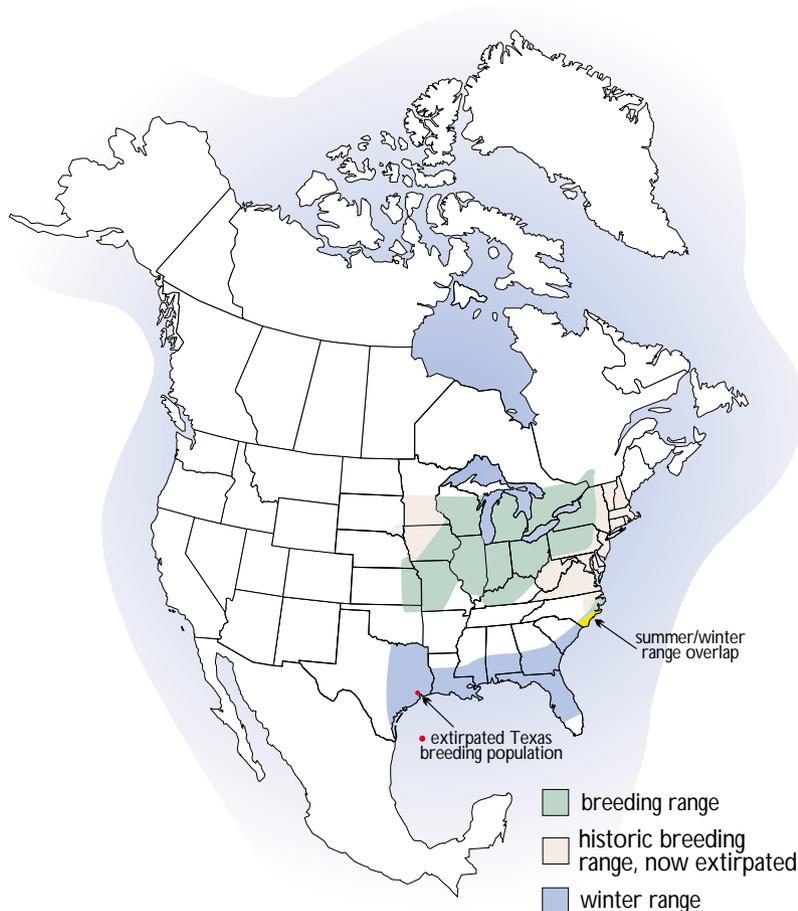
P.O. Box 2007

Bartlesville, OK 74005-2007

dreinking@ou.edu

DLR has been conducting banding and inventory projects and research on grassland birds. He is the coordinator of the Oklahoma Breeding Bird Atlas, serves on the Oklahoma Bird Records Committee, and is the president-elect of the Oklahoma Ornithological Society.

Usually shy and hard to see, a Henslow's Sparrow is much more visible with its head thrown back, proclaiming its territory with an insect-like song. This bird was at the Taberville Prairie Wildlife Area in southwestern Missouri in June 1996.



This map for Henslow's Sparrow includes breeding and wintering ranges, as well as areas where the species has been extirpated. From data taken from the Breeding Bird Survey (1966-1999), Henslow's Sparrow is extirpated from much of New England and is apparently declining in much of Wisconsin, Michigan, Pennsylvania, and New York. Populations, however, may be increasing in Indiana, Kentucky, Ohio, Missouri, Kansas, and Oklahoma (Sauer et al. 2000).

Oklahoma during the 1990s. Recent breeding season reports from southeastern Nebraska have pushed westward the known breeding range of this species (Grzybowski 1998, 1999).

Henslow's Sparrows winter primarily in coastal states from South Carolina to Texas. Winter distribution of the sparrow has been less well studied than breeding-season distribution, but recent efforts have provided insights. Banding returns in Alabama indicate that individuals are site-faithful within a winter sea-

son, but that they may not return to the same area in subsequent winters (Plentovich et al. 1998). Numbers of Henslow's Sparrows wintering in South Carolina have declined substantially since the period 70 to 115 years ago (McNair and Post 2000), perhaps paralleling the decline of breeding populations in the Northeast that may have wintered in South Carolina. Even within the known breeding and wintering range of Henslow's Sparrow, distribution may be localized and fluid from one year to

the next because of this species' particular habitat requirements.

Habitat and Management

Breeding habitat of the Henslow's Sparrow has been described as weedy or grassy fields and meadows (Hyde 1939). Numerous studies have called attention to several important habitat characteristics, including tall, dense grass, a well-developed litter layer, standing dead vegetation, and relatively little woody vegetation (Wiens 1969, Robins 1971, Zimmerman 1988, Herkert 1994 and 1998, Herkert and Glass 1999, Winter et al. 2000, Reinking et al. 2000). This favored vegetation-structure usually results from two or more years of idle management after a disturbance such as fire or grazing. Relatively large areas of suitable habitat also are needed for an area to be occupied, a phenomenon known as area sensitivity (Herkert 1994, Winter and Faaborg 1999).

Although Henslow's Sparrows may occasionally be found in small habitat patches, the minimum size of an area needed to consistently support Henslow's Sparrows has been variously reported to be from 75 to 140 to more than 250 acres, and may vary with the make-up of the surrounding landscape. In western portions of the Henslow's Sparrow range, such as the Flint Hills of Kansas and northeastern Oklahoma, extensive native grasslands remain unplowed. In such areas, it is possible that smaller patches of suitable habitat may be occupied because the area surrounding the patch is still grassland, even if it is not of the minimum height and density needed to support nesting Henslow's Sparrows. In isolated prairies such as those found in Illinois, where the surrounding landscape consists of unsuitable habitat such as agricultural fields planted in corn or soybeans, larger patches of suitable habitat (perhaps 140 acres or greater) may be needed for an area to be consistently occupied (Herkert 1998). Several studies have noted greater Henslow's Sparrow density

in larger habitat patches (Herkert 1998).

In addition to native grasslands, nesting Henslow's Sparrows now occupy hayfields, pastures, wet meadows, and reclaimed strip-mines. If such areas meet the requirements of size and vegetative structure described above, successful reproduction can take place in these locations. Careful attention to the timing of disturbances such as mowing is required to help ensure nesting success. Recently developed, fast-growing hay crops in particular may threaten nesting birds because of the opportunity that they provide for early and multiple harvests, while nesting is in full swing.

This combination of necessary habitat characteristics renders many land uses and land management practices incompatible with maintaining Henslow's Sparrow populations. Any practice which removes too much vegetation, such as burning, haying, or heavy grazing, can exclude this species from an area, depending on the timing and frequency of the action. Grasslands are, however, dynamic habitats, and require periodic natural disturbances such as fire or grazing to maintain their vigor. Other actions, such as mowing, can mimic the effects of natural disturbances (through vegetation removal), and may be useful management tools (Swengel 1996). The keys to managing habitat for Henslow's Sparrows include providing a large enough area of suitable habitat and implementing some form of management in which the necessary disturbance (whether fire, grazing, mowing, or some combination) is conducted over rotating portions of the area in a three-to-five-year cycle. This allows for suitable habitat to be present in any given year.

Much less is known about wintering Henslow's Sparrows. Winter habitats of the Henslow's Sparrow include Longleaf Pine savannas with Wiregrass understory, wet prairies, grassy swales, pitcher-plant bogs, marsh borders, and wet broomsedge meadows (Pruitt 1996). Occupied habitats are similar to breeding habitats in that there is dense vegeta-

tion and ground cover present.

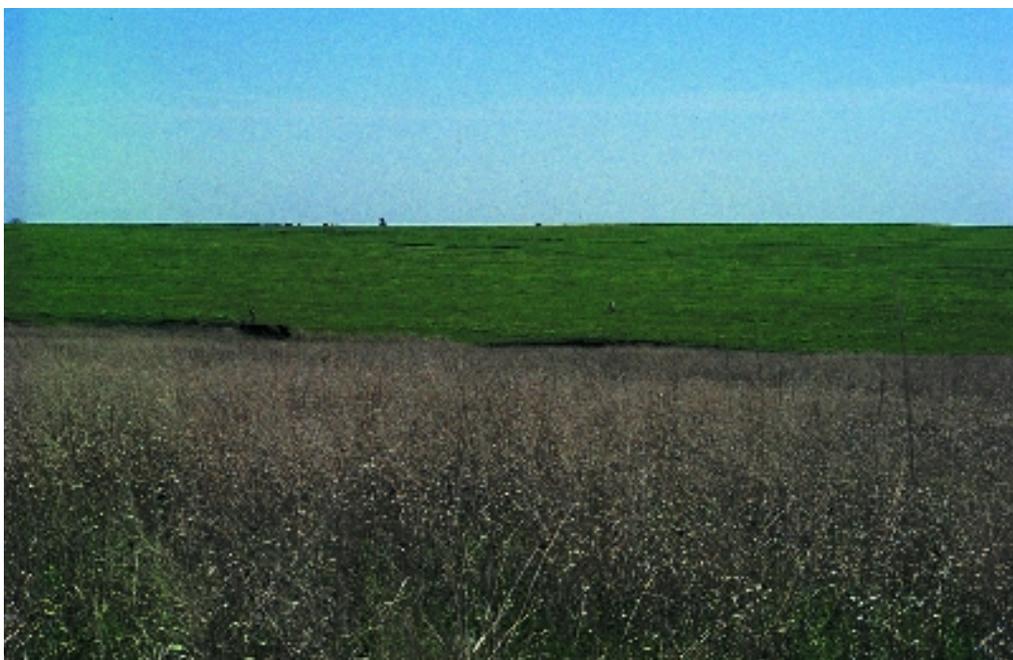
Henslow's Sparrows are secretive and difficult to flush during winter months. Periodic management using fire may be important in maintaining suitable habitat for wintering Henslow's Sparrows.

Breeding Biology

Male Henslow's Sparrows maintain territories through singing. Reported territory sizes range from 0.75 acre to 2.5 acres

hidden and difficult to locate. Three to five greenish or whitish eggs speckled and spotted with reds, browns, and grays are laid and incubated by the female for about 11 days. After hatching, young are tended by both adults for nine to 10 days until fledging.

As is the case with most ground-nesting birds, nesting success of Henslow's Sparrows is fairly low, due primarily to predation. The difficulty of finding



DAN L. REINKING

The "old growth" tallgrass prairie of Oklahoma seen in the foreground provides the tall, dense grass with standing dead vegetation preferred by Henslow's Sparrows. The recently burned area with lush green growth in the background will take at least two years to reach this preferred stage when it may host nesting Henslow's Sparrows. This location, at The Nature Conservancy's Tallgrass Prairie Preserve in Osage County, Oklahoma, was photographed in May 1993.

(Pruitt 1996). Nesting is initiated in May, with nests usually being located very near ground level. Over four to six days, the female builds an open cup nest primarily from grasses, usually situated near the base of a thick clump of grass. Alternatively, nests may be located within the vertical stems of growing vegetation (Baicich and Harrison 1997). A partial roof is often constructed by arching vegetation over the nest. Nests are well

Henslow's Sparrow nests makes assessing their productivity a challenge. Six of 11 nests (54 percent) in Michigan were successful (Robins 1971). In Missouri, 34 of 59 nests (an impressive sample for this species), or 58 percent, were successful (Winter 1999). Forty-one percent of 22 nests in Oklahoma were successful (Reinking et al. 2000). The number of young produced per successful nest was 2.8, 3.6, and 3.3 in those three



DAN L. REINKING

A Henslow's Sparrow nest is usually situated by the base of a thick clump of grass. Three to five eggs are incubated by the female for about 11 days. After hatching, young are tended by both adults for nine to 10 days until fledging. These Henslow's Sparrows, nearly ready to fledge at the Tallgrass Prairie Preserve, in Oklahoma, were being monitored and banded by researchers.

studies, respectively.

Evidence of active nests during the period of May through early August suggests the likelihood of double brooding, but studies of marked individuals are needed to confirm this probability. Nest parasitism of Henslow's Sparrows by Brown-headed Cowbirds has been noted in a handful of cases (Friedmann 1963, Friedmann and Kiff 1985), but occurred in fewer than 10 percent of 22 nests monitored in Oklahoma (Reinking et al. 2000) and in five percent of 59 nests monitored in Missouri (Winter 1999).

Population Trends

The specific habitat requirements of Henslow's Sparrows, together with the dynamic nature of their preferred habitat, results in highly localized and variable distribution of this species from year to year. Population estimation and systematic monitoring of Henslow's Sparrows on a regional or range-wide scale is therefore problematic. Most available data come from the North

American Breeding Bird Survey (Peterjohn 1994), an annual, continent-wide effort to survey about 3,500 roadside routes for birds during the breeding season. As mentioned above, dramatic changes took place in the habitat of eastern North America during the nineteenth century, probably increasing the Henslow's Sparrow population. By the time the Breeding Bird Survey began in 1966, populations had fallen well below this historic high, due once again to large-scale changes in habitat during the twentieth century (Pruitt 1996). Since 1966, the localized nature of Henslow's Sparrow populations and the resulting small number of survey routes which contain this species have made accurate population-trend estimation difficult.

During the period 1966 through 1999, Breeding Bird Survey data for Henslow's Sparrows have shown an average annual decline of about eight percent per year survey-wide (Sauer et al. 2000). Henslow's Sparrow is extirpated from much of New England, and is apparent-

ly declining in much of Wisconsin, Michigan, Pennsylvania, and New York. Populations may be increasing in Indiana, Kentucky, Ohio, Missouri, Kansas, and Oklahoma.

Henslow's Sparrow has been relatively well studied in Illinois, where habitat changes have clearly affected its population. During the eighteenth century, Henslow's Sparrow was considered abundant in Illinois (Herkert 1991, 1994). As recently as the 1950s, it was considered common in northeastern Illinois (Ford 1956). Surveys conducted between 1957 and 1979 suggested a 94 percent decline in the Illinois Henslow's Sparrow population (Herkert 1994). Grassland habitat in Illinois declined 65 percent to 75 percent during this same time-period. Results from the Illinois Spring Bird Count (a standardized annual survey in each of Illinois' counties) show a 78 percent decline in the Henslow's Sparrow population from 1975-1995 (Herkert 1997). Henslow's Sparrows now occur locally and somewhat sporadically in Illinois, and generally only in grasslands larger than 250 acres, even though apparently suitable habitat is present in smaller grasslands (Herkert 1994). Some recent increases in the Illinois population appear to be the result of land being enrolled in the Conservation Reserve Program (Herkert 1997).

Farther west, Henslow's Sparrow populations appear to be stable or increasing in Kansas and Oklahoma. Substantial populations exist in Kansas on Konza Prairie Research Natural Area and on Fort Riley Military Reservation, both near Manhattan (Pruitt 1996). The Nature Conservancy's Tallgrass Prairie Preserve near Pawhuska is home to the largest and most stable population in Oklahoma. Although the Henslow's Sparrow population here may be only recently established, as was the preserve (in 1989), habitat management in this 37,000-acre conservation area favors Henslow's Sparrows, and promises the potential for maintaining substantial numbers of this species in Oklahoma. Additional breeding-season sightings recorded during surveys in 1996

showed Henslow's Sparrows to be present in six counties in northeastern Oklahoma (Reinking et al. 2000).

The widespread and substantial decline of Henslow's Sparrows across much of its range resulted in a petition being submitted to list the species under the Endangered Species Act, which prompted Pruitt's (1996) status-assessment of the species. Due to evidence of increasing populations in several parts of the Henslow's Sparrow range (such as Indiana, Kansas, Kentucky, Ohio, and Oklahoma), the petition request was found to be unwarranted (Department of the Interior 1998).

Henslow's Sparrow is only one of many species whose range and population dynamics are not well enough understood. Continued participation by birders in projects such as the Breeding Bird Survey and breeding bird atlas efforts is critical to our understanding of the "whys and wherefores of population fluctuation," and will help to determine whether or not future generations of birders will enjoy the same diversity of bird life that we often take for granted today.

Acknowledgments

Numerous field personnel over many years have painstakingly collected data on nesting Henslow's Sparrows, and birders have contributed greatly to our understanding of this species through participation in the Breeding Bird Survey and other projects. I thank my uncle, Ken Hollinga, for introducing me to birding, and for later showing me my first Henslow's Sparrow on 6 July 1985 at Mora Prairie in Missouri. David Wiedenfeld helped improve the manuscript.

Literature Cited

- American Ornithologists' Union. 1957. *The A.O.U. Check-list of North American Birds*. The American Ornithologists' Union. The Lord Baltimore Press, Inc., Baltimore, MD. 691 pp.
- . 1998. *The A.O.U. Check-list of North American Birds*. The American Ornithologists' Union, Washington, D.C. 829 pp.
- Arnold, K. A. 1983. A new subspecies of Henslow's Sparrow (*Ammodramus henslowii*). *Auk* 100:504-505.
- Bull, J. 1974. *Birds of New York State*. Doubleday/Natural History Press, Garden City, NY.
- Department of the Interior. 1998. Endangered and threatened wildlife and plants; 90-day finding for a petition to list the Henslow's Sparrow as threatened. *Federal Register* 63:48162-48164.
- Ford, E. R. 1956. *Birds of the Chicago region*. Chicago Acad. Sci., Special Pub. No. 12, Chicago.
- Friedmann, H. 1963. Host relations of the parasitic cowbirds. *U. S. Nat. Mus. Bull.* 233. Washington, D.C. 276 pp.
- Friedmann, H., and L. F. Kiff. 1985. The parasitic cowbirds and their hosts. *Proc. Western Found. of Vert. Zool.* 2(4). 304 pp.
- Goard, D. M. 1974. Henslow's Sparrow in Oklahoma. *Bull. Oklahoma Ornithol. Soc.* 12:57-60.
- Grzybowski, J. A. 1998. Southern Great Plains region. *Field Notes* 52:474.
- . 1999. Southern Great Plains region. *North American Birds* 53:405.
- Hanson, L. G. 1994. The Henslow's Sparrow (*Ammodramus henslowii*) of Minnesota: population status and breeding habitat analysis. M.S. Thesis, Central Michigan Univ., Mount Pleasant. 39 pp.
- Herkert, J. R. 1991. Prairie birds of Illinois: population response to two centuries of habitat change. *Illinois Nat. Hist. Surv. Bull.* 34:393-399.
- . 1994. Status and habitat selection of the Henslow's Sparrow in Illinois. *Wilson Bulletin.* 106:35-45.
- . 1997. Population trends of the Henslow's Sparrow in relation to the Conservation Reserve Program in Illinois, 1975-1995. *J. Field. Ornithol.* 68:235-244.
- . 1998. Effects of management practices on grassland birds: Henslow's Sparrow. Northern Prairie Wildlife Research Center, Jamestown, ND. Jamestown, ND: Northern Prairie Wildlife Research Center Home Page. <<http://www.npwrc.usgs.gov/resource/literatr/grasbird/henslows/henslows.htm>> (Version 17 Feb 2000).
- and W.D. Glass. 1999 Henslow's Sparrow response to prescribed fire in an Illinois prairie remnant. *Studies in Avian Biology* 19: 160-164.
- Hyde, A. S. 1939. The life history of Henslow's Sparrow, *Passerherbulus henslowii* (Audubon). *Mus. of Zool. Misc. Publ.* No. 41. University of Michigan Press, Ann Arbor.
- Knapton, R. W. 1984. The Henslow's Sparrow in Ontario: a historical perspective. *Ontario Birds* 2:70-74.
- McNair, D. B., and W. Post. 2000. Historical winter status of three upland *Ammodramus* sparrows in South Carolina. *Studies in Avian Biol.* 21:32-38.
- Peterjohn, B. G. 1994. The North American Breeding Bird Survey. *Birding* 26:386-398.
- Peterson, Richard A. 1995. *The South Dakota Breeding Bird Atlas*. South Dakota Ornithologists' Union. 276pp.
- Plentovich, S. M., N. R. Holler, and G. E. Hill. 1998. Site fidelity of wintering Henslow's Sparrows. *J. Field Ornithol.* 69:486-490.
- Pruitt, L. 1996. *Henslow's Sparrow status assessment*. U. S. Fish and Wildlife Service. Fort Snelling, MN. 113 pp.
- Reinking, D. L., and D. P. Hendricks. 1993. Occurrence and nesting of Henslow's Sparrow in Oklahoma. *Bull. Oklahoma Ornithol. Soc.* 26:33-36.
- , D. A. Wiedenfeld, D. H. Wolfe, and R.W. Rohrbough, Jr. 2000. Distribution, habitat use, and nesting success of Henslow's Sparrow in Oklahoma. *Prairie Naturalist.* 32:219-232.
- Robins, J. D. 1971. A study of Henslow's Sparrow in Michigan. *Wilson Bulletin.* 83:39-48.
- Rosenburg, K. V., and J. V. Wells. 1995. *Importance of geographic areas to*

Tours for 2002

ABA - ENDORSED

neotropical migrant birds in the Northeast. Report submitted to U. S. Fish and Wildlife Service, Region 5. Hadley, Massachusetts.

- Sauer, J. R., J. E. Hines, I. Thomas, J. Fallon, and G. Gough. 2000. *The North American Breeding Bird Survey, Results and Analysis 1966 - 1999*. Version 98.1, USGS Patuxent Wildlife Research Center, Laurel, Maryland.
- Smith, C. R. 1992. Henslow's Sparrow, *Ammodramus henslowii*. Pages 315-330 in K. J. Schneider and D. M. Pence, eds. *Migratory nongame birds of management concern in the Northeast*. U.S. Dept. Inter., Fish and Wildl. Serv., Newton Corner, Massachusetts.
- Swengel, S. R. 1996. Management responses of three species of declining sparrows in tallgrass prairie. *Bird Conserv. Internat.* 6:241-253.
- Verser, D. W. 1990. Henslow's Sparrow in northeast Oklahoma. *Bull Oklahoma Ornithol. Soc.* 23:9-12.
- Walk, J. W., E. L. Kershner, and R. E. Warner. 2000. Nocturnal singing in grassland birds. *Wilson Bulletin.* 112:289-292.
- Wells, J.V., and K.V. Rosenberg. 1999. Grassland bird conservation in north-eastern North America. *Studies in Avian Biology* 19: 72-80.
- Wiens, J. A. 1969. An approach to the study of ecological relationships among grassland birds. *Ornithol. Monogr.* No. 8. 93 pp.
- Winter, M. 1999. Nesting biology of dickcissels and Henslow's sparrows in southeastern Missouri prairie fragments. *Wilson Bulletin.* 111:515-527.
- , and J. Faaborg. 1999. Patterns of area sensitivity in grassland-nesting birds. *Conserv. Biol.* 13:1424-1436.
- , D. H. Johnson, and J. Faaborg. 2000. Evidence for edge effects on multiple levels in tallgrass prairie. *Condor* 102:256-266.
- Zimmerman, J.L. 1988. Breeding season habitat selection by the Henslow's Sparrow (*Ammodramus heuslowii*) in Kansas *Wilson Bulletin* 100:17-24. ↗



Supporting
Birder's Exchange

Apr 27 to May 11 - Wales & Norfolk

Bird the mountains of Wales, the plains and marshes of Norfolk; expert local guides; expect 175 species.

Celtic Bird Tours, tel (44)-1656 645 709; Birds@celtictours.org.uk

May 19 to Jun 1 - Finland & North Norway

Join 50 million breeding pairs of birds in the Land of the Midnight Sun; excellent local guides; warm hospitality.

Siemer & Hand Travel, (800) 451-4321; (415) 788-4000; travel@siemerhand.com

May 20 to 26 - Presqu'île, Ontario

A trip for newer birders with veteran birder & instructor in highly diverse habitat of this peninsular park. 150 species likely.

Nature Travel Holidays, (888) 305-3955; (613) 531-8105; info@naturetravel.

Aug 4 to 18 - Cruise Alaska to Siberia

Bird the Pribilofis, the Aleutian chain to Attu; Bering Island and Russia's Kamchatka Peninsula; expert ABA guides.

Clipper Cruise Line, (800) 814-9393, x441#, csperry@intrav.com

Oct 6 to 12 - Brazil Special Expedition

Join international expedition to refind Kinglet Calyptura last seen in 1996. Extensions to Pantanal, etc.

Siemer & Hand Travel, (800) 451-4321; (415) 788-4000; travel@siemerhand.com

Oct 14 to 28 - Costa Rica Survey

Join field ornithologists at Tortuguero research station for mist-netting; then climb into foothills and high mountains for fabulous birding.

Holbrook Travel, Inc., (800) 451-7111, woodp@holbrooktravel.com

October & November - Two Trips to Australia

Two affordable 15-day trips offer springtime experience in one of world's most interesting birding destinations.

Nature Travel Holidays, (888) 305-3955; (613) 531-8105; info@naturetravel.net

Oct 30 to Nov 15 - New Zealand

See unique endemics of these delightful isles; expert local guides; several boat excursions including pelagic birding.

Talon Tours, (707) 795-7547, talontours@yahoo.com

Dec 5 to 14 - Cruise Costa Rica & Panama Canal

Bird Darien Jungle and canal region, Marengo, Curur Wildlife Refuge, Carara and other special areas of Costa Rica travelling in luxury from port to port.

Clipper Cruise Line, (800) 814-9393, x441#, csperry@intrav.com

SHORT TRIPS FOR TARGET SPECIES

Dry Tortugas - 4 trips in April and May

Florida Nature Tours, (407) 363-1360; fnt@gdi.net

Pacific Northwest Pelagic Trips

The Bird Guide, (503) 844-6876; greg@thebirdguide.com

CA, CO, ME, NC, TX, Br. Columbia, Newfoundland and Nova Scotia

OBServ Tours, Inc. (615) 292-2739; observinc@aol.com

Hawaii - The Big Island

Hawaii Forest & Trail, (800) 464-1993, info@hawaii-forest.com

Central Oregon - 8 scheduled trips

Paradise Birding, (541) 408-1753, sshunk@paradisebirding.com

Please contact tour company directly for information and reservations, and identify yourself as an ABA member. Tour companies pay ABA a commission for each ABA participant.

For Tour Codes go to www.americanbirding.org