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NEW NESTING DATES FOR SOME BREEDING BIRDS IN NORTH DAKOTA -- There have been few published nest records for North Dakota (e.g., Haas 1985, Kantrud 1992, Buhl and Shaffer 2000) since Robert E. Stewart published *Breeding Birds of North Dakota* in 1975. For several species, we report dates for eggs, nestlings, or fledglings that occurred outside the intervals reported by Stewart (1975). For comparison, we provide nesting dates for breeding birds in South Dakota (Tallman et al. 2002).

Killdeer (*Charadrius vociferus*) – On 23 August 2002, LDI flushed a killdeer from a nest scrape containing four eggs, about 3.2 km east of Jamestown in Stutsman County. Between 30 August and 7 September, the adult was observed incubating the eggs, and on 10 September recently hatched, downy young were observed with two adults. This record is over two months beyond the latest egg date of 21 June reported by Stewart (1975), and thus establishes a new late-nest record for the killdeer in North Dakota. Records from the North Dakota Birding Society (R. E. Martin, North Dakota Birding Society, Sawyer, North Dakota, personal communication) include a record of downy young observed in Ward County on 25 August 1985. Smith et al. (1999) indicated that there were few if any killdeer nest records for late August and September in North America, although they reported several October, November, and December nest records in the southern United States during the past decade. Sordahl et al. (2002), however, observed killdeer young fledging from nests as late as 18 August in northeastern Iowa, and Tallman et al. (2002) provided three nest records in South Dakota from late July as well as a record of young on 25 September.

Mourning Dove (*Zenaida macroura*) – Stewart (1975) listed the extreme egg dates for mourning doves in North Dakota as 16 April to 6 September. On 10 April 1994, LDI flushed a mourning dove from a nest containing two eggs located about 1 m above the ground in a 4 m tall chokecherry (*Prunus virginiana*) bush at Northern Prairie Wildlife Research Center, 4.8 km southeast of Jamestown in Stutsman County. The nest was found destroyed on 14 April. On 12 September 1994, HAK flushed a mourning dove from a nest at Northern Prairie Wildlife Research Center. The nest, containing two eggs, was atop a dense clump of Virginia creeper (*Parthenocissus quinquefolia*) climbing 2 m up a dead chokecherry bush about 4 m tall. The eggs hatched 15 or 16 September, but the nest was found destroyed on 19 September. Records from the North Dakota Birding Society (R. E. Martin, personal communication) included one later nest record with young from McLean County on 4 October 1980. Tallman et al. (2002) listed the earliest mourning dove nest with eggs in South Dakota as 6 April and the latest as 15 September.

Barn Swallow (*Hirundo rustica*) – On 20 September 1994, HAK observed adult barn swallows feeding nestlings in a barn, 10 km southeast of Jamestown. In that same barn, on 2 October 2000, three of four barn swallow young fledged from

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a nest; the remaining nestling was found dead in the nest on 8 October and likely succumbed to cold temperatures or starvation. Stewart (1975) listed the latest date for barn swallow nestlings in North Dakota as 12 September, although R. E. Martin (personal communication) recorded a nest with young in Ward County on 26 September 1982. The nest record from October 2000 establishes a new late date for nestlings and fledglings leaving the nest in North Dakota. Tallman et al. (2002) listed the latest fledging dates in South Dakota as 15 and 16 September.

Bobolink (*Dolichonyx oryzivorus*) – LDI flushed a female bobolink from a nest containing five eggs in a pasture in McLean County on 20 July 1993. Stewart (1975) listed the latest date for a bobolink nest with eggs in North Dakota as 27 June in Ransom County. Tallman et al. (2002) listed late fledging dates in South Dakota between 24 July and 6 August.

Le Conte's Sparrow (*Ammodramus leconteii*) – The Le Conte's sparrow is a secretive species, and its nests are notoriously difficult to locate. Lowther (1996) speculated that only a little over 50 nests have ever been found for this species. Stewart (1975) listed only four nest records (4 eggs each) for the Le Conte's sparrow in North Dakota, ranging from 27 May to 19 June, and one record of dependent young out of the nest on 1 August. During a study of breeding birds nesting in Conservation Reserve Program fields in three counties in North Dakota between 1990 and 2002 (Igl and Johnson 1995, 1999), LDI and his field assistants found seven Le Conte's sparrow nests and observed five cases of dependent fledglings accompanied by adults. All seven nests were found in Eddy County between 14 and 25 June. Three (42.9%) of the seven nests contained brown-headed cowbird (*Molothrus ater*) eggs: one nest contained two brown-headed cowbird and two host eggs, one contained one brown-headed cowbird and three host eggs, and the other contained one brown-headed cowbird and four host eggs. The number of eggs in non-parasitized nests ranged from two to five. Dependent fledglings were observed in Kidder and Eddy counties. Dates of dependent young out of the nest ranged from 19 to 28 June (median: 23 June). Tallman et al. (2002) included two late dates for recently fledged young in South Dakota: 31 July and 6 August.

Lark Sparrow (*Chondestes grammacus*) – LDI found a lark sparrow nest containing four eggs on 20 July 1993 in a spruce (*Picea* sp.) tree in a single-row shelterbelt in McLean County. The latest date previously reported for lark sparrow eggs was 11 July in Williams County (Stewart 1975). Tallman et al. (2002) listed the latest observation of a pair with dependent young in South Dakota as 13 August.

House Finch (*Carpodacus mexicanus*) – In the late 1980's, the house finch expanded its breeding range into North Dakota and other states in the midcontinent (Hill 1993). The first evidence of nesting in North Dakota occurred in Fargo (Cass County) in 1987 (Berkey 1987), and the species is now a common breeding bird in residential areas throughout North Dakota. This range expansion occurred after Stewart (1975) published his book, and there are no published dates

of nesting for this species in the state. LDI recorded nesting dates for house finches using a nest platform in Jamestown between 1999 and 2003 (Table 1). Nest construction began as early as 19 March and as late as 11 June. Nests were built primarily by the female over a 2- to 13-day period, except in 2002, when nest building occurred over a 35-day period by a female suffering from mycoplasmal conjunctivitis. Egg-laying began as early as 24 March for the first brood and 10 May for the second brood. Clutch size ranged from three to six eggs, and the first egg in a clutch hatched between 12 and 17 days after incubation began. Young departed from the nests within 12 to 17 days after the first egg hatched. Young within a clutch typically departed on the same day; the latest departure occurred on 16 July. Tallman et al. (2002) listed the earliest nesting record in South Dakota as 10 April and the latest as 17 August; the first evidence of nesting in South Dakota was in 1989.

Based on comparisons with South Dakota's nesting records (Tallman et al. 2002), some of the above nesting dates are not that unusual for the region and merely reflect an increase in our knowledge of North Dakota's breeding birds. Other nesting dates, however, are more noteworthy and might reflect changes on the breeding grounds. For example, some species have expanded their breeding distribution (e.g., house finch; Hill 1993) or increased in abundance (Le Conte's sparrow; Igl and Johnson 1995, 1999) since Stewart published *Breeding Birds of North Dakota* in 1975. Smith et al. (1999) speculated that the recent increase in fall and winter observations of nesting killdeer in North America might be related to the unusually warm falls and winters that have occurred over the past decade. We suspect that climatic changes on the breeding grounds likely influenced early and late nesting dates for other species as well. For example, the October 2000 nesting record of the barn swallow might be the latest nest record for this species in North America (Brown and Brown 1999); the weather conditions in fall 2000 were dry with above-average temperatures in September and October (NOAA 2000).

We thank D. H. Johnson, R. E. Martin, W. E. Newton, M. D. Schwartz, and M. A. Sovada for commenting on earlier drafts, and R. E. Martin for providing unpublished records from the North Dakota Birding Society. -- *Lawrence D. Igl and Harold A. Kantrud, U.S. Geological Survey, Northern Prairie Wildlife Research Center, 8711 37th Street SE, Jamestown, North Dakota 58401.*

LITERATURE CITED

Berkey, G. B. 1987. Northern Great Plains. American Birds 41:1453-1455.

Brown, C. R., and M. B. Brown. 1999. Barn swallow (*Hirundo rustica*). *In* The birds of North America, No. 452 (A. Poole and F. Gill, editors). The Birds of North America, Inc., Philadelphia, Pennsylvania.

Table 1. Nesting chronology for house finches using a nest platform in Jamestown, North Dakota, 1999 to 2003.

Year	Clutch	Clutch size	Nest building	First egg laid	Incubation	First egg hatched	First young fledged
1999	first	6	19 - 23 March	24 March	29 March - 13 April	14 April	1 May
1999	second	3	7 - 9 May	10 May	12 - 28 May	29 May	13 June
2000	first	5	10 - 16 April	17 April	21 April - 4 May	5 May	19 May
2000	second	4	24 May - 5 June	6 June	10 - 24 June	25 June	8 July
2001	no nesting attempts						
2002	unknown [a]	4	12 April - 15 May [a]	19 May	24 May - 6 June	7 June	22 June
2003	first	5	11 - 23 April	24 April	29 April - 13 May	14 May	26 May
2003	second	5	12 - 13 June	14 June	18 June - 29 June	30 June	16 July

[a] In 2002, a female house finch, suffering from mycoplasmal conjunctivitis and blind in her left eye, spent over a month attempting to build a nest. This female disappeared on 16 May and was replaced three days later by a second female, who started laying eggs on the platform but outside of the original, poorly constructed nest.

Buhl, T. K., and T. L. Shaffer. 2000. Early nesting record of hooded merganser in North Dakota. Prairie Naturalist 32:245-246.

Haas, C. 1985. New nesting dates for brown thrashers, loggerhead shrikes, and American robins in North Dakota. Prairie Naturalist 17:249-250.

Hill, G. E. 1993. House finch (*Carpodacus mexicanus*). *In* The birds of North America, No. 46 (A. Poole and F. Gill, editors). The Academy of Natural Sciences, Philadelphia, Pennsylvania, and The American Ornithologists' Union, Washington, D.C.

Igl, L. D., and D. H. Johnson. 1995. Dramatic increase of Le Conte's sparrow in Conservation Reserve Program fields in the northern Great Plains. Prairie Naturalist 27:89-94.

Igl, L. D., and D. H. Johnson. 1999. Le Conte's sparrows breeding in Conservation Reserve Program fields: precipitation and patterns of population change. Studies in Avian Biology 19:178-186.

Kantrud, H. A. 1992. Late gray partridge nest. Prairie Naturalist 24:44.

Lowther, P. E. 1996. Le Conte's sparrow (*Ammodramus leconteii*). *In* The birds of North America, No. 224 (A. Poole and F. Gill, editors). The Academy of Natural Sciences, Philadelphia, Pennsylvania, and The American Ornithologists' Union, Washington, D.C.

National Oceanic and Atmospheric Administration (NOAA). 2000. Climatological data: North Dakota. National Climatic Data Center, Asheville, North Carolina.

Smith, K. G., W. M. Davis, T. E. Kienzle, W. Post, and R. W. Chinn. 1999. Additional records of fall and winter nesting by killdeer in southern United States. Wilson Bulletin 111:424-426.

Sordahl, T. A., S. L. McMartin, and B. M. Volz. 2002. Phenology of a killdeer population in northeastern Iowa. Iowa Birds 72:69-77.

Stewart, R. E. 1975. Breeding birds of North Dakota. Tri-College Center for Environmental Studies, Fargo, North Dakota.

Tallman, D. A., D. L. Swanson, and J. S. Palmer. 2002. Birds of South Dakota. South Dakota Ornithologists' Union, Northern State University, Aberdeen, South Dakota.

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