



Grasshopper Sparrow numbers continue to decline on Illinois Breeding Bird Survey routes. Ken Schneider took this photo at Nelson Lake in Kane County on 3 June 2008.

Sedge Wren numbers have been rising on Illinois Breeding Bird Survey routes. Ken Schneider took this photo at Nelson Lake in Kane County on 16 June 2008.



Birds associated with urban habitats had the highest overall mean trend as a group and the wetland/open water guild contained the highest percentage of increasing species (Table 2).

All three of the migratory guilds had overall mean trends that were positive. Permanent-residents had the highest overall mean trend (+8.6%/year) and also the highest percentage of increasing species (65%). Long-distance migrants had the lowest percentage of increasing

species among the migratory guild (52%) and also was the migratory guild with the lowest mean trend (+1.1%/year).

The BBS data show that population declines among Illinois bird species have not been equally distributed among bird guilds. In particular, grassland birds have declined more extensively in Illinois than have other groups of birds. Some of these population declines have been sizeable and point to a questionable future for some species unless

the causes of these declines can be identified and efforts to reverse them begun. For example, the estimated 9.9% mean annual decline for the Bobolink within the state (Table 1) is equivalent to a cumulative decline of more than 92% for this species between 1980 and 2006. Two other grassland birds, the Savannah Sparrow and Grasshopper Sparrow, have also experienced considerable cumulative declines, estimated at over 80% since 1980. Another eight species (Red-headed Woodpecker, Kentucky Warbler, Loggerhead Shrike, House Sparrow, Rock Pigeon, Chimney Swift, Northern Flicker, and Yellow-billed Cuckoo) have estimated cumulative declines of 50% or greater between 1980-2006 (i.e., annual declines of 2.6%/year or greater: Table 1). The causal factors for these grassland bird declines are most likely attributable to changing land-use practices that have substantially reduced the amount and quality of grassland nesting habitat in the state (e.g., Herkert 1991; Warner 1994, Ward et al. 2008a).

Presently fewer than 1% of Illinois' historic 8.9 million ha of tallgrass prairie remains (Samson and Knopf 1994). Yet grassland birds within the state have proved to be remarkably resilient and very few birds of Illinois' prairies have been extirpated as a result of this habitat loss (e.g., Herkert 1991). Initially, grassland birds were successful in shifting from native to agriculturally associated grasslands as these agricultural grasslands replaced the Illinois prairies (Grabner and Grabner,

TABLE 1.

Recent population trends of Illinois breeding birds (1980-2006), based on data from the Breeding Bird Survey (BBS) in Illinois. Trends are expressed as percent per year change in population size. Species habitat associations and migratory strategies are also shown. The number of BBS routes on which the species' Illinois trend is based on is also shown. Asterisks indicate the statistical significance of the trend (* = $P < 0.05$, ** = $P < 0.01$).

Species	Migratory Strategy ^a	Habitat Association ^b	Population Trend (%/year)	Number of BBS Routes in Illinois
Great Blue Heron	LDM	Wet/Open	7.5**	97
Great Egret	LDM	Wet/Open	14.2*	20
Green Heron	LDM	Wet/Open	0.2	80
Turkey Vulture	SDM	Wood	14.3**	60
Canada Goose	SDM	Wet/Open	9.3**	75
Wood Duck	SDM	Wet/Open	2.2	62
Mallard	SDM	Wet/Open	1.6	80
Cooper's Hawk	SDM	Wood	9.6	15
Red-tailed Hawk	SDM	Wood	7.2**	98
American Kestrel	SDM	Shrub	8.3**	97
Ring-necked Pheasant	PR	Grass	-1.8*	69
Wild Turkey	PR	Wood	21.7**	50
Northern Bobwhite	PR	Shrub	-1.6**	90
Killdeer	SDM	Wet/Open	5.6**	101
Rock Dove	PR	Urban	-3.8**	100
Eurasian Collared-Dove	PR	Urban	144.2*	15
Mourning Dove	SDM	Urban	2.2**	101
Black-billed Cuckoo	LDM	Wood	-2.0	24
Yellow-billed Cuckoo	LDM	Wood	-2.6**	89
Great Horned Owl	PR	Wood	0.1	46
Barred Owl	PR	Wood	0.6	26