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**Avian Census of the  
the FAP 326, IL 47 (Division Street) Project Area  
(Job no. P-93-048-92)**

Center for Biodiversity  
Technical Report 1998 (2)

Prepared by:

David A. Enstrom and Steven B. Amundsen

Center for Biodiversity  
Illinois Natural History Survey  
607 E. Peabody Drive  
Champaign, IL 61820

Prepared for:

The Illinois Department of Transportation  
Bureau of Design and Environment  
Springfield, Illinois 62764

13 January 1998



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## **Introduction**

The Illinois Department of Transportation (IDOT) has proposed to replace the structures over the I & M Canal and the Illinois River on IL 47 at Morris, IL, and to up-grade IL 47 to four lane pavement from Washington Street in Morris to IL 113 (FAP 326). On 31 May 1996 IDOT requested a four season census (fall, winter, spring and breeding seasons) of the FAP 326 project area (Figure 1).

This report contains the results of a search of records for the occurrence of endangered and threatened avian species in Grundy County, as well as an assessment of the potential habitat that exists in the project area for listed bird species. We also present the results of our censuses of birds in the project area conducted between September 1996 and June 1997.

### **Endangered and Threatened Birds of Grundy County**

We consulted four sources (the Illinois Natural Heritage Database, the Illinois Fish and Wildlife Information System Database, the Illinois Natural Heritage 1993-1996 rookeries report, and the Illinois Breeding Bird Atlas) in order to establish which endangered and threatened bird species were likely to occur in the vicinity of the project.

In the recent past 14 Illinois endangered bird species (one of which is also Federally endangered and one of which is Federally threatened), seven Illinois threatened bird species, and two Illinois Watch-list species have been recorded in the area (see Table 1). None of these records occurred within the project corridor.

We evaluated breeding habitat within the project area for the endangered and threatened species listed in Table 1 using historical records, aerial photographs and topographic maps. We then visited these areas and directly evaluated their potential as breeding habitat based on their physical and floral characteristics. Our habitat assessments (Table 2) are based on published breeding requirements for these species (e.g., Ehrlich et al. 1988; Bohlen 1989; Herkert 1992).



We found potentially high-quality breeding habitat for Great Egrets (Illinois threatened) at a point 300m from the study area (see Figure 3-A). At this location, we found a Great Blue Heron colony with 29 active nests. While no Great Egrets currently nest in this colony, Great Egrets are known to nest within, and to be attracted to, established Great Blue Heron colonies. Therefore, this site represents quality breeding habitat for the Great Egret, which nests in several locations in the Illinois River Valley.

Marginal breeding habitat also occurs within the project area for: Great Egrets, Red-shouldered Hawks (Illinois endangered), Brown Creepers (Illinois threatened), Veery (Illinois threatened; Figure 3-C), and Bell's Vireo (Illinois Watch-list; Figure 3, points 9 and 10). We considered the habitat for Great Egret, Red-shouldered Hawks, Brown Creepers, and Veery (bottomland forest along the Illinois River) marginal because of its limited size. We also classified the potential Bell's Vireo habitat as marginal because of the area's small size.

## **Census Methods**

We established census points in representative habitat types within the project area (Figure 3). A legal description and brief explanation of the habitat surrounding each of the census points is given in Table 3. We divided the year into four census seasons corresponding to major periods of the avian life cycle in the Midwest (Table 4). Because of the migratory habits of birds, each season typically has a different and distinctive complement of species. Each census point was visited twice per season. During these visits we used modified point-counts (Blondel et al., 1981) to determine community composition. We recorded all individuals seen or heard within a range of 50 meters (including birds seen flying over) during the 10 minute count periods. These timed counts provide measures of the structure of bird communities (number of individuals and number of species) within the various habitat types. Because we are also interested in the presence and absence of bird species within the entire corridor, we also recorded all of our sightings of birds within the corridor outside of these 10 minute count periods.

We also ranked the magnitude of concern ('C' in Tables 6-9) for each species in every season. For the breeding and winter seasons we used indices

developed by *Partners in Flight*, a working group of North American avian ecologists (Thompson et al. 1992). Birds are scored on a scale from 1 (low concern) to 5 (extremely high concern). In constructing these indices the following factors were considered: abundance, distribution, threats (e.g. habitat loss, demographic vulnerability, etc.) and population trend (Hunter et al. 1992).

*Partners in Flight* has yet to develop a similar index for birds during migration, therefore, we developed our own with the help of Dr. J. Herkert of the Illinois Endangered Species Protection Board and Dr. S. K. Robinson of the Center for Wildlife Ecology, Illinois Natural History Survey. Both Drs. Herkert and Robinson participated in the original *Partners in Flight* work. We used three parameters in formulating our migratory concern index: 1. population size in the Midwest (using the *Partners in Flight* abundance ranking), 2. population trend over the past ten years (using the *Partners in Flight* population trend estimates), and 3. the degree of migratory habitat specificity (i.e., how restrictive the habitat requirements of each species is during migration) as ranked by S. K. Robinson and D. A. Enstrom.

We provide these concern indices as a tool to help assess the relative importance of the various habitat types within the corridor to the avian community. Typically, endangered and threatened species have concern scores of 3 or above. Clearly, species formally classified as endangered or threatened are not the only ones that are subject to significant threats or which should be considered when assessing the value of a particular parcel of land. Areas which support many species of moderate concern may be very important to the local avifauna. We define a *species of concern* as one that has a concern index value  $\geq 3$  (Thompson et al. 1992; Robinson and Enstrom, unpublished data). The threats to a given species may change with the season. This change is reflected in changes in the magnitude of the concern scores (C in Tables 6-9) among seasons.

The number of species of concern present in a habitat provides a measure of the relative importance of that habitat to the avian community. We feel this measure is better than traditional measures of habitat quality such as 'diversity' or 'richness' (the total number of species found in an area) because it

more accurately reflects the potential impact that the disturbance of a given parcel might have on those populations most at risk.

To date, *Partners in Flight* has focused its efforts on long distance migratory species (neotropical migrants). Concern scores are not available for non-migrants (e.g., chickadees and some woodpeckers) or for migrant species that do not leave the United States during migration (e.g., sparrows and ducks).

We also noted the occurrence of Illinois Watch List species. This list is compiled by the Endangered Species Protection Board of Illinois and consists of three categories:

- 1) *Unknown status*. Species that are suspected to be declining but for which data are insufficient.
- 2) *Special concern*. Species that are known to be declining significantly in numbers but still have relatively large populations in Illinois.
- 3) *Extirpated*. Species that were once listed as Illinois endangered or threatened but have been extirpated from the state.

## Census Results

We recorded a total of 72 species during our census of the FAP 326 corridor (Table 5). One Illinois endangered species, two Illinois threatened species, and one Illinois watch list species were recorded (Table 5)

### *Fall census*

We recorded 191 individuals of 24 species during the fall census conducted between 1 September and 1 November 1996 (Table 6).

No listed species, or Watch-list species were recorded during this period. Four 'species of concern' (Table 6) were recorded. All of these were found in the bottomland forest along the Illinois River.

### *Winter census*

We recorded 73 individuals of 13 species during the winter census (Table 7). One Illinois threatened species, the Brown Creeper, was observed

during this period. All of these sightings occurred at forested census points. This suggests that Brown Creepers over-winter in the forest habitat within the project area. No endangered species, Watch-list species, or species of concern were observed during the winter census period.

### *Spring Census*

We recorded 198 individuals representing 30 species during the spring census conducted between 15 March and 1 May 1997 (Table 8). One Illinois threatened species, the Brown Creeper was observed during this period. These sightings occurred mostly at forested census points, but also at one shrubland point. These individuals may have been spring migrants, or lingering winter residents. No endangered species or Watch-list species were seen in the area during the spring, and we did not find significant number of species of concern at any census point. Two species of concern (Northern Flicker and Golden-crowned Kinglet) were seen; one at points 7 and 8, and one at point 3.

### *Breeding Census*

We recorded 201 individuals representing 46 species during the breeding season census conducted between 1 May and 30 June 1997 (Table 9). No listed species were seen during this period. Thirteen species of concern were found during the breeding season census.

Most of the species of concern probably breed in the area (i.e., Yellow-billed Cuckoo, Eastern Wood-pewee, Wood Thrush, Gray Catbird, White-eyed Vireo, Yellow Warbler, Rose-breasted Grosbeak, Song Sparrow, and Northern Oriole). Of these the Yellow-billed Cuckoo, Eastern Wood-pewee, Wood Thrush, Northern Oriole, and Rose-breasted Grosbeak breed in the forests in the project area (census points 1-7), while the Gray Catbird, Warbling Vireo, Song Sparrow and Yellow Warbler breed in open habitats (census points 9 and 10). The Prothonotary Warbler (point 2) was observed on July 10. This individual may have been an early migrant. The Golden-winged and Black-and-White Warblers were likely migrants.

## Discussion

### Endangered and Threatened Species

One Illinois endangered species (a single Osprey) was observed during our survey of the FAP 326 project area. Two Illinois threatened species (a single Double-crested Cormorant and multiple Brown Creepers) were also observed. Potential habitat exists in the corridor for one Illinois endangered species (Red-shouldered Hawk), three Illinois threatened species (Great Egret, Brown Creeper, and Veery) and one Illinois Watch-list species (Bell's Vireo).

#### **Double-crested Cormorant, Illinois threatened**

One Double-crested cormorant was seen flying over the Illinois River on 21 May 1997 (Figure 3-B), however, no cormorants have bred in the vicinity of the FAP 326 project area in the recent past. Foraging or migrating cormorants are occasionally seen on the Illinois River, and the observed individual was very likely a transient.

#### **Osprey, Illinois endangered**

One Osprey was seen flying over census point 5 on 17 April 1997 (Figure 3). Ospreys migrate at this time of year and this species has not been recorded breeding in the area. This bird was very likely a migratory transient.

#### **Great Egret, Illinois threatened**

No Great Egrets were seen during our census and no high quality habitat is present in the project area. High quality nesting habitat is present in the Great Blue Heron colony located 300 m from the project area (Figure 3-A).

#### **Brown creeper, Illinois threatened**

Brown creepers were found at six census points during the winter and at five census points during the spring (Figure 3). No creepers were seen during

the breeding season. This suggests that this species over-winters in the project area, especially in the forest habitat.

### **Illinois Watch-list Species**

#### **Bell's vireo**

No Illinois Watch-list species were recorded during our censuses. Marginal habitat for one Watch-list species, the Bell's Vireo, was found in the project area at census points 9 and 10 (Figure 3).

### **Summary**

Three listed species were observed within the project area. Brown Creepers (Illinois threatened) were seen on multiple visits and at multiple locations during the winter. It is likely that this species winters within the forests of the project area. The proposed project will remove some forest habitat but is not likely to impact the use of the area by Brown Creepers.

The only other high potential habitat for a listed species, the Great Egret (Illinois threatened), is represented by the Great Blue Heron rookery 300m from the project area (Figure 3-B). No Great Egrets were seen during our censuses.

Two of the listed species seen during our survey, a single Osprey (Illinois endangered) and a lone Double-crested Cormorant (Illinois threatened) were likely transients and adequate habitat for these two species does not occur in the project area.

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**Table 1. Endangered and threatened bird records (Grundy County, IL). Sources: the Illinois Natural Heritage Data Base, and the Illinois Breeding Bird Atlas.**

Species	Breeding season status	Nearest breeding site to the project area (Location)
Pied-billed Grebe †	confirmed 1996	8 km (Goose Lake Prairie)
Great Egret †	unknown	8 km (Goose Lake Prairie)
American Bittern ‡	confirmed (1993)	8 km (Goose Lake Prairie)
Least Bittern ‡	confirmed (1996)	8 km (Goose Lake Prairie)
Bald Eagle ††; ‡	no breeding record	unknown (Morris Quad)
Northern Harrier ‡	confirmed (1996)	8 km (Goose Lake Prairie)
Red-shouldered Hawk ‡	unknown	unknown (Morris Quad)
Peregrine Falcon ‡‡; ‡	no breeding record	unknown (Morris Quad)
King Rail †	confirmed 1994	8 km (Goose Lake Prairie)
Common Moorhen †	confirmed (1991)	10 km (Goose Lake Prairie)
Upland Sandpiper ‡	confirmed (1979)	8 km (Goose Lake Prairie)
Common Tern ‡	unknown	8 km (Goose Lake Prairie)
Forster's Tern ‡	unknown	8 km (Goose Lake Prairie)
Least Tern ‡	unknown	8 km (Goose Lake Prairie)
Black Tern ‡	unknown	8 km (Goose Lake Prairie)
Short-eared Owl ‡	unknown	8 km (Goose Lake Prairie)
Brown Creeper †	unknown	unknown (Morris Quad)
Veery †	unknown	unknown (West Grundy Co.)
Loggerhead Shrike †	confirmed (1988)	8 km (Goose Lake Prairie)
Bell's Vireo ◊	unknown	unknown (Coal City Quad)
Bobolink ◊	unknown	unknown (Coal City Quad)
Henslow's Sparrow ‡	confirmed (1996)	8 km (Goose Lake Prairie)
Yellow-headed Blackbird ‡	unknown	>10 km (East Grundy Co.)

‡‡ = Federal endangered; †† = Federally threatened; ‡ = Illinois endangered; † = Illinois threatened; ◊ = Illinois watch-list



**Table 2. Endangered and threatened species breeding habitat.**

Species	Required habitat type	Breeding habitat in the project area
Pied-billed Grebe †	hemi-marsh	N
Great Egret †	wooded marsh/bottomland forest	M (Figure 3-A)
American Bittern ‡	upland bordering marsh	N
Least Bittern ‡	hemi-marsh	N
Bald Eagle ††; ‡	lakes and rivers	N
Northern Harrier ‡	grassland	N
Red-shouldered Hawk ‡	bottomland forest	M (Figure 3-C)
Peregrine Falcon ††; ‡	Open habitat along rivers w/ cliffs or tall structures	N
King Rail †	hemi-marsh	N
Common Moorhen †	hemi-marsh	N
Upland Sandpiper ‡	grassland	N
Least Tern ††; ‡	sand beaches on large rivers and lakes	N
Forster's Tern ‡	large marshes	N
Common Tern ‡	large marshes with sand or pebble islands	N
Black Tern ‡	hemi-marsh with islands	N
Short-eared Owl ‡	grassland	N
Brown Creeper †	bottomland forest	M (Figure 3-C)
Veery †	upland deciduous forest	M (Figure 3-C)
Loggerhead Shrike †	old fields/shrubland	N
Bell's Vireo ◊	old fields/shrubland	M (Figure 3-9 & 10)
Bobolink ◊	grasslands/hayfields	N
Henslow's Sparrow ‡	grasslands/hayfields	N
Yellow-headed Blackbird ‡	hemi-marsh	N

A = adequate breeding habitat present, M = marginal breeding habitat present, P = poor or inadequate breeding habitat present, N = breeding habitat absent (A / M indicates adequate to marginal). †† = Federally endangered; †† = Federally threatened; ‡ = Illinois endangered; † = Illinois threatened; ◊ = Illinois watch-list

**Table 3. Description of census points.**

Point	Habitat type	UTM / Zone 16	Legal description
1	Flood-plain forest/ oxbow bonds	4,577,900mN 381,000mE	Grundy Co., IL; T 33 N, R 7 E; Section 9, NE/4, SE/4, SE/4; Morris, IL 7.5' series USGS topographic quadrangle.
2	Flood-plain forest/ oxbow bonds	4,578,100mN 381,000mE	Grundy Co., IL; T 33 N, R 7 E; Section 9, SE/4, NE/4, SE/4; Morris, IL 7.5' series USGS topographic quadrangle.
3	Flood-plain forest/ oxbow bonds	4,578,600mN 381,000mE	Grundy Co., IL; T 33 N, R 7 E; Section 9, SE/4, SE/4, NE/4; Morris, IL 7.5' series USGS topographic quadrangle.
4	Flood-plain forest	4,578,500mN 381,150mE	Grundy Co., IL; T 33 N, R 7 E; Section 10, SW/4, SW/4, NW/4; Morris, IL 7.5' series USGS topographic quadrangle.
5	Flood-plain forest	4,578,200mN 381,150mE	Grundy Co., IL; T 33 N, R 7 E; Section 10, SW/4, NW/4, SW/4; Morris, IL 7.5' series USGS topographic quadrangle.
6	Flood-plain forest	4,577,950mN 381,150mE	Grundy Co., IL; T 33 N, R 7 E; Section 10, NW/4, SW/4, SW/4; Morris, IL 7.5' series USGS topographic quadrangle.
7	Riparian forest	4,578,300mN 380,400mE	Grundy Co., IL; T 33 N, R 7 E; Section 9, NW/4, NW/4, SE/4 Morris, IL 7.5' series USGS topographic quadrangle.
8	Shrubland	4,577,500mN 380,350mE	Grundy Co., IL; T 33 N, R 7 E; Section 16, NW/4, NW/4, NE/4; Morris, IL 7.5' series USGS topographic quadrangle.
9	Grassland /shrubland	4,575,975mN 381,000mE	Grundy Co., IL; T 33 N, R 7 E; Section 16, SE/4, SE/4, SE/4; Morris, IL 7.5' series USGS topographic quadrangle.
10	Mid-succession forest	4,575,850mN 381,000mE	Grundy Co., IL; T 33 N, R 7 E; Section 21, NE/4, NE/4, NE/4; Morris, IL 7.5' series USGS topographic quadrangle.

**Table 4. Duration of census seasons.**

Season	Dates
Winter	1 December to 28 February
Spring	1 March to 30 April
Breeding	1 May to 31 August
Fall	1 September to 30 November

**Table 5. List of species observed. FAP 326 corridor survey (1996-1997).**

<b>Species</b>	<b>Species</b>	<b>Species</b>
Double-crested Cormorant †	American Crow	Black-and-white Warbler
Great Blue Heron	Black-capped Chickadee	Blackburnian Warbler
Canada Goose	Tufted Titmouse	Yellow Warbler
Wood Duck	White-breasted Nuthatch	Kentucky Warbler
Mallard	Brown Creeper †	Common Yellowthroat
Turkey Vulture	House Wren	American Redstart
Osprey ‡	Carolina Wren	Scarlet Tanager
Red-tailed Hawk	Golden-crowned Kinglet	Northern Cardinal
American Kestrel	Ruby-crowned Kinglet	Rose-breasted Grosbeak
Killdeer	Blue-gray Gnatcatcher	Indigo Bunting
Ring-billed Gull	Hermit Thrush	Eastern Towhee
Mourning Dove	Swainson's Thrush	American Tree Sparrow
Yellow-billed Cuckoo	Wood Thrush	Song Sparrow
Chimney Swift	American Robin	White-throated Sparrow
Belted Kingfisher	Gray Catbird	Dark-eyed Junco
Red-headed Woodpecker	Brown Thrasher	Red-winged Blackbird
Red-bellied Woodpecker	Cedar Waxwing	Common Grackle
Downy Woodpecker	European Starling ✕	Brown-headed Cowbird
Hairy Woodpecker	White-eyed Vireo	Baltimore Oriole
Northern Flicker	Warbling Vireo	House Finch ✕
Yellow-bellied Sapsucker	Red-eyed Vireo	American Goldfinch
Eastern Wood-pewee	Prothonotary Warbler	House sparrow ✕
Great Crested Flycatcher	Golden-winged Warbler ◊	
Barn Swallow	Tennessee Warbler	
Blue Jay	Nashville Warbler	

‡ = Illinois endangered; † = Illinois threatened; ◊ = Illinois watch-list; ✕ = non-native species

**Table 6. Fall census results.** The values represent the sum of the two censuses conducted at each census point. Counts for each point are presented as well as the total count for each species. The "C" is a measure of the level of concern for each species (Thompson et al. 1992).

Species	Census Point										Total	C
	1	2	3	4	5	6	7	8	9	10		
Belted Kingfisher				2	1						3	1.5
Red-headed Woodpecker				2	1						3	
Red-bellied Woodpecker	1	1		1	1	1	1	1			7	
Downy Woodpecker		1	2		2		1				6	
Hairy Woodpecker	1	2		1	1	1					6	
Northern Flicker *		1									1	3
Eastern Wood-pewee *		1		5							6	3
Blue Jay				2	1	1	2	2		1	9	
American Crow		1			1			1			3	
Black-capped Chickadee	1	6	1	6		3					17	
White-breasted Nuthatch		1		3	2						6	
Carolina Wren					1						1	
House Wren		1									1	1.5
Ruby-crowned Kinglet							1				1	
American Robin	1	1	1	3	3	2	2			1	14	1
Gray Catbird								1		1	2	2.5
Cedar Waxwing *					2						2	3
European Starling		1		2		1	6			1	11	
Warbling Vireo *		1		1							2	3
Yellow-rumped Warbler		1				1	1	1			4	
American Redstart		1									1	2.5
Northern Cardinal	1		1	3	2		1		1	2	11	
White-throated Sparrow							1	10		3	14	
American Goldfinch									5		5	2.5
<b>Number of individuals</b>	<b>5</b>	<b>20</b>	<b>5</b>	<b>31</b>	<b>18</b>	<b>10</b>	<b>16</b>	<b>16</b>	<b>6</b>	<b>9</b>	<b>136</b>	
<b>Number of species</b>	<b>5</b>	<b>14</b>	<b>4</b>	<b>12</b>	<b>12</b>	<b>7</b>	<b>9</b>	<b>6</b>	<b>2</b>	<b>6</b>	<b>24</b>	
<b>Species of concern</b>		<b>3</b>		<b>2</b>	<b>1</b>						<b>4</b>	

\* = species of concern

**Table 7. Winter census results.** The values represent the sum of the two censuses conducted at each census point. Counts for each point are presented as well as the total count for each species. The "C" is a measure of the level of concern for each species (Thompson et al. 1992).

Species	Census Point										Total	C
	1	2	3	4	5	6	7	8	9	10		
Red-bellied Woodpecker		2		1	1	1		1			6	
Downy Woodpecker	2	3	2	1	2	3	2	1		1	17	
Northern Flicker			1								1	1
American Crow			1		1	2		1			5	
Black-capped Chickadee	1		7	1	2		2	1		1	15	
Eastern Tufted Titmouse			1	1			2				4	
White-breasted Nuthatch	1		3			1					5	
Brown Creeper †	2	1	1		2	1	1				8	
Northern Cardinal			2					1		4	7	
American Tree Sparrow			1								1	
Song Sparrow									1		1	1
Dark-eyed Junco			1								1	
House Sparrow								2			2	
<b>Number of individuals</b>	6	6	20	4	8	8	7	7	1	6	73	
<b>Number of species</b>	4	3	10	4	5	5	4	6	1	3	13	
<b>Threatened species</b>	1	1	1		1	1	1				1	

† = Illinois threatened species

**Table 8. Spring season results.** The values represent the sum of the two censuses conducted at each census point. Counts for each point are presented as well as the total count for each species. The "C" is a measure of the level of concern for each species (Thompson et al. 1992).

Species	Census Point										Total	C
	1	2	3	4	5	6	7	8	9	10		
Wood Duck	2	5		3			1				11	
Mallard				2							2	
Mourning Dove								1			1	1
Red-headed Woodpecker							1				1	
Red-bellied Woodpecker				1	1						2	
Yellow-bellied Sapsucker		1	1	1	1						4	2.5
Downy Woodpecker		2	1	2	4	2	1	2		1	15	
Hairy Woodpecker	2	1	1								4	
Northern Flicker *							1	1			2	3
Blue Jay							1				1	
American Crow	1		1								2	
Black-capped Chickadee	3	2	3	4		2	1	2		1	18	
Eastern Tufted Titmouse		1	1			2					4	
White-breasted Nuthatch			1	2							3	
Brown Creeper †				1	1	2	3	2			9	
Carolina Wren				1	1		2				4	
Golden-crowned Kinglet *			1							1	2	3
Ruby-crowned Kinglet								3		1	4	
Hermit Thrush				1							1	
American Robin	2	1	2	3	2	1	2	4		1	18	1
Brown Thrasher										1	1	
European Starling	2	5	3	5	4	3	12				34	
Yellow-rumped Warbler				1	2						3	
Northern Cardinal	1	2	2	2	1		4	5	2		19	
Eastern Towhee							1				1	
Song Sparrow			1	1					3		5	1
Dark-eyed Junco										2	2	
Red-winged Blackbird									3		3	2
Common Grackle	1			2				10	1	1	15	
Brown-headed Cowbird	1			1	1		1	1	1		6	1
American Goldfinch					1						1	2.5
<b>Number of individuals</b>	15	20	18	33	19	12	31	31	10	9	198	
<b>Number of species</b>	10	9	12	17	11	6	13	10	5	8	31	
<b>Species of concern</b>			1				1	1		1	2	
<b>Threatened species</b>				1	1	1	1	1			1	

† = Illinois threatened species; \* = species of concern



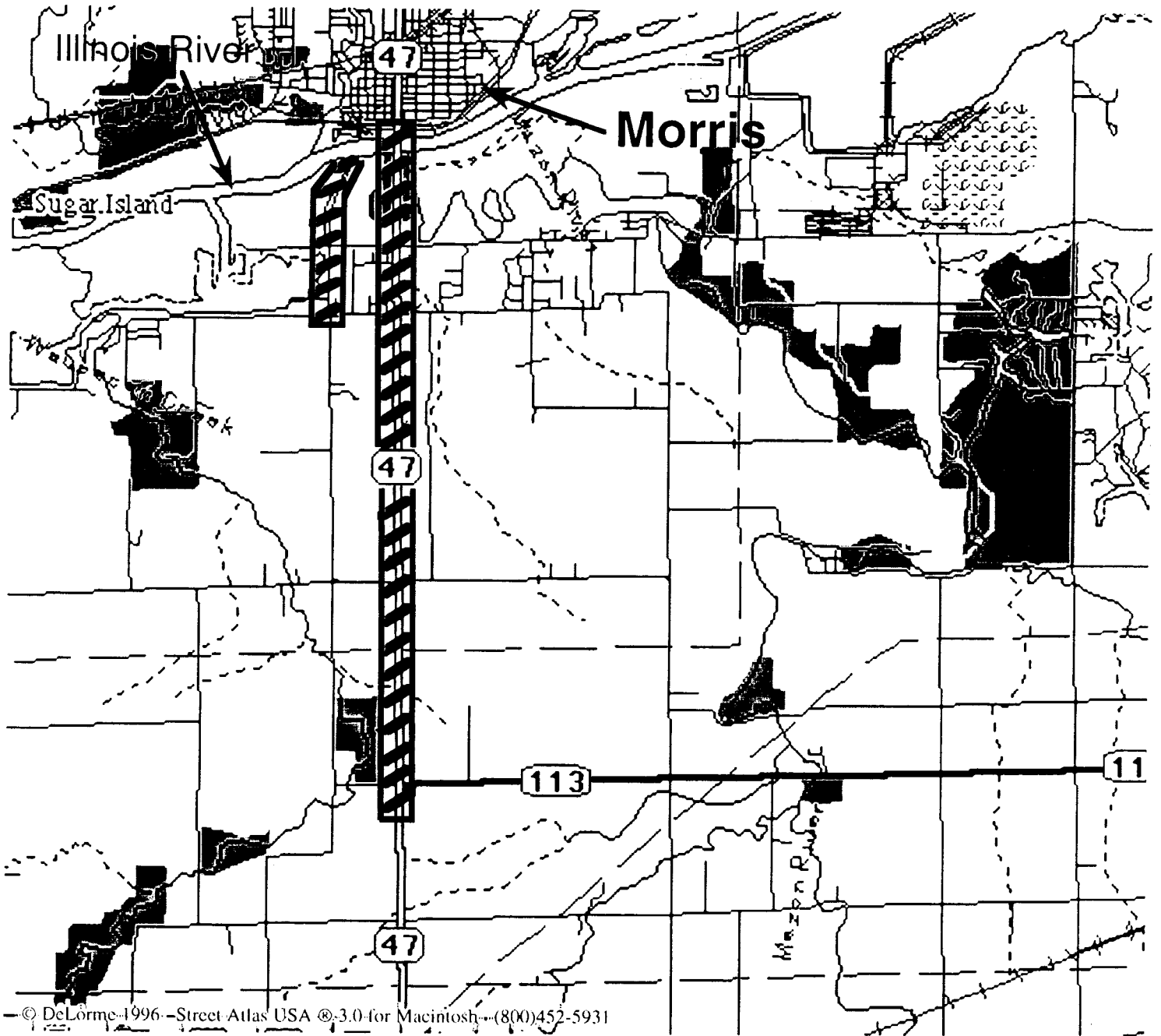
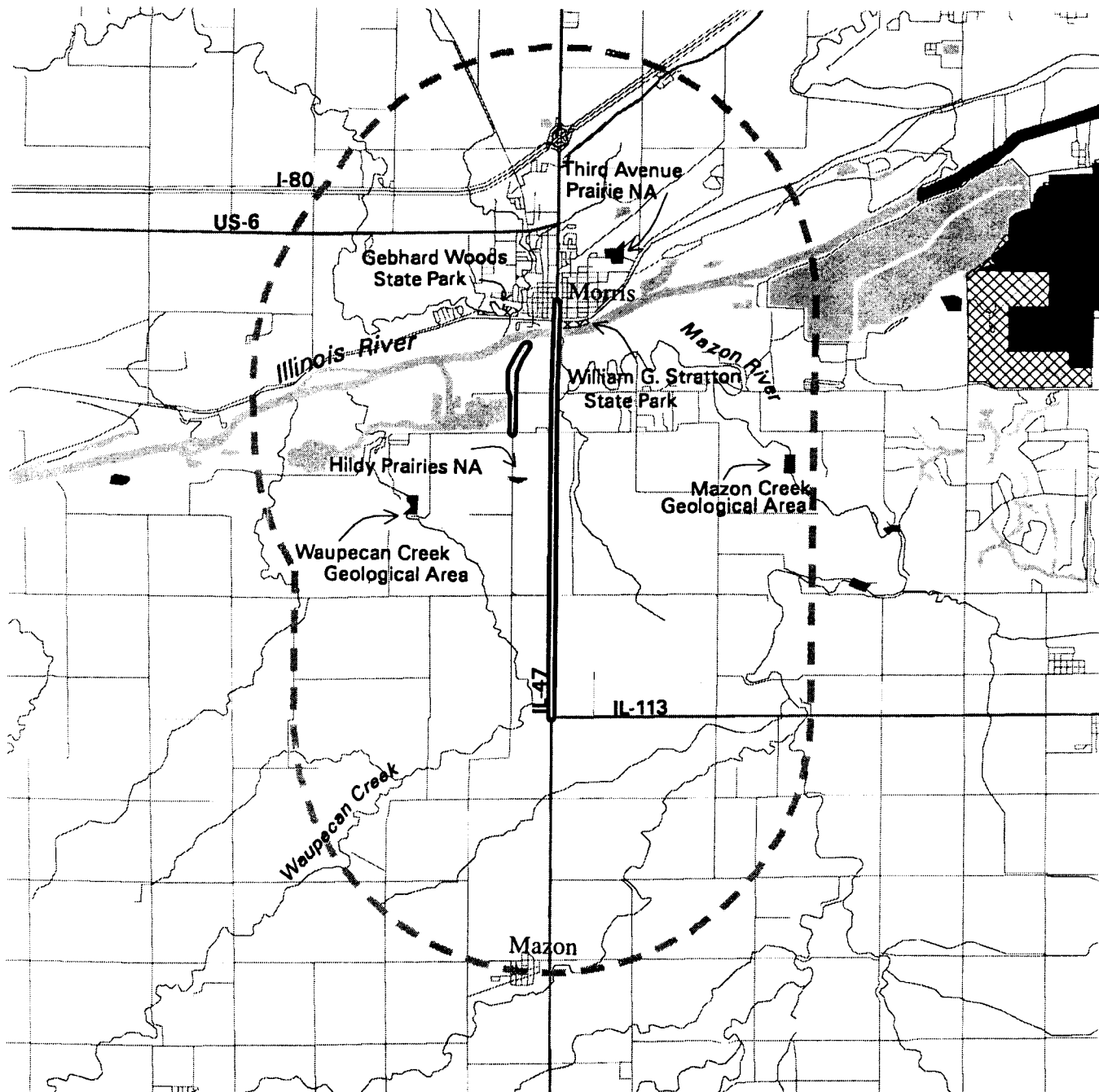
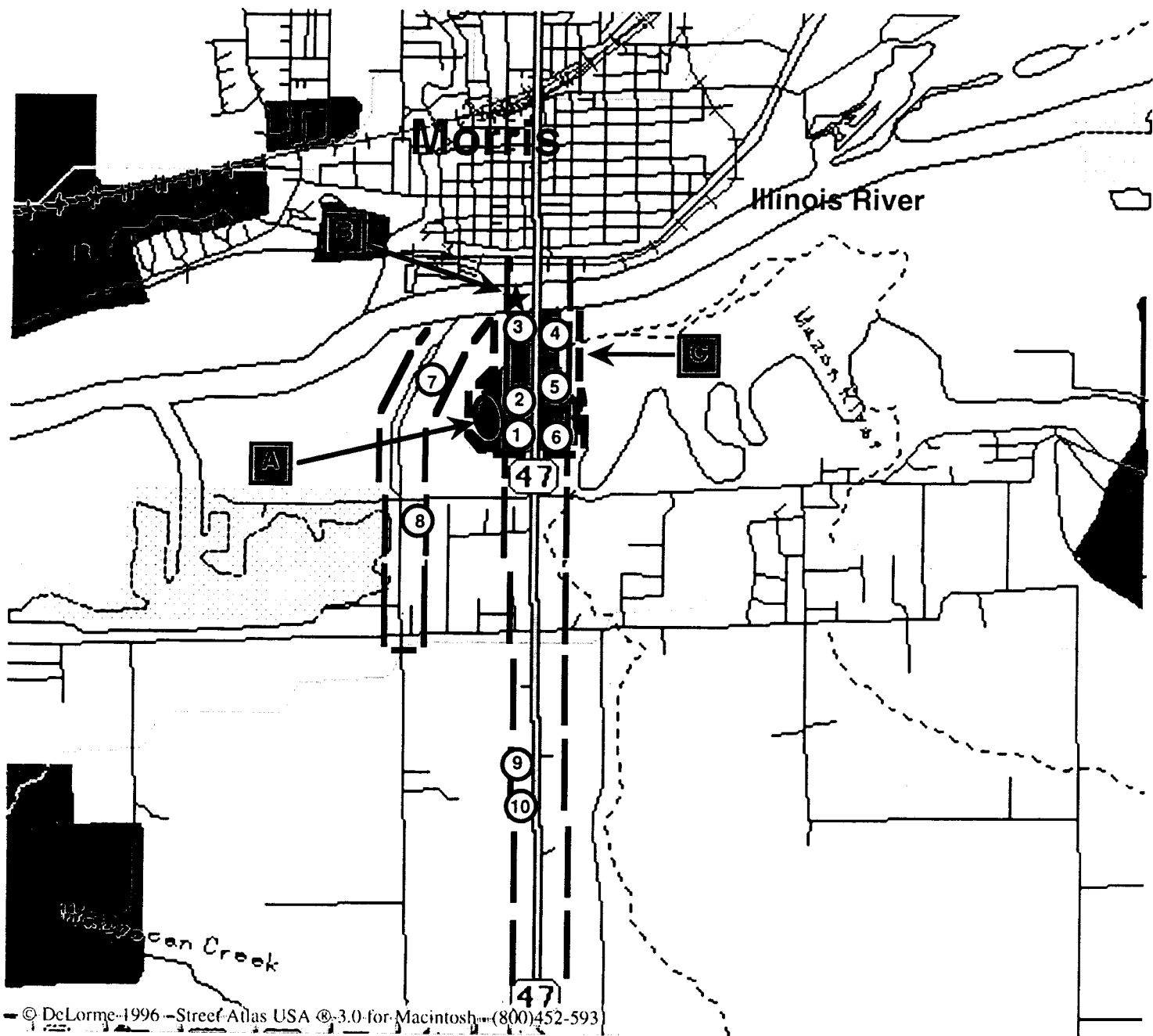


Figure 1. Approximate location of the FAP 326 corridor. Red dashed area indicates the FAP 326 project corridor.





**Figure 2. State natural areas, nature preserves and parks.** The solid black line delineates the corridor. The dashed gray line delineates a 5 km area around the corridor.



**Figure 3: Location of census points and endangered and threatened species sightings.** Circled numbers represent the location of census points 1-10. Brown creepers (Illinois threatened) were sighted on 15 January 1997 at points 2, 5 and 6; on 7 February 1997 at points 1, 3 and 7; and on 20 March 1997 at points 6, 7 and 8. A single Osprey (Illinois endangered) was sighted at point 5 on 17 April 1997. A single Golden-winged warbler (Illinois Watch List) was sighted at point 5 on 22 May 1997. A single Double-crested Cormorant (Illinois threatened) was sighted at point "B" in the Illinois River on 21 May 1997. "A" indicates the location of the Great Blue heron colony. "C" (bounded by the blue dashed line) indicates the forest area and potential breeding habitat for the Veery (Illinois threatened) and the Red-shouldered Hawk (Illinois endangered).