Results of the 2011-2012 Four Season Avian Monitoring Surveys Conducted at the La Grange Wetland Banking Site, Brown County, Illinois

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Introduction

On 22 February 2000, the Illinois Department of Transportation (IDOT) requested that we monitor the avian fauna within the proposed Brown County Wetland Banking Site. We were asked to perform a Level 2 Wildlife Assessment as described in the Illinois Wetland Restoration and Creation Guide (Admiraal et al. 1997). Breeding season censuses at the banking site were to be conducted for five consecutive years. Reports detailing the first two years, 2000 and 2001, of monitoring were forwarded to IDOT on 5 January 2001 and 8 April 2002 respectively. In June 2002, IDOT instructed us to stop monitoring this site until further notice.

On 4 August 2003, IDOT tasked us to resume monitoring the avian fauna at this site, renamed the La Grange Wetland Banking Site (LGWBS), and to continue these surveys, expanded to include the spring and fall migration and winter seasons, at least until 2008 with annual reports due in March of each year. Because tasking was not received until June 2003, only the 2003 breeding and fall migration seasons were completed before the March report deadline. A four-season survey was conducted at the site each year since 2004. In 2008, the four-season bird survey tasking was extended through 2013. This report contains the cumulative species lists by season as well as the specific results of the 2011-12 surveys. Steve Amundsen retired from his position and on June 1, 2010 the tasking was transferred to Wendy Schelsky.

Project Area

The LGWBS is located in Brown County approximately 5 km southwest of Beardstown (Figure 1). It is bounded on the east by the Illinois River, to the north by the La Moine River, and on the south and west by various privately owned properties, and is approximately 667 ha (1648 acres) in area (Figure 1). Its legal location is:

ILLINOIS, Brown County. 3rd Principal Meridian: Township 1 South,
Range 1 West, portions of Sections 9,16,17, 20, and 21.

Much of the project area consists of former agricultural land that had been planted in row crops, mostly corn, in 2004. In 2005, acreage in row crops was greatly reduced and annual herbaceous plants covered much of the previously tilled land. In 2006, wetland tree species were planted in many sections of old field. Planted trees had nearly zero survival as a result of above average flooding in the years following the planting (Plocher et al. 2010). In 2011-2012, new raised gravel roads were added, areas were re-graded to maintain low-lying wet areas and hundreds of new wetland tree species were planted throughout the site. Forested riparian corridors occur along the Illinois and La Moine rivers and a small section of upland forest is present in the southwest corner of the area. The area also includes part of Big Lake (a shallow body of open water) and several drainage ditches.

Methods

Thirteen census points have been established previously (SBA) at the La Grange Wetland Banking site. Eleven census points were established in the LGWBS in all major cover types in 2000 (see Figure 1 and Table 1) (SBA). Three additional survey points were added to the original eleven in 2003 (Figure 1 and Table 1) (SBA). Census point 7, located in the La Moine River flood

plane on the north edge of the site has been dropped as a census point. All census point locations are identified in Table 1.

We sub-sampled non-linear (i.e. at least 50 m in narrowest dimension) habitat parcels using point counts (Manley et al. 1993; Ralph et al. 1993). We recorded all individuals seen or heard within a range of 75 meters (including birds seen flying over) during 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. Birds detected during a point count outside the habitat type being sampled were included in the species list for the project (Table 2), but not in the seasonal census lists for that point (Tables 3, 5, 7, and 8). We also recorded all birds seen or heard within the project area outside of the 10-minute count periods. These sightings are also included in our species list for the project area.

Additional species seen by qualified birders were added to the various seasonal lists to supplement the pulsed nature of migrations where huge numbers of ducks and shorebirds are easily missed if the timing is not quite right.

Results

One hundred forty-eight species representing 42 families have been recorded at the La Grange Wetland Banking Site since we were tasked to conduct avian surveys at this site (breeding 2000 and 2001, breeding and fall 2003 and all seasons 2004 through 2011) (Table 2).

Winter Season

The LGWBS was accessible by car and foot (January 3 and February 18) on the newly established road during the winter surveys. Access beyond the roadway was limited as a result of the muddy conditions from the unseasonably warm winter; therefore, no timed censuses were conducted. Fifty-three species have been observed at the LGWBS during the eight years (2004 through 2011) winter surveys have been conducted. Twenty-nine species including two new winter records, the Great-horned Owl and 30 Trumpeter Swans (Jan. 3), were observed at the site during the 2011 survey period (Table 3). The Trumpeter Swans, thought to be part of a new breeding program in Wisconsin (M. Ward, pers. comm.), were also seen by numerous other birders in the area.

One Illinois Endangered species, the Northern Harrier (5 Adults and 2 Juveniles), was observed throughout the site foraging over old field habitat on both winter surveys. A total of one female, four males, and two juveniles were seen during the two winter survey period. I made a special effort to observe Short-eared Owls, an Illinois State Endangered species, during the evenings of both surveys; however, no owls were seen at the site this year. Bald Eagles were present at the site in winter. I counted a total of three adults and one juvenile Bald Eagle along the levy by the river and two adults present at the established nest (Figure 1) on Jan 3. On Feb 18, three juveniles were present throughout the site and three adults were present with two sitting in the nest.

Spring Season

The LGWBS was accessible by the main road on March 31 and I attempted to conduct point counts but aborted this effort as a result of soft and unstable mud. The results from the three point

count conducted on March 31 are reported in Table 4. On May 4, the site was not accessible beyond 150 feet from the roadway due to extensive flooding and therefore no timed censuses were conducted. A total of 103 species have been observed at the LGWBS during the seven years (2004 through 2011) spring surveys have been conducted, 61 of which were observed in 2011. A total of six new species for the spring migration surveys were documented at the site including Canvasback, Turkey Vulture, Spotted Sandpiper, Purple Martin, Indigo Bunting, and Dickcissel (Table 5).

There were no threatened or endangered species (federally or state) documented at the site during spring migration. A total of four adult Bald Eagles, one of which was situated in the nest (Figure 1), and two juveniles were seen at the site.

Breeding Season

The LGWBS was still extensively flooded during the breeding season survey on June 5, however, access was improved on July 27. Point counts were conducted on July 27 at 11 of the 13 established points (Table 6), however not all points were accessible as a result of muddy conditions. A total of 110 species have been observed at the LGWBS during the seven years (2004 through 2011) since breeding surveys have been conducted 64 of which were observed in 2011 surveys. Eight new species, three of which are Illinois State Endangered (Illinois Endangered Species Protection Board 2011), were added to the breeding season list including White-fronted Goose, Tundra Swan, Semipalmated Plover, Semipalmated Sandpiper, White-rumped Sandpiper, Wilson's Phalarope (Illinois Endangered, IE), Common Tern (IE), and Black Tern (IE). All of these species were seen outside of their normal breeding season and were likely migrants and not breeding at the site (Table 7).

One juvenile Bald Eagle was observed at the site during the July visit, however, no activity was observed near the new Eagle nest during this check. I was unable to document whether the eagles used the nest in the 2011 breeding season because access was restricted in the early spring (May) and the early breeding season (June). One juvenile Bald Eagle was seen at the site in July.

Fall Season (WMS):

A total of 93 species have been observed at the LGWBS during the seven years (2004 through 2011) that fall surveys have been conducted (Table 8). Of these, 44 species were detected in 2011 during the two visits (Oct 14 and Nov 11).

One Illinois State threatened species, the Northern Harrier was observed during the fall migration season surveys. A total of two individuals were seen from a distance which prevented me from identifying them as juveniles or adults. Two juvenile Bald Eagles were seen at the site on October 14 and two adult Bald Eagles were seen in the established nest on November 11.

Discussion

One hundred fifty species representing 42 families have been recorded at the La Grange Wetland Banking Site since surveys were tasked in 2001. Ten new species were added to the cumulative list in 2011 including three Illinois State Endangered species, Wilson's Phalarope, Common Tern, and Black Tern.

Water levels or muddy conditions made surveying away from the road limited or impossible during the spring, part of the summer, and winter months. The winter temperatures were above average throughout much of the 2011-12 winter season which prevented water from freezing in the region and likely reduced large congregations of waterfowl from accumulating at larger water bodies, like the LGWBS (Schummer et al. 2010) and thereby reduced the total number and species of ducks seen at the site in 2011. New grading and road development by Illinois Department of Transportation late in 2011 provided more consistent access by car throughout the LGWBS. Construction to re-grade areas and develop the road, however, resulted in reduced old field habitat in fall and winter, which reduced the numbers of sparrows and other old field species. This change in vegetation structure may have reduced the attractiveness of the habitat to some species such as Short-eared Owls that were documented in the 2010-11 season, but were absent this year. Studies have shown that Short-eared Owls prefer short, dense grasses and are also expected to follow small prey populations on their winter grounds (Wiggins et al. 2006). This alteration of habitat did not seem to discourage Northern Harriers from hunting at the site, however, because they were seen during nearly every survey period, except the breeding season.

One new species of swan, and several shorebirds, terns, and swallows were added to the overall species list this year. The Trumpeter Swans are likely a product of a breeding program taking place in Wisconsin and not from the breeding populations in Alaska (M. Ward, personal communication). The terns were seen during July and August and are likely migrants moving through the area. Nevertheless, the Black and Common Terns are both Illinois State Threatened species. This influx of new waterfowl, shorebirds, terns, and swallows was likely associated with the above average precipitation, extended period of flooding and exposure of additional mudflats in the spring and summer months (Plocher et al. 2010).

Bald Eagles may have nested at the site in 2011 at an established nest from 2009, however, no close observation of the nest was possible due to high waters in late spring and early summer and thus there was no direct observation of breeding success. Pairs were present either in the nest or near the nest tree inconsistently throughout 2011-12, but there were no birds present in late July once the water receded and access was once again possible.

Efforts have been underway to promote wetland restoration at the LGWBS since 2001. The expected wetland habitats of marsh, scrub-shrub, and forested wetland at this site have been slow to develop despite significant efforts to encourage wetland habitat formation. The site, formerly in agriculture in 2001, has been modified to promote annual inundation by removing pumps and drainage tiles and has been monitored intermittently for hydrology (Pociask et al. 2005, Miner et al. 2011) and wetland vegetation (Plocher et al. 2010) since its creation. In 2010 and 2011 above average precipitation caused extended periods of flooding during the growing season. Plocher et al. (2010) claimed that these severe flood events have been significant enough to set back vegetation to an earlier successional stage than what might be expected after 10 years of restoration efforts. In addition, the resulting vegetation at the site is currently primarily weedy and non-native species rather than native wetland vegetation. Because of the set back to the vegetation, some of the expected breeding marsh birds and forested wetland species, such as herons, egrets, bitterns, and night-herons have been absent from the site since 2004. Despite the lack of wetland vegetation for breeding wetland birds, the flooding events have created good habitat for migrating waterfowl and shorebirds and have resulted in significant numbers of Illinois State Threatened or Endangered species in the last two years, such as Upland Sandpipers, Common and Black Terns and Wilson's Phalaropes. The site also functions as good stopover habitat for migrating waterfowl and has supported up to 25 species of waterfowl including American White Pelicans, Tundra and Trumpeter swans, three species of geese and large numbers (>500 per survey) of dabbling ducks.

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Table 1. Description of habitat surrounding census points established in the Brown County Wetland Banking study site, Brown County, Illinois.

Census Point	Habitat Description	Legal Location
1	Non-native grassland/lake shore	Brown Co., IL; T 18 N, R 1W; Section 21, SW/4, SW/4, NE/4; Cooperstown, IL 7.5' series USGS topographic quadrangle map. UTM Zone 15 711,875mE 4,426,650mN
2	Floodplain Forest	Brown Co., IL; T 18 N, R 1W; Section 21, SE/4, SW/4, NE/4; Cooperstown, IL 7.5' series USGS topographic quadrangle map. UTM Zone 15 712,150mE 4,426,600mN
3	Old Field/Second Growth	Brown Co., IL; T 18 N, R 1W; Section 21, NW/4, NE/4, NE/4; Cooperstown, IL 7.5' series USGS topographic quadrangle map. UTM Zone 15 712,300mE 4,427,200mN
4	Marsh	Brown Co., IL; T 18 N, R 1W; Section 16, SE/4, SW/4, NE/4; Cooperstown, IL 7.5' series USGS topographic quadrangle map. UTM Zone 15 712,750mE 4,428,200mN
5	Marsh	Brown Co., IL; T 18 N, R 1W; Section 16, SW/4, SW/4, NE/4; Cooperstown, IL 7.5' series USGS topographic quadrangle map. UTM Zone 15 711,775mE 4,428,750mN
6	Marsh	Brown Co., IL; T 18 N, R 1W; Section 17, SE/4, SW/4, NE/4; Cooperstown, IL 7.5' series USGS topographic quadrangle map. UTM Zone 15 710,500mE 4,42,175mN

Table 1 continued on following page.

Table 1. Description of habitat surrounding census points (Continued).

Census Point	Habitat Description	Legal Location
7	Floodplain Forest	Brown Co., IL; T 18 N, R 1W; Section 17, SW/4, NW/4, NE/4; Cooperstown, IL 7.5' series USGS topographic quadrangle map. UTM Zone 15 710,200mE 4,428,500mN
8	Floodplain Forest edge	Brown Co., IL; T 18 N, R 1W; Section 20, NE/4, SW/4, SE/4; Cooperstown, IL 7.5' series USGS topographic quadrangle map. UTM Zone 15 710,550mE 4,426,050mN
9	Upland Forest	Brown Co., IL; T 18 N, R 1W; Section 20, SW/4, SW/4, SE/4; Cooperstown, IL 7.5' series USGS topographic quadrangle map. UTM Zone 15 710,300mE 4,425,750mN
10	Floodplain Forest/Backwater pond	Brown Co., IL; T 18 N, R 1W; Section 20, SE/4, SW/4, SE/4; Cooperstown, IL 7.5' series USGS topographic quadrangle map. UTM Zone 15 710,575mE 4,425,700mN
11	Old Field/slough edge	Brown Co., IL; T 18 N, R 1W; Section 20, SE/4, SE/4, SE/4; Cooperstown, IL 7.5' series USGS topographic quadrangle map. UTM Zone 15 710,875mE 4,425,800mN
12	Old Field	Brown Co., IL; T 18 N, R 1W; Section 17, NW/4, SE/4, SE/4; Cooperstown, IL 7.5' series USGS topographic quadrangle map. UTM Zone 15 710,600mE 4,427,550mN

Table 1 concluded on following page.

Table 1. Description of habitat surrounding census points (Concluded).

Census Point	Habitat Description	Legal Location
13	Old Field	Brown Co., IL; T 18 N, R 1W; Section 16, SW/4, SW/4, SW/4; Cooperstown, IL 7.5' series USGS topographic quadrangle map. UTM Zone 15 711,075mE 4,427,400mN
14	Lake Shore/Old Field	Brown Co., IL; T 18 N, R 1W; Section 16, SW/4, NW/4, SE/4; Cooperstown, IL 7.5' series USGS topographic quadrangle map. UTM Zone 15 711,850mE 4,427,825mN

Table 2. Cumulative list of bird species observed during seven years of monitoring visits conducted at the La Grange Wetland Banking study site, Brown County, Illinois. Nomenclature and taxonomic order from American Ornithologists' Union 2011 and Banks et al 2002, 2003, 2004, and 2011.

Family / **Subfamily**	Common Name	*Scientific name*
Anatidae		
Anserinae		
	Greater White-fronted Goose	*Anser albifrons*
	Snow Goose	*Chen caerulescens*
	Canada Goose	*Branta Canadensis*
	Trumpeter Swan	*Cygnus buccinators*
	Tundra Swan	*Cygnus columbianus*
Anatinae		
	Wood Duck	*Aix sponsa*
	Gadwall	*Anas strepera*
	American Widgeon	*Anas Americana*
	American Black Duck	*Anas rubripes*
	Mallard	*Anas platyrhynchos*
	Blue-winged Teal	*Anas discors*
	Northern Shoveler	*Anas clypeata*
	Northern Pintail	*Anas acuta*
	Green-winged Teal	*Anas crecca*
	Canvasback	*Aythya valisineria*
	Redhead	*Aythya americana*
	Ring-necked Duck	*Aythya collaris*
	Lesser Scaup	*Aythya affinis*
	Bufflehead	*Bucephala albeola*
	Hooded Merganser	*Lophodytes cucullatus*
	Common Merganser	*Lothodyytes merganser*
	Ruddy Duck	*Oxyura jamaicensis*
Odontophoridae		
	Northern Bobwhite	*Colinus virginianus*
Podicipedidae		
	Pied-billed Grebe	*Podilymbus podiceps*

Table 2. List of bird species (continued).

Family / **Subfamily**	Common Name	*Scientific name*
Phalacrocoracidae		
	Double-crested Cormorant	*Phalacrocorax auritus*
Pelecanidae		
	American White Pelican	*Pelecanus erthrorhynochus*
Ardeidae		
	Least Bittern **IT**	*Ixobrychus exilis*
	Great Blue Heron	*Ardea herodias*
	Great Egret	*Ardea alba*
	Snowy Egret	*Egreta thula*
	Cattle Egret	*Bulbulcus ibis*
	Little Blue Heron **IE**	*Egretta caerulea*
	Green Heron	*Butorides virescens*
	Blk-crowned Night Heron **IT**	*Nycticorax nyticorax*
Cathartidae		
	Turkey Vulture	*Cathartes aura*
Accipitridae		
Pandioninae		
	Osprey	*Pandion haliaetus*
Acciptrinae		
	Bald Eagle	*Haliaeetus leucocephalus*
	Northern Harrier **IE**	*Circus cyaneus*
	Cooper's Hawk	*Accipiter cooperii*
	Red-tailed Hawk	*Buteo jamaicensis*
	Rough-legged Hawk	*Buteo lagopus*

Table 2. List of bird species (continued).

Family / **Subfamily** / Common Name	*Scientific name*
Falconidae	
Falconiniae	
American Kestrel	*Falco sparverius*
Rallidae	
Sora **WL**	*Porzana Carolina*
American Coot	*Fulica americana*
Charadriidae	
Black-bellied Plover	*Pluvialis squatarola*
Semipalmated Plover	*Charadrius semipalmatus*
Killdeer	*Charadrius vociferous*
Recurvirostridae	
Black-necked Stilt	*Himantropus mexicanus*
Scolopacidae	
Solitary Sandpiper	*Tringa solitaria*
Spotted Sandpiper	*Actitis macularia*
Greater Yellowlegs	*Tringa melanoleuca*
Lesser Yellowlegs	*Tringa flavipes*
Upland Sandpiper **IE**	*Bartramia longicauda*
Baird's Sandpiper	*Calidria bairdi*
Least Sandpiper	*Calidris minutilla*
White-rumped Sandpiper	*Calidris fuscicollis*
Sanderling	*Calidris alba*
Semipalmated Sandpiper	*Calidris pusilla*
Pectoral Sandpiper	*Caladris melanotos*
Wilson's Snipe WL	*Gallinago gallinago*
Wilson's Phalarope **IE**	*Phalaropus tricolor*

Table 2. List of bird species (continued).

Family / **Subfamily** / Common Name	*Scientific name*
Laridae	
Larinae	
Franklin's Gull	*Larus pipixcan*
Bonaparte's Gull	*Larus philadelphia*
Ring-billed Gull	*Larus delawarensis*
Herring Gull	*Larus argentatus*
Black Tern	*Chlidonias niger*
Common Tern	*Sterna hirundo*
Columbidae	
Mourning Dove	*Zenaida maccroura*
Cucuidae	
Yellow-billed Cuckoo	*Coccyzus americanus*
Strigidae	
Great Horned Owl	*Bubo virginianus*
Barred Owl	*Strix varia*
Short-eared Owl **IE**	*Asio Flammeus*
Apodidae	
Chaeturinae	
Chimney Swift	*Chaetura pelagica*
Trochilidae	
Ruby-throated Hummingbird	*Archicholus colbris*
Alcedinidae	
Cerylinae	
Belted Kingfisher	*Ceryle alcyon*

Table 2. List of bird species (continued).

Family / **Subfamily**	Common Name	*Scientific name*
Picidae		
Picinae		
	Red-headed Woodpecker	*Melanerpes erythocephalus*
	Red-bellied Woodpecker	*Melanerpes carolinus*
	Downy Woodpecker	*Picoides pubescens*
	Hairy Woodpecker	*Picoides villosus*
	Northern Flicker	*Colaptes auratus*
	Pileated Woodpecker	*Dryocopus pileatus*
Tyranidae		
Fluvicolinae		
	Eastern Wood-pewee	*Contopus virens*
	Eastern Phoebe	*Sayornis pheobe*
Tyranninae		
	Great Crested Flycatcher	*Myiarchus crinitus*
	Eastern Kingbird	*Tyranus tyranus*
Vireonidae		
	Yellow-throated Vireo	*Vireo flavifrons*
	Warbling Vireo	*Vireo gilvus*
	Red-eyed Vireo	*Vireo olivaceus*
Corvidae		
	Blue Jay	*Cyanocitta cristata*
	American Crow	*Corvus brachyrhynchos*

Table 2. List of bird species (continued).

Family / **Subfamily** / Common Name	*Scientific name*
Alaudidae	
Horned Lark	*Eremophila alpestris*
Hirundinidae	
Purple Martin	*Progne subis*
Tree Swallow	*Tachycinete bicolor*
N. Rough-winged Swallow	*Stelgidopteryx serripennis*
Bank Swallow	*Riparia riparia*
Cliff Swallow	*Petrochelidon pyrrhonota*
Barn Swallow	*Hirunda rustica*
Paridae	
Black-capped Chickadee	*Poecile atricapillus*
Tufted Titmouse	*Baeolphus bicolor*
Sittidae	
White-breasted Nuthatch	*Sitta carolinensis*
Troglodytidae	
Carolina Wren	*Thryothorus ludovicianus*
House Wren	*Troglodytes aedon*
Sedge Wren	*Cistothorus platensis*
Regulidae	
Ruby-crowned Kinglet	*Regulus calendula*

Table 2. List of bird species (continued).

Family / **Subfamily**	Common Name	*Scientific name*
Sylviidae		
Polioptilinae		
	Blue-gray Gnatcatcher	*Polioptila caerulea*
Turdidae		
	Eastern Bluebird	*Sialis sialis*
	American Robin	*Turdus migratorius*
Mimidae		
	Gray Catbird	*Dumetella carolinensis*
	Northern Mockingbird	*Mimus polyglottos*
	Brown Thrasher	*Toxostoma rufum*
Sturnidae		
	European Starling **N**	*Sturnus vulgaris*
Motacillidae		
	American Pipit	*Anthus rubescens*
Bombycillidae		
	Cedar Waxwing	*Bombycilla cedrorum*

Table 2. List of bird species (continued).

Family / **Subfamily** / Common Name	*Scientific name*
Parulidae	
Northern Parula	*Parula Americana*
Yellow Warbler	*Dendroica petechia*
Yellow-rumped Warbler	*Dendroica coronata*
Black-throated Green warbler	*Dendroica virens*
Palm Warbler	*Dendroica palmarum*
Prothonotary Warbler	*Protonotaria citrea*
Northern Waterthrush	*Seiurus noveboracensis*
Common Yellowthroat	*Geothlypis trichas*
Yellow-breasted Chat	*Icteria virens*
Emberizidae	
American Tree Sparrow	*Spizella arborea*
Field Sparrow	*Spizella pusila*
Lark Sparrow	*Chondestes grammacus*
Savannah Sparrow	*Passerculus sandwichensis*
Le Conte's Sparrow	*Ammodramus leconteii*
Fox Sparrow	*Passerella iliaca*
Song Sparrow	*Melospiza melodia*
Lincoln's Sparrow	*Melospiza lincolnii*
Swamp Sparrow	*Melospiza Georgiana*
White-throated Sparrow	*Zonotrichia leucophrys*
White-crowned Sparrow	*Zonotrichia albocollis*
Dark-eyed Junco	*Junco hyemalis*
Cardinalidae	
Northern Cardinal	*Cardinalis cardinalis*
Rose-breasted Grosbeak	*Pheucticus ludovicianus*
Indigo Bunting	*Passerina cyanea*
Dickcissel	*Spiza americana*

Table 2. List of bird species (concluded).

Family / **Subfamily**	Common Name	*Scientific name*
Icteridae		
	Bobolink	*Dolichonyx oryzivorus*
	Red-winged Blackbird	*Agelaius phoeniceus*
	Eastern Meadowlark	*Sturnella magna*
	Rusty Blackbird	*Euphagus carolinus*
	Common Grackle	*Quscalus quiscalus*
	Brown-headed Cowbird	*Molothrus ater*
	Orchard Oriole	*Icterus spurius*
	Baltimore Oriole	*Icterus galbula*
Fringillidae		
	American Goldfinch	*Carduelis tristis*
Passeridae		
	Eurasian Tree Sparrow **N**	*Passer montanus*
	House Sparrow **N**	*Passer domesticus*

Table 3. List of bird species observed during the 2004 through 2011 winter season visits to the La Grange Wetland Banking Site, Brown County, Illinois.

Common Name	2004	2005	2006	2007	2008	2009	2010	2011
Trumpeter Swan								X
Greater White-fronted Goose	X	X				X		X
Snow Goose	X	X	X	X			X	X
Canada Goose	X	X	X		X	X	X	X
Gadwall	X						X	
American Black Duck	X						X	
Mallard	X	X				X	X	X
Northern Shoveler		X					X	
Northern Pintail	X	X				X	X	
Green-winged Teal						X	X	
Redhead		X						
Ruddy Duck		X						
Scaup species		X						
Northern Bobwhite	X		X					
Great Blue Heron	X						X	
Bald Eagle	X	X	X	X	X	X	X	X
Northern Harrier IE	X		X	X			X	X
Cooper's Hawk		X						
Red-tailed Hawk			X				X	X
Rough-legged Hawk				X			X	X
Killdeer	X						X	X
Ring-billed Gull	X		X			X	X	X
Mourning Dove			X				X	X
Short-eared Owl IE							X	
Great-horned Owl								X
Red-bellied Woodpecker	X		X				X	X
Hairy Woodpecker								X
Downy Woodpecker	X		X				X	X
Pileated Woodpecker								X
Northern Flicker	X		X				X	
Blue Jay	X		X			X	X	X
American Crow	X		X	X	X	X	X	X
Horned Lark	X		X			X		X
Black-capped Chickadee	X		X	X			X	X
Tufted Titmouse	X							X
White-breasted Nuthatch	X		X					
Carolina Wren	X		X					
Eastern Bluebird	X		X					
American Robin	X		X			X	X	
European Starling N	X		X					

Common Name (Table 3 cont.)	2004	2005	2006	2007	2008	2009	2010	2011
American Tree Sparrow	X		X	X	X		X	X
Field Sparrow			X					
Fox Sparrow	X							
Song Sparrow	X		X	X	X	X	X	X
Swamp Sparrow	X		X				X	
Savannah Sparrow								X
White-crowned Sparrow			X				X	X
White-throated Sparrow								X
Dark-eyed Junco	X						X	
Northern Cardinal	X		X					
Red-winged Blackbird	X		X			X		X
American Goldfinch	X		X	X	X		X	X
Eurasian Tree Sparrow N	X							
Number of Species Per Year	**35**	**11**	**28**	**9**	**6**	**13**	**30**	**29**
Number of Species All Years	**53**							

IE=Illinois Endangered; IT=Illinois Threatened; FT=Federally Threatened; N=Non-native species

Table 4. Results of the 2011 spring point counts conducted on March 31 at the La Grange Wetland Banking Site, Brown County, Illinois. Counts for each species at each point are presented as well as the total count for each species

	Census Point			
Species	**8**	**9**	**10**	**Total**
Wood Duck			1	**1**
Mourning Dove		1	1	**2**
Red-bellied Woodpecker	1	1	2	**4**
Downy Woodpecker			1	**1**
Hairy Woodpecker			1	**1**
Eastern Phoebe	1		2	**3**
Blue Jay	1	1	1	**3**
Black-capped Chickadee		1	2	**3**
Tufted Titmouse		1	1	**2**
Ruby-crowned Kinglet		1		**1**
Eastern Bluebird	2			**2**
American Robin	2			**2**
Brown Thrasher			1	**1**
Song Sparrow	2			**2**
Northern Cardinal	1	2	1	**4**
Red-winged Blackbird	1		1	**2**
American Goldfinch			1	**1**
Total Individuals	**11**	**8**	**16**	**35**
Total Species	**8**	**7**	**13**	**17**

Table 5. List of bird species observed during all 2004 through 2011 spring season visits to the La Grange Wetland Banking Site, Brown County, Illinois.

Common Name	2004	2005	2006	2007	2008	2009	2010	2011
Greater White-fronted Goose			X	X	X		X	
Snow Goose	X		X	X				X
Canada Goose	X	X	X	X	X	X	X	X
Wood Duck	X	X	X	X	X	X	X	X
Gadwall			X			X	X	X
American Widgeon	X	X	X		X		X	
Mallard	X	X	X	X	X		X	X
Blue-winged Teal	X	X	X	X	X		X	X
Northern Shoveler		X	X	X	X		X	X
Northern Pintail	X	X	X				X	X
Green-winged Teal	X	X	X	X	X		X	X
Canvasback								X
Redhead		X						
Ring-necked Duck			X			X	X	X
Lesser Scaup					X		X	X
Bufflehead	X		X					X
Hooded Merganser	X	X						
Common Merganser		X			X			
Rudy Duck	X	X	X				X	X
Wild Turkey			X					
Northern Bobwhite	X							
Pied-billed Grebe		X			X	X	X	X
American White Pelican			X	X	X		X	X
Double-crested Cormorant	X	X	X	X	X	X	X	X
American Bittern IE			X					
Great Blue Heron	X	X	X	X		X	X	X
Green Heron		X						
Turkey Vulture								X
Bald Eagle		X	X	X	X	X	X	X
Northern Harrier IE	X		X		X		X	
Red-tailed Hawk	X	X						X
Sora		X						
American Coot		X		X	X	X	X	X
Killdeer	X	X	X	X	X		X	X
Greater Yellowlegs	X		X	X	X		X	X
Lesser Yellowlegs	X	X			X		X	X
Solitary Sandpiper		X						
Spotted Sandpiper								X
Least Sandpiper		X	X					
Pectoral Sandpiper		X		X	X		X	

Common Name (Table 5 cont.)	2004	2005	2006	2007	2008	2009	2010	2011
Wilson's Snipe	X	X	X					X
Bonaparte's Gull	X							X
Ring-billed Gull			X		X	X		
Herring Gull	X							
Mourning Dove	X	X						X
Belted Kingfisher						X	X	X
Red-headed Woodpecker		X	X		X			
Red-bellied Woodpecker	X	X	X	X	X			X
Downy Woodpecker	X		X					X
Hairy Woodpecker		X						X
Northern Flicker	X	X	X	X		X		
Pileated Woodpecker	X		X					
Eastern Phoebe		X	X				X	X
Great Crested Flycatcher		X						
Eastern Kingbird		X						X
Yellow-throated Vireo		X						
Warbling Vireo		X						
Red-eyed Vireo		X						
Blue Jay	X	X	X	X	X			X
American Crow	X	X	X					X
Horned Lark		X	X	X	X			
Tree Swallow	X	X	X	X	X		X	X
Northern Rough-winged Swallow		X					X	X
Cliff Swallow		X						
Barn Swallow		X						X
Purple Martin								X
Black-capped Chickadee	X	X	X		X			X
Tufted Titmouse	X	X	X	X	X			
White-breasted Nuthatch		X	X					
Carolina Wren		X	X	X	X			
House Wren		X						
Ruby-crowned Kinglet	X				X			X
Blue-gray Gnatcatcher	X							
Eastern Bluebird	X		X					X
American Robin	X	X	X		X	X		X
Northern Mockingbird					X			
Brown Thrasher						X		X
European Starling N	X	X	X					
American Pipit		X						X
Northern Parula		X						
Yellow Warbler		X						

Common Name (Table 5 cont.)	2004	2005	2006	2007	2008	2009	2010	2011
Northern Waterthrush		X						
Common Yellowthroat		X						X
Northern Cardinal	X	X	X				X	X
Indigo Bunting								X
Dickcissel								X
American Tree Sparrow	X		X					X
Chipping Sparrow			X					
Savannah Sparrow	X	X						X
Fox Sparrow	X							
Song Sparrow	X	X	X	X	X	X	X	X
Swamp Sparrow	X		X	X	X			
White-throated Sparrow		X						
White-crowned Sparrow	X	X	X					X
Lark Sparrow								X
Dark-eyed Junco	X							X
Red-winged Blackbird	X	X	X	X	X	X	X	X
Eastern Meadowlark	X	X	X			X	X	X
Common Grackle	X	X	X					X
Brown-headed Cowbird	X	X	X				X	X
House Finch	X							
American Goldfinch	X	X	X					X
Eurasian Tree Sparrow N	X							
Number of Species Per Year	**52**	**66**	**54**	**26**	**35**	**17**	**33**	**61**
Number of Species All Years	**103**							

IE = Illinois Endangered; IT= Illinois Threatened: FT = Federally Threatened; N = Non-native

Table 6. Results of the 2011 breeding season point counts conducted on July 27 at the La Grange Wetland Banking Site, Brown County, Illinois. Counts for each species at each point are presented as well as the total count for each species

	Census Point											
Species	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**Total**
Canada Goose											7	**7**
Tundra Swan	1											**1**
Great Blue Heron	1		2	8	25							**36**
Turkey Vulture						3						**3**
Semipalmated Plover					10						8	**18**
Killdeer	120	2	4	6	12	6	1				8	**151**
Spotted Sandpiper					2							**2**
Solitary Sandpiper	2										2	**4**
Sanderling					1							**1**
Semipalmated Sandpiper	35				8						8	**51**
Least Sandpiper					15							**15**
Pectoral Sandpiper	10										3	**13**
Ring-billed Gull						6						**6**
Black Tern					2							**2**
Mourning Dove			1									**1**
Red-bellied Woodpecker										1		**1**
Yellow-billed Cuckoo			1									**1**
Eastern Phoebe										2		**2**
Blue Jay										1		**1**
Tree Swallow	8	4	2	2	16	8					40	**80**
Northern Rough-winged Swallow			2									**2**
Barn Swallow	15		26	6	15							**62**
Tufted Titmouse									1			**1**
Blue-gray Gnatcatcher										4		**4**
Common Yellowthroat	1	1					1	1	1			**5**
Field Sparrow								1				**1**
Song Sparrow						1						**1**
Indigo Bunting		1	2				1	1	1			**6**
Dickcissel						6		1				**7**
Red-winged Blackbird	1		2			1		3		2	1	**10**
Eastern Meadowlark							1					**1**
Red-winged Blackbird	1		2			1		3		2	1	**10**
American Goldfinch	1	2	2	2						1		**8**
Total Individuals	**196**	**10**	**46**	**24**	**106**	**32**	**4**	**10**	**3**	**13**	**78**	**514**
Total Species	**12**	**5**	**11**	**5**	**10**	**8**	**4**	**6**	**3**	**7**	**9**	**33**

Table 7. List of bird species observed during the 2000 through 2011 breeding season visits to the La Grange Wetland Banking Site, Brown County, Illinois.

Common Name	2000	2001	2003	2004	2005	2006	2007	2008	2009	2010	2011
White-fronted Goose											X
Snow Goose	X										
Canada Goose	X	X	X	X	X		X		X	X	X
Tundra Swan											X
Wood Duck				X	X		X	X			
Mallard	X	X	X	X	X		X	X	X	X	X
Blue-winged Teal	X						X				
Northern Shoveler					X						
Green-winged Teal	X										
Northern Bobwhite	X			X			X		X		
Pied-billed Grebe				X				X			
American White Pelican			X					X	X	X	
Double-crested Cormorant	X	X		X				X	X	X	X
Least Bittern IE	X										
Great Blue Heron		X	X	X	X		X	X		X	X
Great Egret	X	X	X	X	X		X	X	X	X	
Snowy Egret IT			X								
Cattle Egret										X	
Little Blue Heron								X			
Green Heron	X	X		X						X	
Black-crowned Night Heron IT				X							
Turkey Vulture	X		X	X	X	X	X				X
Bald Eagle	X				X		X	X	X	X	X
Northern Harrier IE			X								
Red-tailed hawk	X										X
American Coot							X		X		
Black-bellied Plover							X				
Semipalmated Plover											X
Killdeer	X	X		X	X		X	X	X	X	X
Black-necked Stilt								X			X
Greater Yellowlegs			X	X						X	X
Lesser Yellowlegs	X			X			X			X	X
Semipalmated Sandpiper											X
Solitary Sandpiper		X		X	X						X
Spotted Sandpiper	X			X	X		X	X		X	X
Buff-breasted Sandpiper										X	X
Upland Sandpiper IE										X	X

Common Name (Table 7 cont.)	2000	2001	2003	2004	2005	2006	2007	2008	2009	2010	2011
Sanderling							X				X
Least Sandpiper	X			X			X	X		X	X
Pectoral Sandpiper			X	X				X		X	X
White-rumped Sandpiper											X
Wilson's Snipe	X										
Wilson's Phalarope IE											X
Franklin's Gull	X										
Herring Gull	X			X						X	
Common Tern IE											X
Black Tern IE											X
Mourning Dove	X	X	X	X	X		X			X	X
Yellow-billed Cuckoo	X	X		X	X	X		X	X		X
Great Horned Owl	X										
Barred Owl	X	X									
Ruby-throated Hummingbird		X									
Belted Kingfisher	X	X					X		X	X	X
Red-headed Woodpecker	X	X		X	X	X	X	X		X	
Red-bellied Woodpecker	X	X	X	X	X	X	X			X	X
Downy Woodpecker	X	X		X	X	X		X		X	X
Hairy Woodpecker		X									
Northern Flicker	X		X	X			X	X		X	X
Eastern Wood-pewee	X	X	X	X	X	X	X	X		X	X
Eastern Phoebe	X		X					X	X	X	X
Willow Flycatcher					X						
Great-crested Flycatcher	X	X			X	X	X			X	X
Eastern Kingbird	X		X	X	X		X	X		X	X
Yellow-throated Vireo	X										
Warbling Vireo		X			X	X	X	X	X	X	
Red-eyed Vireo	X	X					X				
Blue Jay	X	X	X	X	X	X	X	X		X	X
American Crow	X	X	X	X	X	X	X	X		X	X
Horned Lark	X	X	X								X
Purple Martin					X						X
Tree Swallow	X	X	X	X	X	X	X	X	X	X	X
Northern Rough-winged Swallow			X	X	X		X	X		X	X
Bank Swallow	X			X						X	X
Cliff Swallow							X				
Barn Swallow	X	X	X	X			X		X	X	X

Common Name (Table 7 cont.)	**2000**	**2001**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**
Black-capped Chickadee	X	X		X		X		X		X	X
Tufted Titmouse	X										X
White-breasted Nuthatch	X	X	X			X		X			X
Carolina Wren	X	X		X	X	X		X			
House Wren	X	X			X	X	X		X	X	
Sedge Wren					X		X				
Blue-gray Gnatcatcher	X										X
Eastern Bluebird	X									X	
American Robin	X	X		X	X	X		X		X	X
Wood Thrush											X
Gray Catbird	X	X		X	X	X	X			X	X
Brown Thrasher									X	X	X
European Starling	X						X				
Cedar Waxwing	X							X			
American Pipit		X									
Yellow Warbler							X				
Prothonotary Warbler		X									
Common Yellowthroat	X	X	X	X	X	X	X	X	X	X	X
Yellow-breasted Chat		X			X		X				
American Tree Sparrow	X										
Song Sparrow	X	X	X	X	X	X	X	X	X	X	X
Field Sparrow										X	X
Northern Cardinal	X	X	X	X	X	X	X	X	X	X	X
Indigo Bunting	X	X	X	X	X	X	X	X	X	X	X
Dickcissel	X		X		X		X	X	X	X	X
Bobolink				X							
Red-winged Blackbird	X	X	X	X	X	X	X	X	X	X	X
Eastern Meadowlark					X		X			X	X
Common Grackle	X	X			X	X	X	X		X	X
Brown-headed Cowbird	X	X	X		X	X	X			X	X
Orchard Oriole							X				X
Baltimore Oriole	X	X			X		X	X	X		X
American Goldfinch	X	X	X	X				X		X	X
Eurasian Tree Sparrow N	X	X		X							
House Sparrow N	X										
Number species Per Year	**65**	**49**	**31**	**45**	**42**	**24**	**49**	**40**	**24**	**53**	**65**
Number of Species All Years	**110**										

IE= Illinois Endangered; IT = Illinois Threatened; FT=Federally Threatened; N = Non-native Species

Table 8. List of bird species observed during the 2003 through 2011 fall migration season visits to the La Grange Wetland Banking Site, Brown County, Illinois.

Common Name	2003	2004	2005	2006	2007	2008	2009	2010	2011
Canada Goose		X	X	X	X			X	X
Wood Duck	X								
Gadwall							X	X	X
American Widgeon	X								X
Mallard	X	X		X	X	X	X	X	X
Northern Shoveler	X				X		X		X
Northern Pintail	X				X			X	X
Blue-winged Teal								X	
Green-winged Teal		X						X	X
Ring-necked Duck								X	
Lesser Scaup	X						X	X	
Bufflehead								X	X
Ruddy Duck	X				X		X	X	X
Ring-necked Pheasant				X		X			
Northern Bobwhite					X				
Pied-billed Grebe					X	X		X	X
American White Pelican	X	X				X		X	X
Double-crested Cormorant	X	X				X			
Great Blue Heron	X	X	X	X	X	X	X	X	X
Great Egret	X	X		X	X	X			
Turkey Vulture	X				X			X	X
Osprey IE		X							
Bald Eagle		X	X		X			X	X
Northern Harrier IE	X	X	X	X	X			X	X
Cooper’s Hawk					X		X		
Red-tailed hawk	X	X		X	X			X	X
Sora WL	X				X				
American Coot						X	X	X	X
Killdeer	X	X	X			X		X	X
Greater Yellowlegs	X	X							
Lesser Yellowlegs	X								
Baird's Sandpiper	X								
Pectoral Sandpiper	X	X							
Wilson’s Snipe WL					X	X			
Phalarope sp.	X								
Ring-billed Gull	X				X	X		X	X
Herring Gull		X				X		X	X
Mourning Dove	X				X	X		X	X
Yellow-billed Cuckoo	X								
Chimney Swift		X		X					

Common Name (Table 8 cont.)	2003	2004	2005	2006	2007	2008	2009	2010	2011
Ruby-throated Hummingbird					X				
Belted Kingfisher							X		
Red-headed Woodpecker	X		X						
Red-bellied Woodpecker	X	X	X		X	X		X	X
Downy Woodpecker	X	X	X	X	X	X		X	X
Northern Flicker	X	X		X	X	X			X
Eastern Wood-pewee					X				
Eastern Phoebe	X	X							
Warbling Vireo	X								
Red-eyed Vireo								X	
Blue Jay	X	X	X	X	X		X	X	X
American Crow	X	X	X	X	X	X		X	X
Horned Lark				X					X
Tree Swallow	X	X	X	X	X	X			
Northern Rough-winged Swallow		X				X			
Barn Swallow		X							
Black-capped Chickadee	X	X	X	X	X	X	X	X	X
White-breasted Nuthatch	X	X	X	X					X
Carolina Wren	X	X	X	X					
House Wren		X							
Golden-crowned Kinglet				X				X	
Ruby-crowned Kinglet		X							
American Robin		X		X	X		X		X
Gray Catbird					X				
European Starling			X	X	X	X			
American Pipit	X	X				X			
Cedar Waxwing									X
Yellow-rumped Warbler		X		X					X
Black-throated Green Warbler		X							
Palm Warbler		X			X				X
Common Yellowthroat		X			X				
Yellow-breasted Chat		X							
American Tree Sparrow		X	X	X	X	X		X	X
Chipping Sparrow				X					
Field sparrow	X			X					
Savannah Sparrow		X							X
Le Conte's Sparrow	X								
Fox Sparrow			X	X	X				
Song Sparrow		X	X		X				X

Common Name (Table 8 cont.)	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**
Lincoln Sparrow	X	X							
Swamp Sparrow	X	X	X	X	X				X
White-throated Sparrow	X	X	X		X	X		X	X
White-crowned sparrow	X	X	X	X	X			X	X
Dark-eyed Junco			X	X	X			X	X
Northern Cardinal	X	X		X					X
Rose-breasted Grosbeak	X								
Indigo Bunting	X	X		X	X				
Red-winged Blackbird	X	X	X	X	X	X	X		X
Rusty Blackbird	X								
Brown-headed Cowbird								X	X
Baltimore Oriole	X								
American Goldfinch	X	X	X	X	X	X	X	X	X
Eurasian Tree Sparrow N		X							
Number of species Per Year	**50**	**49**	**24**	**32**	**42**	**26**	**14**	**35**	**44**
Number of Species All Years	**93**								

IE=Illinois Endangered; IT=Illinois Threatened; FT=Federally Threatened; N=Non-native species; WL=Illinois Watch-List

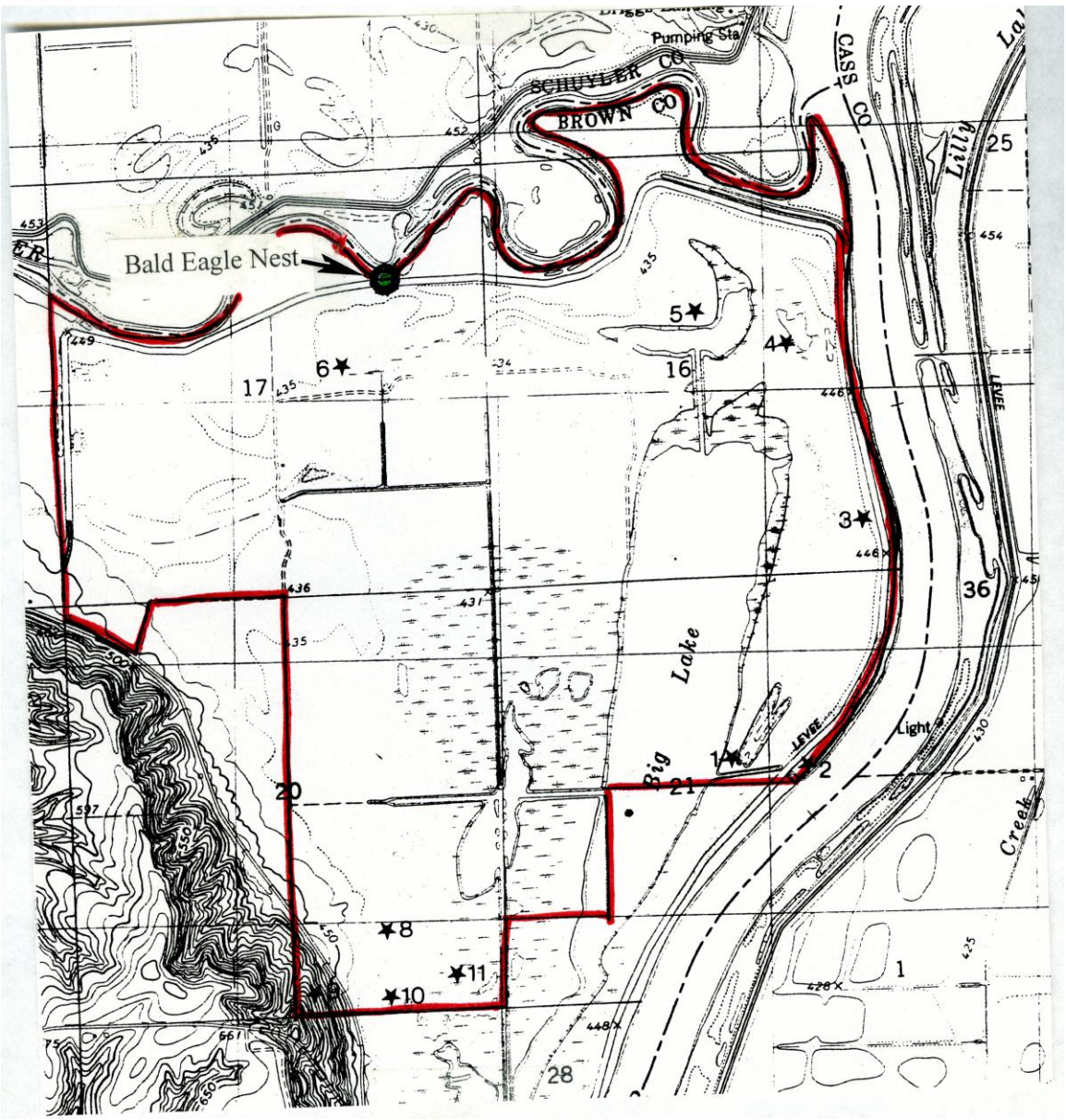

Figure 1. Location of the La Grange Wetland Bank Site project area, the census points used in the avian survey of the project area and the established Bald Eagle nest. The boundaries of the study area are highlighted in red.