(Rallus elegans), and Common Moorhen (Gallinula chloropus). Federally endangered species are listed in U.S. Fish and Wildlife Service, Division of Endangered Species (1993); consult Herkert (1991, 1992, 1994, 1995) and Illinois Endangered Species Protection Board (1994) for the most recent lists of endangered and threatened birds and other organisms for Illinois. Six species of birds observed at Sand Lake are, according to Bohlen (1989), rarely or very rarely seen in Illinois. These include: White Ibis (Eudocimus albus), Glossy Ibis (Plegadis falcinellus), White-Faced Ibis (Plegadis chihi), Black-Necked Stilt (Himantopus, mexicanus), Marbled Godwit (Limosa fedoa), and Ruff (Philomachus pugnax).

Other bird species seen at the wetland are listed in Table 2. The total of 95 species of birds seen is based on our observations and those of various other individuals with ornithological expertise (see *Acknowledgments*), as well as some species listed in Newman (1996). Most sightings were made from 1993-1995. Undoubtedly there are additional species which utilize the wetland, and thus these lists are not to be considered complete.

The spring migration, when the wetland is at a high water stage, is particularly impressive as many thousands of waterfowl can be observed on a single visit. During the summer, the slow-moving Common Moorhen with its beautiful orange-red bill, and the Pied-billed Grebe with chicks riding on its back can frequently be seen. Ten broods of Pied-billed Grebes were observed in the summer of 1994 by J. Herkert (pers. comm.). In the late morning of 27 June 1995, L.E. Brown was standing knee-deep in water in a tall thicket of cattails making clicking sounds in hopes of stimulating the declining northern cricket frog (Acris crepitans) to call. Soon he heard a particularly loud click and turned to see that it was made by a Yellowheaded Blackbird perched about 3 m away. At many times of the year an abundance of shorebirds can also be seen. During 1994, a heron rookery consisting of approximately 50 Cattle Egret (Bubulcus ibis) nests was observed in a clump of willow trees along the shoreline. Some birds, usually individuals or pairs, have been seen at the wetland at unusual times of the year. For example, a Canvasback (Aythya valisineria) and a Snow Goose (Chen caerulescens) were seen in May, while Ruddy Ducks (Oxyura jamaicensis) have been observed as early as July.

Three other non-bird species deserve mention. The Illinois chorus frog (*Pseudacris streckeri illinoensis*), a state-threatened species, forms relatively large breeding choruses at the wetland in early spring (Brown, 1986; Brown and Cima, in press). Hall's bulrush (*Scirpus hallii*), a state-endangered plant, is also quite common at the wetland. Recently, Schwegman (1996) reported another state-endangered plant, the weak bulrush (*Scirpus purshianus*) at Sand Lake.

## **Human Threats**

Sand Lake or portions of it have been farmed when water has been reduced or lacking. However, farming has been intermittent and appears to have been rather nonintrusive, as the wetland vegetation aggressively rejuvenated when flooding re-occurred.

More serious threats are the major flood events which occur at approximately 20-40 year intervals (Environmental Science and Engineering, 1993a, 1993b). The most severe flood was in 1993 which resulted in the appearance of over 171 groundwater lakes in Mason County including Sand Lake (Clark, 1995). Water flowed from Sand Lake northwesterly toward Havana along the drainage ditches bordering Illinois State Highway 97 (Fig. 1, page 88). Much of southeastern Havana was soon inundated, resulting in considerable property damage and human hardship. Residents were quick to blame Sand Lake as the source of their problems, and there was strong pressure to drain the lake. However, the wetland expansion was merely a symptom of the

**TABLE 1.** Endangered and threatened birds observed at Sand Lake, Mason County, IL

American Bittern (Botaurus lentiginosus) SE

Swainson's Hawk (Buteo swainsoni) SE Great Egret (Casmerodius albus) ST

Piping Plover (Charadrius melodus) SFE

Black Tern (Chlidonias niger) SE

Little Blue Heron (Egretta caerulea) SE

Common Moorhen (Gallinula chloropus) ST

Bald Eagle (Haliaeetus leucocephalus) SFE Loggerhead Shrike (Lanius ludovicianus) ST

Black-crowned Night-Heron (Nycticorax nycticorax) SE

Wilson's Phalarope (Phalaropus tricolor) SE

Pied-billed Grebe (Podilymbus podiceps) ST

King Rail (Rallus elegans) ST

Common Tern (Sterna hirundo) SE

Yellow-headed Blackbird (Xanthocephalus xanthocephalus) (SE)

SE denotes state-endangered

SFE denotes federally and state-endangered

ST denotes state-threatened