

er Least Tern was reported from Newton Lake, another power plant lake with fly-ash deposits on 15 June 1998 (Kleen 1999). The largest (only?) regular nesting colony in Indiana is at the Cinergy Gibson Generating Station in southwestern Indiana, less than 1 km from the Wabash River, and just across the Wabash River from Wabash County, Illinois. Initially, the birds began (and continue) to nest there on a long, narrow 3.4-km limestone rip-rap dike. However, as that population increased from 1 to 63 nests, the birds spread out from the dike, to include the fly-ash areas near the lake and have numbered between 3 and 18 nests in these areas between 1993-1998 (Castrale et al. 1999). Interestingly, this area experienced a massive increase in nesting pairs beginning in 1993, when there was massive flooding in the Ohio and Mississippi Rivers. These birds probably wandered up the Ohio and Wabash Rivers until the appropriate habitat at the Cinergy power plant was located (Castrale et al. 1999). Several Least Terns banded along the Mississippi River on islands between Illinois and Missouri have turned up at Gibson Lake.

Such nesting attempts likely resulted from prolonged flooding of the birds' normal breeding colony sites along the Mississippi. Both Massey and Fancher (1989) studying California subspecies and Boyd (1993) studying interior *athalassos* subspecies in Kansas and Oklahoma found that this tern exhibits group adherence when forced to move and re-nest in areas other than the historical nesting area, sometimes moving as a group to another location. Boyd also showed that the interior subspecies does show strong site tenacity, but has the flexibility to move if conditions warrant.

Other man-made areas Least Terns have utilized include dredge spoil islands, parking lots, roof tops, old road beds, sand pits, and other artificial sites with sand or gravel substrates (Boyd 1993, Johnson and Castrale 1993, Kirsch 1993, Wilson et al. 1993, Thompson et al. 1997). Breeding success on artificial nesting habitats has been higher than on many recent nesting studies in natural tern nesting sites (Kirsch and Lingle 1993, Castrale et al. 1999). Any Least Terns seen in or near such areas in future Illinois sightings should be followed up with repeat visits to the location of the sighting as well as to locations nearby that might meet some of the above descriptions. Although there has been some limited surveying of Least Tern colonies the last several years in Illinois by Department of Natural Resources staff, no systematic study of specific breeding parameters has been made. As many sites that were studied have experienced low breeding success due to predation, flooding, and human disturbance, it is time that more be done to help protect this species before it goes the way of the Piping Plover in Illinois (currently no known breeding pairs and effectively extirpated from the state), a species this tern still shares its favored breeding habitat with in the relatively few areas of suitable natural habitat that remain in this subspecies' interior range.

#### Literature Cited

Bohlen, H.D. 1989. The birds of Illinois. Indiana University Press, Bloomington. 221 pp.

Boyd, R.L. 1993. Site tenacity, philopatry, longevity, and population trends of Least Terns in Kansas and northwestern Oklahoma. Pp 196-205 in Proceedings. Missouri River and its tributaries: Piping

Plover and Least Tern Symposium (K.F. Higgins, and M.R. Brashier, eds.). South Dakota State Univ., Brookings. 205 pp.

Castrale, J.S., C.E. Mills, and T. Hayes. 1999. Growth of the Least Tern population at Gibson Lake, Indiana. Indiana Audubon Quarterly 77: 150-158.

Dinsmore, S.J., J.J. Dinsmore, and D.L. Howell. 1993. Least Terns nesting on fly-ash deposits. Pp 103-107 in Proceedings. Missouri River and its tributaries: Piping Plover and Least Tern Symposium (K.F. Higgins, and M.R. Brashier, eds.). South Dakota State University, Brookings. 205 pp.

Endangered Species Protection Board. 1999. Checklist of endangered and threatened animals and plants of Illinois. State of Illinois. 20 pp.

Hardy, J. 1957. The least tern in the Mississippi Valley. Michigan State University Biological Series 1: 3-60.

Johnson, R.R., and J.S. Castrale. 1993. Management of breeding interior Least Terns in Indiana. Proceedings of the Indiana Academy of Science. 102: 59-65.

Kirsch, E.M. 1993. Habitat selection of Least Terns on the lower Platte River, Nebraska. Pp 108 in Proceedings. Missouri River and its tributaries: Piping Plover and Least Tern Symposium (K.F. Higgins, and M.R. Brashier, eds.). South Dakota State University, Brookings. 205 pp.

Kirsch, E.M., and G.R. Lingle. 1993. Habitat use and nesting success of Least Terns along the Platte River, Nebraska. Pp 73 in Proceedings. Missouri River and its tributaries: Piping Plover and Least Tern Symposium (K.F. Higgins, and M.R. Brashier, eds.). South Dakota State University, Brookings. 205 pp.

Kleen, V.M. 1976. 1976 breeding season. I.D.O.C. Seasonal Report No.10: 5 (mimeographed).

\_\_\_\_\_. 1980. 1980 breeding season. I.D.O.C. Seasonal Report No. 26: 7.

\_\_\_\_\_. 1996. Field Notes: The 1995 breeding season report. Meadowlark 5: 31.

\_\_\_\_\_. 1997. Field Notes: The 1996 breeding season report. Meadowlark 6: 33.

\_\_\_\_\_. 1999. Field Notes: The 1998 breeding season report. Meadowlark 8: 33.

Kruse, C., J. Dinan, B. Dirks, K.F. Higgins, and M. Schwalbach. 1993. Effects of predation on interior Least Terns and Piping Plovers along the Missouri River in South Dakota and what's being done about it. In Proceedings. Missouri River and its tributaries: Piping Plover and Least Tern Symposium (K.F. Higgins, and M.R. Brashier, eds.). South Dakota University, Brookings. 205 pp.

Lingle, G.R. Causes of nest failure and mortality of Least Terns and Piping Plovers along the central Platte River. In Proceedings. Missouri River and its tributaries: Piping Plover and Least Tern Symposium (K.F. Higgins, and M.R. Brashier, eds.). South Dakota University, Brookings. 205 pp.

Massey, B.W., and J.M. Fancher. 1989. Renesting by California Least Terns. Journal of Field Ornithology 60: 350-357.

Robinson, W.D. 1996. Southern Illinois Birds. Southern Illinois University Press, Carbondale. 432 pp.

Thompson, B.C., J.A. Jackson, J.Burger, L.A. Hill, E.M. Kirsch, and J.L. Atwood. 1997. Least Tern (*Sterna antillarum*). In The Birds of North America, No. 290 (A. Poole and F. Gill, eds.). The Academy of Natural Sciences, Philadelphia, PA, and The American Ornithologists' Union, Washington, D.C.

Wilson, E.C., W.A. Hubert, and S.H. Anderson. 1993. Foraging and diet of Least Terns nesting at sand pits in the central Platte Valley, Nebraska. Pp 142 in Proceedings. Missouri River and its tributaries: Piping Plover and Least Tern Symposium (K.F. Higgins, and M.R. Brashier, eds.). South Dakota State University, Brookings. 205 pp.

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