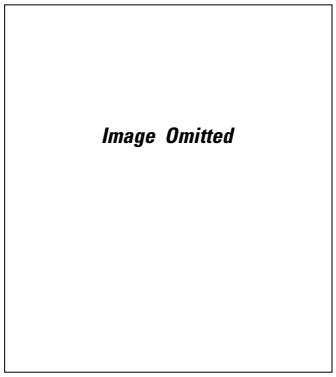
by Lori Pruitt

Indiana's First HCP Conserves Least Tern



Nesting terns on the dike at Gibson Lake, Indiana
Photo © Ron Austing

The Cinergy Corporation's Gibson Generating Station is a 3,250 megawatt coal-fired electrical generating station that helps provide electricity to over 1.4 million Cinergy customers. But the facility produces more than electricity—it also produces habitat for Indiana's only colony of an endangered bird, the interior least tern *(Sterna antillarum)*.

The Gibson Generating Station is located adjacent to the Wabash River in southwest Indiana's Gibson County. Almost half of the facility is covered by Gibson Lake, a 2,964-acre (1,200-hectare) shallow impoundment that provides cooling water for the plant. A prominent feature of the lake is a dike, 16 feet (5 meters) wide and over 2.1 miles (3.4 kilometers) long, that nearly bisects the lake.

In 1986, a single pair of least terns was discovered nesting on the dike. The endangered interior least tern is typically found on barren beaches and gravel bars on large river systems of the interior United States, and the gravel-covered dike of Gibson Lake simulated this habitat. When the terns were discovered, Cinergy immediately began a cooperative program with the Indiana Department of Natural Resources (IDNR) to protect the nesting birds, and later to conserve and enhance their habitat. Activities voluntarily conducted by Cinergy in cooperation with the IDNR included vegetation control on the center dike, maintaining the nesting substrate on the dike, controlling human access to nesting areas, steps to minimize losses to predators, use of decoys and taped vocalizations to attract terns, and providing chick shelters near the nests. Cinergy also facilitated the annual monitoring of the colony, which is conducted by the IDNR. Cinergy's efforts were successful in attracting nesting terns to return in subsequent years and the population has increased, although the level of nesting activity varies annually. The largest population ever observed at Gibson Lake was in 1998, when 85 adults produced 72 fledglings. Productivity of the colony has generally been high compared to other monitored populations. Cinergy was the 1999 regional winner of the Fish and Wildlife Service's National Wetland Conservation Award, in part because of the company's efforts to conserve the least tern.

The first potential conflict between the tern colony and the operation of the generating station was realized 7 years after discovery of the initial nest. Beginning in 1993, terns not only nested on the dike of Gibson Lake but also began nesting in ash disposal ponds, where ash from coal combustion is deposited as a slurry. In 1996, they also were observed nesting on gravel access roads associated with the ash ponds. Cinergy had voluntarily restricted access to the Gibson Lake dike during tern nesting season, but restricting access to ash disposal areas and access roads was more difficult. Nonetheless, the company was successful in avoiding take of

terns in these areas by altering their operations (e.g., moving ash deposition lines and avoiding the use of roads when terns were present). However, Cinergy was concerned that conditions could arise when incidental take of terns associated with ash disposal areas would be unavoidable, and so it approached the Service for advice on how to deal with the potential for take.

The solution Cinergy chose was to develop a Habitat Conservation Plan (HCP), the first in Indiana, for the least tern colony. In its HCP, the company pledges to continue with efforts to protect and enhance habitat on the center dike of Gibson Lake, which remains the primary nesting area for the tern colony. In addition, Cinergy is cooperating with the Service and other partners in development and maintenance of the Cane Ridge Wildlife Area. The restoration of the 463-acre (187-ha) Cane Ridge Wildlife Area, which will be managed as a unit of the Patoka River National Wildlife Refuge, is a North American Waterfowl Management Plan project. The project involves over 15 partners joining forces to restore bottomland hardwood forests and other wetland habitats in an area that had been altered for farming. A unique feature of the restoration is that it will include the construction of least tern nesting islands in shallow impoundments. The Cane Ridge Wildlife Area is immediately adjacent to Gibson Generating Station, and we hope that the Gibson Lake colony will serve as a source of birds to colonize the newly created habitat. Ultimately, these colonies may also serve as a source of birds to colonize suitable habitat along the nearby Ohio and Wabash rivers. Regardless of the outcome, studies on the development of least tern nesting units at Cane Ridge and continued monitoring of the Gibson Lake colony will provide information helpful to the recovery of the species.

As a result of Cinergy's HCP, the Service issued the company a permit that allows for the incidental take of least terns at the Gibson Generating Station for the next 5 years. The level of take in a given year will not exceed 5 percent of the maximum adult population of least terns present at the facility in that year. Cinergy is hopeful that it will be able to continue to avoid any take of terns. However, the incidental take permit will provide Cinergy with assurances that it can continue to maintain and operate the Gibson Generating Station without the risk of violating the Endangered Species Act. The net result of activities proposed in the Cinergy HCP will be increased nesting opportunities for the interior least tern.

"When endangered least terns began nesting at Gibson Station, we were concerned that the Endangered Species Act might limit or impact our ability to generate and deliver power from our largest generating station" said Tim Hayes, Senior Environmental Scientist at Cinergy. "However, through close cooperation with the Fish and Wildlife Service and the Indiana Department of Natural Resources, we have developed this Habitat Conservation Plan which will protect and enhance tern populations while allowing us to continue providing power to our customers."

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Cinergy Corp.'s Gibson Generating Station is home to Indiana's only colony of the endangered interior least tern. The primary nesting area is the dike at Gibson Lake (pictured), an impoundment that provides cooling water for the plant. Cinergy was the 1999 regional winner of the U.S. Fish and Wildlife Service's National Wetland Conservation Award, in part because of their efforts to conserve the least tern.
Cinergy Corp. photo