

# Tiger beetle may have big economic impact

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[ALGIS J. LAUKAITIS / Lincoln Journal Star](#) JournalStar.com | Posted: Friday, October 12, 2007 7:00 pm | [No Comments Posted](#)



Salt Creek Beetle in Little Salt Creek. (LJS file)

The Salt Creek tiger beetle could have an impact of from \$21.4 million to \$25.5 million on the economies of Lancaster and Saunders counties, both of which contain habitat essential to the endangered insect's survival.

That's what a Vancouver, Wash., firm says in its analysis of the economic effect of designating critical habitat areas for the Salt Creek tiger beetle, one of the rarest insects in the United States.

The economic impacts cited in the study are both positive and negative. For example, designating critical habitat for the tiger beetle could restrict development near certain areas and reduce the value of land. But efforts to preserve habitat by acquiring land and easements and other conservation efforts could bring in money.

The U.S. Fish and Wildlife Service, which administers the Endangered Species Act, hired Northwest Economic Associates in Vancouver, Wash., to do the study. Most of the work was done last winter, and a 107-page draft report was published July 17.

Here are some of the highlights:

- \* The Fish and Wildlife Service has proposed 1,778 acres in northern Lancaster and southern Saunders counties be designated critical habitat for the Salt Creek tiger beetle.

- \* Those proposed acres are divided into four "units," or areas of which 49 percent is in private hands, 34 percent is state land, 9 percent is owned by nonprofit groups and 8 percent is city land.

\* Decreases in land value caused by restrictions on beetle-related development account for about \$13.3 million in future economic impact, especially in the vicinity of Lincoln.

\* However, conservation activities by government and nonprofit groups bring in from \$3.8 million to \$6.6 million. The study says that money will be spent on land acquisition, conservation easements, habitat management efforts and restoration projects.

\* Agriculture-related impacts range from \$95,000 to \$258,000 because of anticipated decreases in land value resulting from a change of land use from cropland to pasture.

\* The beetles will cost transportation and public works operations an additional \$850,000 to \$922,000 — mostly because of changes in construction and bridge maintenance. The Lincoln Electric System will pay an additional \$486,000 avoiding beetle habitat when it builds its Northern Tier transmission line, LES spokesman Russ Reno said.

The Salt Creek tiger beetle, with its big eyes, olive green body and long legs, gets its name because it captures its prey with its mouth in a “tiger-like” manner.

There are only 263 Salt Creek tiger beetles in existence today, according to the latest survey by entomologists at the University of Nebraska-Lincoln. Five years ago, there were 777. Biologists cite loss of critical habitat as the primary reason for the declining numbers.

A critical habitat is a specific area that contains physical or biological features essential to the conservation of a species. In the case of the Salt Creek tiger beetle, it’s rare salt flats or salt marshes found mostly north of the 27th Street and Interstate 80 interchange near Lincoln and in a protected wetland area south of Ceresco in Saunders County.

Two years ago, the Fish and Wildlife Service listed the Salt Creek tiger beetle under the Endangered Species Act, a move that gave it federal protection and paved the way for funds to buy and restore habitat or land that would protect the insect population from encroaching development and assist in its recovery.

The federal agency’s next step was to conduct an economic analysis to determine what would be the effects of designating critical habitat in the area, said Bob Harms, a biologist with the Fish and Wildlife Service office in Grand Island. He said such studies are routine and are done for all species that receive federal protection.

The \$13.3 million impact on development may seem high to some observers, but Harms said it’s “pretty low” compared with critical habitat designations for other endangered species.

“Some of that land developers can’t use anyway,” he said. “The city has some constraints on what they can do.”

One the major benefits of critical habitat designation is that it brings in money to buy land from willing sellers, Harms said. The designation also assists the agency in working with developers

because those areas now have set boundaries. However, designation could limit what nonprofit groups can do with their land because their actions would fall under federal review.

University of Nebraska-Lincoln entomology Professor Leon Higley and colleague Steve Spomer have studied the Salt Creek tiger beetle population for years and have begun a captive-breeding project to help boost its numbers. Their work has included annual counts and investigations into the effects of urbanization on the tiger beetle population.

Higley said the \$13.3 million impact on development may seem high, but he has seen bigger numbers for other species.

“If you are talking about birds or mammals, it could be tens of millions of dollars more,” he said.

“I’m not an economist, but I think it’s reasonable,” he said of the results of the study commissioned by the Fish and Wildlife Service.

The Saline Wetlands Conservation Partnership has been working since 2003 to restore degraded saline wetlands in scattered areas north of Lincoln. Partnership members include: Lincoln, Lancaster County, Lower Platte South Natural Resources District, Nebraska Game and Parks Commission and The Nature Conservancy.

Tom Malmstrom, who coordinates partnership activities, said the City Parks and Recreation Department just restored some saline wetland areas in the 160-acre Frank Shoemaker Marsh. He said the two areas could be used as habitat for the tiger beetle or for possible reintroduction of the species.

The Fish and Wildlife Service plans to update Mayor Chris Beutler on the critical habitat designation issue Friday.

Harms said the next step is to designate areas of critical habitat for the tiger beetle and publish those in the Federal Register. That could happen this fall, he said. A 60-day public comment period would follow. Afterward, the federal agency would respond to those comments and publish a final rule that would make the areas official.

Developers and others have been waiting for the federal agency to designate critical habitat areas for the beetle. Harms said the tiger beetle has been put on the back burner because other species have a higher priority.

“It’s frustrating for us and for people in Lincoln who want to know and want to plan around it,” Harms said.

The four “units” or critical habitat areas proposed by the FWS appear reasonable to Higley.

“I don’t think, from a conservation standpoint, that larger is better,” he said. “I think they’ve done a pretty good job of balancing those needs.”

Higley said the critical habitat designations will be useful as the city and the federal agency move forward with a conservation plan for the Salt Creek tiger beetle.

*Reach Algis J. Laukaitis at 473-7243 or [alaukaitis@journalstar.com](mailto:alaukaitis@journalstar.com).*

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