

Salt Creek Tiger Beetle Frequently Asked Questions

Why are we revising critical habitat for the Salt Creek tiger beetle?

Under the Endangered Species Act (ESA), we are required to designate critical habitat for the Salt Creek tiger beetle, unless we find it to be not prudent or not determinable. We designate critical habitat on the basis of the best available scientific data, after taking into consideration the economic impact, national security impact, and any other relevant impact.

We completed this revision of critical habitat for the Salt Creek tiger beetle as required by the terms of a June 7, 2011 settlement agreement between the U.S. Fish and Wildlife Service (Service) and the Center for Native Ecosystems, the Center for Biological Diversity, and the Xerces Society.

Does a 'critical habitat' designation mean an area is considered a wildlife refuge or sanctuary?

The designation of critical habitat does not affect land ownership or establish a refuge, wilderness, reserve, preserve, or other conservation area. A critical habitat designation identifies areas that are important to the conservation of federally listed threatened or endangered species. A critical habitat designation requires federal agencies to consult with the Service on any of their actions that may affect critical habitat in designated areas. The Service can then recommend ways to minimize any adverse effects. It imposes no requirements on state or private actions on state or private lands where no federal funding, permits or approvals are required.

What does a critical habitat designation mean?

Critical habitat is a term in the ESA. It identifies geographic areas that contain features essential for the conservation of a threatened or endangered species and may require special management or protection. Critical habitat often results in an emphasis on conservation actions, including increased land management activities and funding, to support species recovery. The designation of critical habitat does not affect land ownership or establish a refuge, wilderness, reserve, preserve, or other conservation area. It does not allow government or public access to private lands. Federal agencies are required to consult with the Service on actions they carry out, fund, or authorize that might affect critical habitat. A critical habitat designation generally has no effect on actions that do not involve a Federal agency.

Why is the revised critical habitat designation smaller than the previous critical habitat designation?

In this final designation, we have targeted areas that are better able to support the species. In addition, this designation better provides for conservation by including additional unoccupied habitat so that we can establish additional populations needed to improve the species' redundancy and resiliency, two important factors in reducing extinction risk.

What disagreement did the plaintiffs have with our initial critical habitat designation?

The plaintiffs asserted that we failed to designate sufficient critical habitat to conserve and recover the species, believing that 15,000 acres was needed. However, most of the acres they requested for inclusion never supported the species and do not have the ability to support the species.

Where is the revised critical habitat for Salt Creek tiger beetle?

We are designating 1,110 acres of critical habitat along four streams: Little Salt Creek, Rock Creek, Oak Creek, and Haines Branch Creek. Little Salt Creek and Rock Creek are tributaries of Salt Creek, which flows through the city of Lincoln, Nebraska. Little Salt Creek, Oak Creek, and Haines Branch Creek are in Lancaster County, and Little Salt Creek contains the three populations of Salt Creek tiger beetle that exist currently, as well as the site of one extirpated population. Rock Creek is in Lancaster and southern Saunders Counties and contains the site of a population that was extirpated by 1999.

How much Salt Creek tiger beetle habitat has been lost?

Estimates of the extent of saline wetlands historically present in eastern Nebraska range from 16,000–65,000 acres. However, we do not know how much of this habitat may have been occupied by the beetle. At present, we estimate that 3,244 acres of functioning or restorable saline wetland habitat remain. Some of the remaining saline wetland habitat occurs in scattered, small patches that are not large enough to support the species, or occur on streams with no historical record of supporting the species. Only the portion of saline wetland that includes open, moist, saline mudflats or streambanks potentially provides suitable habitat for the Salt Creek tiger beetle. Approximately 122 acres of open, moist, saline mudflats or streambanks currently provide suitable habitat for the species; 35 acres of this habitat is currently occupied by the species. Critical habitat not currently occupied by the species provides essential functions including: protection of occupied habitat, dispersal corridors, habitat for other species of insects that the Salt Creek tiger beetle depends upon for food, and potential future habitat for the species.

What has caused the loss of Salt Creek tiger beetle habitat?

Habitat loss is the primary threat to the Salt Creek tiger beetle. Urbanization associated with the growth of the city of Lincoln, Nebraska, eliminated saline wetland habitat and resulted in the loss of the largest known population at Capitol Beach on Oak Creek. Road construction, including construction of Interstate 80, also destroyed habitat. Channelization of Salt Creek and the lower reaches of several of its tributaries eliminated or degraded habitat. Agricultural development can also have negative effects such as groundwater depletion, wetlands being drained, erosion of sediments into nearby streams, and trampling by grazing livestock.

Are there other threats to the Salt Creek tiger beetle?

The species' small population size (a few hundred individuals) and its limited range along a single stream (35 acres of occupied habitat) make it very vulnerable to extinction. The existing regulatory mechanisms do not address the threats of habitat destruction and limited population and distribution. The eastern saline wetlands are dependent upon saline groundwater discharge. Actions that deplete the aquifer can reduce salinity levels of the wetlands or even cause them to dry up.

What does a Salt Creek tiger beetle look like, and how does it live?

The Salt Creek tiger beetle is a fast-moving, predatory insect with an average length of 0.4 inches. The adult is dark brown shading to green, with lighter markings. The species has a 2-year life cycle of egg, larval, and adult stages. Adult females lay eggs in individual burrows in moist, saline mudflats and along the banks of seeps and streams. Upon hatching, each larva further excavates its burrow, where it lives for the next two years. Larvae are sedentary predators, catching prey that passes nearby. Following pupation, the adult emerges from its burrow in late spring to early summer of its second year and mates. Adults are typically active in May, June, and July before dying.

What is being done to conserve the Salt Creek tiger beetle?

The species was federally listed as endangered in 2005 and is protected under the Endangered Species Act. The Endangered Species Act provides a critical safety net for America's native fish, wildlife, and plants. This landmark conservation law has prevented the extinction of hundreds of imperiled species across the nation and promoted the recovery of many others. We are presently developing a recovery plan for the species. The species was also state-listed as endangered under Nebraska's endangered species act in 2000.

The State of Nebraska has drafted an implementation plan for the conservation of Nebraska's eastern saline wetlands. The goals of this plan include no net loss of saline wetlands and a long-term gain in saline wetland functions, which would result in protecting the species' habitat. The plan also led to the development of the Saline Wetlands Conservation Partnership. Participants include Nebraska Game and Parks Commission, the City of Lincoln, Lancaster County, Lower Platte South Natural Resources District, and The Nature Conservancy. The Partnership works to purchase saline wetland areas and acquire conservation easements. Overall, approximately 29 percent of the proposed critical habitat is protected through these acquisitions. Additionally, there are other important recovery actions that are underway to help protect the saline wetlands including habitat restoration projects. We believe that these actions and the proposed designation of critical habitat collectively will act to protect the saline wetland system for the benefit of the Salt Creek tiger beetle.

Why is the Salt Creek tiger beetle important?

The Salt Creek tiger beetle is unique to Nebraska's eastern saline wetlands—the most limited and endangered wetland type in the State. It is characteristic of high value saline wetlands. Therefore, its presence is indicative of a well-functioning saline wetland. These saline wetlands have been isolated from other salt marsh communities for thousands of years. Consequently, the Salt Creek tiger beetle provides an extraordinary opportunity to address questions of divergence and evolution.

Additionally, the health of threatened and endangered species is strongly linked to our own well-being. Millions of Americans depend on habitat that sustains these species – for clean air and water, recreational opportunities and for their livelihoods. By taking action to protect imperiled native fish, wildlife and plants, we can ensure a healthy future for our community and protect treasured landscapes for future generations.