March 18, 2008

Public Comments Processing
Attn: RIN 1018– AT79
Division of Policy and Directives Management
U.S. Fish and Wildlife Service
4401 N. Fairfax Drive, Suite 222
Arlington, VA 22203

Re: Comments on the Proposed Designation of Critical Habitat for the Endangered Salt Creek Tiger Beetle

These comments are regarding the Proposed Designation of Critical Habitat for the Endangered Salt Creek Tiger Beetle, *Cincindela nevadica lincolniana* (50 CFR Part 17 Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Salt Creek Tiger Beetle (*Cicindela nevadica lincolniana*); Proposed Rule Federal Register / Vol. 72, No. 238 / Wednesday, December 12, 2007 / Proposed Rules).

The 1795 acres (727 hectares) proposed is not adequate pursuant to the Endangered Species Act, 16 U.S.C. § 1531 et seq. ("ESA") and cannot be scientifically or legally justified. The crux of these comments is quite simple. The ESA requires that critical habitat designations include those geographic areas needed to achieve the "conservation" of a species, i.e., recovery of the species to the point that it may be taken off the endangered species list. The US Fish and Wildlife Service (USFWS) has failed to do this in designating 1795 acres of critical habitat for the Salt Creek Tiger Beetle.

The ESA is a federal statute whose purpose is to conserve "the ecosystems upon which endangered species and threatened species depend" and "to provide a program for the conservation of such endangered species" [16 U.S.C. § 1531(b)]. To this end, the ESA requires that the USFWS protect such species by listing them as either "threatened" or "endangered," and by creating "critical habitat" for each listed threatened and endangered species (16 U.S.C. § 1533). The protections of critical habitat are important because, once designated, these areas are subject to a prohibition of "destruction or adverse modification" by any action authorized, funded, or carried out by any federal agency [16 U.S.C. § 1536(a)(2)]. "Critical habitat" means those geographic areas, both occupied and unoccupied by a species, that are essential to the "conservation" of a species [16 U.S.C. § 1532(5)(A)]. "Conservation" means "the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to this chapter are no longer necessary" [16 U.S.C. § 1532(3)].

In 2005 the USFWS developed a *Draft Strategy for the Designation of Critical Habitat for the Salt Creek Tiger Beetle* Cicindela nevadica lincolniana*, Advanced Concept Paper* (USFWS 2005); (this Advanced Concept paper is attached as a pdf). This paper was prepared by biologists from the University of Nebraska-Lincoln, Nebraska Game and Parks Commission, Lower South Platte Natural Resource District and the Nebraska Field

Office of the U.S. Fish and Wildlife Service. Three independent peer-reviewers, each knowledgeable about the conservation of rare and listed tiger beetles and other insects, reviewed and concurred with the strategy. The paper proposes 36,906 acres (14,935 ha), comprising ten recovery units, as critical habitat for the Salt Creek Tiger Beetle (USFWS 2005).

The authors proposed the establishment of six sustainable source populations and six peripheral populations based on extensive evaluation of the population status for the Salt Creek Tiger Beetle and intensive identification of recovery units. The authors also concluded that the distribution of the six populations necessary to conserve the Salt Creek Tiger Beetle should be throughout multiple stream systems in the Salt Creek basin, as opposed to a single stream (USFWS 2005).

The proposal is based on an evaluation of population status consisting of minimum sustainable population number, distribution, size, and the selection of recovery units based on the presence of physical and biological features or primary constituent elements that have been determined to be essential for the conservation of the Salt Creek Tiger Beetle (USFWS 2005).

The conclusion supporting the need for six populations of the Salt Creek Tiger Beetle is comparable to conclusions made for other listed tiger beetles whose metapopulation protection strategies are similar to that of the Salt Creek Tiger Beetle (Murphy et al. 1990). For example, the recovery plan for the Puritan tiger beetle *(C. puritana)* identified that a minimum number of six populations (and several peripheral populations) needed to be protected to sustain this insect (Hill and Knisley 1993). Further, their conclusion that sustainable source populations should be distributed among multiple stream systems addresses concerns made by other researchers regarding the risk from adverse or unpredictable habitat impacts and weather events should a few populations be located in close proximity to each other. For example, Murphy et al. (1990) and Howe et al. (1991) stressed that greater emphasis should be placed on the maintenance of multiple metapopulations as opposed to simply protecting single reservoir populations. Local extinctions caused by habitat deterioration and stochastic weather events are frequent for species whose life histories were characterized by short generation time, small body size, high rates of population increase, and high habitat specificity (Murphy et al. 1990 and Ruggerio et al. 1994). The Salt Creek Tiger Beetle is extremely vulnerable to extinction because of its life history characteristics.

USFWS subsequently asked the authors of the Advance Concept Paper (USFWS 2005) to revise and lower the acreage of the critical habitat proposal (Spomer personnel communication 2007). The authors revised their recommendation to 15,000 acres of critical habitat, distributed across six recovery areas: (1) Upper Salt Creek, (2) Haines Branch/Middle Creek, (3) Oak Creek, (4) Little Salt Creek, (5) Lower Salt Creek, and (6) Rock Creek. Of these six areas, one is currently occupied by the Salt Creek Tiger Beetle (Little Salt Creek) and two were previously occupied (Rock Creek, Oak Creek). Based on existing recovery plans of other endangered/threatened tiger beetles, they felt that establishing minimum (500-1000 individuals) populations at each of these six sites would

reduce the likelihood of a catastrophic event wiping out the species (Spomer 2008). Some team members felt that 15,000 acres was the bare minimum needed to allow the species to recover (Spomer personnel communication 2007).

The USFWS then proposed only 1795 acres (727 hectares) of critical habitat in four small habitat areas (Proposed Rule Federal Register / Vol. 72, No. 238 / Wednesday, December 12, 2007). There is no rational for the USFWS to cut over 13,000 acres from the previous proposal. The USFWS has not provided any scientific justification for how 1795 acres would allow the recovery and long term maintenance of the Salt Creek tiger beetle. One of the authors of the Advanced Concept Paper (USFWS 2005) has called the decrease from 15,000 acres to 1,795 acres ludicrous (Spomer 2008).

As stated above, a critical habitat designation must contain sufficient areas such that if those areas are restored and protected, and an endangered species is successfully reintroduced into such areas if currently unoccupied, then the species may be "delisted."

The best available scientific evidence as presented in the Advanced Concept Paper (USFWS 2005) clearly shows that the current proposed critical habitat is woefully inadequate for the recovery and long term maintenance, let alone the delisting, of the Salt Creek Tiger Beetle.

Sincerely,

Scott Hoffman Black Executive Director Xerces Society 4828 SE Hawthorne Blv. Portland, OR 97215	Michael Senatore Center for Biological Diversity 1601 Connecticut Avenue, N.W., Suite 701 Washington, D.C. 20009

Literature Cited

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USFWS. 2005. Draft Strategy for the Designation of Critical Habitat for the Salt Creek Tiger Beetle *Cicindela nevadica lincolniana*, Advanced Concept Paper. 4 May 2005. (attached as a PDF)

Personal Communication

Stephen M. Spomer, Research Entomologist, University of Nebraska August 2007.