

QUESTIONS AND ANSWERS MIAMI TIGER BEETLE PROPOSED LISTING RULE

1. What action is the Service proposing?

The U.S. Fish and Wildlife Service is publishing a proposed rule to list the Miami tiger beetle as endangered under the Endangered Species Act (ESA).

2. Why is the Service proposing to list the Miami tiger beetle and what criteria did the Service use?

Based on best available science, the Service has determined that the Miami tiger beetle is currently at risk of extinction throughout all of its range.

Under the ESA, we can determine that a species is endangered or threatened based on any of five factors:

- (A) The present or threatened destruction, modification, or curtailment of its habitat or range;
- (B) Overutilization for commercial, recreational, scientific, or educational purposes;
- (C) Disease or predation;
- (D) The inadequacy of existing regulatory mechanisms; or
- (E) Other natural or man-made factors affecting its continued existence.

Habitat loss, degradation, and fragmentation have destroyed an estimated 98 percent of the historical Miami-area pine rockland habitat, with only two known Miami tiger beetle populations remaining. It was thought to be extinct before two populations were found in the past decade. The threat of habitat loss is continuing from development, inadequate habitat management, encroaching vegetation, and environmental effects resulting from climatic change (Factors A, E). Because of its restricted range, small population size, few populations, and relative isolation (Factor E), collection is a significant threat to the species and could potentially occur at some locations at any time (Factors B, D). Additionally, the species is currently threatened by a wide array of natural and man-made factors (Factor E). Existing regulatory mechanisms do not provide adequate protection for the species (Factor D).

3. Is a critical habitat designation for the Miami tiger beetle part of this proposal?

No. Critical habitat is not being proposed at this time. If the Miami tiger beetle is listed under the ESA, critical habitat will be proposed later in a separate action that is anticipated to publish by the fall of 2016. The Service's biologists are seeking information from the public and peer reviewers on critical habitat parameters in this proposed listing rule.

4. What is the Richmond Pine Rocklands?

The Richmond Pine Rocklands is a mixture of publically and privately owned lands that retains the largest area of contiguous pine rockland habitat (approximately 503 hectares (1,243 acres))

outside of Everglades National Park. Seven federally listed species or their critical habitat, if applicable, are currently found within the Richmond Pine Rocklands, including species such as Florida bonneted bat, Bartram's scrub-hairstreak butterfly, Florida leafwing butterfly, Florida brickell-bush, Carter's small-flowered flax, deltoid spurge, and tiny polygala.

5. Was this proposed listing triggered by plans to develop areas in the Richmond Pine Rocklands area of Miami?

No single development plan triggered this proposed listing. The Miami tiger beetle is currently threatened by a wide array of factors, and the threat from proposed development in the Richmond Pine Rocklands area is one of the threats considered under Factor A, "the present or threatened destruction, modification, or curtailment of its habitat or range."

6. How might the Miami tiger beetle's proposed listing affect landowners' ability to develop or sell their land?

If this proposed listing becomes final, Section 7(a)(4) of the ESA requires a federal agency to talk with the Service if an action is likely to jeopardize the continued existence of a proposed species. For non-federal entities (e.g., Miami-Dade County and University of Miami), it is recommended that the proposed species be included as a covered species when developing Habitat Conservation Plans under Section 10 of the ESA.

Sections 7 and 10 of the ESA would apply, requiring consideration of the species in any actions that may affect it, including development or management of lands. The sale or transfer of lands that involves the Federal Government (e.g., Coast Guard) would likely require review under the ESA and the National Environmental Policy Act depending on the ultimate intended use of the land. Consultation under Section 7 of the ESA may be required based on whether a listed species is present and the ultimate intended use of the land. It is prudent for the parties involved to discuss the presence of listed species prior to finalization of any sale or transfer of lands.

7. How might this proposed listing affect proposed development in the Richmond Pine Rocklands?

We are aware of two large developments proposed in the Richmond Pine Rocklands: Miami Wilds at Zoo Miami and Coral Reef Commons by Ram and the University of Miami. Those lands have not been fully surveyed for the beetle. The Service is working closely with prospective developers and key stakeholders in Miami-Dade County to consider the Miami tiger beetle in development or management plans.

In a December 2, 2014, letter, the Service notified Miami-Dade County about concerns regarding the proposed development's effects to listed, candidate, and imperiled species, including the Miami tiger beetle. Service biologists and managers also have met with Miami-Dade officials and provided recommended survey guidelines for already protected species and for the Miami tiger beetle. With regard to Coral Reef Commons, the Service notified Ram of concerns regarding development in the Richmond Pine Rocklands in a July 15, 2014, letter. The Service has met with representatives of Ram and the University of Miami and is currently reviewing an

Incidental Take Permit Application and the associated draft Habitat Conservation Plan for the proposed development. The earliest anticipated date for completing the HCP process is spring 2017.

8. Is the Service already working with landowners to try to protect rare pine rocklands in this area?

We are coordinating with federal, state, county, and private stakeholders to notify them of our proposed actions, seek their support, and refine strategies essential to survival and conservation of the beetles. We have a good working relationship with most stakeholders and have received their assistance in pulling together information for this proposed listing action. Coordination to date includes obtaining information about habitat quality and management efforts and constraints. Reactions of key partners have so far been positive.

9. How will protected status for these beetles impact the ability of the Mosquito Control District to do its job of protecting the health and well-being of South Florida citizens?

Although the effects of pesticides and contaminants on the Miami tiger beetle have not been directly studied, the species may be exposed to a variety of compounds through multiple routes of exposure. The Service plans to build upon its evolving partnerships with the Miami-Dade Mosquito Control District, Florida Department of Agriculture and Consumer Services, and others and encourage partners to, wherever possible, avoid or minimize pesticide application in occupied and suitable habitat to increase the likelihood of survival and conservation. Most recently, Miami-Dade Mosquito Control District implemented spray buffers for listed butterflies, which should also significantly reduce potential threats to the Miami tiger beetle.

10. Is the Miami tiger beetle a separate species from the scrub tiger beetle or Highlands tiger beetle?

Yes. The most current peer-reviewed scientific information confirms that the Miami tiger beetle (*Cicindelidia floridana*) is a separate species, and this taxonomy is used by the scientific community.