Recently, the Service's Alabama Ecological Services Field Office learned that a specimen at the Museum of Comparative Zoology in Boston, Massachusetts, identified by T.A. Conrad as A. melanoides is not the same species that was described by Minton et al. (2003). Therefore, we cannot with any certainty determine the status of either the entity that Conrad (1834) first described as A. melanoides, or the entity that Minton et al. (2003) redescribed as E. melanoides. Additional taxonomic review, led by the Smithsonian Institution, is underway as of early 2016. The results of this review will require additional efforts to define Elimia spp. boundaries, status, and distribution within the Black Warrior River Basin.

Finding

The Act only allows listing of "species" as defined under Section 3(16)—that is, recognized species, subspecies, or distinct population segments of vertebrates. Based on our review of the best available scientific and commercial information, and in light of the best available scientific information regarding taxonomic uncertainty described above, we conclude that the black mudalia is not currently a recognized "species." We are therefore removing the black mudalia from candidate status pending further study.

As a result of the Service's 2011 multidistrict litigation settlement with the Center for Biological Diversity and WildEarth Guardians, the Service is required to submit a proposed listing rule or a not-warranted 12-month finding to the **Federal Register** by September 30, 2016 (In re: Endangered Species Act Section 4 Deadline Litigation, No. 10-377 (EGS), MDL Docket No. 2165 (D.D.C. May 10, 2011)), for all 251 species that were included as candidate species in the Service's November 10, 2010, CNOR. This document satisfies the requirements of that settlement agreement for the black mudalia, and constitutes the Service's 12-month finding on the April 20, 2010, petition to list the black mudalia as an endangered or threatened species. A detailed discussion of the basis for this finding can be found in the black mudalia's species-specific assessment form and other supporting documents (see ADDRESSES, above).

Highlands Tiger Beetle (Cicindela highlandensis)

Previous Federal Actions

The Highlands tiger beetle was first recognized as a candidate species on

November 21, 1991 (56 FR 58804), when we assigned the species an LPN of 2. In the October 30, 2001, CNOR (66 FR 54808), we changed the LPN for the Highlands tiger beetle from 2 to 5, because the immediacy of threats to the species' scrub habitat had decreased with the acquisition of scrub habitat by the State of Florida and conservation groups. On May 11, 2004, the Service received a petition dated May 4, 2004, from the Center for Biological Diversity and others to list 225 species as endangered or threatened, including the Highlands tiger beetle. The species was maintained as a candidate with an LPN of 5 through the 2015 CNOR (see June 13, 2002 (67 FR 40657); May 4, 2004 (69 FR 24876); May 11, 2005 (70 FR 24870); September 12, 2006 (71 FR 53756), December 6, 2007 (72 FR 69034), December 10, 2008 (73 FR 75176), November 9, 2009 (74 FR 57804), November 10, 2010 (75 FR 69222), October 26, 2011 (76 FR 66370), November 21, 2012 (77 FR 69994), November 22, 2013 (78 FR 70104), December 5, 2014 (79 FR 72450), and December 24, 2015 (80 FR 80584)).

Background

The Highlands tiger beetle is elongate with an oval shape and bulging eyes, and is one of the smallest (7.0-9.5 mm) (0.28-0.37 in) tiger beetles in the United States. As is typical of other tiger beetles, adult Highlands tiger beetles are active diurnal predators that use their keen vision to detect movement of small arthropods and run quickly to capture prey with their well-developed mandibles (jaws). Tiger beetle larvae have an elongate white grub-like body and a dark or metallic head with large mandibles. Larvae are sedentary sit-andwait predators occurring in permanent burrows flush with the ground surface. When feeding, larvae position themselves at the burrow mouth and quickly strike at and seize small arthropods that pass within a few centimeters of the burrow mouth. Larvae prey on small arthropods, similar to adults.

The Highlands tiger beetle occurs primarily in open sandy patches of Florida scrub habitat on the Lake Wales Ridge in Highlands and Polk Counties. The Lake Wales Ridge is one of the largest and oldest Florida scrub ecosystems. The harsh environment on the Lake Wales Ridge is characterized by hot weather, nutrient-poor sandy soils, and (historically) frequent wildfires. The Highlands tiger beetle is often associated with evergreen scrub oaks, as well as high pineland with deciduous turkey oak (Quercus laevis) and longleaf pine (Pinus palustris).

High-quality habitat for the species is primarily scrub or sandhill having natural or management-created interior patches with a high percent of open sand (greater than 50 percent) that is continuous or connected to adjacent open patches by lightly disturbed trails or paths. The known extant range of the Highlands tiger beetle exists in the core of the suitable (scrub) habitat in the central and south-central portion of the Lake Wales Ridge, approximately 90 km (56 mi) in length and about 10 km (6 mi) in width).

Summary of Status Review

The following summary is based on information contained in our files. The Highlands tiger beetle is narrowly distributed and restricted to areas of bare sand within scrub and sandhill on ancient sand dunes of the Lake Wales Ridge in Polk and Highlands Counties, Florida. Adult tiger beetles have been found in 56 of the total 71 sites surveyed at the core of the Lake Wales Ridge. In 2004-2005 surveys, a total of 1,574 adults were found at four sites. A total of 643 adults at 31 sites were found in 1996, 928 adults at 31 sites in 1995, and 742 adults at 21 sites in 1993. A visual reference count of 2,231 adults was found from 46 sites in 2014. This increase in index counts over time can be attributed to new survey sites and finding a large number of beetles at these sites. Estimates from the visual reference (index) counts are used to provide an estimate of the populations. Results from a limited removal study suggest that the actual population size at some survey sites can be as much as two to three times as high as the visual reference. In addition, surveys for Highland tiger beetles were not exhaustive, and there are additional potential suitable habitats. An estimate of beetle numbers likely present in these additional potential habitats added to the modified index count produces an estimated minimum total abundance of 10,438 adults in at least 16 populations. Based on these expanded surveys and the findings of additional large beetle populations at these sites, it is determined that the Highland tiger beetle is more abundant than previously documented, and its habitat is of much better quality than previously documented. Of the 15 sites with the largest populations, 7 sites show an increase in number of individuals. The number of occupied sites identified as high or good quality also increased from 13 in 2005, to 21 in 2014, and of the currently known sites nearly half of them (21 of 46) are of high or good quality.