Endangered and Threatened Wildlife and Plants; Proposed Listing of the Miami Blue Butterfly as Endangered, and Proposed Listing of the Cassius Blue, Ceraunus Blue, and Nickerbean Blue Butterflies as Threatened Due to Similarity of Appearance to the Miami Blue Butterfly

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule; request for public comments.
SUMMARY: We, the U.S. Fish and Wildlife Service (Service), propose to list the Miami blue butterfly (Cyclargus thomasi bethunebakeri) as endangered under the Endangered Species Act of 1973, as amended (Act). An emergency rule listing this subspecies as endangered for 240 days is published concurrently in this issue of the Federal Register. We also propose to list the cassius blue butterfly (Leptotes cassius theonus), ceraunus blue butterfly (Hemiargus ceraunus antibubastus), and nickerbean blue butterfly (Cyclargus ammon) as threatened due to similarity of appearance to the Miami blue, with a special rule pursuant to section 4(d) of the Act. We solicit additional data, information, and comments that may assist us in making a final decision on this proposed action.

DATES: Comments from all interested parties must be received by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]. Public hearing requests must be received by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may submit comments by one of the following methods:


- U.S. mail or hand-delivery: Public Comments Processing, Attn: FWS-R4-ES-2011-0043; Division of Policy and Directives Management; U.S. Fish and
Wildlife Service; 4401 North Fairfax Drive, MS 2042-PDM; Arlington, VA
22203.

We will post all comments on http://www.regulations.gov. This generally means that we will post any personal information you provide us (see Public Comments section below for more information).

FOR FURTHER INFORMATION CONTACT: Paula Halupa, Fish and Wildlife Biologist, U.S. Fish and Wildlife Service, South Florida Ecological Services Office, 1339 20th Street, Vero Beach, Florida 32960-3559 by telephone 772-562-3909, ext. 257 or by electronic mail: miamiblueinfo@fws.gov.

SUPPLEMENTARY INFORMATION:

Public Comments Solicited

Our intent is to use the best available commercial and scientific data as the foundation for all endangered and threatened species classification decisions. Therefore, we request comments or suggestions from other concerned governmental agencies, the scientific community, industry, or any other interested party concerning this proposed rule to list the Miami blue butterfly (Cyclargus thomasi bethunebakeri) as endangered. We particularly seek comments concerning:
(1) Biological, commercial trade, or other relevant data concerning any threat (or lack thereof) to the Miami blue butterfly;

(2) The location of any additional populations of the Miami blue butterfly within or outside the United States;

(3) Additional information regarding the taxonomy, genetics, life history (e.g., dispersal capabilities, host plants, nectar sources, dependence on ants), range, distribution, population size, and metapopulation dynamics of the Miami blue;

(4) Current or planned activities in occupied or potential habitat and their possible impacts to the Miami blue;

(5) The reasons why any habitat should or should not be determined to be critical habitat for the Miami blue as provided by section 4 of the Act, including physical and biological features within areas occupied or specific areas outside of the geographic area occupied that are essential for the conservation of the subspecies;

(6) Threats to the Miami blue butterfly from collection of or commercial trade involving the cassius blue butterfly (Leptotes cassius theonus), ceraunus blue butterfly (Hemiargus ceraunus antibubastus), and nickerbean blue butterfly (Cyclargus ammon), due to the Miami blue’s similarity in appearance to these species.
(7) Effects of the proposed 4(d) special rule to establish prohibitions on collection of, or commercial trade involving, the cassius blue butterfly, ceraunus blue butterfly, and nickerbean blue butterfly).

Please note that submissions merely stating support for or opposition to the action under consideration without providing supporting information, although noted, will not be considered in making a determination, as section 4(b)(1)(A) of the Act directs that determinations as to whether any species is an endangered or threatened species must be made “solely on the basis of the best scientific and commercial data available.”

You may submit your comments and materials concerning this proposed rule by one of the methods listed in ADDRESSES. We will not accept comments sent by e-mail or fax or to an address not listed in ADDRESSES. Comments must be submitted to http://www.regulations.gov before 11:59 p.m. (Eastern Time) on the date specified in DATES. We will not consider hand-delivered comments that we do not receive, or mailed comments that are not postmarked, by the date specified in DATES.

We will post your entire comment—including your personal identifying information—on http://www.regulations.gov. If you provide personal identifying information in your comment, you may request at the top of your document that we withhold this information from public review. However, we cannot guarantee that we
Comments and materials we receive, as well as supporting documentation we used in preparing this proposed rule, will be available for public inspection on, or by appointment, during normal business hours at the South Florida Ecological Services Office (see FOR FURTHER INFORMATION CONTACT section).

Background

The Miami blue butterfly is known to occur on only a few, small remote islands within the Florida Keys. The geographic range of this butterfly, which once extended from the Dry Tortugas north along the Florida coasts to about St. Petersburg and Daytona, has been severely reduced. The subspecies is now restricted to Key West National Wildlife Refuge (KWNWR), Monroe County, Florida, where the only confirmed metapopulation(s) (group of smaller populations that have some interaction) occurs. No other extant populations are known at this time. In 2009, metapopulations existed at two main locations: Bahia Honda State Park (BHSP) and KWNWR, roughly 50 miles (80 kilometers [km]) apart. The metapopulation at KWNWR was believed to be several hundred adults in 2007, possibly more, with fewer reported in 2009 through July 2011. From 1999 to 2009, the metapopulation at BHSP appeared to be generally restricted to 200 adults or fewer. This metapopulation may now be extirpated; no adults have been located at BHSP since July 2010. The remaining metapopulation(s) occurs
entirely within KWNWR. Abundance is not known, but is estimated in the hundreds or fewer. Recent available count data are limited, but show wide fluctuations.

The Miami blue butterfly is imminently threatened by the combined influences of habitat destruction or modification, herbivory of host plants by exotic green iguanas (*Iguana iguana*), illegal collection, accidental harm from humans, restricted range, small population size, loss of genetic heterogeneity, and catastrophic environmental events. Predation and disease may also be a threat due to the small population size. The Miami blue butterfly, if it is found to persist elsewhere in its historical range (i.e., outside of its most recent known occurrences), is threatened by habitat loss and fragmentation, pesticide application from mosquito control practices, displacement of native host plants by invasive exotic species, detrimental land management practices, inadequate regulatory protection, restricted genetic exchange, and vulnerability to extirpation from severe or catastrophic weather events in addition to the threats listed above. Environmental effects from climatic change, including sea level rise, are also significant long-term threats that are expected to substantially reduce the butterfly’s habitat in both its current and historical range.

For an extensive discussion of biological background information, previous Federal actions, factors affecting the subspecies, our determination of status under the Act, conservation measures available to listed and proposed species, similarity of appearance, and special rules, consult the emergency rule for the Miami blue butterfly
published concurrently in this issue of the Federal Register.

Critical Habitat and Prudence Determination

Critical habitat is defined in section 3(5)(A) of the Act as (i) the specific areas within the geographic area occupied by a species, at the time it is listed in accordance with the Act, on which are found those physical or biological features (I) essential to the conservation of the species and (II) that may require special management considerations or protection; and (ii) specific areas outside the geographic area occupied by a species at the time it is listed, upon a determination that such areas are essential for the conservation of the species. Conservation is defined in section 3(3) of the Act as the use of all methods and procedures that are necessary to bring any endangered or threatened species to the point at which listing under the Act is no longer necessary.

Section 4(a)(3) of the Act, as amended, and implementing regulations (50 CFR 424.12), require that, to the maximum extent prudent and determinable, we designate critical habitat at the time we determine that a species is endangered or threatened. Our regulations (50 CFR 424.12(a)(1)) state that the designation of critical habitat is not prudent when one or both of the following situations exist: (1) The species is threatened by taking or other human activity, and identification of critical habitat can be expected to increase the degree of threat to the species, or (2) such designation of critical habitat would not be beneficial to the species. We have determined that both circumstances
apply to the Miami blue butterfly. This determination involves a weighing of the expected increase in threats associated with a critical habitat designation against the benefits gained by a critical habitat designation. An explanation of this “balancing” evaluation follows.

*Increased Threat to the Subspecies by Designating Critical Habitat*

Designation of critical habitat requires the publication of maps and a narrative description of specific critical habitat areas in the **Federal Register**. The degree of detail in those maps and boundary descriptions is greater than the general location descriptions provided in this proposal to list the species as endangered. We are concerned that designation of critical habitat could more widely announce the exact location of the butterflies to poachers, collectors, and vandals and further facilitate unauthorized collection and trade. Due to its extreme rarity (a low number of individuals, combined with small areas inhabited by the remaining metapopulation), this butterfly is highly vulnerable to collection. Vandalism, disturbance, and other harm from humans are also serious threats to the butterfly and its habitat (see Factors B and E of emergency rule). At this time, removal of any individuals or damage to habitat may have devastating consequences for the survival of the subspecies. We believe that these threats will be exacerbated by the publication of maps and descriptions outlining the specific locations of this critically imperiled butterfly in the **Federal Register** and local newspapers. Maps
and descriptions of critical habitat, such as those which would appear in the Federal Register if critical habitat were designated, are not now available to the general public.

Although we do not have specific evidence of taking for this subspecies, illegal collection of imperiled butterflies from State, Federal, and other lands in Florida appears ongoing, prevalent, and damaging (see Factor B analysis of emergency rule for specific cases). In addition, we are aware that a market exists for trade in rare, imperiled, and listed butterflies, including those in south Florida (see Factor B analysis of emergency rule). For example, there is currently a demand for two other butterflies from south Florida that are candidates for listing under the Act, the Florida leafwing (*Anaea troglodyta floridalis*) and Bartram’s hairstreak (*Strymon acis bartrami*). At least one website we are aware of offers specimens of the Florida leafwing and Bartram’s hairstreak for up to €110.00 and €10.00 (euros), respectively (approximately $154.00 and $14.00) (Lit. cited 2011a). A forum on another website documents strong interest in trade or outright purchase of specimens among collectors (Lit. cited 2011b). Although it is unclear from where the specimens originated or when they were collected, these butterflies occur predominantly on conservation lands, where collection is prohibited.

Additionally, we are aware of a market for butterflies that look similar to the Miami blue, including all three of the subspecies proposed for listing due to similarity of appearance (see emergency rule), as well as other *Cyclargus thomasi* subspecies that occur in foreign countries. It is clear that a demand currently exists for both imperiled
butterflies and those similar in appearance to the Miami blue. Due to the few metapopulations, small population size, restricted range, and remoteness of occupied habitat, we believe that collection is a significant threat to the Miami blue butterfly and could occur at any time. Even limited collection from the remaining population (or other populations, if discovered) could have deleterious effects on reproductive and genetic viability and thus could contribute to its extinction. Identification of critical habitat would increase the severity of this threat by spatially depicting exactly where the subspecies may be found and more widely publicizing this information, exposing the fragile population and its habitat to greater risks.

Identification and publication of critical habitat may also increase the likelihood of inadvertent or purposeful habitat destruction. Damage to host plants from humans has been documented in the past (see Factor E of emergency rule). Recreation within occupied areas has resulted in trampling of vegetation and negative impacts to the subspecies and its habitat (see Factor E of emergency rule). High visitation and illicit uses (e.g., fire pits, camping, vandalism) within occupied and suitable habitat have resulted in local disturbances (see Factor E of emergency rule). Identification and advertisement of critical habitat will likely generate interest by the public, potentially leading to additional use of and increased risk to sensitive habitats. Inadvertent impacts from humans, including human-induced fire, are now significant threats to habitat within portions of the subspecies’ occupied range (see Factor E of emergency rule). Immature stages (eggs, larvae), which are sedentary, are particularly vulnerable. Identification and
publication of critical habitat would likely increase exposure of sensitive habitats and increase the likelihood and severity of threats to both the subspecies and its habitat.

Identification and publication of critical habitat would also likely increase enforcement problems. Though take prohibitions exist, effective enforcement is difficult. As discussed in Factors B, D, and E and elsewhere in the emergency rule, the threat of collection and inadvertent impacts from humans exists; areas are already difficult to patrol. Areas within the KWNWR are remote and accessible mainly by boat, making them difficult for law enforcement personnel to patrol and monitor. We believe that designation of critical habitat would facilitate further use and misuse of sensitive habitats and resources, creating additional difficulty for law enforcement personnel in an already challenging environment. Overall, we believe that designation of critical habitat will increase the likelihood and severity of the threats of illegal collection of the subspecies and destruction of sensitive habitat, as well as exacerbate enforcement issues.

Benefits to the Subspecies from Critical Habitat Designation

It is true that designation of critical habitat for the Miami blue butterfly within the KWNWR or BHSP would have some beneficial effects. Section 7(a)(2) of the Act requires Federal agencies, including the Service, to ensure that actions they fund, authorize, or carry out are not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of
that species’ critical habitat (see Available Conservation Measures and Jeopardy Standard sections of the emergency rule). Critical habitat only provides protections where there is a Federal nexus, that is, those actions that come under the purview of section 7 of the Act. Critical habitat designation has no application to actions that do not have a Federal nexus. Section 7(a)(2) of the Act mandates that Federal agencies, in consultation with the Service, evaluate the effects of its proposed action on any designated critical habitat. Similar to the Act’s requirement that a Federal agency action not jeopardize the continued existence of listed species, Federal agencies have the responsibility not to implement actions that would destroy or adversely modify designated critical habitat. Critical habitat designation alone, however, does not require that a Federal action agency implement specific steps toward species recovery.

All areas known to support the Miami blue butterfly during the past 13 years are or have been on Federal or State lands; these areas are currently being managed for the subspecies. Management efforts are consistent with, and geared toward, Miami blue conservation, and such efforts are expected to continue in the future. Because the butterfly exists only as one or possibly two small metapopulations, any future activity involving a Federal action that would destroy or adversely modify critical habitat would also likely jeopardize the subspecies’ continued existence (see Jeopardy Standard within emergency rule). Consultation with respect to critical habitat would provide additional protection to a species only if the agency action would result in the destruction or adverse modification of the critical habitat but would not jeopardize the continued existence of
the species. In the absence of a critical habitat designation, areas that support the Miami blue butterfly will continue to be subject to conservation actions implemented under section 7(a)(1) of the Act and to the regulatory protections afforded by the section 7(a)(2) jeopardy standard, as appropriate. Federal actions affecting the Miami blue butterfly even in the absence of designated critical habitat areas will still benefit from consultation pursuant to section 7(a)(2) of the Act and may still result in jeopardy findings. Therefore, designation of specific areas as critical habitat that are currently occupied or recently occupied is unlikely to provide measurable benefit to the subspecies.

Another potential benefit to the Miami blue butterfly from designating critical habitat is that it could serve to educate landowners, State and local government agencies, Refuge or Park visitors, and the general public regarding the potential conservation value of the area. Through the processes of listing the butterfly under the State of Florida’s endangered species statute in 2002 and the recognition of the Miami blue as a Federal candidate subspecies in 2005, much of this educational component is already in effect. Agencies, organizations, and stakeholders are actively engaged in efforts to raise awareness for the butterfly and its conservation needs. For example, the North American Butterfly Association has a Miami blue chapter, which helps promote awareness for the subspecies. The Florida Fish and Wildlife Conservation Commission and partners have also formed a workgroup, in part to raise awareness for imperiled butterflies in south Florida. Staff at BHSP have also recruited volunteers to help search for the subspecies within the Park and surrounding areas, and they have organized speakers to inform the
general public about the butterfly. In addition, designation of critical habitat could inform State agencies and local governments about areas that could be conserved under State laws or local ordinances. However, since awareness and education involving the Miami blue is already well underway, designation of critical habitat would likely provide only minimal incremental benefits.

*Increased Threat to the Subspecies Outweighs the Benefits of Critical Habitat Designation*

Upon reviewing the available information, we have determined that the designation of critical habitat would increase the threat to the Miami blue butterfly from unauthorized collection and trade, and may further facilitate inadvertent or purposeful disturbance and vandalism to the Miami blue’s habitat. At the same time, we believe that designation of critical habitat is likely to confer little measurable benefit to the subspecies beyond that provided by listing. Overall, we believe that the risk of increasing significant threats to the subspecies by publishing location information in a critical habitat designation greatly outweighs the benefits of designating critical habitat.

In conclusion, we find that the designation of critical habitat is not prudent, in accordance with 50 CFR 424.12(a)(1), because the Miami blue butterfly is threatened by collection and habitat destruction, and designation can reasonably be expected to increase the degree of these threats to the subspecies and its habitat. Critical habitat designation
could provide some benefit to the subspecies, but these benefits are significantly outweighed by the increased risk of collection pressure, habitat destruction, and enforcement problems that could result from depicting, through publicly available maps and descriptions, exactly where this extremely rare butterfly and its habitat can be found. However, we seek public comment on our determination that designation of critical habitat is not prudent (see Public Comments Solicited section earlier in this rule for instructions on how to submit comments).

*Peer Review*

In accordance with our policy, “Notice of Interagency Cooperative Policy for Peer Review in Endangered Species Act Activities,” that was published on July 1, 1994 (59 FR 34270), we will seek the expert opinion of at least three appropriate independent specialists regarding this proposed rule. The purpose of such a review is to ensure listing decisions are based on scientifically sound data, assumptions, and analysis. We will send copies of this proposed rule to the peer reviewers immediately following publication in the *Federal Register*. We will invite these peer reviewers to comment, during the public comment period, on the specific assumptions and the data that are the basis for our conclusions regarding the proposal to list the Miami blue butterfly as endangered and our prudency determination regarding critical habitat for this subspecies.
We will consider all comments and information we receive during the comment period on this proposed rule during preparation of a final rulemaking. Accordingly, our final decision may differ from this proposal.

Public Hearings

The Act provides for one or more public hearings on this proposal, if requested. Requests must be received within 45 days after the date of publication of this proposal in the Federal Register (see DATES). Such requests must be sent to the address shown in FOR FURTHER INFORMATION CONTACT. We will schedule public hearings on this proposal, if any are requested, and announce the dates, times, and places of those hearings, as well as how to obtain reasonable accommodation, in the Federal Register and local newspapers at least 15 days before the hearing.

Persons needing reasonable accommodation to attend and participate in a public hearing should contact the South Florida Ecological Services Field Office at 772-562-3909, as soon as possible. To allow sufficient time to process requests, please call no later than one week before the hearing date. Information regarding this proposed rule is available in alternative formats upon request.

National Environmental Policy Act
We have determined that an Environmental Assessment or Environmental Impact Statement, as defined under authority of the National Environmental Policy Act of 1969, need not be prepared in connection with regulations adopted pursuant to section 4(a) of the Act. We published a notice outlining our reasons for this determination in the Federal Register on October 25, 1983 (48 FR 49244).

*Paperwork Reduction Act (44 U.S.C. 3501, et seq.)*

This proposed rule does not contain any new collections of information that require approval by the Office of Management and Budget (OMB) under the Paperwork Reduction Act. This rule will not impose new recordkeeping or reporting requirements on State or local governments, individuals, businesses, or organizations. We may not conduct or sponsor, and you are not required to respond to, a collection of information unless it displays a currently valid OMB control number.

*References Cited*

A complete list of all references cited in the emergency rule published concurrently in this issue of the Federal Register is available on the Internet at [http://www.regulations.gov](http://www.regulations.gov) or upon request from the Field Supervisor, South Florida Ecological Services Office (see FOR FURTHER INFORMATION CONTACT).
Author

The primary author of this proposed rule is the staff of the South Florida Ecological Services Office (see ADDRESSES).

List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, Transportation.

Proposed Regulation Promulgation

For the reasons given in the preamble of the emergency rule listing the Miami blue butterfly (*Cyclargus thomasi bethunebakeri*) as endangered and the cassius blue butterfly (*Leptotes cassius theonus*), ceraunus blue butterfly (*Hemiargus ceraunus antibubastus*), and nickerbean blue butterfly (*Cyclargus ammon*) as threatened due to similarity of appearance, published concurrently in the Rules and Regulations section of this issue of the *Federal Register*, we propose to amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as set forth below:
PART 17—[AMENDED]

1. The authority citation for part 17 continues to read as follows:


2. This document proposes to establish the provisions of the emergency rule published elsewhere (in this issue of the Federal Register) as a final rule.

Dated: July 27, 2011

Gregory E. Siekaniec

Acting Director, U.S. Fish and Wildlife Service