

Peer Review of Scientific Information
Proposed Listing Rule and Proposed Designation of Critical Habitat for
Kentucky Arrow Darter

Species: Kentucky arrow darter (*Etheostoma spilotum*)

About the Document

Title: Proposed Listing Rule and Proposed Designation of Critical Habitat for Kentucky arrow darter

Summary: The U.S. Fish and Wildlife Service (Service) is proposing to list and designate critical habitat for the Kentucky arrow darter (*Etheostoma spilotum*) as threatened pursuant to the Endangered Species Act of 1973, as amended (Act). We are proposing 38 separate units that encompass approximately 395 stream kilometers (246 stream miles) for designation as critical habitat in Breathitt, Clay, Harlan, Jackson, Knott, Lee, Leslie, Owsley, Perry, and Wolfe Counties, Kentucky.

Type of Review: Influential

Timeline of the Peer Review

Date of Peer Review: October 8, 2015, through December 7, 2015

Date Document will be finalized: October 2016

About the Peer Review Process

The Service solicited written comments from 7 independent scientific reviewers. Formal request for peer review is made by individual letters to experts from various backgrounds at universities, institutions, agencies, and private industry. These reviewers were selected by the Service for their familiarity with the species' distribution and status within the upper Kentucky River drainage, their recognized expertise with general fish biology and ecology, and their understanding of the species' potential threats. We are following our national policy on peer review and our regional approach for peer review for rulemakings. In selecting peer reviewers, we consider four key factors – expertise, balance, independence, and avoidance of conflict of interest.

This review occurs during the public comment period for the proposed actions. The public comment period will close on December 7, 2015. We have provided each peer reviewer with information necessary to complete the peer review. We will request that reviewers use the Southeast Region's guidance to ensure that reviews comply with the 1994 policy statement for listing and critical habitat designation under the Act. Peer reviewers are expected to: (1) review all material provided; (2) identify, review, and provide other relevant data; and (3) provide written comments on relevance and soundness of data, analysis or assumptions of data, and whether we have used the best

available science in making the proposed determinations. Peer review comments will be public documents.

The Service will use the information received from the peer review process, as appropriate, to develop the final listing and critical habitat rules for the Kentucky arrow darter.

Peer Reviewers*

The Service will request peer review from the following individuals:

- Michael Compton, Aquatic Zoologist
Kentucky State Nature Preserves Commission
- Dr. David Eisenhour, Professor
Department of Biology and Chemistry, Morehead State University
- Dr. Steven J. Price, Assistant Professor
Department of Forestry, University of Kentucky
- David Ledford, President and CEO
Appalachian Wildlife Foundation
- Travis Lowe, Vice-President of Biological and Ecological Services
Appalachian Technical Services, Inc.
- Greg Pond, Aquatic Biologist
Environmental Protection Agency
- Dr. Matthew Thomas, Ichthyologist
Kentucky Department of Fish and Wildlife Resources

**Disclosure:* In selecting peer reviewers, we considered four key factors – expertise, balance, independence, and conflict of interest. We believe all the peer reviewers possess the necessary scientific and technical expertise (knowledge, experience, and skills) to perform the review, and they represent a diversity of scientific disciplines and perspectives, allowing for a sharper, more focused peer review (balance). With respect to independence, none of the peer reviewers are employed by the Service, and none were involved in producing the draft documents. Three peer reviewers (Compton, Eisenhour, and Thomas) have received research funding from the Service to conduct biological studies on the Kentucky arrow darter and other Kentucky fishes; however, we believe any minor concerns about independence are outweighed by the reviewer’s unique expertise and our inclusion of additional reviewers to provide balance. Perceived conflicts of interest are possible for some reviewers (e.g., associations with regulated entities or contractual relationships with agencies such as the Service); however, any perceived

conflicts will be mitigated by the balanced list of peer reviewers, all of whom are uniquely qualified to conduct the review.

About Public Participation

Public comments on both the proposed listing and critical habitat designation will be sought with a **Federal Register** announcement on October 8, 2015 (80 FR 60962 and 80 FR 61030, respectively). This comment period ends on December 7, 2015. Information regarding submission of comments is included in the **Federal Register** notice. The Service will consider all comments received prior to publishing a final determination.

This peer review plan is made available on this website to allow the public to monitor our compliance with the Office of Management and Budget's Final Information Quality Bulletin for Peer Review.

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