



Questions and Answers: American Burying Beetle Endangered Species Act Downlisting Proposal and 4(d) Rule

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Q. What is the U.S. Fish and Wildlife Service proposing?

A. The Service is proposing to downlist the American burying beetle from endangered to threatened under the Endangered Species Act (ESA). This proposal is based on a thorough review of the best available science and information, including the recently completed Species Status Assessment (SSA), indicating the beetle is not presently in danger of extinction throughout all or a significant portion of its range. As such, it does not meet the definition of endangered under the ESA.

The Service is also proposing a 4(d) rule that would apply prohibitions that are necessary and advisable for the conservation of American burying beetles. Exemptions from the prohibition on take for actions that have minor or beneficial effects offer landowners and industry participants regulatory relief and certainty that actions carried out in accordance with the 4(d) rule would be in compliance with the ESA.

The public will have 60 days to review and comment on the proposed downlisting and 4(d) rule.

Q. What is a Species Status Assessment (SSA)?

A. The Service has adopted the SSA framework as a different way of thinking about biological status. The SSA provides for a streamlined, more efficient way to assist in conservation delivery. The SSA begins with a compilation of the best available information on the species and its ecological needs at the individual, population and/or species levels based on how environmental factors are understood to act on the species and its habitat. Next, the SSA describes the current condition of the species' habitat and demographics and the probable explanations for past and ongoing changes in abundance and distributions within the species' ecological settings. Lastly, an SSA forecasts the species' response to probable future scenarios of environmental conditions and conservation efforts. Although an SSA report is not a decision-making document, the ultimate goal of the document is to assist decision makers by providing a clear characterization of viability, including risks to the species, and key uncertainties in the characterization.

The American burying beetle SSA was initiated June 2015 and included input from biologists from nine Service field offices across five regions, multiple species experts, eight peer reviewers,

and all states throughout the beetle's current range. The American burying beetle SSA Report is available [here](#).

Q. Why did the Service list the American burying beetle as endangered in 1989?

A. The American burying beetle was listed as endangered in 1989 primarily due to the disappearance of the species across the vast majority of its known historical range, habitat changes, and competition for limited carrion resources. At the time of listing, only two highly distinct populations of the formerly widespread species were known to exist – one in New England and one in eastern Oklahoma. Since the time of the listing, surveys have resulted in the discovery of additional burying beetle occurrences in Oklahoma, Nebraska, Arkansas, Texas, Kansas and South Dakota. However, even with the discovery of additional populations, the species' range has been reduced to about 10 percent of its historical range. Some known populations are small and isolated, and the monitored portions of the southernmost areas have declined in recent years.

Q. What is the 4(d) rule for the ABB?

A. Our proposed rule under section 4(d) of the ESA outlines prohibitions necessary and advisable for the conservation of the American burying beetle. In this proposed 4(d) rule we provide prohibitions that are necessary for conservation of the species, but also propose exemptions for activities we determined will have minor or temporary effects and are not anticipated to affect the viability of beetle populations. For example, the proposed 4(d) rule would exempt activities related to ranching and grazing in the American Northern Plains and New England analysis areas. These land uses generally support healthy habitat for American burying beetle populations.

Q. Why does the 4(d) rule provide different provisions for some regions of the country?

A. The risks for American burying beetle populations are different for each region of the country. The area, density and distribution of populations are also different in each location, and risks that may be minor for one population could be substantial and affect the resiliency of other populations. For example, urban expansion may be a minor risk for larger populations in Nebraska and South Dakota but is a substantial risk for the small Block Island population in Rhode Island. The proposed 4(d) rule includes protection of the species from take related to soil disturbance activities on Block Island because suitable habitat is limited (only about 2,000 acres), and protecting habitat is necessary for the conservation of this important population. In developing proposed protections and exemptions, we considered appropriate risks for each region or population. The American burying beetle SSA provides detailed information on the status of the species in each region.

Q. What is the range of the American burying beetle?

A. The American burying beetle is native to at least 35 states in the United States and the southern borders of three eastern Canadian provinces, covering most of temperate eastern North America. The species is believed to be extirpated from all but nine states in the United States and likely from Canada. Based on the last 15 years of surveys, the beetle is known to occur in

portions of Arkansas, Kansas, Oklahoma, Nebraska, South Dakota and Texas, on Block Island off the coast of Rhode Island, and in reintroduced populations on Nantucket Island off the coast of Massachusetts, and in southwest Missouri. Reintroduction efforts are also underway in Ohio, but survival of reintroduced American burying beetles into the next year (successful overwintering) has not yet been documented in this area. A 2017 report of a potential American burying beetle in Michigan is being investigated. Surveys for American burying beetles in Michigan in 2018 failed to confirm the report, but additional surveys are planned in 2019.

Q. What is the current estimated population of the American burying beetle?

A. American burying beetles live for about one year. Estimates of total numbers of the beetles are valid only for short time periods, available only for limited areas, and are only one of the potential measures used in assessing the status of populations in most areas of the range. The American burying beetle SSA report gathered information on all current populations and determined that there were six populations with moderate to high resiliency and one population with low resiliency. Resiliency refers to the population size and characteristics necessary to endure periodic environmental stresses. Resilient populations are better able to recover from losses caused by random variation, such as fluctuations in reproduction, variations in rainfall, or changes in the frequency of wildfires. There are also two reintroduced populations and another reintroduction effort in progress, but their resiliency is questionable without active management and supplementation of carcasses (required for feeding and reproduction). Population assessments were based on the area of suitable habitat, area of protected habitat, presence and absence survey information, and distribution of beetles within the population. The area of individual populations range from more than 15 million acres to only a few thousand acres in size. Most current populations are projected to decline in the future (more detailed assessments in the SSA) due to climate and land use changes.

Q. What factors did the Service consider in proposing to downlist the American burying beetle?

A. Section 4(a)(1) of the ESA requires the Service to determine if a species is endangered or threatened based on one or more of the five following factors: (1) present or threatened destruction, modification or curtailment of its habitat or range; (2) overutilization for commercial, recreational, scientific or educational purposes; (3) disease or predation; (4) the inadequacy of existing regulatory mechanisms; or (5) other natural or man-made factors affecting its continued existence. To address these factors, the Service characterized the species' viability using the SSA framework. This assessment used the best scientific and commercial information available to evaluate known threats to the species as well as identify any new threats since it was listed. A significant portion of our analysis involved an assessment of the current and future risks, resiliency of all current populations, number and distribution of populations (redundancy), and ecological and genetic diversity (representation). Risks related to increasing temperatures due to effects of climate change and land use-related impacts to habitat and carrion sources were identified as the primary factors affecting populations, but other risks such as disease were identified as potential factors. The current status includes at least six American burying beetle populations with moderate to high resiliency, and these populations include representation from northern, eastern, western, and southern portions of the range.

Q. What threats continue to impact the American burying beetle?

A. Threats vary in type and degree across the beetle's range, but those related to land-use activities and increasing temperatures due to climate change continue to impact the species. Habitat loss or alteration related to land-use activities is ongoing in all burying beetle population habitats, but the impacts of these losses is considered relatively minor for most areas with the exception of the Loess Canyons (NE) and New England populations. Increasing temperatures are ongoing as well and have the potential to affect all populations to some degree.

Q. What are the recovery criteria for the American burying beetle?

A. The American burying beetle recovery plan was approved by the Service on September 27, 1991. The recovery plan is an exceptional source of information but is out of date and contained only downlisting criteria rather than downlisting and delisting criteria. New information will be used to inform the criteria needed to be met for full recovery of the species. Recovery is a dynamic process requiring adaptive management that may or may not fully follow the guidance provided in an earlier recovery plan. The SSA does not include recovery criteria but will inform the establishment of such criteria as it provides an updated, revised analysis of current and future status and risks based on our current understanding of the species needs. The existing recovery plan reclassification criteria include the following:

(a) Three populations of American burying beetle have been reestablished or discovered within each of four broad geographical areas of its historical range: the Northeast, the Southeast, the Midwest and the Great Lake states.

(b) Each population contains a minimum of 500 adults as estimated by capture rates per trap night and blacklight effort.

(c) Each population is demonstrably self-sustaining for at least five consecutive years (or is sustainable with established long-term management programs).

The established criteria for downlisting the American burying beetle have been met or exceeded with the exception that the additional populations are not within the geographical areas described in the recovery plan. Instead, several large populations have been discovered or reestablished in the western portion of the range, and one population has been reestablished in New England. Current populations exist in northern, southern, eastern and western portions of the range but with very limited representation in the East.

Q. What conservation actions are being undertaken that resulted in the proposed reclassification of the American burying beetle?

A. A combination of conservation actions has improved the status of the American burying beetle since it was listed. Additional survey effort and improved survey methods have documented the presence of beetles in areas near the western portions of the range. Burying beetle habitat has been protected through consultations, and mitigation for some actions has enhanced and provided long-term protection for American burying beetle habitat.

Cooperative efforts on tribal, federal, state and private lands have involved monitoring and management of beetle habitat. Several large areas of protected habitat occur on Department of

Defense lands, national wildlife refuge lands, national forests, state wildlife management areas, tribal lands and lands managed by The Nature Conservancy. Consultations for these lands have authorized incidental take and management/uses of the lands in ways that also contribute to beetle recovery. Two American burying beetle conservation banks have been established in Oklahoma that provide mitigation options for multiple types of projects including oil and gas exploration and development, road construction, transmission lines and others that support habitat management and protection on several thousand acres. Conservation easements have protected habitat in Nebraska and New England. Reintroductions have successfully established populations in Missouri and Massachusetts and another reintroduction is in progress in Ohio.

Q. Would a downlisting impact project planning and consultation?

A. The downlisting and proposed ESA 4(d) rule, if finalized, will provide regulatory relief throughout the beetle's range. Exemptions for incidental take related to otherwise legal actions would apply to nearly all projects in the Southern Plains Analysis Areas and all activities related to ranching/grazing and wildlife management in the Northern Plains Analysis Areas. Projects with soil disturbance in the occupied portions of the Northern Plains and New England Analysis Areas still would need to consider potential take of burying beetles during project planning and consultation. Federal agencies would still be required to consult on all actions that may affect the species in all analysis areas, but these consultations could be streamlined for actions with incidental take that is exempted under a 4(d) rule.

Q: What information is the Service requesting?

A: Any final actions resulting from the proposed rule will be based on the best scientific and commercial data available and will be as accurate and as effective as possible. With respect to the proposal to downlist the American burying beetle, the Service is seeking information regarding the following:

(1) New information on the historical and current status, range, distribution and population size of the American burying beetle, including the locations of any additional populations.

(2) New information on the known, potential and future threats to the American burying beetle, particularly any projected quantities and locations of potential threats to the beetle or its habitat. This could include, for example, information that would allow us to better project the potential future impacts of wind development, including scientific assessments of how much potential habitat could be lost. Better assessments of future land use and industry development could allow us to develop more accurate assessments of risks and potential exemptions associated with the proposed rule under section 4(d).

(3) The temperature range in which the species will or will not persist long term.

(4) Any data on the effects climate change may have on the ecosystem on which this species depends, particularly information related to a future northward shift of this ecosystem.

(5) New information regarding the life history, ecology and habitat use of the American burying beetle.

(6) Information on a potential acreage threshold level below which the prohibitions in the proposed 4(d) rule would not be necessary and advisable for the conservation of American burying beetle.

Q. How do I submit comments on the proposals?

A. The Service is requesting comments or information from the public, other concerned governmental agencies, the scientific community, industry, or any other interested parties concerning the delisting proposal. Comments must be received within 60 days, on or before July 2, 2019. You may submit comments by one of the following methods:

(1) Electronically: Go to the Federal eRulemaking Portal:

<http://www.regulations.gov>. In the Search box, enter FWS–R2–ES–2018–0029, which is the docket number for this rulemaking. Then, click on the Search button. On the resulting page, in the Search panel on the left side of the screen, under the Document Type heading, click on the Proposed Rules link to locate this document. You may submit a comment by clicking on “Comment Now!”

(2) By hard copy: Submit by U.S. mail or hand-delivery to: Public Comments Processing, Attn: FWS–R2–ES–2018–0029, U.S. Fish and Wildlife Service, MS: BPHC, 5275 Leesburg Pike, Falls Church, VA 22041-3803.

We request that you send comments only by the methods described above. We will post all comments on <http://www.regulations.gov>. This generally means that we will post any personal information you provide us.