Federal Docket No. FWS–R8–ES–2015–0049

90-Day Finding on a Petition to List a Distinct Population Segment of North American Wild Horses on all U.S. Federal Public Lands as an Endangered or Threatened Species

Background

Section 4(b)(3)(A) of the Act requires that we make a finding on whether a petition to list, delist, or reclassify a species presents substantial scientific or commercial information indicating that the petitioned action may be warranted. We are to base this finding on information provided in the petition and supporting information submitted with the petition.

Our standard for substantial scientific or commercial information within the Code of Federal Regulations (CFR) with regard to a 90-day petition finding is "that amount of information that would lead a reasonable person to believe that the measure proposed in the petition may be warranted" (50 CFR 424.14(b)).

Petition History

On June 17, 2014, we received a petition, dated June 10, 2014, from Friends of Animals and The Cloud Foundation, requesting that the distinct population segment (DPS) of North American wild horses on all U.S. Federal public lands be listed as an endangered or threatened species under the Act. The petition clearly identified itself as such and included the requisite identification information for the petitioner(s), as required by 50 CFR 424.14(a). In an October 3, 2014, letter to the petitioner, we responded that we reviewed the information presented in the petition and did not find that the petition warranted an emergency listing. This finding addresses the petition.

Evaluation of Petition to List the Distinct Population Segment of North American Wild Horses on all U.S. Federal Public Lands

Species and Range

Does the petition identify an entity that is eligible for listing (i.e., is the entity a species, subspecies, or DPS)?

☐Yes

X No

The petitioners requested that we list the North American wild horse on all U.S. Federal public lands as a DPS. The petition classifies the North American wild horse as a population of the species *Equus caballus*.

The petition requests that the Service list the DPS of North American wild horses on all U.S. Federal public lands (intended to encompass those lands owned or administered by the Bureau of

Land Management (BLM), the Service, the National Park Service (NPS), and the U.S. Forest Service (USFS). However, the information provided in the petition appears to focus on the wild horses covered under the Wild Free-Roaming Horse and Burro Act of 1971 (WHBA).

The WHBA defines ""wild free-roaming horses and burros" to mean "all unbranded and unclaimed horses and burros on public lands of the United States" and defines "public lands" to mean "any lands administered by the Secretary of the Interior through the Bureau of Land Management or by the Secretary of Agriculture through the Forest Service." (16 USC 1332 (b) and (e)). The WHBA does not apply to management of feral horses or burros within National Wildlife Refuges, which are managed by the Service, or management of feral horses or burros in National Parks, which are managed by the NPS.

However, because the petition requested that we consider North American wild horses on all U.S. Federal public lands, we are evaluating the petition based on this request. Our evaluation considers whether the petition presents substantial information that the North American wild horse found on U.S. Federal public lands may meet the criteria to be considered a distinct population segment.

Evaluation of the Population of North American Wild Horse Found on Public Lands as a Distinct Population Segment

To interpret and implement the DPS provisions of the Act, the Service and the National Oceanic and Atmospheric Administration published the Policy Regarding the Recognition of Distinct Vertebrate Population Segments Under the Endangered Species Act in the Federal Register on February 7, 1996 (61 FR 4722). Under the DPS Policy, three elements are considered in the decision regarding the establishment and classification of a population of a vertebrate species as a possible DPS: (1) The discreteness of a population segment in relation to the remainder of the species to which it belongs; (2) the significance of the population segment to the species to which it belongs; and (3) the population segment's conservation status in relation to the Act's standards for listing, delisting, or reclassification. Both discreteness and significance are used to determine whether the population segment constitutes a valid DPS. If it does, then the population segment's conservation status is used to consider whether that DPS warrants listing. We address these elements with respect to the North American wild horse found on public lands.

Discreteness

Under the DPS policy, a population segment of a vertebrate species may be considered discrete if it satisfies either one of the following conditions: (1) It is markedly separated from other populations of the same taxon as a consequence of physical, physiological, ecological, or behavioral factors (quantitative measures of genetic or morphological discontinuity may provide evidence of this separation); or (2) it is delimited by international governmental boundaries within which differences in control of exploitation, management of habitat, conservation status, or regulatory mechanisms exist that are significant in light of section 4(a)(1)(D) of the Act.

Markedly Separated

Information Provided in the Petition

The petitioners assert that the population of North American wild horses on U.S. Federal public lands is markedly separated from other populations of horses throughout its range due to physical separation as well as ecological, physiological, and behavioral factors.
The petitioners assert that the BLM-designated Herd Management Areas (HMAs) separate the population of wild horses on public lands from domestic horses on private property as well as wild horses occurring on tribal lands. In 2012, there were 179 HMAs that occurred in ten states – Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, and Wyoming; 171 of the HMAs were occupied by either horses or burros (National Research Council, 2013, p.21-24). Some HMAs are connected to other HMAs and the animals can move between these areas; these areas often managed as a complex (National Research Council, 2013, p.22). The BLM often removes horses from HMAs and places them in short-term or long-term holding areas (National Research Council, 2013, p.2). These animals may be adopted out to private owners. The horses that are removed may also be gelded or treated with a contraceptive and returned back to an HMA (National Research Council, 2013, p. 25).

The horses occurring on HMAs may disperse or migrate out of the HMA. According to the 2013 National Research Council report: "A designated HMA may constitute the core range of a herd or population, but dispersal movements outside the HMA are possible" (p. 84).

Although the citations provided by the petitioner speak to horses occurring on BLM-lands, it is not clear that they apply to all North American horses that occur on U.S. Federal public lands. Therefore, we find the petition does not provide substantial information that the population of North American wild horse on Federal public lands may be discrete based on physical separation.

The petitioners assert that the wild horses occurring on Federal public lands in the Western States occupy a unique ecological setting. The petition describes the horses on Federal lands in the west as living in areas that "can be extremely harsh with very hot summers, cold winters, sparse vegetation." The petition asserts that domesticated horses that live on private properties are provided food and water by humans and do not face the same conditions that horses on private lands do. We note that the consideration of a population occurring in a unique ecological setting is generally addressed under the evaluation of Significance (see below). However, in evaluating discreteness, we consider how physiological and behavioral differences may result in the marked separation of populations of the taxon. Thus, although there may be physiological or behavioral differences between populations, these differences are only relevant for discreteness if they are a cause of the population being markedly separate from other populations of the taxon.

The petition asserts that wild horses have physiological differences that make them more suitable for living in the wild when compared to domestic horses. For example, the petition asserts that wild horses may be able to survive longer without water than domestic horses; however, the citation to support this claim indicates that this contention "has not been demonstrated with empirical data" (Beever 2003, p. 892). The petition also points to a 2008 article by Jaime Jackson that discusses the differences between wild and domestic horse hooves. Although the article provides a description of common characteristics of the wild horse foot, we find that it does not provide substantial information that the North American wild horse on Federal public lands may be markedly separate from other populations of the taxon based on physiological

factors related to hoof structure. The petition also identifies the "long limbs and single-unit soliped hooves" of wild horses that allow them to move long distances in order to obtain food and water. The provided citation (Downer 2014) does not indicate that this is a physiological difference between the wild horse on Federal public lands and other populations of the taxon. In fact, all equids have soliped (single) hooves on each foot. Therefore, based on our review of the petition and information provided by the petitioner, we find that the petition does not provide substantial information indicating that the wild horse occurring on Federal public lands may be markedly separate from other populations of the taxon based on physiological differences.

The petition asserts that wild horses have different behaviors than domestic horses. Specifically, the petition asserts that wild horses live in family groups (or bands) consisting of a lead stallion and several mares. The petition provides a discussion of the behavior of the bands, as well as a discussion of the communication patterns of wild horses and aggressive encounters between stallions of wild horses. However, the petitioner does not provide citations to indicate that these communication patterns or aggressive encounters do not occur with wild horses occurring outside of Federal lands or among domesticated horses. The petitioner asserts that a wild horse has a "highly refined fight or flight reaction," but the citation provided (Nock, 2010) does not discuss how or why the fight or flight response differs between North American wild horses and other populations of horse. While the petitioner provides a quote from a 2014 perspective piece (Marshall, Dobney, Denham & Capriles) that states domestication "has resulted in diverse phenotypic and behavioral changes to wild animals, including decrease flight responses, increased sociality, earlier reproduction, and modification of endocrine and metabolic systems," the article's authors cite four additional articles associated with the quote. These articles were not provided to the Service by the petitioners. Furthermore, the focus of the Marshall, et al. 2014 article is on assumptions of gene flow between wild and domestic stocks of animals (including horses, donkeys, cats, dogs, etc.) and the new data that are showing such gene flow existed for longer periods of time than previously thought. Although behaviors between domestic and wild (or feral) animals of the same species may differ, based on our review of the information in the petition, we find that the petition does not present substantial information that the North American wild horse may be markedly separate from other populations of horse as a consequence of behavioral differences.

The petition asserts that the population of wild horses is discrete because the WHBA applies regulations to horses on public lands that are not applied to horses on private or tribal lands. The petition asserts that this difference in management is important with regard to section 4(a)(1)(D) of the Act. Under our discreteness analysis, we consider whether a population is delimited by international governmental boundaries within which differences in control of exploitation, management of habitat, conservation status, or regulatory mechanisms exist that are significant in light of section 4(a)(1)(D) of the Act. The discreteness analysis does not consider whether a regulatory mechanism might apply to only specific populations of a species or subspecies that occur within the United States. Because the horses addressed in the petition occur within the United States and are not delimited by international governmental boundaries, the second condition of discreteness is not met.

Following a review of the petition and the sources provided, we find that the petition does not present substantial information that the population of North American wild horse may be discrete under our DPS policy.

Significance

Under the DPS policy, a discrete population segment of a vertebrate species may be considered significant if there is: (1) Persistence of the discrete population segment in an ecological setting unusual or unique for the taxon; (2) evidence that loss of the discrete population segment would result in a significant gap in the range of the taxon; (3) evidence that the discrete population segment represents the only surviving natural occurrence of a taxon that may be more abundant elsewhere as an introduced population outside its historical range; or (4) evidence that the discrete population segment differs markedly from other populations of the species in its genetic characteristics.

We concluded in the previous section that the population of North American wild horse did not meet the discreteness criteria. Therefore, we do not need to evaluate the significance criteria. Based on our review of the petition and the information provided, we find there is not substantial information that the North American wild horse occurring on Federal public lands may meet the discreteness criteria outlined in our 1996 policy, and therefore the petitioned entity is not a DPS.

Petition Finding

Based on our review of the petition and sources cited in the petition, we find that the petitioned entity is not a listable entity under the Act.

In summary, the petition does not present substantial information supporting the characterization of North American wild horses on all U.S. Federal public lands as a DPS, because the discreteness criteria were not met. Therefore, this population is not a valid listable entity under section 3(16) of the Act.

On the basis of our determination under section 4(b)(3)(A) of the Act, we conclude that the petition does not present substantial scientific or commercial information to indicate that listing North American wild horses on all U.S. Federal public lands as a DPS as a threatened or endangered species under the Act may be warranted at this time.

Author

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Date: 6/22/15

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