

meadow jumping mouse. On March 15, 1995, the Service published a notice of the 90-day finding that the petition presented substantial information indicating that listing the Preble's may be warranted, and requested comments and biological data on the status of the mouse (60 FR 13950). On March 25, 1997, the Service issued a 12-month finding on the petition action along with a proposed rule to list Preble's as an endangered species and announced a 90-day public comment period (62 FR 14093), with subsequent reopenings of the comment period to gather additional information (62 FR 24387, 62 FR 67041). The Service added the Preble's meadow jumping mouse to the List of Endangered and Threatened Wildlife in 50 CFR 17.11 as a threatened species on May 13, 1998 (63 FR 26517).

On July 27, 1999, the Service received a petition to delist the Preble's, dated July 20, 1999. The Service subsequently received two other petitions to delist the Preble's—one dated July 26, 1999, and one dated August 27, 2000. These petitions are being treated as second petitions for the requested delisting action, and both have been considered in this 90-day finding.

Review of the Petition

In requesting that the Service delist the Preble's, the first petitioner stated that the information available to the Service did not justify a listing and asked the Service to "set aside" the Act relative to the Preble's to allow time to gather more information. The third petitioner stated that, because the information available on the Preble's is limited, the Service's listing of the subspecies was "precipitate and uninformed." The Service is mandated to use the best scientific information available at the time we make a decision to list a species (50 CFR 424.11(b)). Once petitioned to list a species, we are under statutory obligations as stated in the Act to complete the petition process. We did extend or reopen the comment period twice and held three public hearings to seek factual reports or information that might contribute to the development of the final rule (63 FR 26517).

The first petitioner stated that additional information was available on trapping conducted by private landowners, the Forest Service, and the State Department of Transportation that the Service did not consider in its 1998 listing and that the Service should set aside the listing to evaluate this new information. The third petitioner stated that the information coming to light in 1999 indicated a plenitude of this subspecies. Trapping conducted by

private landowners, the Forest Service, and the Wyoming Department of Transportation in a number of potential habitat sites in the North Platte drainage occurred after the species was listed as threatened in 1998. Although the Service did not have this trapping information available for consideration during preparation of the 1998 listing rule, we did consider in the listing rule that the Preble's likely occurred in these areas because the species historically had been collected there and these areas have suitable habitat for the Preble's. Therefore, the Service took into consideration the likely presence of the Preble's in these surveyed locations in the 1998 listing rule.

The second petitioner stated that the reason for the delisting request was the inability to identify the mouse. We interpret this concern, that is the difficulty in differentiating Preble's from the western jumping mouse in the field, as either a concern that (1) the listing is invalid or (2) the taxonomic entity is not valid. The range of the western jumping mouse (*Zapus princeps*) in Wyoming and Colorado overlaps that of Preble's (Hall 1981), and the two species are similar in their appearance. Despite difficulties in field identification, the Preble's can be differentiated from the western jumping mouse. Compared to the western jumping mouse, the Preble's is generally smaller and has a more distinctly bicolored tail and a less obvious dorsal (back) stripe. A better technique for identification of the Preble's requires skulls of specimens housed in natural history museums, where dental characteristics (such as the presence or absence of a tooth fold on the first lower molar (Klingener 1963, Hafner 1993) or the shape of a tooth cusp) can be seen and used in combination with distribution and elevation. These techniques have been useful scientific tools for almost half a century. A third and more recent technique to identify Preble's uses a combination of skull measurements in addition to the tooth fold (which may not always be reliable by itself due to tooth wear) (Conner and Shenk in press). These techniques accurately identify most of the Preble's specimens. A fourth technique is genetic analysis. Future DNA studies, including a current study being conducted at the Denver Museum of Nature and Science, will go a long way towards resolving some of the few remaining identification inconsistencies.

In addition, ease of field identification is not a threat to be evaluated when making a listing determination. The Act requires that the Service evaluate five factors in determining whether to list a

taxon as endangered or threatened. Under section 4(a)(1) of the Act, we must determine whether a species should be listed as threatened or endangered due to one or more of the following five factors—(1) present or threatened destruction, modification, or curtailment of habitat or range; (2) overutilization for commercial, recreational, scientific, or educational purposes; (3) disease or predation; (4) the inadequacy of existing regulatory mechanisms; and (5) other natural or manmade factors affecting the species' continued existence. Our determination is statutorily limited to an evaluation of these five factors.

In response to whether the taxonomic entity is valid, the Code of Federal Regulations (50 CFR 424.11) states that in listing entities as endangered or threatened under the Act, the Service will rely on standard scientifically accepted taxonomy. The Preble's meadow jumping mouse (*Zapus hudsonius preblei*) is a valid, scientifically accepted subspecies of meadow jumping mice (*Zapus hudsonius*) (Krutzsch 1954; Clark and Stromberg 1987; Fitzgerald *et al.* 1994).

The third petitioner disagreed with the use of information available on *Zapus hudsonius* and the application of this information to *Zapus hudsonius preblei*. When information specific to a subspecies is lacking, information on the parent species may be the best information available for the Service to use. We must base our determination on the best available scientific information. Many characteristics of the species *Z. hudsonius* would generally be applicable to all its subspecies, including *Z. h. preblei*.

The third petitioner stated that the original petition to list the Preble's should not have been given credence because it lacked sufficient information on the Preble's. Under the Code of Federal Regulations (50 CFR 424.13 and 424.14), the Service is required to seriously consider all petitions and utilize all available information, not just the petitioner's, when making its determination. In the 1998 listing rule, we relied on a host of scientific information available on the species concerning the threats it faced and did not make our determination based solely on the information provided in the original petition.

The third petitioner stated that the 1998 listing is inappropriate because of errors in the subspecies' geographical distribution. The third petitioner stated that the Service did not accept the identification of an individual Preble's reportedly found in Las Animas County, Colorado, because it would have raised