The Services will hold a public hearing in Mangilao, Guam. Interested parties may provide oral or written comments at this hearing, which will be held on July 15, 2015 from 6 to 8 p.m., with an informational open house starting at 5:30 p.m., at the Multi-Purpose Room of the School of Business and Public Administration, University of Guam, Mangilao, Guam 96923.

Special Accommodations

These hearings will be physically accessible to people with disabilities. Requests for sign language interpretation or other accommodations should be directed to Jennifer Schultz (see FOR FURTHER INFORMATION CONTACT) as soon as possible, but no later than 7 business days prior to the hearing date.

AUTHORITY: 16 U.S.C. 1531 et seq.

Dated: June 5, 2015.

Samuel D. Rauch III,
Deputy Assistant Administrator for Regulatory Programs, National Marine Fisheries Service.

Dated: June 10, 2015.

Gary Frazer,
Acting Director, U.S. Fish and Wildlife Service.

[FR Doc. 2015–14906 Filed 6–16–15; 8:45 am]
BILLING CODE 3510–22–P

DEPARTMENT OF THE INTERIOR
Fish and Wildlife Service

50 CFR Part 17

RIN 1018–AY05

Endangered and Threatened Wildlife and Plants; Removing Eastern Puma (=Cougar) From the Federal List of Endangered and Threatened Wildlife

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule.

SUMMARY: The best available scientific and commercial data indicate that the eastern puma (=cougar) (Puma (=Felis) concolor cougar) is extinct. Therefore, under the authority of the Endangered Species Act of 1973, as amended, we, the U.S. Fish and Wildlife Service (Service), propose to remove this subspecies from the Federal List of Endangered and Threatened Wildlife. This proposed action is based on a thorough review of all available information, which indicates that there is no evidence of the existence of either an extant population or individuals of the eastern puma and that, for various reasons, it is highly unlikely that an eastern puma population could remain undetected over the time span since the last confirmed sighting was documented in 1938.

DATES: We will accept comments received or postmarked on or before August 17, 2015. Comments submitted electronically using the Federal eRulemaking Portal (see ADDRESSES below) must be received by 11:59 p.m. Eastern Time on the closing date. We must receive requests for public hearings, in writing, at the address shown in FOR FURTHER INFORMATION CONTACT by August 3, 2015. Informational webinars will be scheduled upon request.

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

Electronically: Go to the Federal eRulemaking Portal: http://www.regulations.gov. In the search box, type FWS–R5–ES–2015–0001 which is the docket number for this proposed rule. Then, click on the search button. In the Search panel on the left side of the screen, under the Document Type heading, click on the box next to “Proposed Rule” to locate this document. When you have located the correct document, you may submit a comment by clicking on “Comment Now!”


We will post all comments at: http://www.regulations.gov. This generally means that we will post any personal information you provide us (see Information Requested below, for more information).

Copies of documents: This proposed rule and any primary supporting documents are available at: http://www.regulations.gov. In addition, the supporting files for this proposed rule will be available for public inspection, by appointment and during normal business hours, at the U.S. Fish and Wildlife Service’s Maine Field Office, 17 Godfrey Drive, Suite #2, Orono, ME 04473, and on the Eastern Cougar Web site at: http://www.fws.gov/northeast/ECougar.

FOR FURTHER INFORMATION CONTACT: Questions and requests for additional information may be directed to Martin Miller, Northeast Regional Office, telephone 413–253–8615, or to Mark McCollom, Maine Field Office, telephone 207–866–3344, extension 115. Individuals who are hearing- or speech-impaired may call the Federal Relay Service at 1–800–877–8337 for TTY assistance. General information regarding the eastern puma and the delisting process may also be accessed at: http://www.fws.gov/northeast/ECougar.

SUPPLEMENTARY INFORMATION:

Information Requested

We intend that any final action resulting from this proposed rule will be based on the best scientific and commercial data available and be as accurate and effective as possible. Therefore, we invite tribal and governmental agencies, the scientific community, and other interested parties to submit comments and new data regarding this proposed rule. In particular, we are seeking targeted information and comments concerning the following:

(1) The persistence or extinction of a breeding population of the eastern puma subspecies within its historical range;

(2) Verifiable reports or evidence of wild-origin pumas within the historical range of the eastern puma subspecies;

(3) Our analysis of the status of the eastern puma; and

(4) The taxonomy of North American pumas.

Please include sufficient information with your submission (such as scientific journal articles or other publications) to allow us to verify any scientific or commercial information you include. Bear in mind that comments simply advocating or opposing the proposed action without providing supporting information will be noted but not considered in making a determination, as section 4(b)(1)(A) of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.) (Act), directs that determinations as to whether any species is an endangered species or threatened species shall be made “solely on the basis of the best scientific and commercial data available.”

You may submit your comments and materials concerning the proposed rule by one of the methods listed in ADDRESSES. We request that you send comments only to an address listed in ADDRESSES. All comments must be submitted to http://www.regulations.gov, hand delivered, or postmarked by the deadline specified in DATES. If you submit information via http://www.regulations.gov, your entire submission—including any personal identifying information—will be posted on the Web site. If your submission is made via a hardcopy that includes personal identifying information, you may request at the top of your document...
that we withhold this information from public review; however, we cannot guarantee that we will be able to do so. We will post all hardcopy submissions on http://www.regulations.gov.

Comments and materials we receive, as well as supporting documentation used in preparing this proposed rule, will be available for public inspection on http://www.regulations.gov, or by appointment during normal business hours at the U.S. Fish and Wildlife Service, Maine Field Office (see FOR FURTHER INFORMATION CONTACT). In making a final decision on this proposal, we will take into consideration the comments and any additional information we receive during the public comment period. Such communications could lead to a final rule that differs from this proposal.

Public Hearing

Section 4(b)(5)(E) of the Act provides for one or more public hearings on this proposal, if requested. We must receive requests for public hearings in writing, at the address shown in the FOR FURTHER INFORMATION CONTACT section within 45 days after the date of this Federal Register publication (see DATES). 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 accommodations, in the Federal Register at least 15 days before the first hearing.

Peer Review

In accordance with our policy, “Notice of Interagency Cooperative Policy for Peer Review in Endangered Species Act Activities,” which was published on July 1, 1994 (59 FR 34270), we will seek the expert opinion of at least three independent specialists concerning the scientific data and analyses contained in this proposed rule. We will send copies of this proposed rule to peer reviewers immediately following its publication in the Federal Register. The purpose of such review is to ensure that our decision is based on scientifically sound data, assumptions, and analysis.

Background

This proposed rule is based on detailed information and in-depth analyses contained in the Service’s 5-year review for the eastern puma (USFWS 2011, entire), which can be accessed at: http://www.fws.gov/northeast/ECougar. That review includes a thorough discussion of the eastern puma’s biology, historical, records, and analysis of contemporary sightings. We also take into account information that has become available since 2011, noting that this information corroborates the 5-year review’s analysis. All references cited in the 2011 review and this proposed rule are maintained on file at the Service’s Maine Field Office (see ADDRESSES).

Previous Federal Actions

Under the Act, we maintain a List of Endangered and Threatened Wildlife (List) at 50 CFR 17.11 and a List of Endangered and Threatened Plants at 50 CFR 17.12. On June 4, 1973 (38 FR 14678), we listed the eastern puma (=cougar), *Puma (=Felis) concolor couguar,* as an endangered subspecies (using the common name of eastern cougar). At that time, critical habitat was not provided for under the Act; consequently, critical habitat was not designated for the eastern cougar. The principal factors leading to the listing of the eastern puma were widespread persecution (poisoning, trapping, hunting, and bounties), decline of forested habitat, and near-extirpation of white-tailed deer populations during the 1800s, which together resulted in the extirpation of most eastern puma populations by 1900.

A Service status review of the puma in North America, including the eastern puma, was issued in 1976 (Nowak 1976). This review, along with status reviews by some States and Canadian provinces (e.g., van Zyll de Jong and van Ingen 1978, R.L. Downing newsletters from 1979 to 1982), suggested that a large number of unverified public reports may be evidence of a persisting, native breeding population of eastern pumas. Such reports led the Service to retain the eastern puma on the List until such time as either a breeding population or extinction could be verified.

The Eastern Cougar Recovery Plan was approved in 1982 (USFWS 1982). During plan preparation, R.L. Downing conducted field surveys and investigated sighting reports and concluded that “no breeding cougar populations have been substantiated within the former range of *F. c. couguar* since the 1920s.” Nonetheless, the recovery plan states that the eastern cougar could be reclassified from endangered to threatened when one population containing at least 50 breeding adults was found or established. It further states that the eastern cougar could be removed from the List when at least three populations were found or established, with each containing more than 50 breeding adults. Since that plan’s approval, no breeding populations have been found, nor have any individual pumas known to be *F. c. couguar* (such individuals would form the basis of a founder population). Thus, neither of the recovery criteria was ever met.

Section 4(c)(2) of the Act requires that we conduct a review of listed species at least once every 5 years to determine: (1) Whether a species no longer meets the definition of an endangered species or threatened species and should be removed from the List (i.e., delisted), (2) whether a species listed as endangered more properly meets the definition of threatened and should be reclassified to threatened (i.e., downlisted), or (3) whether a species listed as threatened more properly meets the definition of endangered and should be reclassified to endangered. In accordance with 50 CFR 424.11(d), we will consider a species for delisting only if the best scientific and commercial data substantiate that the species is neither endangered nor threatened for one or more of the following reasons: (1) The species is considered extinct, (2) the species is considered recovered, or (3) the data available when the species was listed, or the interpretation of such data, were in error.

Between 1979 and 1991, the eastern puma was included in three cursory 5-year reviews conducted by the Service: A 1979 review of all domestic and foreign species listed prior to 1975 (44 FR 29566, May 21, 1979), a 1985 review of all species listed before 1976 and from 1979 to 1980 (50 FR 29901, July 22, 1985), and a 1991 review of all species listed before 1991 (56 FR 56882, November 6, 1991). None of these reviews recommended a change from the eastern puma’s listing classification as endangered.

On January 29, 2007, we published a Federal Register notice announcing a 5-year review specific to the eastern puma and nine other species, and we requested information from the public concerning the eastern puma (72 FR 4018). The assessment of the eastern puma’s current status, completed on January 28, 2011 (USFWS 2011), found no evidence of the existence of either an extant population or isolated eastern pumas, and concluded, therefore, the subspecies should be considered extinct. The assessment thus concluded that the eastern puma does not meet the definition of either an endangered species or a threatened species under section 3 of the Act.

Assessment of Species Status

Section 4 of the Act and its implementing regulations (50 CFR part 424) set forth the procedures for listing species, reclassifying species, and removing species from listed status.
“Species” is defined by the Act as including any species or subspecies of fish or wildlife or plants, and any distinct population segment of any species of vertebrate fish or wildlife which interbreeds when mature (16 U.S.C. 1532(16)). To determine whether a species should be listed as endangered or threatened, we assess the likelihood of its continued existence based on the five factors described in section 4(a)(1) of the Act (see Consideration of Factors Under Section 4(a)(1) of the Act). A species may be reclassified or removed from the List on the same basis. With regard to delisting a species due to extinction, “a sufficient period of time must be allowed before delisting to indicate clearly that the species is extinct” (50 CFR 424.11(d)(1)).

According to these standards, we must determine whether the eastern puma is a valid subspecies and whether the subspecies is still extant in order to determine its appropriate listing status. The following sections thus examine the biological and legal information considered to be most germane to the status of the eastern puma as a valid, extant subspecies before looking at factors that may affect its continued existence.

Overview

The eastern puma (Puma (=Felis) concolor couguar) is treated as a subspecies of the puma. The species is also known by many other common names, including, among others, cougar, calamount, mountain lion, panther, painter, and wildcat. As explained in the 5-year review (USFWS 2011, pp. 4–5), the puma is the most widely distributed land mammal in the New World and is one of the most adaptable mammals in the northern hemisphere. At the time of European contact, the puma ranged from Florida to southern Quebec and remained abundant through much of eastern North America during the colonial era. Despite its apparent early abundance, however, only 26 historical reports in Ontario, Quebec, and the Maritimes provinces. In 1998, the Canadian eastern puma listing was changed from the Endangered to the Data Deficient or Indeterminate category for Ontario, Quebec, New Brunswick, and Nova Scotia.

The eastern cougar (=puma) is listed as endangered in the International Union for Conservation of Nature’s (IUCN) Mammal Red Data Book (IUCN 1982). The subspecies is also classified as an Appendix I animal under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), which provides protection from international trade.

Legal protections at the State and provincial levels are discussed under "Historical Range, Abundance, and Distribution" below.

Biological Status

Taxonomy and Genetics: The eastern puma 5-year review (USFWS 2011, pp. 29–35) provides a full discussion of the taxonomic history of this subspecies. As indicated in that review, the current practice is to refer to the species as Puma concolor (Linnaeus 1771) and the eastern subspecies as Puma concolor couguar.

There is ongoing debate about the taxonomic assignment of puma subspecies, including the question as to whether North American pumas comprise a single subspecies or multiple subspecies. In particular, there has been disagreement about whether the scientific community should accept the use of genetics as the driving factor in puma taxonomy, as was done by Culver et al. (2000, entire). The Service’s position is that until a comprehensive evaluation of the subspecies status of North American pumas, including genetic, morphometric, and behavioral analyses, is completed, the best available information continues to support the assignment of the eastern taxon to Puma concolor couguar as distinct from other North American subspecies.

In recognizing the eastern puma as a valid subspecies, and thus a valid listed entity, we next evaluate whether the subspecies should be determined extinct. It is important to note that assessing the biological status of the eastern puma as a subspecies does not preclude eventual taxonomic revision.

Biology and Life History: There is little basis for believing that the ecology of eastern pumas was significantly different from puma ecology elsewhere on the continent. Our biological understanding of the eastern puma, therefore, is derived from studies conducted in various regions of North America and, to the extent possible, from eastern puma historical records and museum specimens. This information is detailed in the status review (USFWS 2011) on pages 6 through 8.

Historical Range, Abundance, and Distribution: Details and citations for the following summary are provided in the status review (USFWS 2011, pp. 8–29 and 36–56). Although a lack of reliable sightings and historical records makes it difficult to estimate past abundance and distribution, the available information is discussed below.

In eastern North America at the time of European contact, the puma ranged from Florida to southern Quebec and remained abundant through much of eastern North America during the colonial era. Despite its apparent early abundance, however, only 26 historical specimens of eastern pumas, from seven eastern States and one Canadian province within the subspecies’ historical range, reside in museums or other collections.

Based on this admittedly small number of specimens and other scant evidence, Young and Goldman (1946) described the historical range of Felis concolor couguar as southeastern Ontario, southern Quebec, and New Brunswick in Canada, and a region bounded from Maine to Michigan, Illinois, Kentucky, and South Carolina in the eastern United States. The Service’s recovery plan for the eastern cougar describes a similar range (USFWS 1982, pp. 1–2), although the range is mapped a little farther north into Ontario. The recovery plan also maps Felis concolor schorgeri, named as a subspecies after Young and Goldman (1946) was published, to the west and F. c. coryi to the south of the eastern puma’s range.

The most recently published assessment of the puma in eastern Canada, conducted by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) (Scott 1998), maps...
the puma’s range throughout southern Ontario and Manitoba. The eastern subspecies is not stipulated in Scott’s (1998) range description; indeed, the review questioned whether the eastern puma was ever a valid subspecies. Other authors have also discussed the past distribution of pumas in Canada without acknowledging them as the eastern subspecies. Rossette (2011) asserts that native, free-roaming pumas of unknown origin may continue to survive in Ontario while conceding that no evidence of their presence has been documented for almost 100 years. In Manitoba, on the other hand, several authors have documented a relatively consistent record of pumas, but there is no evidence that these are eastern pumas or that the subspecies ever occurred that far west.

The historical literature indicates that puma populations were thought to have been largely extirpated in eastern North America (except for Florida and perhaps the Smoky Mountains) by the 1870s, and in the Midwest by 1900. According to many historical accounts, pumas were greatly feared and were also persecuted as competitors for game and occasional predators of livestock. Eastern puma populations also decreased as habitat conditions for the puma’s primary prey base, white-tailed deer, changed dramatically during this time. By the mid- to late-1800s, human settlement patterns resulted in the extirpation of deer from much of eastern North America. The last records of pumas in most of the eastern States and provinces, from approximately 1790 to 1890, coincided with loss of deer populations and habitat.

By 1929, eastern pumas were believed to be “virtually extinct,” and Young and Goldman (1946) concurred that “they became extinct many years ago.” On the other hand, puma records from New Brunswick in 1932 and Maine in 1933 suggest that a population may have persisted in northernmost New England and eastern Canada.

In the Service’s 1976 status review (Nowak 1976), R.M. Nowak stated his belief that the large number of unverified sightings of pumas constituted evidence that certain other populations had also survived or had become reestablished in the central and eastern parts of the continent and may have increased in number since the 1940s. Further, as stated in the Eastern Cougar Recovery Plan (USFWS 1982, pp. 4, 7), R.L. Downing believed it possible that a small population may have persisted in the southern Appalachians into the 1920s. Nonetheless, the field surveys he conducted and the reports he investigated prior to writing the recovery plan led him to conclude that “no breeding cougar populations have been substantiated within the former range of F. c. couguar since the 1920s” (USFWS 1982, p. 6). Scott’s (1998) COSEWIC review also concluded that “there is no objective evidence (actual cougar specimens or other unequivocal confirmation) for the continuous presence of cougars since the last century anywhere in eastern Canada or the eastern United States outside of Florida,” and that “there is circumstantial evidence for virtual or complete extirpation” from central Ontario eastward.

The known status of the eastern puma within its historical range is summarized in table 1, below. A more detailed discussion of the historical status, current confirmed and unconfirmed puma sightings, potential habitat, and legal protection (also see Current Legal Status above) of the eastern puma in the states and provinces is provided in the 5-year status review (USFWS 2011, pp. 8–26). To summarize, eastern pumas historically were considered generally common and widespread; however, by the late 1800s, eastern pumas were believed to be extirpated from most of their range. As indicated in table 1, the majority of the most recent confirmed reports date from the mid-1800s to around 1930. Later reports are thought to be indicative of dispersers of western pumas, as in Missouri, or released animals, as in Newfoundland. Although there now appears to be adequate habitat and prey for pumas in various portions of the subspecies’ historical range, the many decades of habitat loss and near-extirpation of the puma’s primary prey, white-tailed deer, bring into question the continued survival and reproduction of eastern pumas over that time.

### Table 1—Eastern Puma Status by State and Province

<table>
<thead>
<tr>
<th>State or province</th>
<th>Historical status</th>
<th>Most recent confirmed or verifiable report</th>
<th>Potential habitat</th>
<th>Current status in wild</th>
<th>Legal protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connecticut</td>
<td>Historically common.</td>
<td>1842 ..........</td>
<td>56 square miles (mi²) (145 square kilometers (km²)); limited.</td>
<td>Considered extirpated.</td>
<td>State species of special concern, with no open season and possession prohibited.</td>
</tr>
<tr>
<td>Delaware</td>
<td>Disappeared in late 1700s.</td>
<td>Not described ..........</td>
<td>Southern Illinois ...</td>
<td>Considered extirpated.</td>
<td>Possession of carnivores permitted under stringent conditions.</td>
</tr>
<tr>
<td>Illinois</td>
<td>Uncertain taxonomy; disappeared before 1870.</td>
<td>Not described ..........</td>
<td>Southern Illinois ...</td>
<td>Considered extirpated; possible dispersal of western pumas into the State; no breeding population.</td>
<td>No State endangered species status, but some level of protection from hunting; permit required for possession of dangerous animals.</td>
</tr>
<tr>
<td>Indiana</td>
<td>Historical records are rare.</td>
<td>1851 ..........</td>
<td>Not described ..........</td>
<td>Considered extirpated.</td>
<td>No legal protection; private possession permitted.</td>
</tr>
<tr>
<td>Kentucky</td>
<td>Widely distributed historically; disappeared before 1900.</td>
<td>Statewide; ample prey base.</td>
<td>Considered extirpated.</td>
<td>State listed as extirpated; private possession of dangerous wildlife banned.</td>
<td></td>
</tr>
<tr>
<td>Maine</td>
<td>Historically rare ....</td>
<td>1938 ..........</td>
<td>−17,064 mi² (44,196 km²).</td>
<td>Considered extirpated.</td>
<td>State listed as extirpated; perpetual closed season; permit required for possession of captive animals.</td>
</tr>
<tr>
<td>State or province</td>
<td>Historical status</td>
<td>Most recent confirmed or verifiable report</td>
<td>Potential habitat</td>
<td>Current status in wild</td>
<td>Legal protection</td>
</tr>
<tr>
<td>-------------------</td>
<td>-------------------</td>
<td>------------------------------------------</td>
<td>-------------------</td>
<td>-----------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>Maryland</td>
<td>Occurred State-wide.</td>
<td>Late 1800s?</td>
<td>Western Maryland</td>
<td>Considered extirpated.</td>
<td>State listed as endangered-extirpated; protected from take; permit required for possession of captive animals, but no permits have been issued.</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>Occurred State-wide.</td>
<td>1858</td>
<td>No large habitat blocks.</td>
<td>Considered extirpated.</td>
<td>Included on State list due to Federal designation; protected with closed season and other regulations. State listed as endangered species; pumas cannot be privately held as pets.</td>
</tr>
<tr>
<td>Michigan</td>
<td>Occurred in much of State.</td>
<td>1906</td>
<td>Upper and Lower Peninsulas; ample prey base.</td>
<td>Current reports considered to be dispersers of western pumas into the state; no breeding population.</td>
<td></td>
</tr>
<tr>
<td>Missouri</td>
<td>Historically common; taxonomy uncertain.</td>
<td>1966; taxonomy uncertain.</td>
<td>Southeastern Missouri; ample prey base.</td>
<td>Classified as extirpated but protected under Wildlife Code provisions.</td>
<td></td>
</tr>
<tr>
<td>New Hampshire</td>
<td>Historically rare ....</td>
<td>Late 1800s</td>
<td>Northern New Hampshire; limited.</td>
<td>Considered extirpated.</td>
<td>State-protected species; possession of wild felines illegal except for educational purposes.</td>
</tr>
<tr>
<td>New Jersey</td>
<td>Historically common Statewide.</td>
<td>1830 to 1840.</td>
<td>No large habitat blocks.</td>
<td>Considered extirpated.</td>
<td>Not on the State endangered species list; possession of dangerous species permitted for scientific holding, animal exhibitor, zoological holding, or animal dealer.</td>
</tr>
<tr>
<td>New York</td>
<td>Occurred State-wide.</td>
<td>1894</td>
<td>Adirondack area; low prey density.</td>
<td>Considered extirpated.</td>
<td>Protected by State Endangered Species Act; State issues permits for possession, sale, and breeding of big cats.</td>
</tr>
<tr>
<td>North Carolina</td>
<td>Historically common.</td>
<td>1920</td>
<td>Western and southeastern coastal North Carolina; ample prey base.</td>
<td>No physical evidence to confirm sightings.</td>
<td>State protected as an endangered species; no open season; permit required for captive pumas.</td>
</tr>
<tr>
<td>Ohio</td>
<td>Historically uncommon; disappeared by 1850.</td>
<td></td>
<td>No large habitat blocks.</td>
<td>Considered extirpated.</td>
<td>Not on the State endangered species list; no State protective regulations.</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>Common Statewide</td>
<td>1914</td>
<td>Northern Allegheny Plateau and north-central Pennsylvania; ample prey base.</td>
<td>Considered extirpated.</td>
<td>State listed as extirpated; no open season; exotic wildlife permit required for possession.</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>Early records are scant.</td>
<td>1848</td>
<td>No large habitat blocks.</td>
<td>Considered extirpated.</td>
<td>Classified as extirpated; permit required for possession of native wildlife or their hybrids.</td>
</tr>
<tr>
<td>South Carolina</td>
<td>Present until 1850</td>
<td></td>
<td>Northwest portion of State; ample prey base.</td>
<td>No confirmed evidence of occurrences or a population.</td>
<td>State listed as endangered with protection from take; possession prohibited.</td>
</tr>
<tr>
<td>Tennessee</td>
<td>Historically present Statewide; common in western portion of State.</td>
<td>1930</td>
<td>Areas in central and eastern Tennessee.</td>
<td>Considered extirpated.</td>
<td>Permit required for possession of dangerous animals.</td>
</tr>
<tr>
<td>Vermont</td>
<td>Historically reported as both rare and common.</td>
<td>1881</td>
<td>Large forested blocks; adequate prey density.</td>
<td>Considered to be no longer present.</td>
<td>State listed as endangered; protected under State Endangered Species Act; permit required for possession of big cats.</td>
</tr>
<tr>
<td>Virginia</td>
<td>Historically plentiful in coastal low-lands and western mountains.</td>
<td>1882</td>
<td>Western mountains; ample prey base.</td>
<td>No confirmed records since the 1880s.</td>
<td>State listed as endangered; protected under State Endangered Species Act; import permit required for wild felines.</td>
</tr>
<tr>
<td>Washington, DC</td>
<td>Native to area</td>
<td>1913</td>
<td>None available</td>
<td>Considered extirpated.</td>
<td>Private possession of pumas prohibited.</td>
</tr>
</tbody>
</table>
TABLE 1—EASTERN PUMA STATUS BY STATE AND PROVINCE—Continued

<table>
<thead>
<tr>
<th>State or province</th>
<th>Historical status</th>
<th>Most recent confirmed or verifiable report</th>
<th>Potential habitat</th>
<th>Current status in wild</th>
<th>Legal protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>West Virginia</td>
<td>Historically common.</td>
<td>1901</td>
<td>Extensive and widespread; ample prey base.</td>
<td>Considered extirpated.</td>
<td>State listed; protected under the State ESA; permit required to import, hold, or sell native or exotic felines. Not currently protected.</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>Historically common; uncertain taxonomy.</td>
<td>1909</td>
<td>Assumed to have adequate habitat and prey base.</td>
<td>Confirmed records since 1994, possibly of another subspecies and illegally released pumas; no known breeding population. Not considered extirpated; insufficient evidence to determine current status.</td>
<td>Pumas not included on Provincial endangered species list, but considered a Species of Special Concern.</td>
</tr>
<tr>
<td>Manitoba</td>
<td>Pumas historically occurred throughout province; not considered to be the eastern subspecies.</td>
<td>Historically records unreliable.</td>
<td>Abundant habitat and prey, but snow depth may be limiting.</td>
<td>Not considered extirpated.</td>
<td>Listed as endangered under the Provincial Endangered Species Act.</td>
</tr>
<tr>
<td>New Brunswick</td>
<td>Historical records unreliable.</td>
<td>1932</td>
<td>Northern New Brunswick; low prey densities.</td>
<td>Small number may be present, of unknown origin and taxonomy; lack of evidence of a viable population.</td>
<td>Not currently protected.</td>
</tr>
<tr>
<td>Newfoundland</td>
<td>Not native to province, illegally introduced in 1960.</td>
<td></td>
<td>Not described</td>
<td>Sightings believed to be of released animals or their progeny. No verified records</td>
<td>Not listed on the Provincial list of endangered species, but protected by Provincial regulations.</td>
</tr>
<tr>
<td>Nova Scotia</td>
<td>No verified reports; may have extended into area coincident to deer expansion in early 1900s.</td>
<td></td>
<td>Not described</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ontario</td>
<td>Historically reported as both rare and common.</td>
<td>1908</td>
<td>Large forested blocks; ample prey base.</td>
<td>Considered extirpated.</td>
<td>Not protected under Provincial Endangered Species Act.</td>
</tr>
<tr>
<td>Prince Edward Island</td>
<td>No known historical records.</td>
<td></td>
<td>Not described</td>
<td>No known occurrences.</td>
<td>Not currently protected.</td>
</tr>
<tr>
<td>Quebec</td>
<td>Occurred provincewide; common south of St. Lawrence River.</td>
<td>1920</td>
<td>Habitat and prey available.</td>
<td>Considered extirpated despite recent reports.</td>
<td>Not currently protected.</td>
</tr>
</tbody>
</table>

Current Biological Status of Pumas in Eastern North America: Our conclusions regarding the current biological status of the eastern puma rely upon three lines of evidence: (1) The detectability of wild pumas, (2) contemporary accounts of puma sightings in eastern North America as evidence of the continued existence of eastern pumas, and (3) the time since the last verified eastern puma occurrence. Recognizing that extinction cannot be demonstrated with absolute certainty (i.e., it is a probabilistic determination), the totality of evidence for the eastern puma provides a basis for drawing robust conclusions about the true status of this subspecies, as discussed below. A more detailed discussion and references are provided in the 5-year status review (USFWS 2011, pp. 36–56).

Detectability of pumas: This line of evidence addresses the question of how likely it is that eastern puma individuals or populations could continue to persist without being detected. If entities are difficult to detect, lack of confirmed sightings may not be indicative of absence; however, if detectability is known to be high, it is much more likely that lack of sightings is evidence of absence. For the eastern pума, detectability differs between individuals and populations. Although individual pumas are difficult to detect, determining the presence of a puma population is possible with a reasonable amount of effort.

Detection of single, transient pumas is particularly problematic because they cover such a large range and leave behind little sign of their occupation (e.g., scrapes, kills, and tracks) in any one place. The best prospect for detecting these animals is through tracks left during their extensive daily movement in the snowy regions of North America.

Numerous searches and surveys have been undertaken to detect the presence of individual pumas, either directly or as part of large carnivore studies, and, by extension, puma populations in eastern North America. Searches have been conducted in areas reputed to harbor pumas, and reports of puma sightings have been investigated.
extensively. Surveys have utilized a variety of techniques, including trail transects with motion-sensing cameras, hair trap posts and rubbing pads, and snow-covered road surveys to detect the tracks or signs of pumas. Such studies have yielded few positive results in eastern North America. However, in other parts of North America, pumas have been readily detected through searches and surveys. Additionally, pumas have been detected as a result of road kills; even in areas with small extant populations (such as Florida and South Dakota) and low road densities, pumas killed on roads are reported nearly every month of the year. In contrast, although road mortalities have been documented in the eastern United States and Canada in recent years, the reports are irregular, and in the rare instances where individuals have been verified as wild pumas, they have originated outside the eastern puma’s historical range.

Overall, pumas have been readily detected in eastern North America outside the historical range of the eastern puma. We can thus conclude that pumas and, in particular, puma populations, could be detected with a reasonable amount of effort if present in eastern North America. We further conclude that the searches, surveys, and efforts to verify sightings by the public since the 1950s constitute a reasonable effort, as discussed below and detailed in the 5-year review (USFWS 2011, pp. 26–29). However, despite the detectability of pumas, no evidence has been presented to verify the continued existence of the eastern subspecies or of any breeding population of pumas within its historical range.

Contemporary accounts of pumas in eastern North America as evidence of the continuing existence of the subspecies: As discussed in the 5-year review (USFWS 2011, pp. 36–38), renewed interest in puma conservation over the past 60 years has resulted not only in a profusion of reported sightings by the public but also efforts by scientists to determine the presence of pumas in eastern North America. We summarize these accounts below and discuss whether they constitute a basis for concluding that the eastern puma remains extant. There were few reports of pumas in eastern North America between the late 1800s and the 1940s and 1950s (see “Historical Range, Abundance, and Distribution” above). The number of reports increased in the 1950s, and states, provinces, and puma organizations began maintaining databases of puma sightings. The increased reporting coincided with coverage in the popular press and assertions by biologists and other writers that there was sufficient evidence to believe that the eastern puma still existed. It also coincided with a growing number of pumas in the North American pet trade.

A surge in reported sightings followed in the 1960s and 1970s, again coincident with publications claiming that a relic population of pumas from the northeastern United States and eastern Canada was repopulating eastern North America. Although based mostly on questionable evidence, many—including wildlife biologists—accepted this hypothesis without critical scientific review. The sheer volume of anecdotal reports was cited as evidence for the continued existence of pumas, although few of these reports were ever substantiated. By the 1970s, puma advocacy groups had been established, and they, along with many independent researchers and advocates, were investigating sightings and promoting recovery. This led to the 1973 listing of the eastern cougar, even though there was no physical evidence showing that populations existed at that time.

Since listing, thousands of reports have been collected by wildlife agencies and puma organizations, including hundreds of puma sightings by reliable witnesses where physical evidence was not available. Most recently, during preparation of the eastern puma 5-year review (from 2007 to 2010), 60 reports of pumas were considered to have some likelihood of validity based on verified identification of tracks; photographic evidence; genetic, hair, or scat samples; or discovery of carcasses (USFWS 2011, appendix B). It is important to note that none of these reports was verified as the eastern subspecies.

A number of formal studies have been undertaken to determine the presence of pumas in eastern North America. One study (Michigan Wildlife Conservancy 2003) detected pumas, but the results and methodology were subsequently contested. Elsewhere in the Midwest, pumas have been detected with trail cameras. A puma sighted in Wisconsin was verified in January 2008 and shot in Chicago, Illinois, in April 2008. This animal was determined to be of North American origin with characteristics similar to South Dakota pumas. In 2009, another Wisconsin puma was treed and photographed on several occasions; DNA analysis was not available for this animal. In eastern Canada, a survey of the Maritime provinces from 2001 to 2004 (Chapman 2005, entire) confirmed six samples as puma. Of these six samples, several were found to be of South American origin, indicating that released or escaped captive pumas are also present in the wild, while others were verified as North American genotypes without being able to determine if they were of captive or wild origin.

Overall, most of the surveys conducted by wildlife biologists in eastern North America—some of which have targeted pumas while others have targeted different species (e.g., wolves, lynx)—have failed to detect any sign or evidence of the presence of pumas. Details of each survey effort are provided in the eastern puma 5-year review (USFWS 2011, pp. 26–29 and appendix B).

Many puma sightings are reported as “eyewitness” accounts; this type of report has increased with the availability of Internet search engines and is sometimes spurred by news articles that encourage others to report observations. The reliability of such accounts can depend on time of day, experience level of the observer, duration of the observation, and observer trustworthiness. Insufficient field identification and tracking skills, as well as photographs of single tracks rather than a series of tracks, may further compromise reliability. Based on our assessment of puma eyewitness accounts (USFWS 2011, pp. 36–42), it appears that 90 to 95 percent of puma sightings and vocalizations reported by the public involve instances of misidentification and, at times, deliberate hoaxes.

Although documentation of sightings by the public in areas where pumas are uncommon can be useful—particularly where protocols for puma sightings and analysis have been established—compilations of unconfirmed sighting reports can also produce a large volume of cogent but misleading information. The problem with treating anecdotal sightings as empirical evidence is compounded when such observations are supplemented by inconclusive physical evidence such as indistinct photographs. Typically, as a species becomes rarer, the proportion of false positives increases; thus, even the most tangible evidence of a puma must be followed by further inquiry to identify it as a wild specimen and ascertain its origins.

Over the past 50 years, thousands of puma sightings have been investigated, at substantial public and private expense. Only a small percentage of investigations have resulted in collection of evidence that could be interpreted or further analyzed, and only a small percentage of the analyses have provided irrefutable proof of a
wild puma. The most recent case was a male puma killed on a highway in Milford, Connecticut, in 2011. Genetic analysis of the animal determined that its origin was a population in South Dakota, indicating that it was a transient western puma; the same animal had been documented in Minnesota, Wisconsin, and northern New York prior to arriving in Connecticut.

Despite the large number of contemporary eastern puma accounts, few of the surveys and investigations of puma reports have provided verifiable evidence of the presence of pumas, irrespective of origin, in eastern North America, and even fewer have provided irrefutable proof of a wild puma. Nonetheless, verified puma occurrences have occurred with enough frequency in eastern North America (approximately 15 puma carcasses have been documented in eastern North America north of Florida since 1950) to encourage a widespread belief that a cryptic eastern puma population continues to persist.

In considering whether all this constitutes evidence of an extant eastern puma population, three possible hypotheses have been considered: First, that the observed animals are members of a persistent relic population; second, that they are released or escaped captives; or, third, that they are dispersers from source populations outside of the region. These hypotheses are discussed, in turn, below.

1. A relic population of pumas has survived in eastern North America

Although some hypothesize that the eastern puma has survived in eastern North America since colonial times, the continued existence of a puma population in eastern North America is not corroborated by the historical record, the history of white-tailed deer, or our current understanding of puma ecology (USFWS 2011, pp. 43–46).

As noted above, most eastern pumas were thought to have been virtually extirpated by the late 1800s. Had members of the subspecies survived, they should have been detectable. With some exceptions (e.g., later records in Maine and New Brunswick) authors document a near-absence of records from the late 1800s to the 1950s. Further, despite the verified reports of pumas mentioned above, whenever we have been able to determine the origins of these pumas, they have been shown to be either captive pumas (generally South American pumas or their progeny) or dispersers from western populations. None of these animals has been confirmed as the eastern subspecies.

A number of population viability analyses indicate that both a minimum population size and minimum area of high-quality habitat are needed for long-term puma persistence. The probability of population persistence also depends on favorable demographic factors. Studies to date indicate, very approximately, that puma populations consisting of fewer than 15 to 20 animals and occupying less than 386 to 772 mi² (1,000 to 2,000 km²) of high-quality habitat would be unlikely to persist over the long term, particularly in the face of any adverse genetic effects (USFWS 2011, pp. 8 and 46). Effects of postsettlement persecution of eastern pumas, compounded by loss of habitat and the near-extermination of white-tailed deer, severely reduced the probability of persistence using both of these measures. Pumas likely survived longest in remaining large forest tracts where deer were not extirpated and at the northern periphery of their historical range as deer shifted northward (which would explain the later puma records in Maine and New Brunswick). To survive elsewhere in the East, puma populations would have had to persist for decades with extremely low or absent populations of their primary prey, and such persistence is doubtful. Even in northern regions, deer populations were greatly reduced, and snow depths there would have been limiting for pumas.

This information, along with the total absence of verified contemporary eastern puma records, suggests that a remnant population of eastern pumas is highly unlikely to have survived two centuries of intense human exploitation and persecution, habitat changes, and near-eradication of its primary prey. Further, were a relic puma population to have survived, the rebounding of deer populations along with protections from take under the Act would have likely resulted in a corresponding increase in documentation of eastern puma presence and increased likelihood of detection. Given the lack of verified contemporary records, we therefore find no evidence to support the hypothesis that an undetected remnant population of eastern pumas remains extant.

2. Pumas occurring in eastern North America are released or escaped pets

Since the mid-1900s, there has been speculation that perhaps all pumas observed in eastern North America (outside of Florida) are escaped or released captive animals. The findings regarding this hypothesis, presented in the 5-year review (USFWS 2011) on pp. 47–51 and in Appendix B, are summarized below.

Genetic techniques are now available to determine if puma specimens are of North American origin and therefore more likely to be wild animals. Captive puma enthusiasts apparently favor Central and South American animals, and it can be assumed that pumas found in eastern North America with South American DNA are escaped or released captives or their progeny. Since the early 1990s, 24 puma genetic samples have been collected within the historic range of the eastern puma and tested using a variety of techniques (USFWS 2011, Appendix B). Of these, about one-third were found to be of Central or South American origin, one-third were of North American origin, and one-third were identified as pumas but of unknown origin.

In addition to genetic evidence, the increasing frequency of reported puma sightings in the eastern United States and Canada correlates with the increased private ownership, trade, and breeding of pumas that began in the 1940s and 1950s. Zoos formerly sold or gave pumas to individuals or dealers, although this is strictly prohibited today and there currently is a ban on breeding pumas in zoos. More recently, Internet sales of exotic cats have flourished, illustrating the continuing ease of acquiring captive pumas. This situation is exacerbated in some States by enforcement challenges, and these States’ lack of information about the number and disposition of captive pumas within their borders. Overall, there are likely thousands of privately-held (both legally and illegally) pumas in the eastern United States, dwarfing the number of pumas in zoos.

Released or escaped pumas are documented in numerous accounts, along with frequent reports of such pumas being recaptured (USFWS 2011, pp. 49–50). It has also been found that individual captive pumas may successfully adapt to conducive conditions in the wild. If released or escaped captives initially avoid recapture or death, they most likely become wandering transients. Overall, it may be possible, although unlikely, for individual captive pumas to transition into a wild existence, establish home ranges, and, like other transient pumas, persist with low detectability.

Nonetheless, the likelihood of escaped or released captive pumas establishing breeding populations is minimal, both because transient pumas are unlikely to recolonize new areas unless there is an adjacent resident puma population, and because their survival prospects are generally low. The multiple reports we have received of pumas in a geographic location over a period of months (but not years) could constitute actual observations of
escaped animals. However, if these animals are declawed or defanged, they have little chance of surviving over the long term, particularly at rates needed to establish a population. Further, few of the many reported sightings of puma kittens in eastern North America, which would be indicative of a breeding population, have been substantiated (USFWS 2011, p. 51).

We conclude that the evidence supports the hypothesis that pumas recently found in eastern North America are released or escaped captive animals, with the exception of some animals in Illinois, Wisconsin, and other midwestern States that are dispersing from more westward populations (see discussion below). Genetic and isotope techniques are improving, which will help distinguish whether pumas of North American ancestry are of wild or captive origin.

3. Pumas in eastern North America are dispersers from breeding populations to the west and south. Breeding populations in proximity to the eastern puma’s historical range occur in Manitoba, North Dakota, South Dakota, possibly Nebraska and Oklahoma, and Florida. The Service’s 5-year review discusses the likelihood of immigration of pumas to eastern North America from these populations (USFWS 2011, pp. 51–56).

Regarding dispersal from Florida, there was little evidence until recently that the Florida panther population was expanding northward, but since 1998, four tagged and several unmarked animals have crossed the Caloosahatchee River, previously thought to be a barrier to northward expansion. In addition, an adult male puma killed in Georgia in 2008 originated in Florida. Nonetheless, given the many other substantial barriers to dispersal, it is considered highly unlikely that Florida panthers are dispersing out of Florida with enough frequency to establish populations elsewhere in the Southeast, although adequate prey and habitat are available in Georgia.

As to dispersal from the West, puma populations in most western States are believed to be at historically high levels, and breeding populations have expanded their ranges eastward. Dispersing pumas have been reported since 1990 in the Midwest, primarily west of the Mississippi River and possibly the Great Lakes Region, with over 130 confirmed puma records documented in Wisconsin, Illinois, Nebraska, Kansas, Minnesota, Missouri, and Iowa.

These records confirm that eastward dispersal from breeding populations of western pumas is occurring, especially from North and South Dakota (note the previous mention of a South Dakota puma killed in Connecticut in 2011). Confirmed records of wild-origin pumas exist in many States and provinces bordering the western and northern peripheries of the eastern puma’s historical range, and most States in the Midwest now acknowledge the presence of wild pumas. Further, persistent puma presence has been documented in a few areas (Missouri, Iowa, Minnesota, Nebraska), suggesting that individual pumas are successfully surviving in the wild and may have established home ranges.

Suitable, albeit sometimes fragmented, habitat and an adequate prey base are available for pumas in the Midwest and Great Lakes regions, with large populations of white-tailed deer occurring throughout the region. Moreover, numerous dispersal corridors leading to highly suitable habitat areas in the Midwest have been identified within feasible dispersal distances for pumas. Although dispersing pumas frequently travel along deer-rich riparian corridors and generally avoid human-dominated landscapes, pumas are known to disperse across large expanses of inhospitable habitat. Roads and railroad rights-of-way and associated brush belts also provide dispersal corridors. The upper Midwest Region is the most favorable route for cougars repopulating the East from the Dakotas, and Manitoba’s puma population may be a potential source for animals observed in Ontario, northern Minnesota, Wisconsin, and Michigan.

Although individual males are known to disperse over long distances, the establishment of puma populations in the Midwest and Great Lakes regions is less likely to occur unless breeding range expansion is facilitated. Female pumas do not move far from their natal areas, and male pumas compete for access to females; that is, in addition to adequate food and cover, dispersing males search for areas occupied by one or more resident females. Thus, range expansion is unlikely unless females disperse—or are released—into new habitats. As would be expected, most of the recent Midwest puma records are of males.

Given evidence of growing puma populations in the West, increased dispersal, and availability of dispersal corridors and prey in the Midwest, we conclude that wild-origin pumas (primarily males) will continue to disperse into the midwestern States and into the historical range of the eastern puma and are the likely source of any wild pumas that currently exist in eastern North America.

Summary: First, it is important to note that the alternative hypotheses for the continuing presence of pumas in eastern North America are not mutually exclusive. Physical evidence indicates that pumas recently found in eastern North America are released or escaped captive animals, with the exception of some wild animals in the Midwest (and one documented in Connecticut) that are dispersing from western populations. The evidence also suggests that these are transient pumas with little potential for naturally establishing breeding populations.

Most significantly, no evidence whatsoever has been found to show that either individual eastern pumas or any relic populations of the eastern puma subspecies remain extant in eastern North America.

Time since last verified eastern puma report: The most recently confirmed records of pumas native to eastern North America are from Tennessee (1930), New Brunswick (1932), and Maine (1938). These records coincide with the extirpation of white-tailed deer in most of its range in the 1800s, with the exception of some remaining large forest tracts, and a shift toward the northern periphery of its historical range during that time. Reports of pumas were made by reputable observers in Missouri as late as 1966, but the taxonomy of these animals has long been in question.

It is notable that areas in eastern North America that still support extant populations of native pumas (e.g., Florida and Manitoba) have had a long and continuous record of confirmed occurrences. In contrast, a long-term record of verified puma occurrences is lacking in regions of eastern North America outside Florida.

Given the puma’s life span, generally thought to be 10 to 11 years, it is extremely implausible that non-breeding eastern pumas could have persisted in the wild under conditions of habitat loss and lack of their primary prey base and without being detected for over six decades. It is equally if not more unlikely that breeding populations of the subspecies could have gone undetected for that long. Based on how improbable it is that eastern puma individuals or populations could have weathered such a long period of habitat and prey loss, along with the lack of either a recent report or a long-term record of eastern puma occurrences, we conclude that the time since the last verified eastern puma record is indicative of the long-term absence of this subspecies.
Summary: Overall, we find that pumas (except for single transients) are reasonably detectable, that no contemporary puma sightings in eastern North America have been verified as the eastern puma subspecies since 1938, and that it is extremely unlikely that either individuals or eastern puma populations could have survived the long period during which most of their habitat was lost and their primary prey base was nearly extirpated. We therefore determine the eastern puma subspecies to be extinct.

Consideration of Factors Under Section 4(a)(1) of the Act

As mentioned under Assessment of Species Status above, section 4 of the Act and its implementing regulations (50 CFR part 424) set forth the procedures for listing, reclassifying, or removing species from listed status. When we evaluate whether a species should be listed as an endangered species or threatened species, we must consider the five listing factors described in section 4(a)(1) of the Act: (A) The present or threatened destruction, modification, or curtailment of the species’ habitat or range; (B) overutilization for commercial, recreational, scientific, or educational purposes; (C) disease or predation; (D) the inadequacy of existing regulatory mechanisms; and (E) other natural or manmade factors affecting the species’ continued existence. We must consider these same factors in reclassifying a species or removing it from the List.

The principal factors leading to the listing of the eastern puma were widespread persecution (poisoning, trapping, hunting, and bounties), decline of forested habitat, and near-extirpation of white-tailed deer populations during the 1800s. These impacts led to the extirpation of most eastern puma populations by 1900. However, because we have determined that all populations of pumas described as the eastern puma, Puma (=Felis) concolor couguar, have been extirpated, analysis of the five factors under section 4(a)(1) of the Act, which apply to threats facing extant species, is tragically irrelevant. As stated above, given the period of time that has passed without verification of even a single eastern puma, the Service believes that the last remaining members of this subspecies perished decades ago. Therefore, the eastern puma is no longer extant and logically can no longer be an endangered species or threatened species because of any of the five factors.

Conclusion

Widespread persecution, decline of forested habitat, and near-extirpation of white-tailed deer populations during the 1800s led to the loss of most eastern puma populations by 1900. Although individual pumas were taken as late as 1932 in New Brunswick and 1938 in Maine, neither the Service’s 5-year status review (USFWS 2011) nor information that has become available since then has yielded any convincing evidence to support the hypothesis that small, cryptic populations of the subspecies continue to persist anywhere within its historical range, including northern New England and eastern Canada. These findings are supported by the most recent Canadian Wildlife Service status review (Scott 1998) and by analyses in the revised Florida Panther Recovery Plan (USFWS 2008).

We therefore conclude that the subspecies Puma (=Felis) concolor couguar, or eastern puma (=cougar), was likely extirpated from eastern North America prior to its listing in 1973, notig, however, that extirpation had not been substantiated at that time.

We further conclude that although there have been thousands of puma sightings in eastern North America since the 1950s, most are a case of mistaken identity. We acknowledge that a small number of pumas are occasionally encountered in the wild in eastern North America within the historical range of the listed eastern puma. Based on the best available scientific evidence, however, we conclude that these are escaped or released captive animals, or dispersers from western puma populations, not the eastern puma subspecies. Breeding of escaped or released individuals, if it occurs, appears to be an extremely rare event, and there is no evidence of any population established from escaped or released captive animals. Although it is improbable that pumas can disperse regularly out of Florida, puma range expansion may be occurring in the Midwest from the West. Several wild-origin pumas have been confirmed in that region and are likely dispersers from western populations that have reached carrying capacity. Dispersal into the Midwest will likely increase in frequency as long as western puma populations continue to grow.

With regard to puma taxonomy, we recognize the ongoing debate among scientists about the taxonomic assignment of puma subspecies and whether genetics should be the driving factor in puma taxonomy. Although Culver et al.’s (2000, entire) genetic analysis injected significant uncertainties into current puma taxonomy, we have concluded that until a comprehensive evaluation (including genetic, morphometric, and behavioral analyses) of North American pumas is completed, the best available information continues to support the assignment of the eastern taxon to Puma (=Felis) concolor couguar. We further note that these taxonomic questions do not affect the determinations in this proposed rule regarding the listed entity’s biological status.

Taking all these considerations into account, we conclude that the taxon Puma (=Felis) concolor couguar is extinct.

Proposed Determination

After a thorough review of all available information, we have determined that the subspecies Puma (=Felis) concolor couguar is extinct. Based upon this determination and taking into consideration the definitions of “endangered species” and “threatened species” contained in the Act and the reasons for delisting as specified in 50 CFR 424.11(d), we propose to remove the eastern puma from the List of Endangered and Threatened Wildlife at 50 CFR 17.11.

Available Conservation Measures

Conservation measures provided to species listed as endangered or threatened under the Act include recognition, recovery actions, requirements for Federal protection, and prohibitions against certain practices. However, since the Service has determined the eastern cougar to be extinct, this proposed rule, if made final, would remove any Federal conservation measures for any individual pumas (except dispersing Florida panthers) that may subsequently be found within the historical range of the eastern puma.

Effects of the Rule

This proposal, if made final, would revise 50 CFR 17.11 to remove the eastern puma from the List of Endangered and Threatened Wildlife due to extinction. The prohibitions and conservation measures provided by the Act would no longer apply to this subspecies. There is no designated critical habitat for the eastern puma.

Post-Delisting Monitoring

Section 4(g)(1) of the Act, added in the 1988 reauthorization, requires us to implement a program, in cooperation with the States, to monitor for not less than 5 years the status of all species that have recovered and been removed from the Lists of Endangered and Threatened...
Wildlife and Plants (50 CFR 17.11 and 17.12). Based upon the results of more than 25 years of investigating sporadic reports of sightings and our conclusion that the eastern puma is extinct, post-delisting monitoring is not warranted.

**Required Determinations**

*Clarity of the Rule*

We are required by Executive Orders 12866 and 12988 and by the Presidential Memorandum of June 1, 1998, to write all rules in plain language. This means that each rule we publish must:

(a) Be logically organized;
(b) Use the active voice to address readers directly;
(c) Use clear language rather than jargon;
(d) Be divided into short sections and sentences; and
(e) Use lists and tables wherever possible.

If you feel that we have not met these requirements, send us comments by one of the methods listed in **ADDRESSES**. To better help us revise the rule, your comments should be as specific as possible. For example, you should tell us the names of the sections or paragraphs that are unclearly written, which sections or sentences are too long, the sections where you feel lists or tables would be useful, etc.

*National Environmental Policy Act*

We have determined that an environmental assessment or an environmental impact statement, as defined under the 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).

**Government-to-Government Relationship With Tribes**

In accordance with the President’s memorandum of April 29, 1994, Government-to-Government Relations with Native American Tribal Governments (59 FR 22951), E.O. 13175, and the Department of the Interior’s manual at 512 DM 2, we readily acknowledge our responsibility to communicate meaningfully with recognized Federal Tribes on a government-to-government basis. In accordance with Secretarial Order 3206 of June 5, 1997 (American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act), we readily acknowledge our responsibilities to work directly with Tribes in developing programs for healthy ecosystems, to acknowledge that tribal lands are not subject to the same controls as Federal public lands, to remain sensitive to Indian culture, and to make information available to Tribes. Accordingly, the Service communicated with Tribes during the 5-year review process, and we are notifying Tribes of our activities regarding this proposal to delist the eastern puma based on extinction.

**References Cited**

A complete list of all references cited in this document and in the 5-year review upon which this proposal is based is available upon request from the Service’s Maine Field Office (see **FOR FURTHER INFORMATION CONTACT**). References are also posted on http://www.fws.gov/northeast/ECougar.

**Authors**

The primary authors of this proposed rule are the staff members of the Maine Field Office and the Hadley, Massachusetts, Regional Office.

**List of Subjects in 50 CFR Part 17**

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

**Proposed Regulation Promulgation**

Accordingly, 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:

   Authority: 16 U.S.C. 1361–1407; 1531–1544; 4201–4245, unless otherwise noted.

   **§ 17.11 [Amended]**

   2. Amend § 17.11(h) by removing the entry for “Puma (=cougar), eastern” under “Mammals” in the “List of Endangered and Threatened Wildlife.”

   Dated: May 22, 2015.

   **Stephen Guertin,**
   Acting Director, U.S. Fish and Wildlife Service.

   [FR Doc. 2015–14931 Filed 6–16–15; 8:45 am]

   **BILLING CODE 4310–55–P**