

5-Year Review: Summary and Evaluation
Jaguar (*Panthera onca*)
Current Classification: *Endangered*

U.S. Fish and Wildlife Service
Ecological Services Office
Tucson, AZ

1.0 GENERAL INFORMATION

1.1 Reviewers: Scott Richardson (Arizona Ecological Services Field Office (AESO), Tucson), Julie McIntyre (AESO, Tucson), Stacey Stanford (Regional Office), Bill Radke (Refuges), and Jeffrey A. Humphrey (Field Supervisor AESO, Phoenix)

Lead Field Office: Marit Alanen, Fish and Wildlife Biologist, 520-670-6150 x234

1.2 Methodology: In 2010, the U.S. Fish and Wildlife Service initiated the writing of a Jaguar Draft Recovery Plan. This plan was open for public comment for 90 days from December 20, 2016, through March 20, 2017, and received peer review from two outside reviewers, both from Mexico. The final Jaguar Recovery Plan was signed in July, 2018. It contains objective and measureable criteria for downlisting to threatened status and recovery of the taxon (delisting). The Jaguar Recovery Plan contains the most current and complete evaluation of the status of this species and is the basis for this 5-year Review.

1.3 FR Notice citation announcing initiation of this review: April 21, 2006 (71 FR 20714) and May 31, 2018 (83 FR 25034).

2.0 REVIEW ANALYSIS

2.1 Review Summary: Please refer to the Recovery Plan for a complete review of the taxon's status (including biology, population trends, and habitat), threats, and recovery actions. Currently, jaguars are found in 19 countries from the southwestern U.S. to northern Argentina. The species is believed to be extirpated in El Salvador and Uruguay.

As a large carnivore, the jaguar is more vulnerable to extinction than many other land mammals. Habitat loss and fragmentation; killing for trophies/illegal trade in body parts; pro-active or retaliatory killing associated with livestock depredations; and competition for wild meat with human hunters are the primary threats contributing to its current status, considered to have a decreasing population trend according to the International Union for Conservation of Nature (IUCN). Decline in range (20% loss from 2002 to 2015) indicates the species is trending toward Vulnerable (IUCN category). The estimated rangewide jaguar population is

173,000 (95% CI: 138,000–208,000) individuals, mostly concentrated in the Amazon Basin, with jaguar populations tending to be small and fragmented outside of this area. The legal protected status in countries throughout its range does not appear to have secured jaguars in their core or corridor areas. Connectivity among jaguar populations is being lost at local and regional scales and small and isolated jaguar populations do not appear to be highly persistent. Additionally, jaguars require sufficient prey, and when prey is overharvested, jaguars may turn to livestock to meet their dietary needs, resulting in retaliatory killing.

Criteria developed to down or delist the jaguar focus on protecting jaguar habitat quantity, quality, and connectivity; providing incentives to protect jaguars and their habitat; reducing human-caused mortality of jaguars, particularly retaliatory killing due to livestock depredation; improving, enacting, and/or enforcing effective laws that regulate illegal killing of jaguars, jaguar prey, and habitat loss; securing adequate funding to implement recovery actions; and maintaining and developing partnerships in the Americas, particularly in Mexico.

3.0 RESULTS

3.1. Recommended Classification:

Downlist to Threatened

Uplist to Endangered

Delist (*Indicate reasons for delisting per 50 CFR 424.11*):

Extinction

Recovery

Original data for classification in error

No change is needed

3.2 **Recovery Priority Number:** No change (5C).

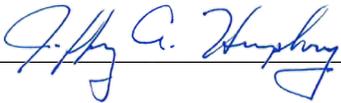
Brief Rationale: In our previous assessment, the recovery priority number (48 FR 43104) was determined to be 5C. Our current assessment indicates that the degree of threat remains high, the recovery potential remains low, some degree of conflict exists between the species' recovery efforts and economic development, and the taxon is a species. Therefore, the current recovery priority number remains 5C.

4.0 RECOMMENDATIONS FOR FUTURE ACTIONS

The principle recovery strategy incorporates the important biodiversity principles of representation, resiliency, and redundancy and involves securing jaguar populations throughout their range by removing, reducing, and mitigating the primary threats to the jaguar (habitat loss and fragmentation, illegal killing, and unsustainable depletion of jaguar prey resources). These protections are needed and must remain in place after delisting to ensure the long-term viability of the

species. Due to past habitat loss, it is unlikely that jaguars will be fully self-sustaining throughout their historical range; however, conservation of key jaguar habitat (including core and connective areas) and populations in their current range will be critical to the recovery of jaguars. Several recovery actions listed in the Recovery Plan are already under way, including survey and monitoring efforts and protecting habitat and corridors.

Field Supervisor, Arizona Ecological Services Field Office

Approve  Date 11/14/19