



Proposed Rule to List the Western Distinct Population Segment of the Yellow-Billed Cuckoo as a Threatened Species.

Species Description

The yellow-billed cuckoo (*Coccyzus americanus*) is a neotropical migrant bird that winters in South America and breeds in North America.

Adult yellow-billed cuckoos have moderate to heavy bills, somewhat elongated bodies and a narrow yellow ring of colored bare skin around the eye. The plumage is loose and grayish-brown above and white below, with reddish primary flight feathers. The tail feathers are boldly patterned with black and white below. They are a medium-sized bird about 12 inches in length, and weigh about 2 ounces. The species has a slender, long-tailed profile with a fairly stout and slightly down-curved bill that is blue-black with yellow on the basal half of the lower mandible. The legs are short and bluish-gray.



Yellow Billed Cuckoo

Yellow-billed cuckoos have feet that are zygodactyl; each foot has two toes that point forwards and two toes point backwards. Juveniles resemble adults, except the tail patterning is less distinct and the lower bill has little or no yellow. Males and females differ slightly; the males have a slightly smaller body size, smaller bill, and the white portions of the tail tend to form distinct oval spots. In females, the white spots are less distinct and tend to be connected.

A typically secretive and hard-to-detect bird, mated yellow-billed cuckoos have a distinctive “kowlp” call which is a loud, nonmusical series of notes that slows down and slurs toward the end. Unmated cuckoos advertise for a mate using a series of soft “cooing” notes. Both members of a pair use the “knocker” call, a series of soft notes given as a contact or warning call near the nest.

While the yellow-billed cuckoo is common east of the Continental Divide, biologists estimate that more than 90 percent of the bird's riparian habitat in the west has been lost or degraded as a result of conversion to agriculture, dams and river flow management, bank protection, overgrazing, and competition from exotic plants.

Questions and Answers

Q. What is being proposed?

A. The U.S. Fish and Wildlife Service (Service) is proposing to add federal protections for the Western Distinct Population Segment (DPS) of the yellow-billed cuckoo by listing it as a Threatened Species under the Endangered Species Act (ESA).

Q. What is the difference between the western yellow-billed cuckoo and other yellow-billed cuckoos?

A. During the breeding season, the western yellow-billed cuckoo populations are separated from other yellow-billed cuckoo populations by high mountains, extensive desert, or nonhabitat areas. In the west, they nest only in extensive stands of riparian habitat. The behavior of the western yellow-billed cuckoo is also different. They migrate a month or more later to their breeding grounds and nest later. Western yellow-billed cuckoos are larger than their eastern counterpart and produce larger eggs with thicker eggshells.

Q. What is a distinct population segment (DPS)?

A. A DPS is a segment of a species' population that is markedly "discrete," separated from other populations due to physical, physiological, ecological, or behavioral factors. A DPS must also be "significant" or, in other words, important to the species. Significance can be satisfied by the persistence of the DPS in an unique or unusual ecological setting, evidence that the loss of the DPS would result in a significant gap in the range of the species, evidence that the DPS represents the only surviving natural occurrence of the species, and evidence that the DPS differs markedly from the other populations of the species in its genetic characteristics.

The western yellow-billed cuckoo is considered a DPS because it is markedly separated from other yellow-billed cuckoo populations by:

- Physical Separation: The majority of the western yellow-billed cuckoo population is geographically separated by 50 to 500 miles of unsuitable breeding habitat from other yellow-billed cuckoos. Some limited mixing of the birds occurs in New Mexico and Texas.
- Migration timing: Western birds arrive on their breeding grounds 4-8 weeks later than eastern cuckoos arrive on theirs.

The western DPS of the yellow-billed cuckoo is significant because a loss of the DPS would result in a significant gap (almost 33%) across the entire range of the species, both eastern and western birds. Western yellow-billed cuckoos have significantly larger body sizes and lay larger eggs that have thicker egg shells than their eastern counterparts.

Q. What factors does the Service evaluate in determining whether a species is endangered or threatened?

A. Under the ESA, the Service can determine that a species is endangered or threatened as a result of one or more of five factors:

1. The present or threatened destruction, modification, or curtailment of its habitat or range;
2. Overutilization for commercial, recreational, scientific, or educational purposes;
3. Disease or predation;
4. Inadequacy of existing regulatory mechanisms; or
5. Other natural or manmade factors affecting its continued existence.

Q. What are the specific threats to the western yellow-billed cuckoo?

A. The Service has determined that the western yellow-billed cuckoo is threatened by two of the five factors mentioned above:

- The present or threatened destruction, modification, or curtailment of its habitat or range: Threats to the western yellow-billed cuckoo result from habitat destruction and modification due to dam construction and operations; water diversions; river flow management; stream channelization and stabilization; conversion to agricultural uses, such as crops and livestock grazing; urban and transportation infrastructure; and increased incidence of wildfire. These factors also contribute to fragmentation and promote habitat conversion to nonnative plant species, particularly tamarisk. The threats affecting western yellow-billed cuckoo habitat are ongoing and serious. Such a loss of riparian habitat leads not only to a direct reduction in cuckoo numbers but also leaves a highly fragmented landscape, which can reduce breeding success through increased predation rates and barriers to dispersal by juvenile and adult cuckoos.
- Other natural or manmade factors affecting its continued existence: Habitat scarcity and small, isolated populations of the western yellow-billed cuckoo, cause the remaining cuckoo populations to be increasingly susceptible to further declines through lack of immigration, chance weather events, fluctuating availability of prey populations, pesticide effects on prey species, and climate change. The serious and ongoing threats of small overall population size lead to an increased chance of local extinctions through random events.

Q. Why has the Service proposed to list the western yellow-billed cuckoo as a threatened rather than endangered?

A. Under the ESA, an endangered species is defined as any species that is “in danger of extinction throughout all or a significant portion of its range” and a threatened species is defined as any species “that is likely to become endangered throughout all or a significant portion of its range within the foreseeable future.”

Threats to the western yellow-billed cuckoo and the decline of its population do not currently reach the level typical of an endangered species. The western yellow-billed cuckoo remains rather widespread through much of its historic range. Although there is a general decline in the overall population and its breeding range has been reduced, the rate of the population decline and contraction of its breeding range is not so severe to indicate extinction is imminent. This current downward trend is slow and not expected to increase in the near future. The majority of large-scale habitat losses and conversions through dam building and agricultural development have already occurred. We are not aware of any large scale projects which would affect the species to the extent that the current trend of decline would accelerate.

The western yellow-billed cuckoo does not meet the definition of “endangered” as determined by the ESA because it doesn’t face any known sudden and calamitous threats, it is not a narrowly endemic species vulnerable to extinction from elevated or cumulative threats, and it is not yet restricted to a critically small range or critically low numbers.

Q. What impact may climate change have on the western yellow-billed cuckoo?

A. While we do not have evidence to suggest that the habitat of the western yellow-billed cuckoo is being substantially affected by climate change at this time, we expect long-term climate trends to have an overall negative effect on the available habitat throughout the breeding range of the western yellow-billed cuckoo. Precipitation events under most climate change scenarios will decrease in frequency but increase in severity. A dramatic increase in flooding could scour remaining western yellow-billed cuckoo habitat and result in the loss of habitat. Long drought cycles could also hamper recruitment of riparian vegetation following scouring floods and lead to reduced cover and nest sites for the species. Under drought conditions, fire frequency is expected to increase which will hamper riparian and thorn forests' ability to recover.

Q. Are there any ongoing conservation efforts that benefit the western yellow-billed cuckoo?

A. Yes. The Sacramento River National Wildlife Refuge (NWR) has conducted habitat restoration activities on more than 4,500 acres that have resulted in greater habitat opportunities for the western yellow-billed cuckoo which has been found utilizing these restoration sites as early as four years after planting. Overbank flows have also been restored in a small section of the Sacramento River on the Sacramento River NWR through a small-scale levee removal project that has resulted in increased riparian habitat and floodplain function.

The Lower Colorado River Multi-Species Conservation Program (LCRMCP) is an effort that calls for restoring more than 4,000 acres of western yellow-billed cuckoo habitat. In Arizona, implementation of the LCRMSCP has successfully increased occupied western yellow-billed cuckoo habitat through restoration, and researchers have found greater occupancy of yellow-billed cuckoos in restored compared to natural habitat along the lower Colorado River and tributaries.

In Colorado's San Luis Valley, approximately 1,500 acres of riparian habitat that supports the western yellow-billed cuckoo are under permanent conservation easement along the Rio Grande and Conejos River which supports the western yellow-billed cuckoo. The easements prohibit any activity that alters or diminishes the value of the wildlife habitat.

In northeastern Sonora, Mexico, a habitat conservation action includes the purchase and protection of the 10,000-acre Pavos-Northern Jaguar Preserve by a nongovernmental conservation organization. While not managed on the site, yellow-billed cuckoos were commonly sighted during bird surveys. This rugged roadless area is located on the Río Aros, which is part of the Río Yaqui watershed, is in the core area that supports one of the largest unfragmented wild areas of foothills thorn scrub in the State of Sonora.

The Santa Clara Pueblo, the San Juan Pueblo (Ohkay Owingue), and the San Ildefonso Pueblo Tribes have conducted a variety of voluntary measures, restoration projects, and management actions to conserve the western yellow-billed cuckoo and its habitat on their lands. The Santa Clara Pueblo and the San Juan Pueblo (Ohkay Owingue) have made a commitment to develop an integrated resources management plan to address multiuse, enhancement, and management of their natural

resources. The Pueblos have implemented native tree restoration projects and removed flammable exotic riparian vegetation in the riparian area since 2001.

Q. What happens next?

A. Before any final decisions are made regarding listing the western yellow-billed cuckoo, the Service will compile and assess all comments received during the public comment period. The Service will also seek the expert opinions of at least three appropriate and independent specialists with scientific expertise to review our determinations.

The Service is also scheduled to publish in the Federal Register a proposed rule to designate critical habitat for the western yellow-billed cuckoo later this year. The proposed critical habitat rule will contain a draft economic analysis of the proposed designation. The Service will open another comment period so that the public can send in comments and information.

Q. Specifically, what kind of information is the Service looking for?

A. The Service intends that any final action resulting from these proposed rules will be based on the best scientific and commercial data available and be as accurate and as effective as possible. Therefore, we request comments or information from the public, other concerned governmental agencies, Native American tribes, the scientific community, industry, or any other interested parties concerning these proposed rules.

For the proposed listing rule, we particularly seek comments concerning:

1. The DPS's biology, range, and population trends, including:
 - a. Habitat requirements for feeding, breeding, and sheltering;
 - b. Genetics and taxonomy;
 - c. Historical and current range including distribution patterns;
 - d. Historical and current population levels, and current and projected trends; and
 - e. Past and ongoing conservation measures for the DPS, its habitat or both.
2. The factors that are the basis for making a listing determination for a species under section 4(a) of the ESA, which are:
 - a. The present or threatened destruction, modification, or curtailment of its habitat or range;
 - b. Overutilization for commercial, recreational, scientific, or educational purposes;
 - c. Disease or predation;
 - d. The inadequacy of existing regulatory mechanisms; or
 - e. Other natural or manmade factors affecting its continued existence.
3. Biological, commercial trade, or other relevant data concerning any threats (or lack thereof) to the western yellow-billed cuckoo, and regulations that may be addressing those threats;
4. Additional information concerning the historical and current status, range, boundary, distribution, population trends, and population size of the DPS, including the locations of any additional populations, specifically;

- a. Breeding season data in the mountain ranges of southeastern Arizona and southwestern New Mexico, and
 - b. Breeding season data south of the United States/Mexico border;
 - c. Additional morphological and genetic data on Pecos River, New Mexico, cuckoos.
5. Any information on the biological or ecological requirements of the DPS, and ongoing conservation measures for the DPS and its habitat;
 6. Current or planned activities in the areas occupied by the DPS, and possible impacts of these activities on the DPS or its habitat;
 7. Specific information on the amount and distribution of western yellow-billed cuckoo habitat; and
 8. Information on the projected and reasonably likely impacts of climate change on the western yellow-billed cuckoo and its habitat.

Q. What's the deadline and where do I submit my comments?

A. Comments will be accepted through December 2, 2013. Comments may be submitted online at the Federal eRulemaking Portal at <http://www.regulations.gov>. The Docket Number for the proposed listing rule is FWS-R8-ES-2013-0104. Comments can also be sent by U.S. mail to:

Public Comments Processing
Attn: FWS-R8-ES-2013-0104
Division of Policy and Directives Management
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MORE QUESTIONS?

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If you use a telecommunications device for the deaf (TDD), call the Federal Information Relay Service (FIRS) at (800) 877-8339.