Ash-throated Flycatcher

Myiarchus cinerascens

REGULATORY STATUS

USFWS: Migratory Bird USFS R2: No special status USFS R4: No special status Wyoming BLM: No special status State of Wyoming: Protected Bird

CONSERVATION RANKS

USFWS: No special status WGFD: NSS3 (Bb), Tier II WYNDD: G5, S1S2 Wyoming Contribution: LOW IUCN: Least Concern PIF Continental Concern Score: 9

STATUS AND RANK COMMENTS

The Wyoming Natural Diversity Database has assigned Ash-throated Flycatcher (*Myiarchus cinerascens*) a state conservation rank ranging from S1 (Critically Imperiled) to S2 (Imperiled) because of uncertainty about the extent of the species' breeding range, amount of occupied habitat, and population trends in Wyoming.

NATURAL HISTORY

Taxonomy:

There are two subspecies of Ash-throated Flycatcher, but only *M. c. cinerascens* is found in Wyoming ^{1, 2}.

Description:

Identification of Ash-throated Flycatcher is possible in the field. Adults weigh roughly 27 g, range in length from 19–21.5 cm, and have a wingspan of 30–32 cm^{1,3}. Males, females, and juveniles are nearly identical in appearance. Ash-throated Flycatcher has a brownish-gray back and head with a bushy crest; pale gray throat and breast; very light yellow belly; some rufous coloration on the primaries and tail feathers; and a dark bill, eyes, and legs ^{1,3}. Other flycatchers in the genus *Myiarchus* are similar in appearance to Ash-throated Flycatcher but are unlikely to be found in Wyoming ⁴.

Distribution & Range:

During the breeding season, Ash-throated Flycatcher is found in the western and southwestern United States, northern Baja Peninsula, and inland Mexico¹. Local expansions have occurred on the periphery of the species' range, including Wyoming^{1, 4}. Southwestern Wyoming is on the northeastern edge of the core breeding distribution of Ash-throated Flycatcher, which is a summer resident in the state^{4, 5}. Confirmed or suspected breeding has been documented in just 3 of the state's 28 latitude/longitude degree blocks, all is southwestern and southcentral Wyoming

⁵. Disjunct populations have more recently been identified in Fremont and Natrona counties in central Wyoming ⁴; however, there are no known breeding records from those areas ⁵. Ash-throated Flycatcher migrates out of Wyoming for the winter and overwinters from extreme southern California and southwestern Arizona to northern Central America ¹.

Habitat:

Across its continental distribution, Ash-throated Flycatcher inhabits a variety of arid and semiarid environments including desert scrub, riparian corridors, and open woodlands dominated by piñon (*Pinus* spp.), juniper (*Juniperus* spp.), and oak (*Quercus* spp.)¹. In Wyoming, the species is found in mature Utah Juniper (*J. osteosperma*) woodlands ^{1, 4}, where it is most frequently observed on steep hillsides or heavily-eroded lowlands with large trees and an open understory ⁴. ⁶. Ash-throated Flycatcher is an opportunistic secondary cavity nester; nest are commonly ≥ 0.3 m above the ground in natural and woodpecker-excavated cavities as well cavities in a wide variety of man-made structures and objects ¹. Nests have been documented in natural tree cavities in southwestern Wyoming ⁶. Nest cavities are lined with fine plant materials, feathers, wild and domestic animal hair, and other scavenged soft materials ¹.

Phenology:

Spring arrival of Ash-throated Flycatcher in Wyoming likely occurs in early May⁴. Nesting chronology in Wyoming is unknown, but egg laying probably occurs 1–3 weeks after arrival on the breeding grounds. In other parts of its distribution, incubation lasts 14–16 days and fledging occurs at 13–17 days of age. Parental care continues for up to 2 weeks after fledging¹. Ash-throated Flycatcher is predominantly a single brood species, although two broods may be produced in some southern, low-elevation areas where breeding seasons are longer¹. Fall migration from Wyoming likely occurs before early September⁴.

Diet:

Ash-throated Flycatcher predominantly consumes arthropods, some fruit, and infrequently small reptiles and mammals such as lizards and mice ¹.

CONSERVATION CONCERNS

Abundance:

Continental: WIDESPREAD

Wyoming: VERY RARE

Ash-throated Flycatcher has a statewide abundance rank of VERY RARE, and its abundance within suitable environments in the occupied area is unknown ⁵. In 2013, Partners in Flight estimated the Wyoming population of Ash-throated Flycatcher to be around 400 individuals ⁷; however, this abundance estimate is based primarily on Breeding Bird Survey (BBS) data and should be viewed with caution due to the low detection rate of this species in the state. From 1968–2015, annual Wyoming BBS detections of Ash-throated Flycatcher ranged from 0 to 35, with none recorded in most years ⁸. Only 5 Ash-throated Flycatchers were detected during surveys for the Integrated Monitoring in Bird Conservation Regions (IMBCR) program between 2009–2015 ⁹. More targeted surveys in juniper woodland habitat may be necessary to adequately detect Ash-throated Flycatcher in Wyoming.

Population Trends:

Historic: UNKNOWN Recent: UNKNOWN Robust population trends are not available for Ash-throated Flycatcher in Wyoming because the species is infrequently detected during monitoring efforts. Survey-wide trend data from the North American BBS indicate that Ash-throated Flycatcher numbers experienced a statistically significant annual increase of 0.92% from 1966–2013 and a non-significant annual increase of 0.70% from 2003–2013¹⁰.

Intrinsic Vulnerability:

HIGH VULNERABILITY

Ash-throated Flycatcher has high intrinsic vulnerability in Wyoming due to low abundance, a narrow range of breeding habitats, and potentially restrictive nesting habits. Although it is found in a variety of habitat types across its continental distribution, Ash-throated Flycatcher is only known to breed in Utah Juniper woodlands in Wyoming. Mature juniper forests are rare in the state ¹¹, which likely limits the breeding distribution of this species. Breeding can be limited by the availability of suitable nest cavities in some environments ¹. Ash-throated Flycatcher will also nest in cavities of a variety of man-made structures; however, this adaptive behavior has not been documented in Wyoming.

Extrinsic Stressors:

MODERATELY STRESSED

Ash-throated Flycatcher breeds in Utah Juniper woodlands in Wyoming, and natural and anthropogenic disturbances to this environment could negatively impact the species. Piñon and juniper woodlands have been expanding in many areas of the western United States since the mid-1800s¹²; however, Wyoming is predicted to lose a majority of its Utah Juniper woodlands over the next century due to changing climate ¹³. Existing juniper woodlands in the state are potentially vulnerable to changes in fire regime; invasive species such as Cheatgrass (Bromus *tectorum*); drought and climate change; habitat fragmentation; and human disturbance, including juniper removal and thinning programs ¹¹. In addition, juniper woodlands in southwestern Wyoming are often associated with rocky habitats, which are threatened by potential energy development and exposure to anthropogenic disturbances from recreational activities ^{11, 14}. Practices that remove large, mature juniper trees and snags from the landscape may reduce the availability of natural and woodpecker-excavated cavities for breeding Ash-throated Flycatchers. The species is likely impacted by other disturbances that alter woodland habitat structure (i.e., fire, grazing, invasive plants, etc.)¹, but research on exactly how these stressors affect Ashthroated Flycatcher is limited, conducted in other habitat types, and shows mixed effects ^{15, 16}. Currently, it is not known how these potential stressors impact Ash-throated Flycatcher in Wyoming.

KEY ACTIVITIES IN WYOMING

Ash-throated Flycatcher is classified as a Species of Greatest Conservation Need by the Wyoming Game and Fish Department (WGFD), and as a Level II Priority Bird Species requiring monitoring in the Wyoming Bird Conservation Plan ¹⁷. Current statewide activities for monitoring annual detections and population trends for Ash-throated Flycatcher in Wyoming include the BBS program conducted on 108 established routes since 1968 ¹⁰, and the multi-agency IMBCR program initiated in 2009 ⁹. In 2016, the WGFD began a two-year project designed to collect data on the distribution, relative abundance, and habitat use of piñon-juniper obligate species, including Ash-throated Flycatcher, in the woodlands of southwestern Wyoming.

ECOLOGICAL INFORMATION NEEDS

There is a general lack of knowledge about Ash-throated Flycatcher in Wyoming, and the species would benefit from research to determine its detailed distribution, abundance, and breeding phenology. Nothing is known about nest success or fledgling survival in the state. The populations in Natrona and Fremont counties should be studied, since confirmation of breeding in those areas would represent a northward expansion of the known breeding distribution of Ash-throated Flycatcher in Wyoming. Likewise, breeding has recently been documented in the Nebraska panhandle within 3.2 km of Wyoming, which could suggest the possibility of breeding in southeastern Wyoming ¹⁸. Additional research is needed to determine how Ash-throated Flycatcher populations in Wyoming might respond to natural and anthropogenic disturbances to existing habitat.

MANAGEMENT IN WYOMING

This section authored solely by WGFD; Andrea C. Orabona. Ash-throated Flycatcher is classified as a SGCN in Wyoming due to a need for robust information on breeding status and population trend in Wyoming; limited distribution of required breeding habitat; loss, degradation, and fragmentation of Utah Juniper habitat due to industrial developments; and incompatible management practices ¹¹. Two separate but compatible survey programs are in place to monitor populations of many avian species that breed in Wyoming; the Breeding Bird Survey ¹⁰ and Integrated Monitoring in Bird Conservation Regions ⁹. While these monitoring programs provide robust estimates of occupancy, density, or population trend for many species in Wyoming, Ash-throated Flycatcher needs a targeted, species-specific survey method approach to obtain these data. Initial work and written species accounts on avian Utah Juniper obligate species, including Ash-throated Flycatcher, occurred in 1988¹⁹. However, higher priorities and limited personnel and funding precluded conducting additional work on these species. Best management practices to benefit Ash-throated Flycatcher include implementing a sufficient monitoring technique; maintaining mature stands of Utah Juniper habitat where Ash-throated Flycatcher nests, including herbaceous vegetation and shrubs for foraging, and abundant snags for perching; implementing prescribed and natural fire management to maintain savannah-like stands of juniper woodlands in areas occupied by Ash-throated Flycatcher; and coordinating Utah Juniper management to provide a mosaic of juniper woodland conditions²⁰.

CONTRIBUTORS

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Figure 1: Adult Ash-throated Flycatcher in-hand in Cibola National Wildlife Refuge, California. (Photo courtesy of Carolyn Anderson)



Figure 2: North American range of *Myiarchus cinerascens*. (Map courtesy of Birds of North America, <u>http://bna.birds.cornell.edu/bna</u>, maintained by the Cornell Lab of Ornithology)



Figure 3: Ash-throated Flycatcher habitat in southwestern Wyoming, dominated by Utah Juniper. (Photo courtesy of Leah H. Yandow, WGFD)



Figure 4: Range and predicted distribution of *Myiarchus cinerascens* in Wyoming.