Scott's Oriole

Icterus parisorum

REGULATORY STATUS

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

CONSERVATION RANKS

USFWS: No special status
WGFD: NSSU (U), Tier II
WYNDD: G5, S1
Wyoming contribution: LOW
IUCN: Least Concern
PIF Continental Concern Score: 11

STATUS AND RANK COMMENTS

Scott's Oriole (*Icterus parisorum*) has no additional regulatory status or conservation rank considerations beyond those listed above.

NATURAL HISTORY

Taxonomy:

Orioles are monophyletic, with all species belonging to the genus *Icterus*. No subspecies of Scott's Oriole are recognized [1].

Description:

Scott's Oriole is a medium-sized oriole. The sexes are dimorphic in both size and color, with females slightly smaller than males. Although the species does not display geographic variation in plumage, male plumage changes with age. Adult males have a black hood, chest, back, wings, and tail feathers. The wings have white wing bars with a yellow epaulet. The rest of the body is bright yellow. Adult females are generally paler than males, with a yellow-green body and brownish black wings with white wing bars. The head coloration is highly variable and can range from only a few black feathers to a nearly solid brownish-black color on the head, back, and throat. Juvenile males display similar plumage to adult females, but with a dark head and throat and olive-colored tail feathers [1]. Scott's Oriole can be distinguished from Orchard Oriole (*I. spurius*) by a yellow body as compared to a rusty orange in Orchard Oriole and a non-overlapping range in Wyoming. Bullock's Oriole (*I. bullockii*) has wider white wing bars, and the cheeks, throat, and chest are yellow as compared to the black coloration of Scott's Oriole [2].

Distribution & Range:

Scott's Oriole, sometimes called the Mountain or Desert Oriole, is found throughout the southern Rocky Mountains and the southwestern United States from extreme southwestern Wyoming through southern Mexico, although detailed information from Mexico is lacking. Breeding range

extends north from roughly Michoacán, Puebla, and Oaxaca, Mexico. Winter range extends south from central Baja California, Sonora, and Chihuahua, Mexico [1]. In Wyoming, Scott's Oriole is only found in areas of Utah Juniper (*Juniperus osteosperma*) interspersed with Wyoming Big Sagebrush (*Artemisia tridentata*), shrubs, and grasses in Sweetwater County, reaching as far north as Little Firehole Canyon at Flaming Gorge Reservoir [3, 4]. An isolated observation of a male near Lander is the only confirmed sighting outside of this range [2]. Scott's Oriole has been observed in 4 of the state's 28 latitude/longitude degree blocks, with confirmed or circumstantial evidence of breeding documented in 3 of those 4 degree blocks [4].

Habitat:
Scott's Oriole is typically associated with higher-elevation arid habitats, including those dominated by juniper and yucca. In Wyoming, the species is restricted to Utah Juniper woodlands with moderate to sparse canopy closure located in extreme southern Sweetwater County [4, 5]. Wintering habitat is not well-studied, but likely includes arid habitats dominated by pine-oak (*Pinus* spp.-*Quercus* spp.) woodlands [1]. Nests are often constructed in yuccas [1], although in Wyoming nests are built near the ends of branches in mature Utah Junipers [3, 5, 6]. Smaller junipers and deciduous shrubs are also used for foraging [5].

Phenology:
Scott's Oriole migrates north from Mexico in March and April, typically reaching northernmost breeding grounds in early May [1], where it has been observed as early as 16 May in Wyoming [2]. Adult males are the first to reach breeding grounds, followed by second-year males and females; nest building begins soon after both adults have arrived. Egg laying begins 2–4 days after the nest is completed; clutches average 3 eggs (range 1–6). Hatching begins 12–14 days after the last egg is laid, and young typically fledge 12 days later. Juveniles are dependent on adults for an additional 2–3 weeks after fledging. Scott's Oriole may raise 1 or 2 broods per season; pairs occasionally raise 3 broods. Typically, however, only a single brood is successful per season. Individuals begin leaving breeding grounds in late July or early August, reaching wintering sites by late September [1].

Diet:
Scott's Oriole primarily consumes insects captured from the ground or gleaned or probed from leaves of yucca and shrubs. Both adults and larvae of Lepidoptera, Orthoptera, Hymenoptera, and Coleoptera as well as spiders are consumed. Other food items include fruit, especially from cacti; nectar; and lizards. Monarch Butterfly (*Danaus plexippus*) may be an important food item in winter. Scott's Oriole does not appear to need to drink frequently, as the diet may provide most of the needed water, especially at cooler temperatures [1].

CONSERVATION CONCERNS

Abundance:
Continental: WIDESPREAD
Wyoming: VERY RARE
Using North American Breeding Bird Survey (BBS) data, the Partner's in Flight (PIF) Science Committee estimated the global population of Scott's Oriole to be 4 million birds [7]. Currently, no population estimates exist for the state. The statewide rank of VERY RARE is based on the rather small area of the state known to be occupied in any given season and the small coverage of suitable habitat within that area. However, within suitable habitat in the occupied area, Scott's Oriole appears to be rare, as it occupies only a small percentage of preferred habitat within its

range and may not be readily detected during surveys expected to indicate its presence [4]. There are only two confirmed breeding records and one suspected breeding record for the species in the state [3, 4, 6]. Scott's Oriole density and population size estimates for Wyoming are not available from the Integrated Monitoring in Bird Conservation Regions (IMBCR) program [8].

Population Trends:

Historic: UNKNOWN

Recent: UNKNOWN

Population trends are not available for Scott's Oriole in Wyoming due to a limited number of survey routes or grids in place in the state where this species occurs and low detection rates during monitoring surveys. Currently, there are no North American BBS trend data for Scott's Oriole in Wyoming [9]. According to the BBS, Scott's Oriole has experienced a slight but insignificant decrease range-wide, with decreases becoming more pronounced in recent years. Decreases are more prominent in southern California, with increases throughout New Mexico as well as near Wyoming in Colorado and Utah [9]. In contrast, PIF categorizes Scott's Oriole as displaying a stable to significant but small increase [7]. In general, the species is thought to be expanding northward in both breeding and wintering range, potentially in response to climate change [1].

Intrinsic Vulnerability:

HIGH VULNERABILITY

Scott's Oriole has somewhat specialized habitat requirements, especially in Wyoming where it is restricted to a narrow area of Utah Juniper in extreme southern Sweetwater County [3]. Scott's Oriole is fairly faithful to breeding sites, but does not seem to be restricted by population density. Approximately 50–60% of females successfully raise a brood to fledging each season [1]. Other life history characteristics do not predispose the species to declines from changes in environmental conditions.

Extrinsic Stressors:

SLIGHTLY STRESSED

Predation is a major cause of nest failure, followed by nest parasitism, particularly by Brown-headed Cowbird (*Molothrus ater*) [1]. PIF assigns Scott's Oriole a threat level of 3, indicating that the species is expected to display a slight to moderate decline in the future suitability of breeding conditions. The factors that may contribute to this decline are variable but, for Scott's Oriole, likely include sensitivity to parasitism and loss of habitat due to a relative specialization on sensitive habitats [7]. In fact, the loss of habitat is likely the most significant issue facing the species range-wide, especially loss of wintering habitat in Mexico, where much less is known about the status and ecology of the species [1]. In contrast, juniper habitat may be expanding range-wide as a result of fire suppression, climate change, and grazing practices, although this expansion may not be as prominent in Wyoming as in other portions of the western United States [10-12]. However, the availability of Utah Juniper habitat remains limited in Wyoming and may be negatively impacted through fragmentation, disruption of historic fire regimes, climate change, energy development, and removal and thinning programs [12-15]. Consequently, the future availability and suitability of this habitat in Wyoming is unclear.

KEY ACTIVITIES IN WYOMING

Scott's Oriole is classified as a Species of Greatest Conservation Need (SGCN) in Wyoming by the Wyoming Game and Fish Department (WGFD) and a Wyoming PIF Level II Priority Species

[10]. The species is not adequately monitored by current national or regional avian monitoring efforts in Wyoming, including the IMBCR program initiated in 2009 (0 detections since initiation) [8] or the BBS program conducted on 108 established routes since 1968 [9]. Scott's Oriole is a species for which the Wyoming Bird Records Committee requests documentation on all sightings. Observations of this species are reported to the WGFD and vetted through the Wyoming Bird Records Committee. In 2016, the WGFD began a project focused on addressing data deficiencies for piñon-juniper obligate species in southwestern Wyoming, including Scott's Oriole. This project will be completed in 2017 and will address a number of objectives, including evaluating species distribution and richness, estimating relative abundance and occupancy rates, and quantifying and evaluating habitat characteristics.

ECOLOGICAL INFORMATION NEEDS

In Wyoming, assessment of the status of Scott's Oriole is hampered by a lack of ecological and population data. Additional information is needed on distribution and habitat use, and estimates of abundance and occupancy rates are needed to assess status, monitor populations, and evaluate trends. Traditional state-wide survey efforts do not tend to detect Scott's Oriole, suggesting targeted, species-specific monitoring efforts are needed. Because only two breeding records are available for the species in Wyoming, additional work is needed to determine the frequency of these events in the state. Additionally, the distribution of juniper forests in Wyoming is far vaster than the distribution of Scott's Oriole, and a better understanding of habitat use and requirements at this northernmost range boundary is needed. Finally, because the species is potentially expanding northward with changes in climate conditions, a better understanding of the current range boundary for both the species as well as the juniper habitat on which it depends is needed to evaluate potential expansions.

MANAGEMENT IN WYOMING

This section authored solely by WGFD; Andrea C. Orabona. Scott's Oriole is classified as a SGCN in Wyoming due to a need for robust information on breeding status and population trends in Wyoming; limited distribution of required breeding habitat; loss, degradation, and fragmentation of Utah Juniper habitat due to industrial developments; and incompatible management practices [12]. Two separate but compatible survey programs are in place to monitor populations of many avian species that breed in Wyoming; the BBS [9] and IMBCR [8]. While these monitoring programs provide robust estimates of occupancy, density, or population trend for many species in Wyoming, Scott's Oriole 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 Scott's Oriole, occurred in 1988 [5]. However, higher priorities and limited personnel and funding precluded conducting additional work on these species until recently. Best management practices to benefit Scott's Oriole include implementing a sufficient monitoring technique; maintaining mature stands of Utah Juniper habitat where Scott's Oriole nests, including herbaceous vegetation and shrubs for foraging; implementing prescribed and natural fire management to maintain savannah-like stands of juniper woodlands in areas occupied by Scott's Oriole; and coordinating Utah Juniper management to provide a mosaic of juniper woodland conditions [16].

CONTRIBUTORS

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Figure 1: Adult male Scott's Oriole in Boulder, Colorado. (Photo courtesy of Bill Schmoker)

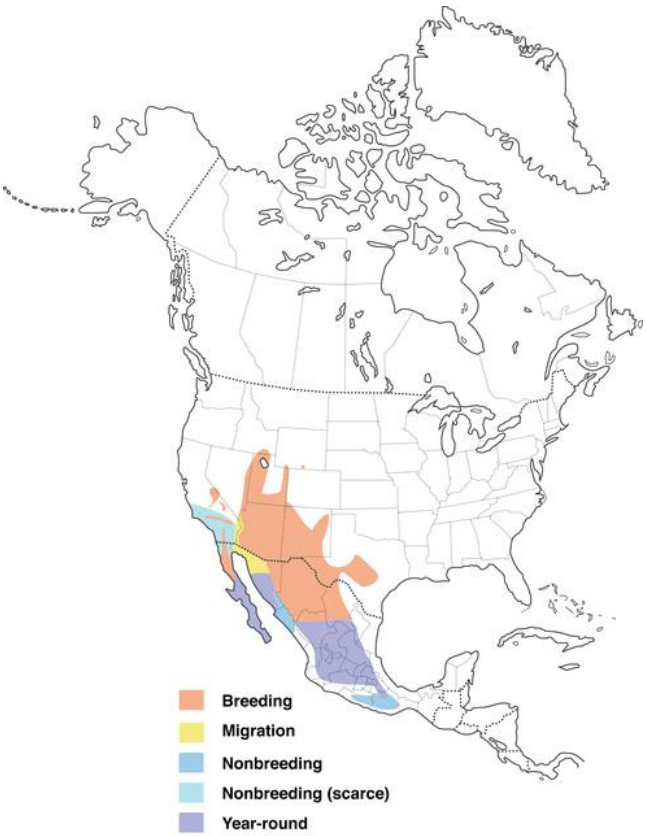

Figure 2: North American range of *Icterus parisorum*. (Map courtesy of Birds of North America, http://bna.birds.cornell.edu/bna, maintained by the Cornell Lab of Ornithology)

Figure 3: Scott's Oriole habitat in southwestern Wyoming, dominated by Utah Juniper. (Photo courtesy of Leah H. Yandow, WGFD)

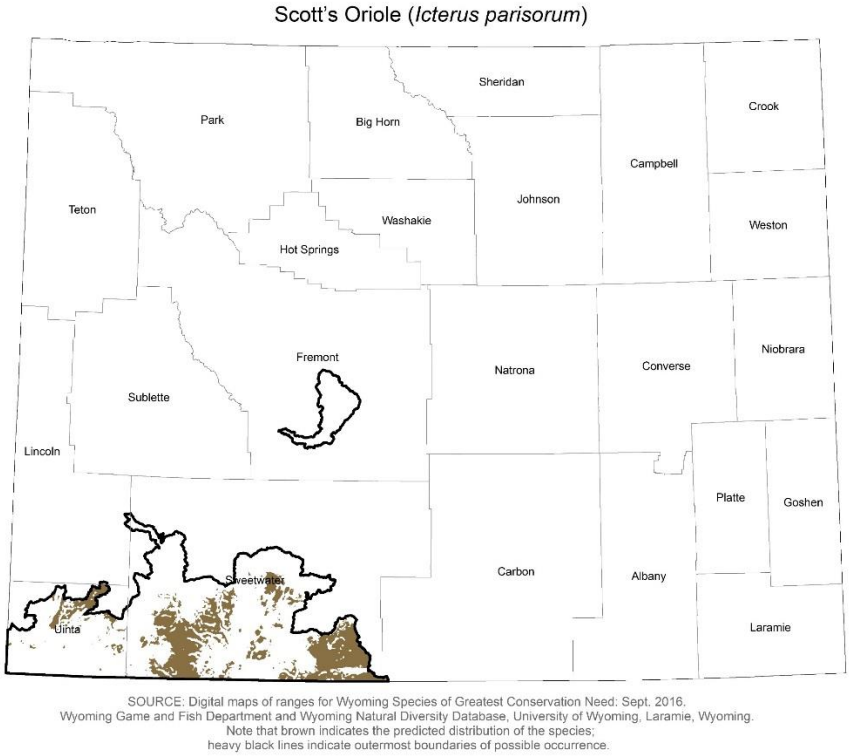

Figure 4: Range and predicted distribution of *Icterus parisorum* in Wyoming.