Olive-sided Flycatcher

Contopus cooperi

Photo by Martin Meyers

Habitat Use Profile

Habitats Used in Nevada	
Coniferous Forest	
Key Habitat Parameters ●	
Plant Composition	Ponderosa and Jeffrey pines, red fir
Plant Density & Age	Canopy closure ≤ 39%, excluding forest openings;[12] late-successional forest[1]
Mosaic	Closely associated with natural or disturbance-created forest openings with dense shrub layer[1]
Distance to Water	Usually close to surface water[1]
Response to Vegetation Removal	Positive to creation of forest openings, but requires shrub layer within openings[1]
Area Requirements ○	
Minimum Patch Size	Unknown
Recommended Patch Size	> 200 ha (500 ac) [EO]
Home Range	Up to 45 ha [110 ac][1]

Conservation Profile

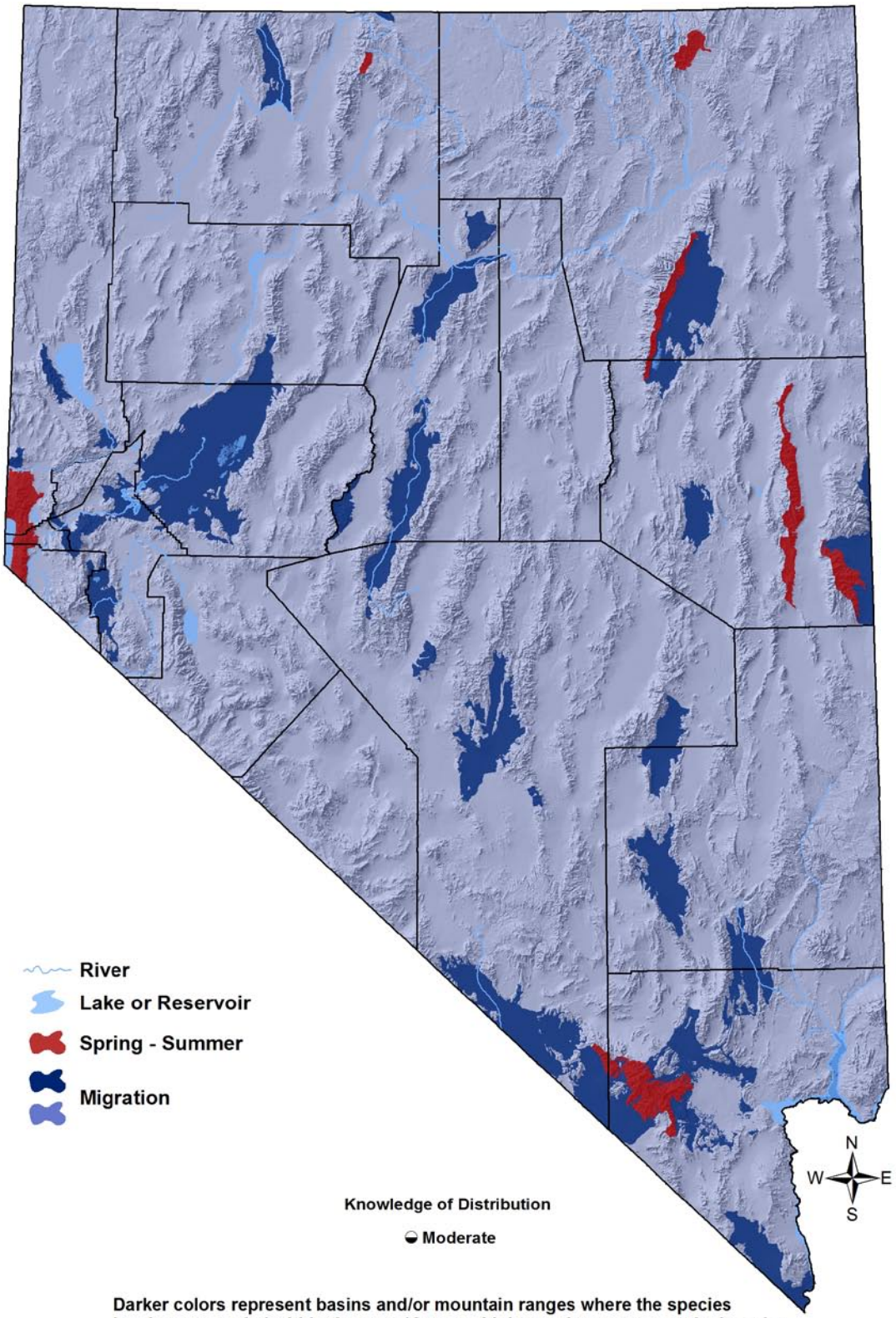
Priority Status	
Conservation Priority Species	
Species Concerns	
Historical and recent declines Habitat threats	
Other Rankings	
Continental PIF	Watch List
Audubon Watchlist	Yellow
NV Natural Heritage	S2B
USFWS	Bird of Conservation Concern, Migratory Bird
BLM	None
USFS	None
NDOW	Conservation Priority
Trends	
Historical ●	Significant range contraction[1]
Recent ◑	Declines of 3% / year in West[10]
Population Size Estimates	
Nevada (NBC) ◑	5,600
Global ◑	1,200,000 [8]
Percent of Global	< 1%
Population Objective	
Increase by 100% [8, EO]	
Monitoring Coverage	
Source	Nevada Bird Count
Coverage in NV	Good
Key Conservation Areas	
Protection	Carson, Pine Nut, Toiyabe, Monitor and nearby ranges
Restoration	Same

Natural History Profile

Seasonal Presence in Nevada	
Spring - Summer	
Known Breeding Dates in Nevada	
Mid-June – early August[2]	
Nest and Nesting Habits	
Nest Placement	At tip of high horizontal branch in conifer[1, 11]
Site Fidelity	Probably high for breeding area[6]
Food Habits	
Basic	Fly-catcher
Primary Diet	Flying insects, exclusively[1]
Secondary Diet	n/a

Olive-sided Flycatcher

Contopus cooperi



Darker colors represent basins and/or mountain ranges where the species has been recorded within the past 12 years. Lighter colors represent the broader area within which the species is presumed to occur in appropriate habitat types.

Olive-sided Flycatcher

Contopus cooperi

Overview

This long-distance migrant breeds in coniferous forests across Nevada, although its distribution is notably patchy within the state. The range map shown above illustrates only confirmed spring-summer range, but it is possible that heretofore undetected breeding occurs in other mountainous areas. Fire is thought to play an important role in creating the Olive-sided Flycatcher's preferred landscape, which consists of mature coniferous forest interspersed with brush-filled openings for foraging.[1] This combination of foraging perches located next to open foraging spaces can occur at forest edges, in patchily burned or partially logged stands, or in open boreal (subalpine) forest. Olive-sided Flycatchers are one of several bird species that make ready use of open patches of snags created by stand-replacement fires.[3] Limited studies of reproductive success in burned vs. logged stands have had conflicting results.[5, 9]

The Olive-sided Flycatcher is declining steadily and the causes for the decline are still not fully understood,[1] although changes in historical fire regimes have been suggested as a likely culprit.[4] Breeding populations in central, eastern, and southern Nevada are smaller and more isolated than is the case within most of the species' breeding range, and this may render the species especially vulnerable to local habitat threats.[7]

Abundance and Occupancy by Habitat

Birds / 40 ha on NBC Transects in the Great Basin and Mojave Regions

Primary Habitat at Transect	Transects Occupied	Birds/40 ha (95% C.I.)
Great Basin		
Coniferous Forest	42% (8/19)	3.5 (1.4 – 5.6)
Aspen	17% (3/18)	0.9 (0.5 – 1.3)
Pinyon-Juniper	3% (2/70)	0.6 (n/a)
Mojave		
Coniferous Forest	75% (3/4)	0.4 (0.3 – 0.5)

- The BBS-derived population estimate[8] of 1,000 birds in Nevada is much lower than the NBC-derived estimate of 5,600 birds. It is not clear which estimate is more realistic

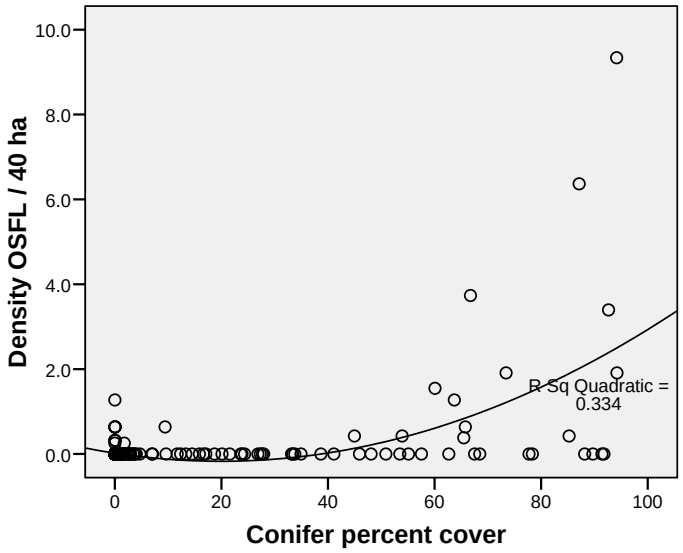
Olive-sided Flycatcher

Contopus cooperi

Nevada-Specific Studies and Analyses

Landscape Associations (NBC data)

- NBC data indicate that Olive-sided Flycatchers are most often found in areas where > 50% of the landscape is covered by coniferous forest (see graph below; OSFL = Olive-sided Flycatcher)



- NBC data show that except in western Nevada, Olive-sided Flycatchers may occasionally breed in aspen and pinyon-juniper woodlands that are relatively distant from coniferous forest. Densities and frequencies of occurrence in these alternate habitats tend to be lower than in coniferous forest

Main Threats and Challenges

Habitat Threats

- Causes of ongoing declines in Nevada are not known, but in the Sierra Nevada region, it has been suggested that changes in historical fire regimes have contributed to declines.[1] It is likely that fire suppression has reduced the frequency of smaller fires that create the forest openings that this species prefers
- Although not immediately relevant to Nevada resource managers, it has been suggested that habitat loss and degradation on the Olive-sided Flycatcher's wintering grounds in South and Central America may be contributing to the species' declines[1]

Olive-sided Flycatcher

Contopus cooperi

Research, Planning, and Monitoring Challenges

- Causes of ongoing declines are not fully understood
- Uncertainty about the most beneficial fire regime for the species
- Possibility that the species' full breeding range in Nevada has not yet been delineated

Conservation Strategies

Habitat Strategies

- The Coniferous Forest (p. Hab-5-1) habitat conservation strategy benefits this species
- Allow small stand-replacing fires to burn when possible to create and maintain forest openings
- Manage forests to retain standing snags and isolated trees, which provide beneficial sallying stations

Research, Planning, and Monitoring Strategies

- Continue monitoring to determine if trends in Nevada reflect regional trends, and to better estimate population size
- Search for Olive-sided Flycatchers in mountain ranges where there is currently no breeding evidence
- Conduct additional research on populations in central, southern, and eastern Nevada (which have not been as well-studied as those in western Nevada) to determine whether they have unique habitat requirements
- Investigate the role of fire intensity, scale, and frequency in creating suitable habitat for Olive-sided Flycatchers, and develop fire management strategies based upon these findings

Public Outreach Strategies

- None identified

References: [1]Altman and Sallabanks (2000); [2]GBBO unpublished Atlas data; [3]Hutto (1995); [4]Kotliar (2007); [5]Meehan and George (2003); [6]Nevada Wildlife Action Plan Team (2006); [7]Reed (1995); [8]Rich et al. (2004); [9]Robertson and Hutto (2007); [10]Sauer et al. (2008); [11]Shuford and Gardali (2008); [12]Verner (1980); [EO] Expert opinion

Olive-sided Flycatcher

Contopus cooperi

Olive-sided Flycatcher habitat near Lake Tahoe. Photo by Dave Catalano.