

Green-tailed Towhee

Pipilo chlorurus



Photo by Bob Goodman

Habitat Use Profile

Habitats Used in Nevada	
Montane Shrubland Aspen Pinyon-Juniper Montane Riparian	
Key Habitat Parameters •	
Plant Composition	Aspen, currants, willows, alder, sagebrush, squawbush, other montane riparian and transitional shrubs; high species richness of shrubs preferred ³
Plant Density & Height	High density shrub cover, 0.5 – 1.5 m [1.6 – 5 ft] tall ¹
Mosaic	Patches of different montane shrub species ^{1, 3}
Distance to Water	Water or mesic habitats usually within 1 km [0.6 mi] ³
Response to Vegetation Removal	Positive in coniferous forest canopy, if shrub layer benefits; negative for shrub removal ¹
Area Requirements •	
Minimum Patch Size	Unknown
Recommended Patch Size	> 10 ha (22 ac) ^{EO}
Territory Size	Averages 0.9 ha [2.2 ac] ¹

Conservation Profile

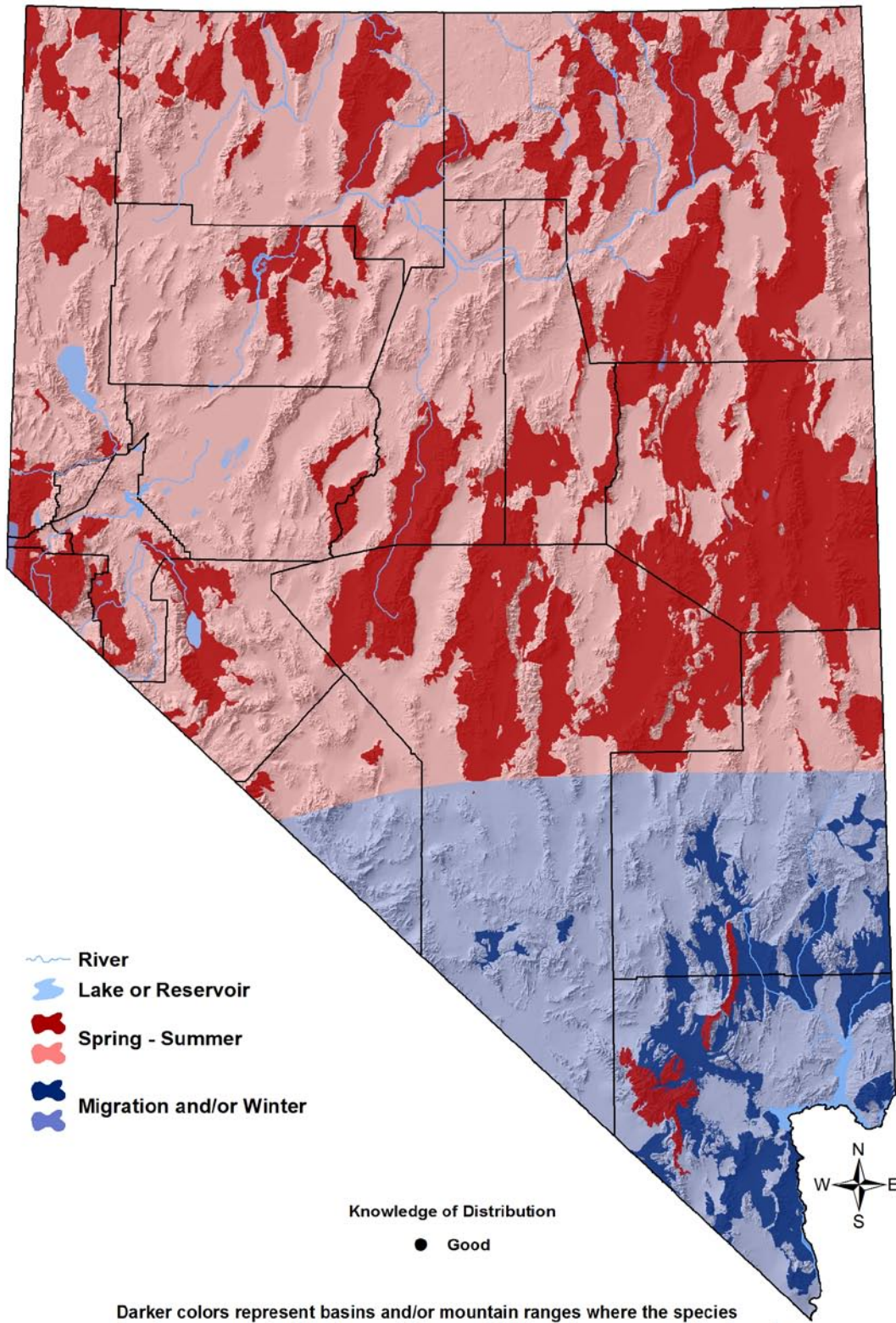
Priority Status	
Stewardship Species	
Species Concerns	
High stewardship responsibility Historical declines	
Other Rankings	
Continental PIF	Stewardship
Audubon Watchlist	None
NV Natural Heritage	None
USFWS	Bird of Conservation Concern, Migratory Bird
BLM	None
USFS	None
NDOW	Stewardship
Trends	
Historical •	Probable declines ¹
Recent ○	Stable ^{1, 8}
Population Size Estimates	
Nevada (NBC) •	885,000
Global •	4,100,000 ⁷
Percent of Global	22%
Population Objective	
Maintain ^{7, EO}	
Monitoring Coverage	
Source	Nevada Bird Count
Coverage in NV	Good
Key Conservation Areas	
Protection	Great Basin montane riparian, aspen, montane shrubland habitat
Restoration	Great Basin montane riparian and aspen woodlands

Natural History Profile

Seasonal Presence in Nevada	
Spring – Summer (Great Basin) Winter (Mojave)	
Known Breeding Dates in Nevada	
Mid-May – early August ²	
Nest and Nesting Habits	
Nest Placement	On or within 1 m [3 ft] of ground in or under dense shrub ¹
Site Fidelity	Moderate for breeding territory ¹
Food Habits	
Basic	Ground or near-ground forager
Primary Diet	Terrestrial arthropods, seeds ¹
Secondary Diet	Fruit ¹

Green-tailed Towhee

Pipilo chlorurus



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.

Green-tailed Towhee

Pipilo chlorurus

Overview

The Green-tailed Towhee is nearly always found within dense shrub cover in montane settings, especially in transitional zones that feature high shrub species diversity, interspersed trees, and a high proportion of edge habitat. As such, this bird's distribution patterns do not neatly align with standard habitat type categories. For instance, favored habitat in northwestern Nevada has been described as ecotones between "sagebrush and other shrub species, especially mountain mahogany",⁶ whereas in southeastern Oregon, Green-tailed Towhees were shown to prefer intermediate levels of juniper cover.⁶ Green-tailed Towhees were recorded on many different NBC-defined habitat types, as shown in the table below.

Beyond the general preference for dense, diverse cover of montane shrubs, there is surprisingly little detailed information about habitat use of Green-tailed Towhees, especially given that the species is widespread and relatively common. Nevada, as the home of about one-fifth of the global breeding population, therefore has an opportunity to make significant contributions to our knowledge about this bird and to its conservation. Fortunately, current trends appear to be stable, and habitat threats to montane shrublands appear overall less severe than for many other habitat types.

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		
Montane Shrubland	75% (15/20)	8.6 (4.8 – 12.4)
Montane Riparian	57% (50/88)	4.7 (3.5 – 5.9)
Aspen	83% (15/18)	5.9 (3.8 – 8.0)
Coniferous Forest	47% (9/19)	2.1 (0.0 – 4.4)
Pinyon-Juniper	59% (41/70)	6.6 (4.9 – 8.3)
Mojave		
Montane Shrubland	75% (6/8)	5.1 (0.0 – 13.8)
Montane Riparian	67% (6/9)	0.3 (0.1 – 0.5)
Aspen	86% (6/7)	3.6 (2.0 – 5.2)
Coniferous Forest	75% (3/4)	3.2 (2.6 – 3.8)
Pinyon-Juniper	58% (7/12)	0.9 (0.3 – 1.5)

Green-tailed Towhee

Pipilo chlorurus

Nevada-Specific Studies and Analyses

Landscape Associations (NBC data)

Green-tailed Towhees had positive associations (*Appendix 3*) with several different habitat types that often contain dense shrub layers, including Montane Shrubland, Pinyon-Juniper, Mountain Mahogany (an NBC-defined habitat type, and subset of Pinyon-Juniper habitat as defined in this plan), Montane Riparian, and Aspen. As in other parts of its range, Green-tailed Towhees appear to use openings in coniferous forests in Nevada, although their density in such settings is usually lower than in other montane habitat types. Green-tailed Towhees were somewhat more common on transects closer to water, and were most numerous on transects characterized by a diversity of available habitat types.

Main Threats and Challenges

Habitat Threats

- Historically, loss of shrublands is thought to have reduced Green-tailed Towhee numbers, but current threats are not well characterized¹
- Reduction in fire return intervals due to fire suppression may have reduced landscape complexity and diversity in the long-term, but prescribed fire has been shown to have a negative effect on Green-tailed Towhees for at least five years after the initial fire⁴
- Heavy grazing or browsing that reduces shrub cover or diversity may negatively impact this bird

Research, Planning, and Monitoring Challenges

- Substantial additional research is needed to better defined this species' microhabitat preferences, and to quantify its preferred landscape mosaic
- Additional studies are needed to determine the nature and severity of any current habitat threats
- Additional research is needed to determine the most beneficial long-term fire regime for diverse montane shrubland systems, and to develop a fire-management plan that incorporates these findings

Green-tailed Towhee

Pipilo chlorurus

Conservation Strategies

Habitat Strategies

- Montane Shrubland (p. Hab-14-1), Montane Riparian (p. Hab-13-1), Aspen (p. Hab-3-1), and Pinyon-Juniper (p. Hab-16-1) habitat conservation strategies benefit this species
- Conserve and protect montane areas with diverse, dense shrubs and interspersions of habitat types
- Manage livestock grazing to maintain dense shrub layers within Aspen and Montane Riparian habitats

Research, Planning, and Monitoring Strategies

- Continue monitoring to detect any changes from current population stability
- Conduct research to:
 - Better determine microhabitat preferences and quantify preferred landscape mosaic
 - Further investigate possible habitat threats
 - Identify preferred fire regime for montane shrubland systems to maintain long-term shrub and habitat diversity

Public Outreach Strategies

- None identified

References: ¹Dobbs et al. (1998); ²GBBO unpublished Atlas data; ³GBBO unpublished NBC data; ⁴Jehle et al. (2006); ⁵Knopf et al. (1990); ⁶Noson et al. (2006); ⁷Rich et al. (2004); ²Sauer et al. (2008); ^{EO} Expert opinion

Green-tailed Towhee
Pipilo chlorurus



Green-tailed Towhee habitat in western Nevada. Photo by Elisabeth Ammon.