

## Common Yellowthroat

*Geothlypis trichas*

### **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: NSS4 (Bc), Tier III  
WYNDD: G5, S5  
Wyoming Contribution: LOW  
IUCN: Least Concern  
PIF Continental Concern Score: 9

### **STATUS AND RANK COMMENTS**

Common Yellowthroat (*Geothlypis trichas*) does not have any additional regulatory status or conservation rank considerations beyond those listed above.

### **NATURAL HISTORY**

#### **Taxonomy:**

Subspecies designations for Common Yellowthroat are perplexing and debated among taxonomic authorities due to the complicated nature of the species' geographic variation, individual variation within subspecies that obscure subspeciation differentiation, and poorly described subspecies that render them invalid<sup>1</sup>. Therefore, descriptions and ranges of Common Yellowthroat subspecies are disputed, especially in western North America<sup>2,3</sup>. Thirteen subspecies are included in the Birds of North America species account for Common Yellowthroat; two of these subspecies occur in Wyoming<sup>1</sup>. *G. t. campicola* is the main subspecies that occurs in Wyoming. *G. t. occidentalis* may also be found in extreme southwestern Wyoming during the breeding season<sup>1</sup>.

#### **Description:**

Common Yellowthroat is a medium-sized (length 11–13 cm, mass 9–10 g), compact, wood-warbler<sup>1</sup>. Common Yellowthroat is identifiable in the field, although coloration varies by geography and subspecies. Dunn and Garrett (1997) describe the male as having plain olive upperparts, wings, and tail; a bright yellow chin, throat, upper breast, and undertail coverts; a whitish belly; dusky colored flanks; a broad black mask that extends across the eyes and face, from the forehead and lower auricular area to the sides of the neck; and a narrow whitish-grayish band that separates the mask from the crown and nape<sup>4</sup>. The female Common Yellowthroat is similar to the male, although the female lacks the black mask and whitish-grayish band and instead has plain olive coloration in that area, and has paler yellow coloration on the underparts<sup>4</sup>.

Juveniles are similar to adult females, although juvenile males have a faint black mask <sup>4</sup>. Common Yellowthroat is unlikely to be confused with any other species within its Wyoming distribution, especially during the breeding season, as similar species are either migrants or have accidental occurrence in the state.

**Distribution & Range:**

Common Yellowthroat breeds throughout most of Canada and Alaska south into the United States from the eastern to the western coasts south throughout most of Florida to the Gulf Coast and into eastern Texas and the Texas Panhandle of Texas, in eastern and northern Oklahoma, across the west to southern New Mexico, southern Arizona, and southern California <sup>1</sup>. Common Yellowthroat has been documented in all of Wyoming's 28 latitude/longitude degree blocks, with breeding confirmed in 16 degree blocks and circumstantial evidence of breeding noted in 10 degree blocks <sup>5</sup>. Common Yellowthroat is a summer resident in Wyoming and winters from the southern United States south through Mexico, Baja California, Central America, northern South American, and most of the West Indies <sup>1</sup>.

**Habitat:**

Across its range, Common Yellowthroat is found in a variety of habitats, although it typically occurs in dense vegetation associated with marshes, thickets, and shrubby areas <sup>1</sup>. In Wyoming, the species breeds below 2,438 m in dense willow (*Salix* spp.) and other shrubby habitats along the edges of ponds, lakes, and riparian areas, and in emergent bulrush (*Scirpus* spp., *Schoenoplectus* spp., etc.) and cattail (*Typha* spp.) vegetation along the edges of marshes <sup>5, 6</sup>. No quantitative studies have been conducted to provide additional detail or specific habitat associations across the species' range.

**Phenology:**

Common Yellowthroat arrives in Wyoming in early May, and begins to depart breeding grounds by late August, with peak autumn migration occurring in September and the latest autumn date recorded as October 16<sup>th</sup> <sup>6</sup>. The species is a nocturnal, short- to long-distance migrant, although some populations are only partial migrants or fully sedentary <sup>1</sup>. Males arrive on their breeding grounds in the spring before females <sup>7, 8</sup>. Both adult and juvenile Common Yellowthroats depart in the autumn at approximately the same time <sup>9</sup> for the extreme southern portion of the United States and the Neotropics <sup>1</sup>. Common Yellowthroat is known to produce two broods per year in some parts of its range, but more information is needed to determine if second broods are common throughout most of its range <sup>1</sup>. Common Yellowthroat clutches usually contain 4 eggs, but can range from 1–6 eggs <sup>1</sup>. Incubation lasts for 12 days, and fledglings leave the nest 10 days after hatching <sup>10</sup>.

**Diet:**

Common Yellowthroat feeds primarily on insects and spiders taken from the ground and in low vegetation <sup>10, 11</sup>. Foraging specifics are not available from Wyoming, but in Arizona the species was noted to forage from 0 to 6.2 m above the ground <sup>11</sup>. The primary foraging method used is gleaning from leaves, bark, or the ground <sup>10-12</sup>. Other foraging methods can include hover glean, sally-hover, sally-strike, hawk, and flutter-chase <sup>10, 13</sup>.

**CONSERVATION CONCERNS**

**Abundance:**

**Continental:** WIDESPREAD

**Wyoming: COMMON**

Using North American Breeding Bird Survey (BBS) data, the Partners in Flight Science Committee estimated the global population of Common Yellowthroat to be 87 million birds <sup>14</sup>. Approximately 0.20% of the global population, or around 200,000 birds, is estimated to breed in Wyoming <sup>15</sup>. However this estimate should be viewed with caution. Estimates of Common Yellowthroat density (number of birds per square km) and population size in Wyoming are available from the Integrated Monitoring in Bird Conservation Regions (IMBCR) program for the years 2009–2015, although data from only two years have a percent coefficient of variation of estimates that are considered robust, so must be interpreted with caution until data from additional years are included <sup>16</sup>. The statewide rank of COMMON is based on the relatively large area of the state known to be occupied in any given season, and the large coverage of suitable habitat within that area. Within suitable habitat in the occupied area, Common Yellowthroat also appears to be common and is usually encountered during surveys that could be expected to indicate its presence <sup>5</sup>. Estimates of Common Yellowthroat density (number of birds per square km) and population size in Wyoming are available from the Integrated Monitoring in Bird Conservation Regions (IMBCR) program for the years 2009–2015, although sample sizes are small so data must be interpreted with caution <sup>16</sup>.

**Population Trends:**

**Historic:** UNKNOWN

**Recent:** MODERATE DECLINE

Common Yellowthroat population trend data from the BBS are available from 1968–2013 and suggest a moderate decline. However, results have been determined to fall within a credibility category containing data with ‘deficiencies’ due to low relative abundance and number of routes with Common Yellowthroat detections, so also must be interpreted with caution <sup>17</sup>.

**Intrinsic Vulnerability:**

LOW VULNERABILITY

Although abundant and widespread, Common Yellowthroat uses specific habitat types year-round. For nesting habitat in Wyoming, and also at migration stopover and wintering areas, Common Yellowthroat is associated with dense shrubby and grassland habitats often along the edges of ponds, lakes, and riparian areas, and in emergent bulrush and cattail vegetation along the edges of marshes <sup>1, 6</sup>. Loss of such habitat resulting from climate change and urban or agricultural development could affect local and regional breeding populations. As a long distance night migrant, collisions with towers, buildings, and other infrastructure have been reported, and can involve several hundred birds at a time <sup>1</sup>.

**Extrinsic Stressors:**

MODERATELY STRESSED

The declining trend documented by BBS data for Wyoming’s population suggests that stressors exist for this population, but none have been directly studied in the state. Moderate to severe drought in Wyoming has been documented since 1999, with intensity varying from year to year and within different regions <sup>18</sup>. Natural wetlands continue to decline both in number and area from historic levels <sup>19</sup>. Loss of wetlands from draining, flood-control measures, and development also may affect populations. Conversion of Conservation Reserve Program lands back to crops could also affect certain populations <sup>20</sup>. Direct disturbance by human activity was blamed for loss of eggs and young in Michigan and Minnesota <sup>7</sup>. There has been a dramatic increase in the infrastructure associated with energy production in Wyoming, which supplies more energy to

other states than any other state in the nation <sup>21</sup>. Increasing numbers of power lines, wind farms, drilling rigs, and other structures, especially those with lights, present risks for night migrants <sup>22</sup>. Extensive use of pesticides to control mosquitoes and other insects could result in both direct mortality and greatly decreased prey availability <sup>24</sup>. Similarly, poisoning by carbofuran near a cornfield has been reported, but few data exist on the risk to this species from pesticides or other contaminants and toxins <sup>1</sup>. Common Yellowthroat is one of the three most common cowbird (*Molothrus* spp.) hosts <sup>10</sup>.

### **KEY ACTIVITIES IN WYOMING**

Common Yellowthroat is listed as a Species of Greatest Conservation Need (SGCN) in Wyoming by the Wyoming Game and Fish Department due to concerns over wetland habitat loss or degradation from drought and climate change, and moderate population declines as suggested by data from on-going monitoring programs. Current statewide efforts for monitoring annual detections and population trends of Common Yellowthroat in Wyoming include the BBS program conducted on 108 established routes since 1968 <sup>17</sup>, and the multi-partner IMBCR program initiated in 2009 <sup>16</sup>. Trend data are available on the United States Geologic Survey BBS website <sup>17</sup>, and occupancy, density, population estimates, and decision support tools are available through the Rocky Mountain Avian Data Center <sup>16</sup>. Across its range, Common Yellowthroat has not been the focal species of any specific conservation or management actions. This species is likely to benefit from management practices directed to less common species or those with restricted habitat requirements <sup>1</sup>.

### **ECOLOGICAL INFORMATION NEEDS**

Knowledge of how Common Yellowthroat responds to drought and climate change is poorly understood. More exact information on population trends is needed and will continue to be refined through the IMBCR and BBS programs. Although Common Yellowthroat is abundant and has widespread occurrence across its range, few studies have been conducted on the species' breeding biology or behavior, and none of the studies have been long-term <sup>1</sup>.

### **MANAGEMENT IN WYOMING**

*This section authored solely by WGFD; Andrea C. Orabona.* Common Yellowthroat is classified as a SGCN in Wyoming due to moderate population declines and severe habitat impacts that can occur from drought and climate change. Two separate but compatible survey programs are in place to monitor Common Yellowthroat populations. The first is the long-term BBS started in Wyoming in 1968 with 108 established routes <sup>17</sup>. Species must be detected on at least 14 routes for data analyses to be significant for tracking population status and trend over time. The IMBCR program was established in 2009 in Wyoming with many state, federal, and nongovernmental organization partners that contribute funding, field personnel, technical assistance, or in-kind services. Data analyses produce density, occupancy, and population estimates at various scales, and provide decision support tools for managers <sup>16</sup>. Best management practices to benefit Common Yellowthroat include maintaining dense shrubs and diverse vegetation heights in wetland and riparian habitats, using rotational livestock grazing during the nesting season to rest wetland and riparian areas from cowbird concentrations and brood parasitism, and minimizing insecticide use in wetland and riparian habitats <sup>25</sup>.

## CONTRIBUTORS

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Wyoming Species Account

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Figure 1: Adult male Common Yellowthroat in Sweetwater County, Wyoming. (Photo courtesy of Tom Koerner, USFWS)

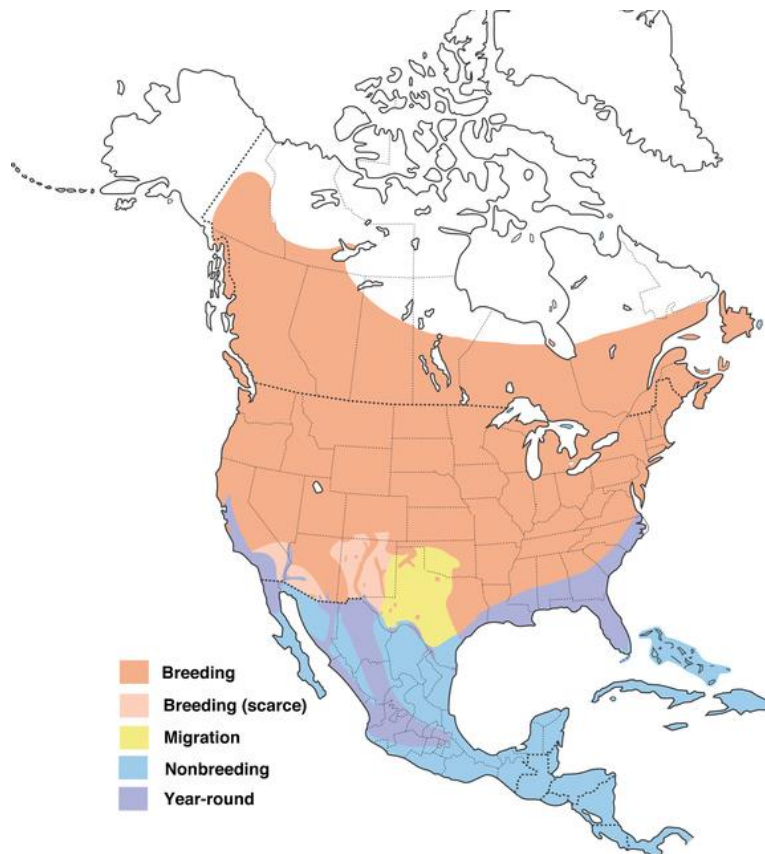


Figure 2: North American range of *Geothlypis trichas*. (Map courtesy of Birds of North America, <http://bna.birds.cornell.edu/bna>, maintained by the Cornell Lab of Ornithology)



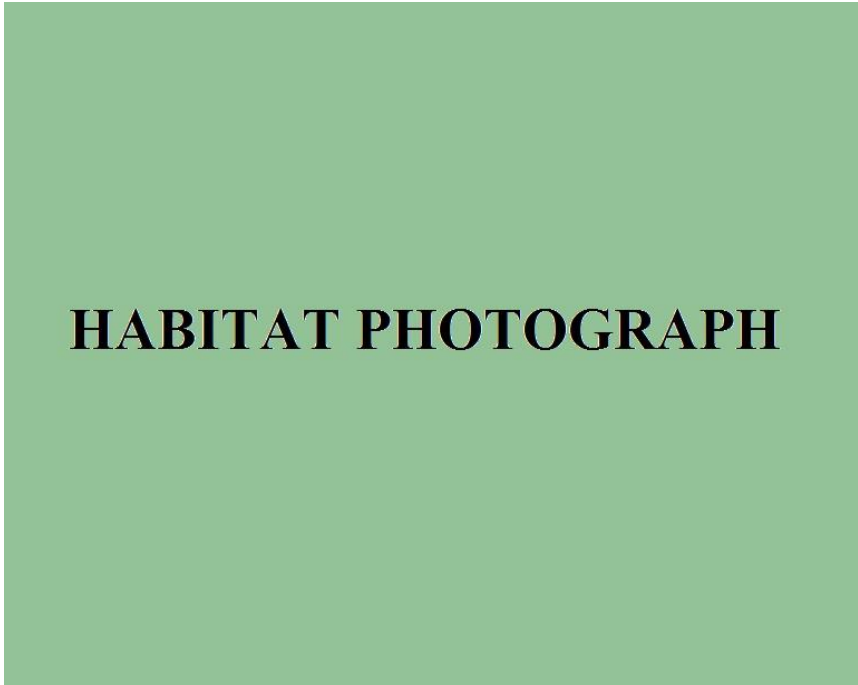


Figure 3: Photo not available.

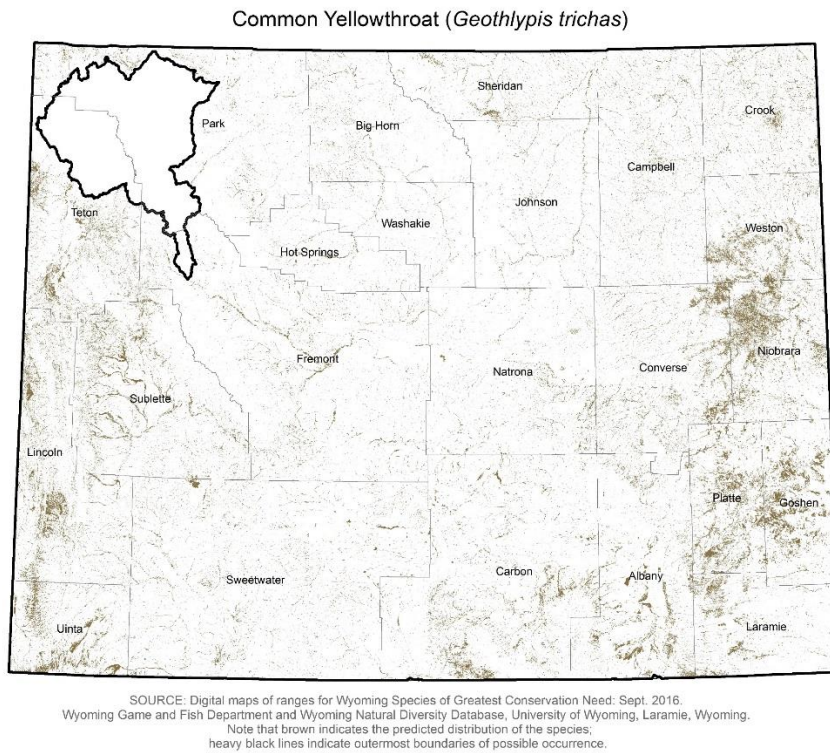


Figure 4: Range and predicted distribution of *Geothlypis trichas* in Wyoming.