

RIPARIAN GUILD

Lincoln's Sparrow (*Melospiza lincolni*)

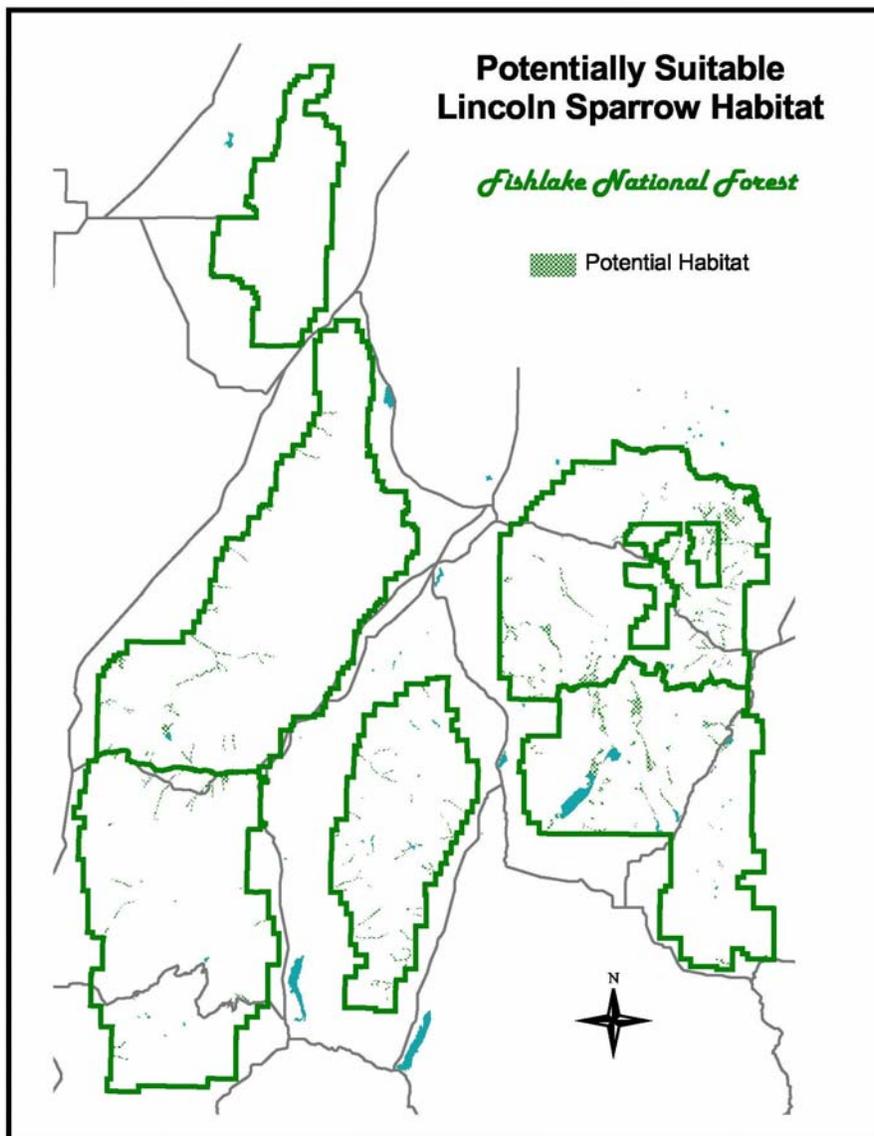
The Lincoln's Sparrow is an uncommon breeding species in Minnesota and is restricted to northern Minnesota. Nest records for this species indicate that it probably breeds sparingly across the northern portions of the state (Janssen 1987). Minnesota is at the extreme southern portion of its range, which extends throughout Canada to Hudson Bay and into Alaska. This species has a western range in the continental United States that extends from the Rocky Mountains to the Pacific Coast. The Lincoln's Sparrow is a short- to long-distance migrant. Some individuals winter in southern portions of the United States, while others over-winter in Central America. Spring migration in Minnesota is from mid-April through late-May and fall migration begins in late July and continues into October (Janssen 1987).

This species occupies a narrow range of habitat in Minnesota during the breeding season. It is found almost exclusively in lowland black spruce (*Picea mariana*) stands where tree density is sparse and height is low (<10 m) (Niemi and Hanowski 1992). Typical breeding densities for this species in the Chippewa National Forest in 1991 were less than one breeding pair/40 acres in seedling-sapling and pole sized lowland black spruce stands. The species was also observed in low densities in seedling aspen (<1 pair/40 acres) and pine (<1 pair/40 acres) stands in northern Minnesota (Superior and Chippewa National Forests) in 1991 (Hanowski and Niemi 1991a, 1991b). The Lincoln's Sparrow also occurs in early successional jack pine stands in northern Michigan (Brewer et al. 1991). This habitat type is more similar to habitats that they occupy in northern and western portions of their range. Based on this information, the species was classified as a conifer dependent species.

The presence of this species in poorly stocked lowland conifer may indicate that the species prefers areas that are in early stages of regeneration. However, this may be misleading because age of stands in the seedling-sapling class of black spruce in the Chippewa National Forest, where the species was found, averaged >65 years. In Minnesota, the species is most abundant in unproductive forest lands (lowland conifer) found in peatland areas of northern Minnesota (Niemi and Hanowski 1992).

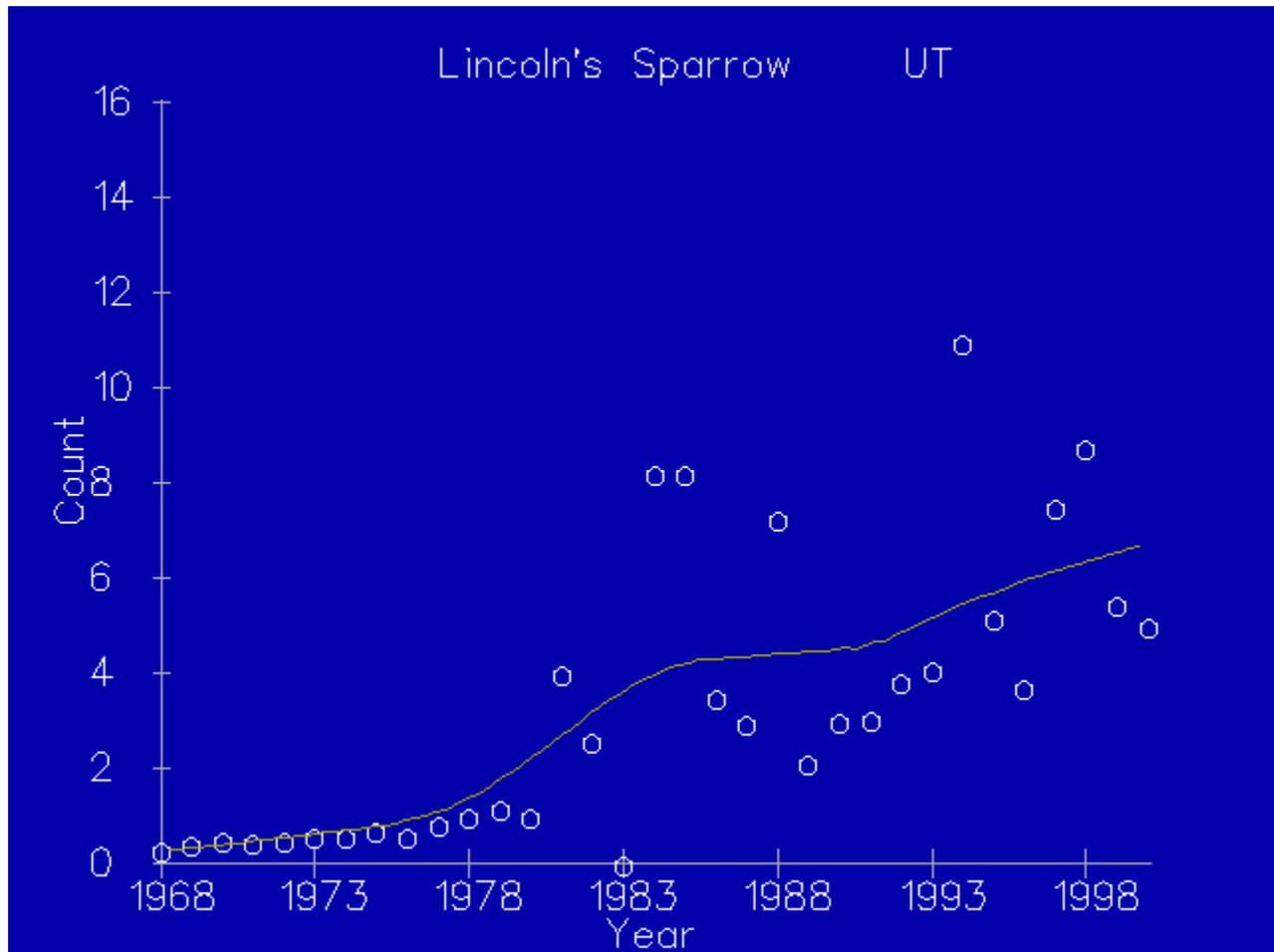
This species nests and feeds (primarily on insects) on the ground. Therefore, a critical habitat need is a well-developed ground cover of Sphagnum and other mosses to provide nesting cover (Brewer et al. 1991).

On the Fishlake National Forest the Lincoln sparrow occurs on all four Ranger Districts. This species is wide-ranging and easily detectable. Below is a map that displays potentially suitable habitat across the forest. This area totals approximately 423,432 acres.



Trend

In addition to these data, the BBS database (www.mbr-pwrc.usgs.gov) display an upward trend of Lincoln's sparrows in Utah. These data represent a 30-year trend between 1968 and 1998. These data were collected throughout the entire state of Utah, including points on the Fishlake National Forest. The estimated trend in Utah from 1966-2002 has been summarized as a 6.9% increase per year.



Surveys for avian MIS have been conducted on the Fishlake National Forest since the mid 1980's. Additional studies by "expert birders" were conducted in 1994, 1998, 2002, and 2003. These surveys targeted cavity nesting species, riparian species, and sage nesting species. All other avian species were also recorded while conducting survey routes.

Data has been collected between 1998-2003. No birds were detected in the Burnt Flat area transects during 1994, 3 transects in 1998 and 8 transects in 2002. As a result of these data collected over the past 8 years, this species has increased in the number of presence/absence transects across the forest. The total number of detections has increased to 27. While these numbers are increasing they are few. Therefore, further data is needed to continue to evaluate the status of the population on the Fishlake National Forest. Data presented by the Nature Conservancy indicates this species is "vulnerable". However, based on the BBS data which demonstrates a strong increase in trend beginning as far back as 1978, as well as professional judgment, the population across the forest is stable and likely viable.

Song Sparrow (*Melospiza melodia*)

The song sparrow is a common resident of most of California, but avoids higher mountains and occurs only locally in southern deserts. In winter, most leave montane habitats; they are more abundant and widespread than in lowlands and deserts. At all seasons, it prefers riparian, fresh or saline emergent wetland, and wet meadow habitats. It breeds in riparian thickets of willows, other shrubs, vines, tall herbs, and in fresh or saline emergent vegetation. The song sparrow also breeds in damp thickets and coastal scrub of northern California and Channel Islands where fog drip and a moist climate compensate for a lack of surface water. In winter in much of northern California, these sparrows also may be found far from water, in open habitats with thickets of shrubs or tall herbs. The song sparrow usually avoids densely wooded habitats, except along forest edges. The song sparrow is an uncommon resident in suitable habitat in southern deserts along western edge (very locally) and in Imperial and Colorado River valleys (Grinnell and Miller 1944, Garrett and Dunn 1981).

This species requires low, dense vegetation for protective cover, usually near water, in emergent vegetation, or in other moist areas. The male typically sings from an exposed perch at moderate height in shrub, tall herb, or low tree.

A single winter home range in New York was 0.6 ha (1.4 ac). In Kansas, Fitch (1958) measured a winter home range of 3.6 ha (8.9 ac), and estimated 29 home ranges as averaging about 2.8 ha (6.8 ac). In British Columbia, home range of an island population averaged 0.05 ha (0.12 ac). Territory in Ohio varied from 0.2 to 0.6 ha (0.48 to 1.4 ac), averaging 0.3 ha (0.7 ac). Breeding territory in salt marshes of Contra Costa Co. averaged about 0.04 ha (0.1 ac) in a year of high density (Johnston 1956b) adults rarely shifted location from year to year (Johnston 1956a). In a San Francisco Bay salt marsh, territory averaged 0.07 ha (0.2 ac) in human-altered linear strips of habitat, and 0.04 ha (0.1 ac) in unaltered habitat. Along Minnesota lakeshores, 4 territories varied from 0.12 to 0.26 ha (0.30 to 0.65 ac), averaging 0.18 ha (0.45 ac) (McCarty 1975). On an island in British Columbia, territory averaged 0.03 ha (0.07 ac).

Most nesters in California are nonmigratory, but numbers are augmented in winter by migrants from the north. Part of the population that breeds east of Cascade Range and Sierra Nevada migrates to more westerly and southerly portions of California in winter. Breeders in montane habitats mostly move to lower elevations for winter, more widespread than in desert riparian habitat. The song sparrow breeds in dense riparian thickets, emergent wetlands, or dense thickets in other moist situations. An open overstory of trees may be present, but is not required. In winter, it occurs in similar habitats, often far from water.

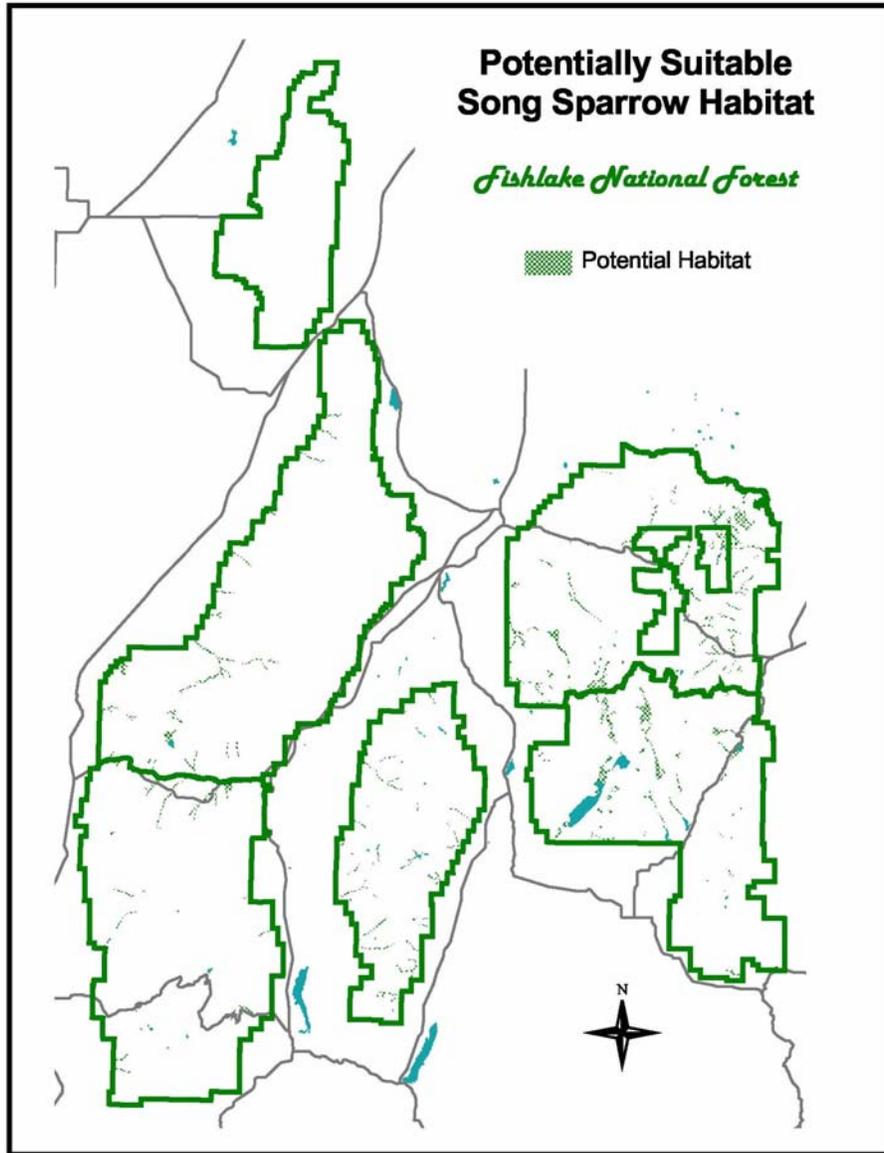
The song sparrow builds its nest on the ground (Bent 1968); however, it also nests in shrub, thicket, emergent vegetation, and small trees, usually within 1.3 m (4 ft) of the ground (Harrison 1978). The ground nest is hidden under low, dense vegetation, usually near water, in emergent vegetation, or in other moist sites. Nesting season usually begins in April. The song sparrow is a monogamous, solitary nester. Clutch size is 3 or 4, rarely 2, 5 or 6. Often double-brooded, sometimes treble-brooded. Incubation lasts 12-14 days. Altricial young tended by both parents, leave the nest at about 10 days and become independent about 25 days later. The song sparrow probably breeds first at 1 yr (Harrison 1978).

Seeds are the most important foods in the annual diet of song sparrows, but insects, spiders, and other small invertebrates, make up almost half of their diet in the nesting season (Martin et al. 1961). Berries and other small fruits are minor foods. The song sparrow regularly takes crustaceans and mollusks along the coast. It usually forages on the ground or in low vegetation, under cover of dense thickets or wetland vegetation. It gleans from the ground or low plants and often scratches in litter. Sometimes the

song sparrow forages a short distance from cover. In more arid regions, the song sparrow nests only along edges of bodies of water. In northern California and Channel Islands, it also nests in coastal fog zone and shaded sites where generally moist conditions compensate for a lack of surface water. In winter, it may be found far from water throughout much of northern California.

Typical nest predators include dogs, cats, and rats. The song sparrow, according to Friedmann (1963), is one of the most frequent, if not the most frequent host of brown-headed cowbird nest parasitism. It is one of the most variable bird species- 31 races in North America (Ehrlich et al. 1988).

On the Fishlake National Forest the Song sparrow occurs on all four Ranger Districts. This species is wide-ranging and easily detectable. Below is a map that displays potentially suitable habitat across the forest. This area totals approximately 423,432 acres.



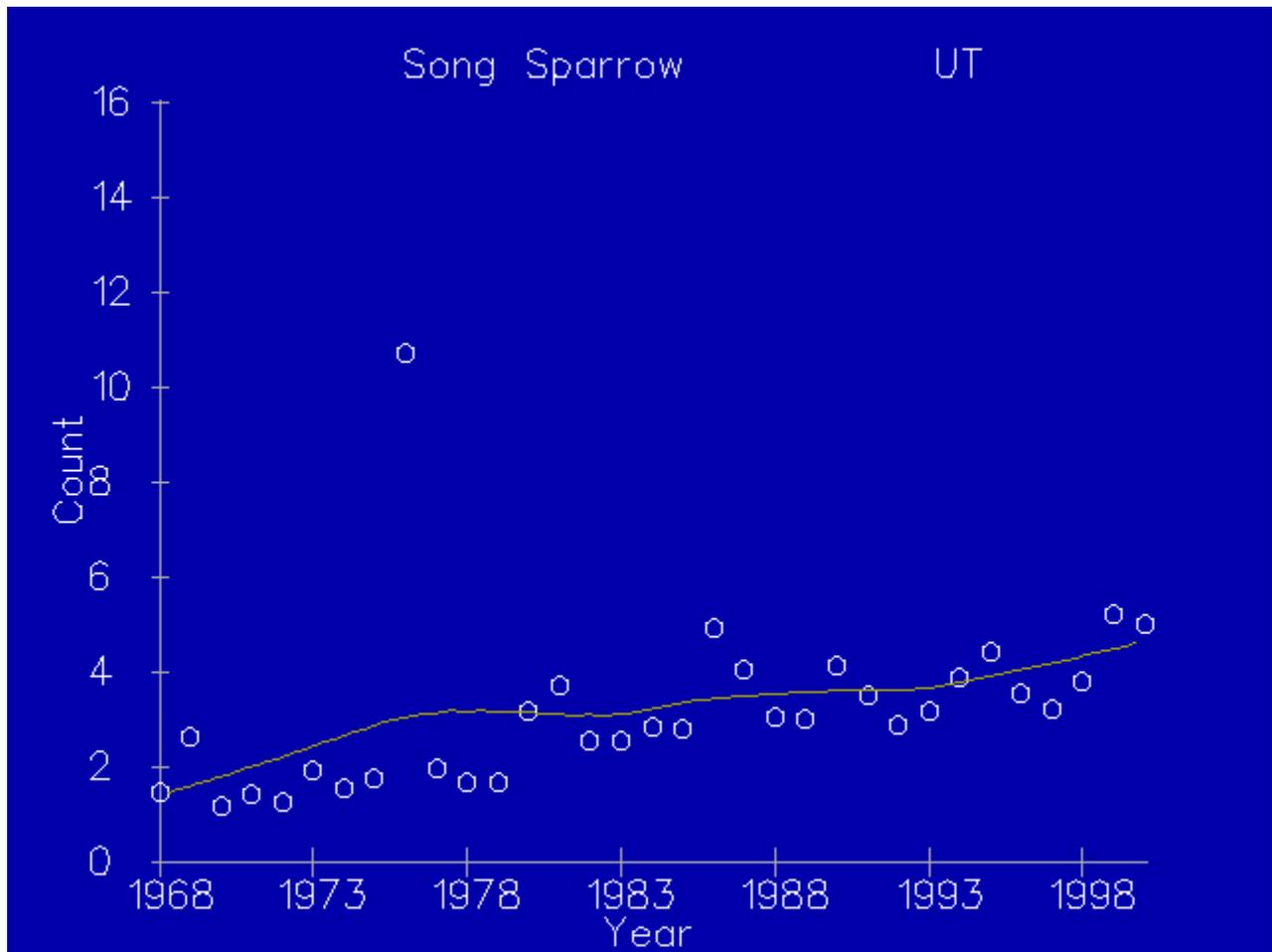
Surveys for avian MIS have been conducted on the FNF since the mid 1980's. Additional studies by "expert birders" have been conducted in 1994, 1998, and 2002. These surveys have targeted cavity nesting species, riparian species, and sage nesting species. All other avian species were also recorded while conducting survey routes.

Data has been collected between 1998-2003. No birds were located during survey efforts in the Burnt Flat area, however in 1998, 6 transects recorded individuals, and 3 transects recorded this species in 2002. As a result of these data collected over the past 8 years, this species has demonstrated a decreased in overall presence along transects across the forest. The total number of detections across the

Forest has increased to 26. Although these numbers have decreased the sample size is small. Therefore, further data is needed to evaluate the status of the population on the Fishlake National Forest. These data differ from that collected by the BBS, which demonstrates a steady increase in song sparrow numbers in Utah, including the Fishlake National Forest. The Nature Conservancy data indicates the population in Utah to be “apparently secure”. Based on all the data presented in this discussion and professional judgment, the population across the forest is likely stable or in a slightly downward trend, however, it is still likely viable.

Trend

In addition to these data, the BBS database (www.mbr-pwrc.usgs.gov) display a slightly upward trend of Song sparrows in Utah. These data represent a 30-year trend between 1968 and 1998. These data were collected throughout the entire state of Utah, including points on the Fishlake National Forest.

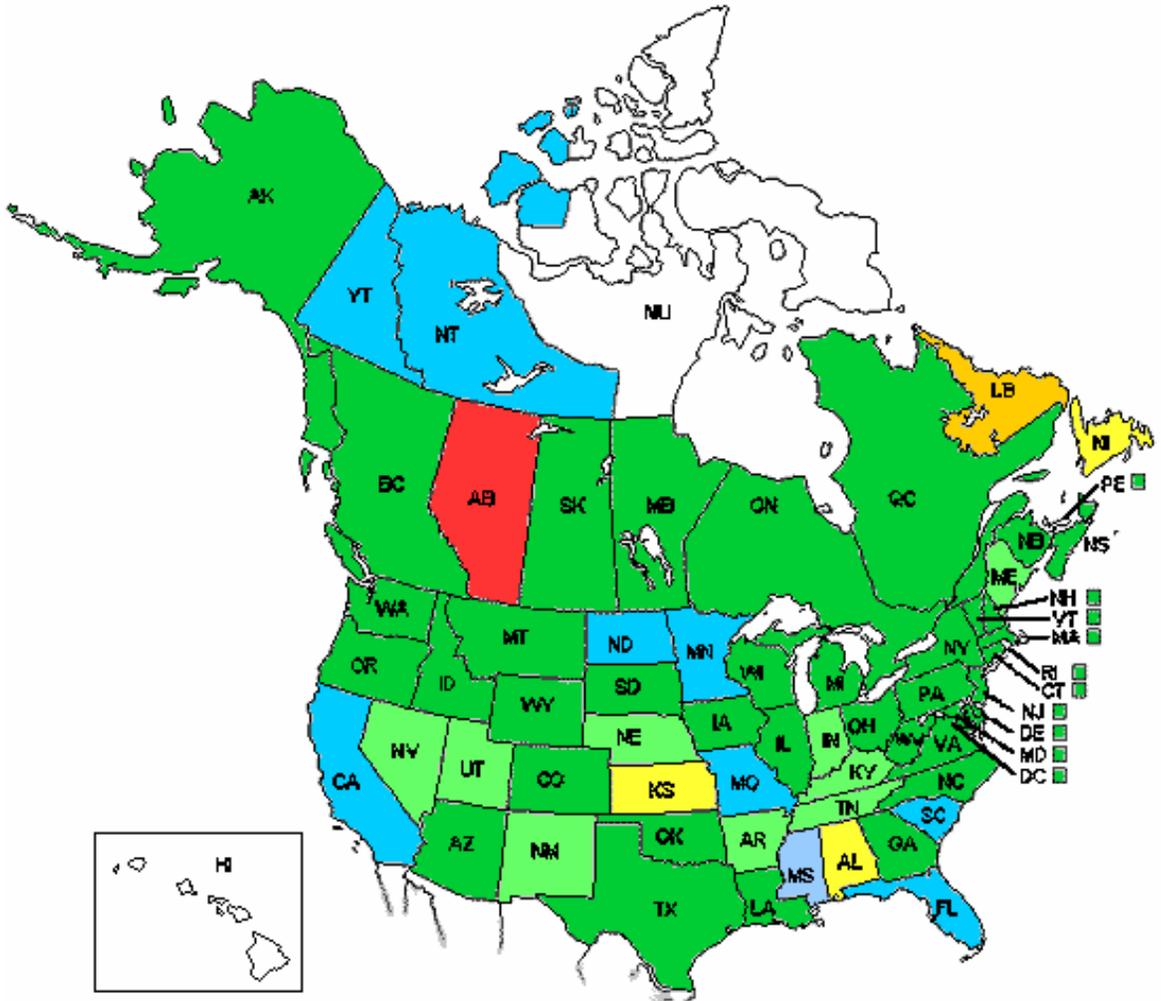


The map below displays the status ranking from the Nature Conservancy database (NatureServe Explorer). The Song sparrow in Utah has been ranked as “apparently secure”.

Song Sparrow (*Melospiza melodia*)

State/Province Conservation Status Rank

- SX: Presumed Extirpated
 - SH: Possibly Extirpated
 - S1: Critically Imperiled
 - S2: Imperiled
 - S3: Vulnerable
 - S4: Apparently Secure
 - S5: Secure
-
- SR: Reported
 - SZ: Migratory Transient
 - SE: Exotic
 - S?: Unranked
 - Under Review
 - SU: Unrankable



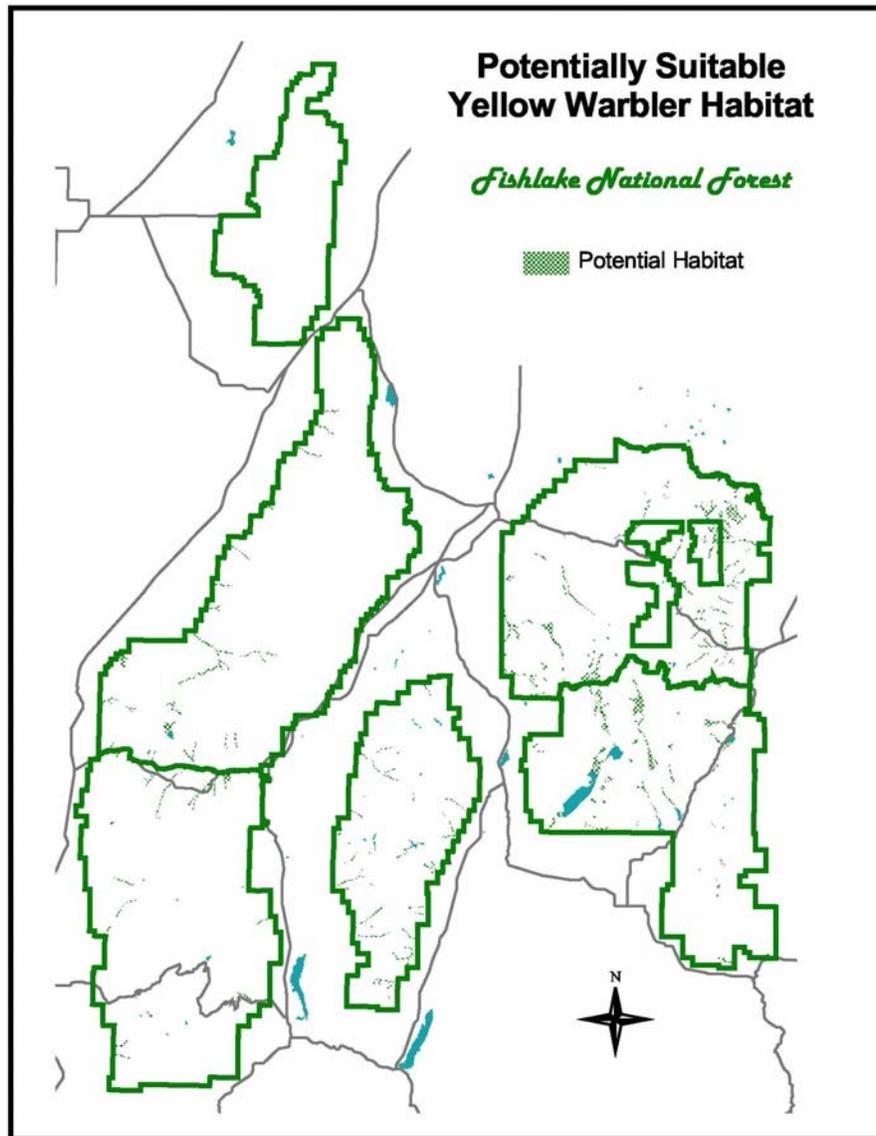
Yellow Warbler (*Dendroica petechia*)

The Northern Yellow Warblers are neotropical migrants that breed within North America and winter from Mexico to northern South America. Within North America they breed throughout most of Alaska and Canada and the lower 48 States except for Texas and the extreme south and southeast. The subspecies of Northern Yellows are *morcomi* in the Rocky Mountains, *parkesi* and *annicola* in Canada east of the Rockies, *aestiva* in the US and southernmost Canada east of the Rockies, *rubiginosa* in coastal British Columbia and the Alaska Panhandle, and *brewsteri* in the Pacific Northwest and California.

Yellow Warblers nest in shrubby growth by swamps and watercourses, in wet scrub, tree foliage, mangroves, gardens, shrubberies and berry patches. Dense growth may be preferred in order to reduce nest predation and brood parasitism. The males are sometimes polygamous. The female builds a neat, compact cup nest in an upright twig fork 2 to 12 feet up, sometimes up to 40 or even 60 feet. The cup is made of wool, plant down, dry weed stem fibers, and fine grass stems, then lined with plant fibers, cotton, plant down, and sometimes feathers. Incubation of the 3 to 6 (usually 4 or 5) whitish spotted eggs is for 11 days. Both parents tend the nestlings until fledging occurs at 9 to 12 days.

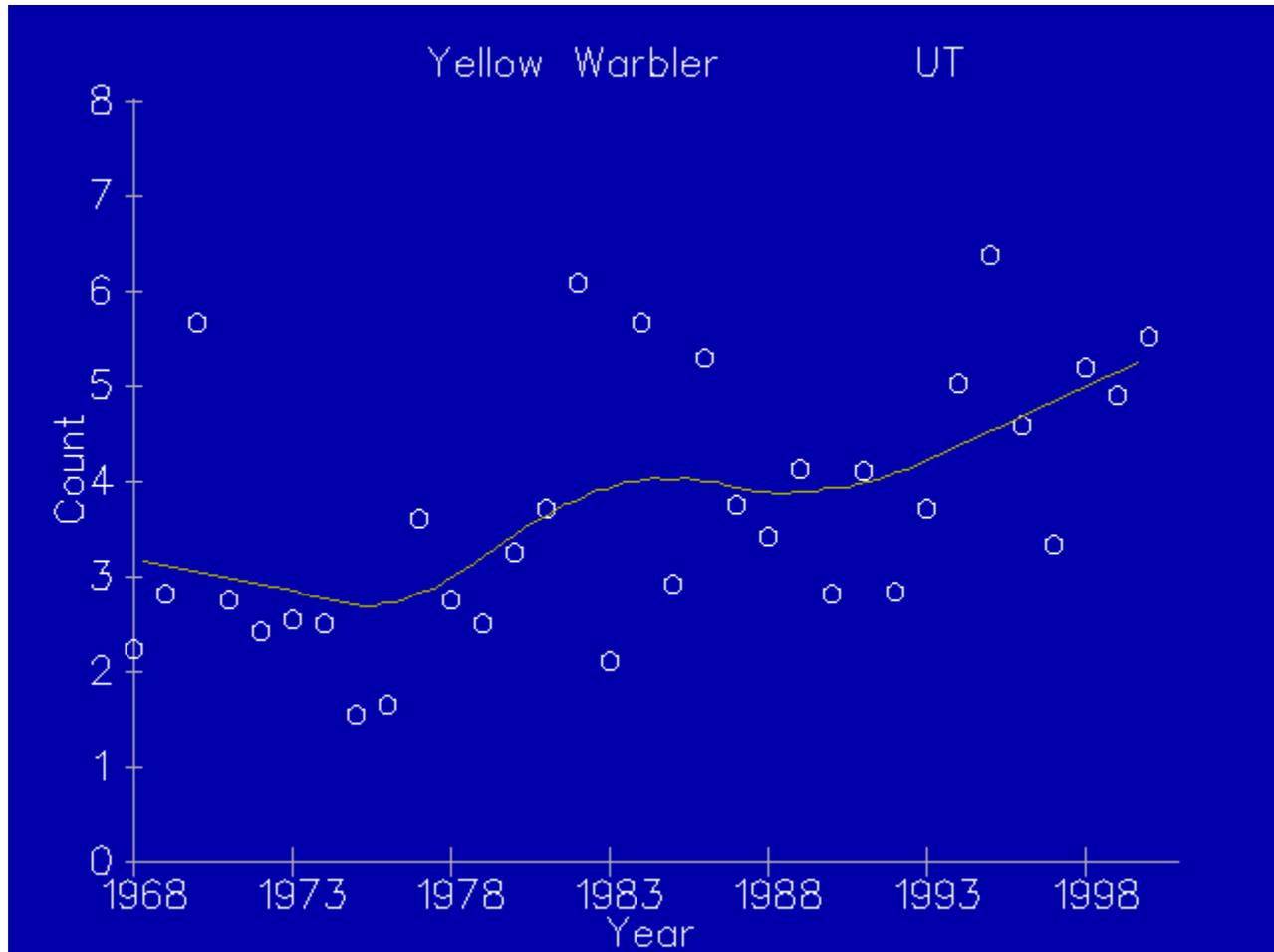
The male Yellow warbler has golden yellow plumage with rusty streaks on the breast and flanks. Wings and tail may have a slight greenish tint. The females have plain yellow plumage and breast streaks are absent or barely noticeable. The bill is thin and pointed and the legs are yellowish. This species is known to occur within riparian areas on the Fishlake National Forest.

On the Fishlake National Forest the Yellow warbler occurs on all four Ranger Districts. This species is wide-ranging and easily detectable. Below is a map that displays 423,432 acres of potentially suitable habitat across the forest.



Trend

This BBS data (www.mbr-pwrc.usgs.gov) displays a stable, to slightly upward trend of Yellow warblers in Utah. These data represent a 30-year trend between 1968 and 1998. These data were collected throughout the entire state of Utah, including points on the Fishlake National Forest.



Surveys for avian MIS have been conducted on the FNF since the mid 1980's. Additional studies by "expert birders" were conducted in 1994, 1998, and 2002. These surveys targeted cavity nesting species, riparian species, and sage nesting species. All other avian species were also recorded while conducting survey routes.

Data has been collected between 1998-2003. In 1998 the number of presence/absence observations of this species along each transect line totaled 14. In 2002 the total number of transects recording this species totaled 19. As a result of these data collected over the past 8 years, this species has demonstrated an increased in presence/absence numbers across the forest. The total number of detections has increased to 86. While these numbers are increasing, the sample size is small. Therefore, further data is needed to continue to evaluate the status of the population on the Fishlake National Forest. These data differ from that collected by the BBS, which demonstrates a steady increase in the song sparrow in Utah, including the Fishlake National Forest. The Nature Conservancy data indicates the population in Utah to be "apparently secure". Based on all the data presented in this discussion and professional judgment, the population across the forest is in an upward trend and likely viable.

MacGillivray's Warbler (*Oporornis tolmiei*)

The MacGillivray's warbler breeds from southeastern Alaska, southwestern Yukon, northern British Columbia, southern Alberta, northwestern Saskatchewan, and southwestern South Dakota south, primarily in the mountains, to southern California, central Arizona, and southern New Mexico. It is an uncommon to common summer resident of dense brush in moist habitats. It frequents valley foothill riparian, coastal Douglas-fir and redwood, montane riparian, and, in migration, desert riparian habitats. This warbler prefers early successional stages of cutover or burned woodlands or low shrubby habitats. It also inhabits low vegetation such as blackberry, salmonberry, cherry, currant, serviceberry, snowberry, poison oak, ninebark, spirea, and riparian willow and alder. It breeds in interior mountains up to about 2800 m (9000 ft) in the south (Garrett and Dunn 1981), and to 2400 m (8000 ft) in the north (Gaines 1977). It is a common migrant in the southern interior and less common coastally. The MacGillivray's warbler is less abundant in interior and more abundant coastally in the north. It is an uncommon to fairly common migrant on Farallon and the Channel Islands (DeSante and Ainley 1980, Garrett and Dunn 1981).

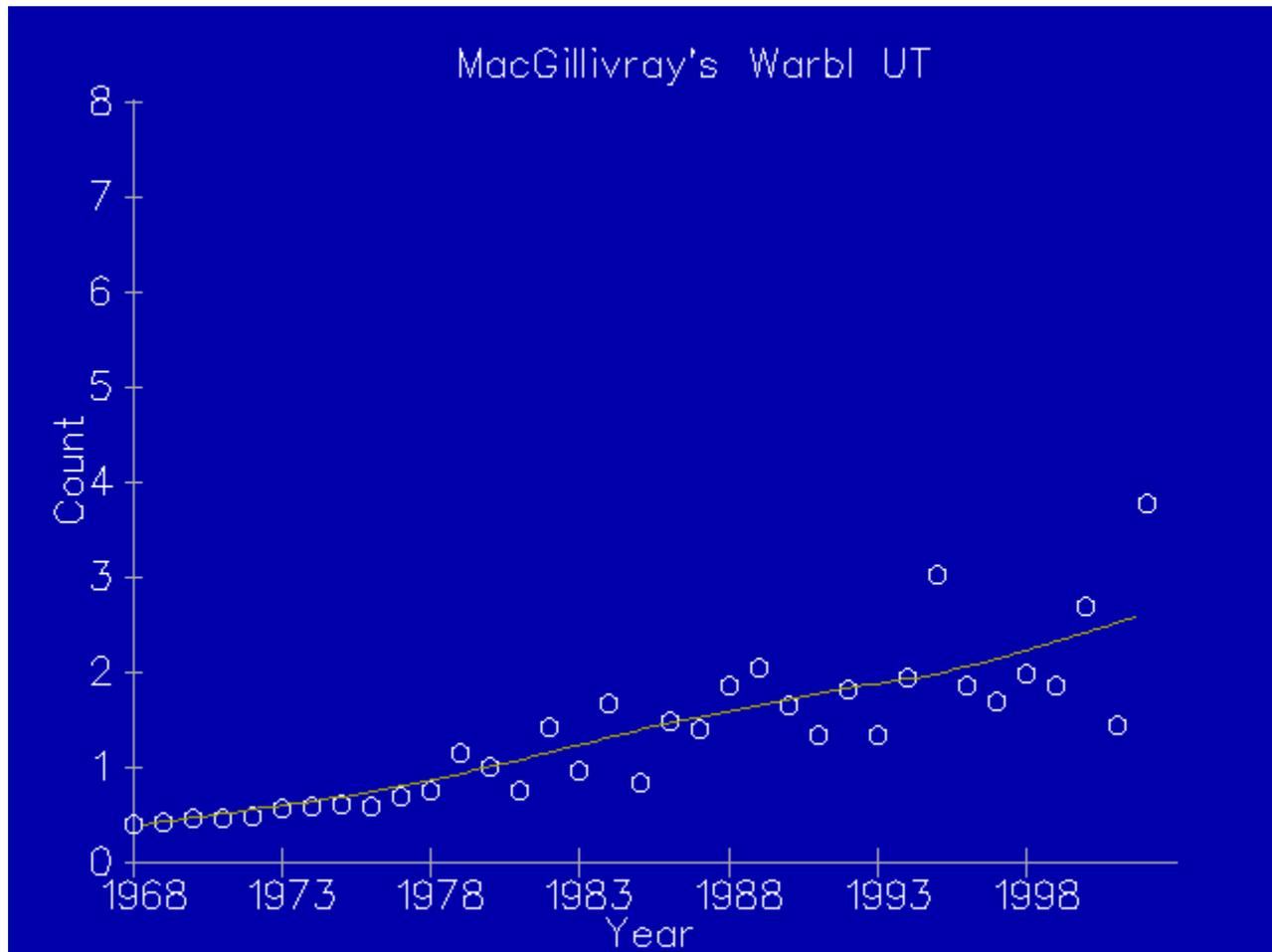
The MacGillivray's warbler apparently eats mostly insects. It forages low in shrubs or on the ground in dense thickets. It gleans foliage and branches and scrapes and probes ground litter. Young may take sap from sapsucker drillings in willows (Ehrlich et al. 1988). Willow, alder, and other dense shrubs in riparian areas or in moist woodlands provide cover at all seasons. Drier shrub habitats near water are used to a lesser extent.

The MacGillivray's warbler nests between May and July, with peak activity in June. It lays 3-6 eggs, usually 4. Incubation is 11-13 days, by the female only. Both parents tend altricial nestlings until the fledging stage in eight or nine days (Harrison 1978). This species prefers dense, moist, brushy habitat, or areas with tall weeds or ferns for nesting. The nest is usually placed 0.6 to 2 m (2-6 ft) above ground in a shrub, or is attached to several stalks of plants. It frequents areas near water, and prefers riparian thickets of willow, alder, other species, woodlands, and forests with moist, dense understory habitats.

The activity of this species is diurnal yearlong. Breeding grounds at higher elevations usually are not occupied until May; breeding areas are generally deserted by mid-September. A few birds move upslope post-breeding in willows and meadows as high as the timberline (Gaines 1977). Small numbers are regularly observed in lowlands into October, but are usually gone by November. Density in Wyoming was 10 per 40 ha (100 ac) in a willow-sedge swamp, 30 per 40 ha (100 ac) in a flatland aspen stand, and 85 per 40 ha (100 ac) in a scrub-meadow (Salt 1957). This species may be territorial on wintering ground (Ehrlich et al. 1988). It is subject to predation by accipiters, small mammals, and snakes, and is apparently quite rarely parasitized by cowbirds (Bent 1963).

The Fishlake National Forest has expanded the search for riparian related species to include the MacGillivray's warbler. Between 2002-2003 there were 6 incidental detections of MacGillivray's warbler on the Richfield Ranger District of the Fishlake National Forest. Additional field surveys will continue to add to the knowledge concerning trend on or around the Fishlake National Forest. However, according to the BBS data, the estimated trend in Utah for this species between 1966-2002 has increased by 5.6% annually. Therefore, the trend of this species is considered stable or perhaps in an upward on the Fishlake National Forest.

This BBS data (www.mbr-pwrc.usgs.gov) displays an upward trend of MacGillivray's warblers in Utah. These data represent a 30-year trend between 1968 and 1998. These data were collected throughout the entire state of Utah, including points on the Fishlake National Forest.



The map below displays the status ranking from the Nature Conservancy database (NatureServe Explorer). The MacGillivray’s warbler in Utah has been ranked as “apparently secure”.

State/Province Conservation Status Rank

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 - S?: Unranked
 - Under Review
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