

## RIPARIAN GUILD

### **Lincoln's Sparrow (*Melospiza lincolni*)**

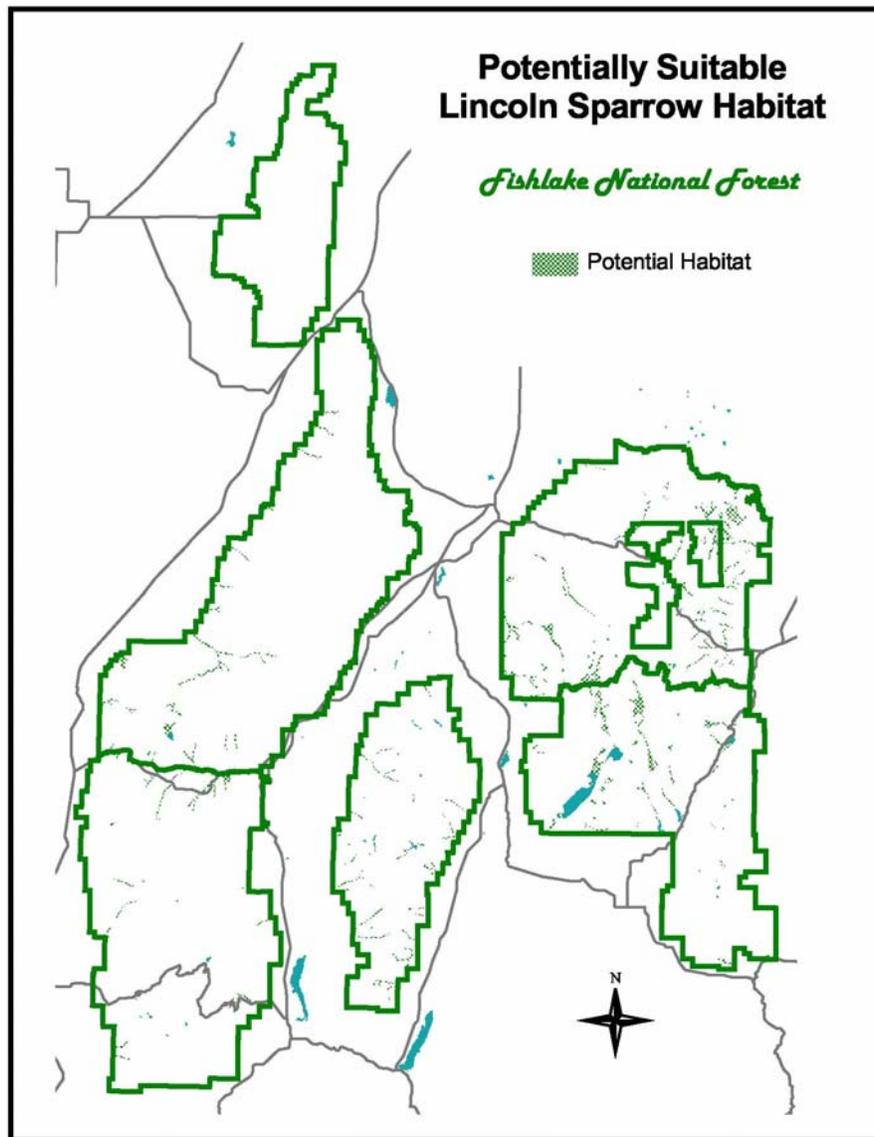
The Lincoln's Sparrow breeds from Alaska, northern Quebec, Labrador, and Newfoundland south to California, New Mexico, and northern New England. It can be found in brushy bogs and willow and alder thickets. It winters across the southern tier of the United States in woodland thickets and brushy pastures (Udvardy 1994, Bond 1937).

The Lincoln's sparrow breeds very locally in wet montane meadows of corn lily, sedges, and low willows (Garrett and Dunn 1981). The nest is often on the edge of wet areas, or in wet places on drier raised mounds (Harrison 1978). The nest is a grass tussock or sunk in shallow depression on sphagnum or moss (Bent 1968, Bond 1937). It is a cup made of grass or sedge and lined with fine grass and hair.

Breeding season begins late in May in the south areas and mid-June in the north (Harrison 1978). Typically 4-5 eggs are laid, though 3-6 has been observed. Incubation is carried out by the female and lasts between 12 and 14 days. The altricial young are cared for by both parents, and fledge in 9-12 days (Bent 1968).

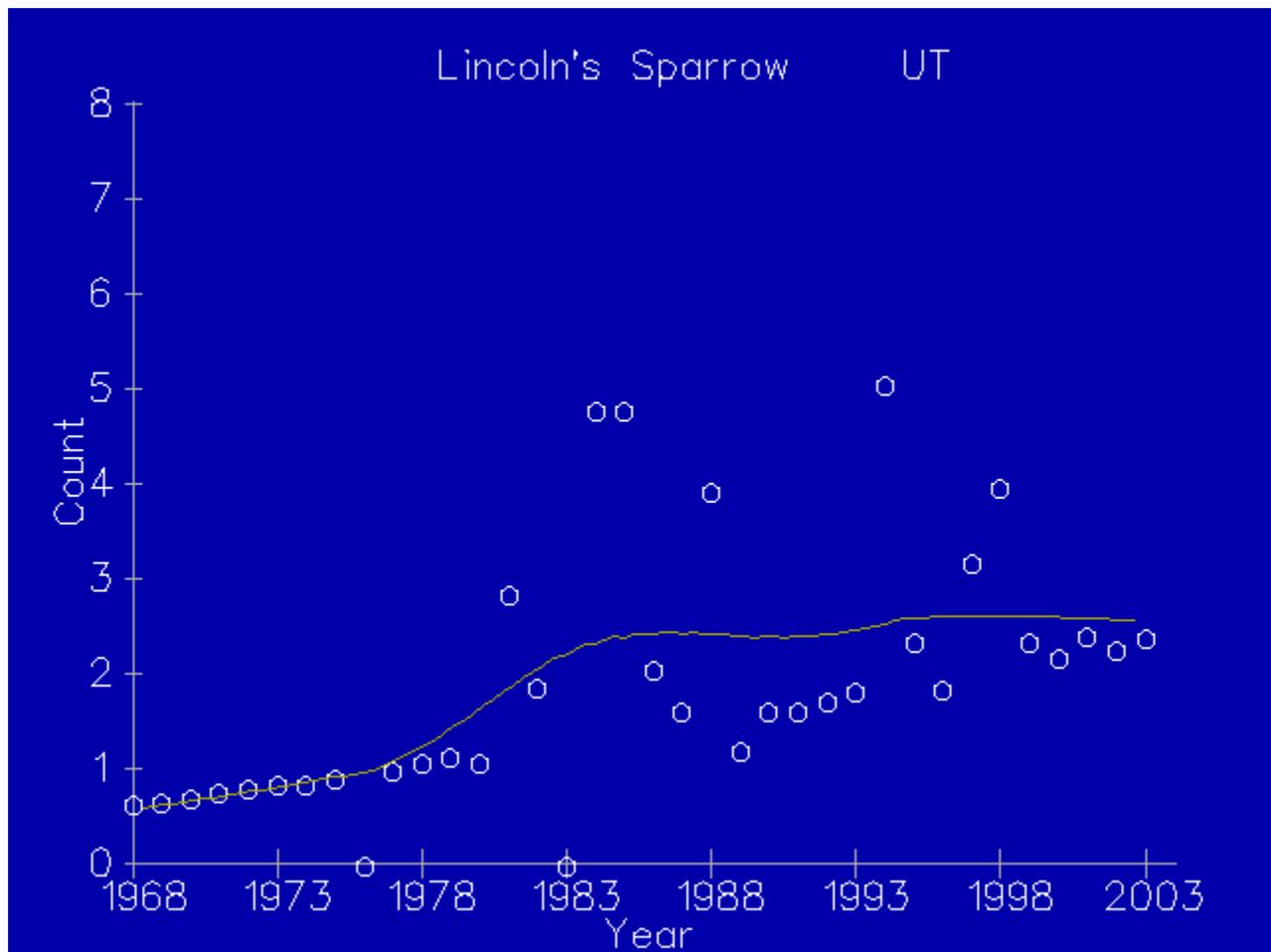
The diet consists mainly of insects, but spiders and millipedes will also be eaten. Grass and forb seed are also consumed (Bent 1968).

On the Fishlake National Forest, the Lincoln's 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](http://www.mbr-pwrc.usgs.gov)) display an upward trend of Lincoln's sparrows in Utah. These data represent a 35-year trend between 1968 and 2003. These data were collected throughout the entire state of Utah, including points on the Fishlake National Forest.

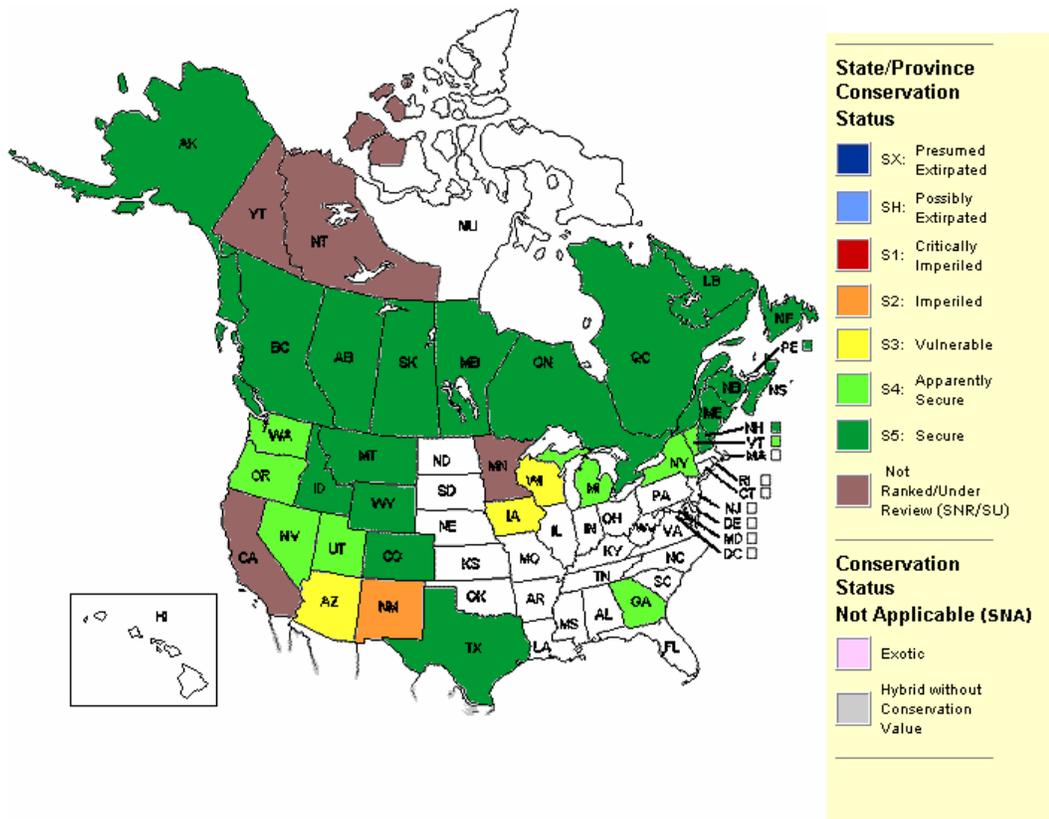


Surveys for avian MIS have been conducted on the Fishlake National Forest since the mid 1980's. Additional studies by "expert birders" were conducted in 1994, 1998, 2002, and 2003. These surveys targeted cavity nesting species, riparian species, and sage nesting species. All other avian species were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

Data has been collected between 1998-2004. No birds were detected in the Burnt Flat area transects during 1994, 3 transects in 1998 and 8 transects in 2002. In 2004 14 observations were detected. As a result of these data collected over the past 10 years, this species trend is stable. Data collected in 2004 was limited and not all transects monitored in 2002 and 2003 were revisited in 2004. Further data is being collected to fine-tune the status of the population on the Fishlake National Forest. Additional field surveys will continue to add to the knowledge concerning trend on the Fishlake National Forest. Data presented by the Nature Conservancy indicates this species is "apparently secure". Based on the BBS data, which demonstrates a strong increase in trend beginning as far back as 1978, as well as my professional interpretation of these data, the population across the forest is stable and viable.

The map below displays the status ranking from the Nature Conservancy database (NatureServe Explorer). The Lincoln's sparrow in Utah has been ranked as "apparently secure".

**Lincoln's Sparrow (*Melospiza lincolnii*)**



NatureServe. 2005. NatureServe Explorer: An online encyclopedia of life [web application]. Version 4.2. NatureServe, Arlington, Virginia. Available <http://www.natureserve.org/explorer>. (Accessed: February 18, 2005).

## **Song Sparrow (*Melospiza melodia*)**

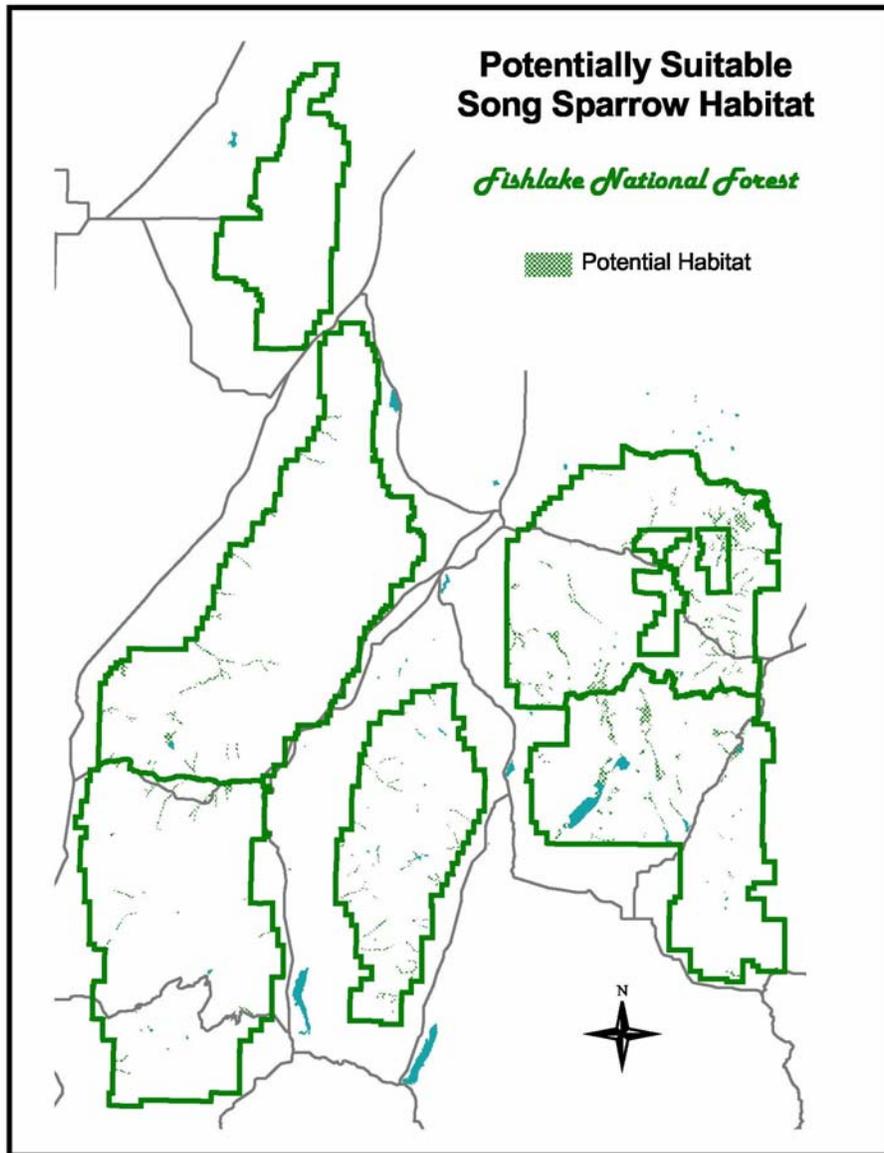
The song sparrow is one of the most widespread, diverse, and geographically variable of North American birds. There are 34 recognized subspecies, covering a breeding range from the Aleutians and mainland Alaska east to Newfoundland and south to California North Dakota, and the Carolinas. They winter from southern Canada throughout the United States to the Gulf Coast and Mexico (Udvardy 1994). The song sparrow is a common permanent resident in riparian thickets and a variety of other wet, brushy situations throughout California (Garrett and Dunn 1981).

In Kansas, Fitch (1958) measured a winter home range of 8.9 acres, and estimated 29 home ranges as averaging about 6.8 acres. Breeding territory in salt marshes of San Francisco Bay in the 1950's averaged 9.7 breeding pairs per acre (Johnston 1956b). Adults rarely shifted location from year to year (Johnston 1956a). Along Minnesota lakeshores, territories varied from 0.22-0.49 per acre (McCarty 1975). Habitat characteristics may explain spatial variation in abundance. Song sparrows do not appear to respond to vegetation height and density of plant stems, but do respond positively to shrub cover (Nur and Spautz 2002). Territories may also be delineated by food resources (Lindsey 2003)

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 4 feet 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. The breeding season occurs from March to June, with a peak at the end of March (Johnston 1956a). Clutch size is 3 or 5, rarely 2 or 6. They will often double-brood, or sometimes brood three times a year to replace lost clutches. Incubation lasts 12-14 days. The altricial young are tended by both parents, leave the nest after about ten days, and become independent about 25 days later (Harrison 1978). Predation is the major cause of nest failure in San Francisco Bay (Nur and Spautz 2002).

Seeds are the most important foods in the annual diet of song sparrows, but insects, beetles, and other small invertebrates make up part of their diet (Martin et al. 1961). Numerous insects may be available for forage, especially in the summer (Lindsey 2003). The song sparrow 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. Water is also required in a song sparrow territory (Marshall 1948). The song sparrow is commonly host to nest parasitism by brown-headed cowbirds (Hauber 2000).

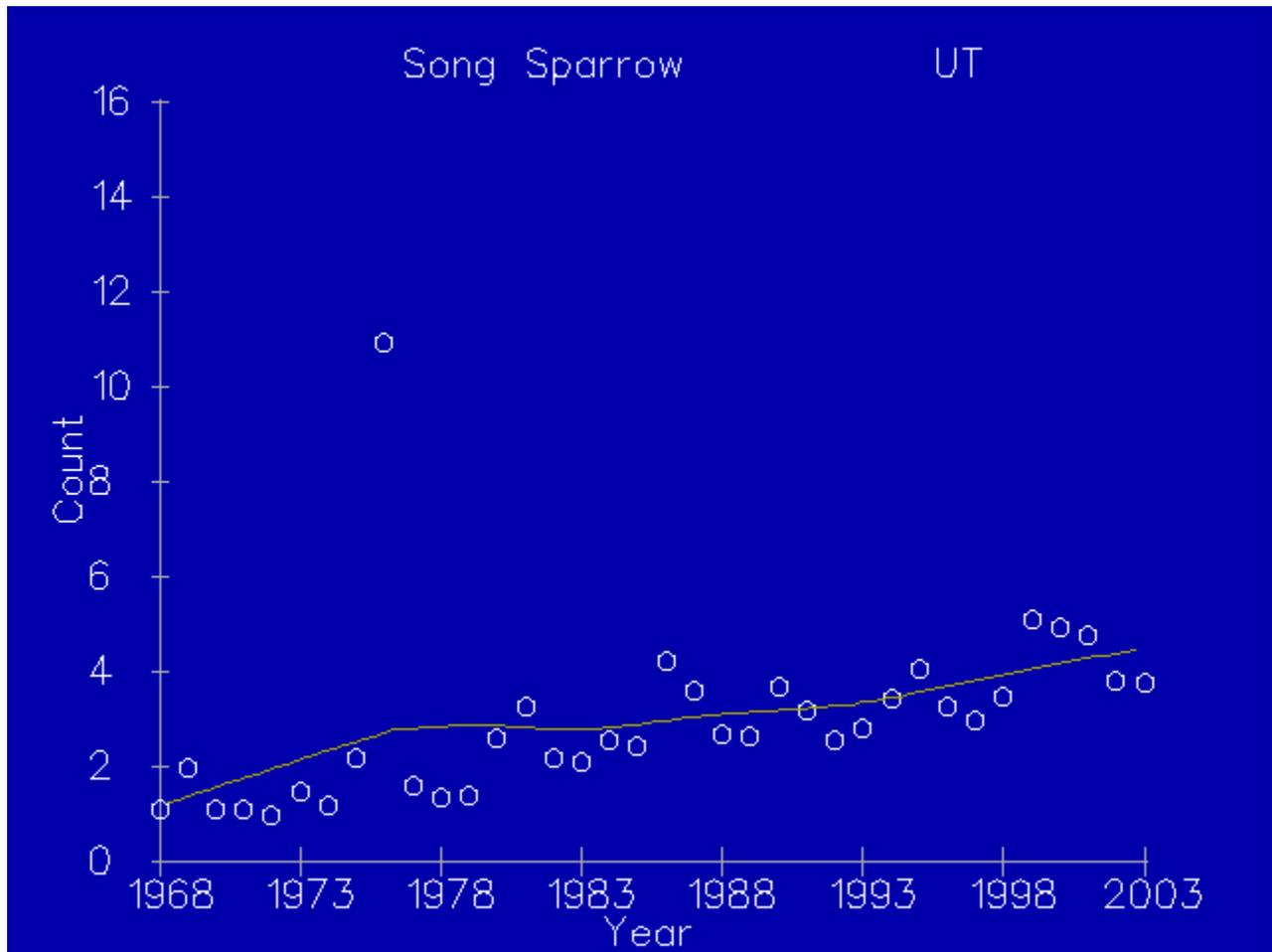
On the Fishlake National Forest the Song sparrow occurs on all four Ranger Districts. This species is wide-ranging and easily detectable. Below is a map that displays potentially suitable habitat across the forest. This area totals approximately 423,432 acres.



Surveys for avian MIS have been conducted on the Fishlake National Forest since the mid 1980's. Additional studies by "expert birders" have been conducted in 1994, 1998, 2002, 2003 and 2004. These surveys have targeted cavity nesting species, riparian species, and sage nesting species. All other avian species were also recorded while conducting survey routes.

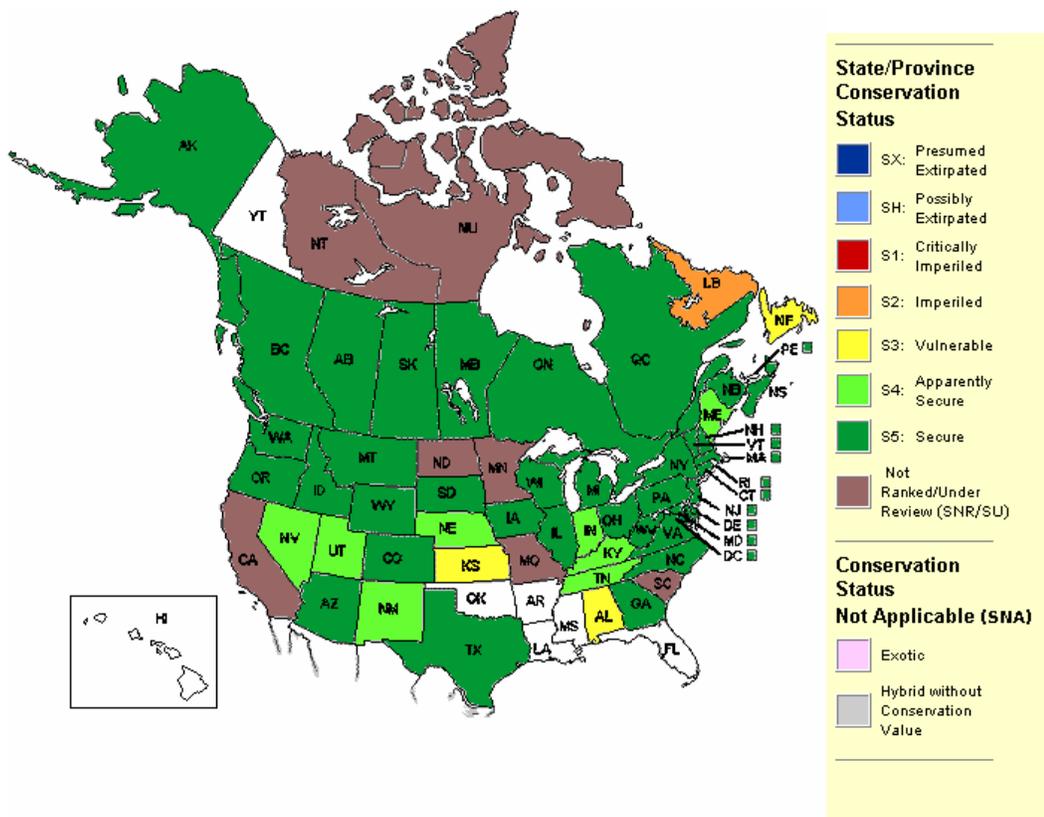
**Trend**

In addition to these data, the BBS database ([www.mbr-pwrc.usgs.gov](http://www.mbr-pwrc.usgs.gov)) displays a slightly upward trend of song sparrows in Utah. These data represent a 35-year trend between 1968 and 2003. 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*)**



NatureServe. 2005. NatureServe Explorer: An online encyclopedia of life [web application]. Version 4.2. NatureServe, Arlington, Virginia. Available <http://www.natureserve.org/explorer>. (Accessed: February 18, 2005).

Data has been collected between 1998-2004. 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. In 2004 no song sparrow detections were recorded. Data collected in 2004 was limited and not all transects monitored in 2002 and 2003 were revisited in 2004. Although these numbers have decreased, the sample size is small, and further data is needed to evaluate the status of the population on the Fishlake National Forest. Further data is being collected to fine-tune the status of the population on the Fishlake National Forest. Additional field surveys will continue to add to the knowledge concerning trend 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 my interpretation of these data, the population across the forest is stable or in a slightly downward trend, however still viable.

### **Yellow Warbler (*Dendroica petechia*)**

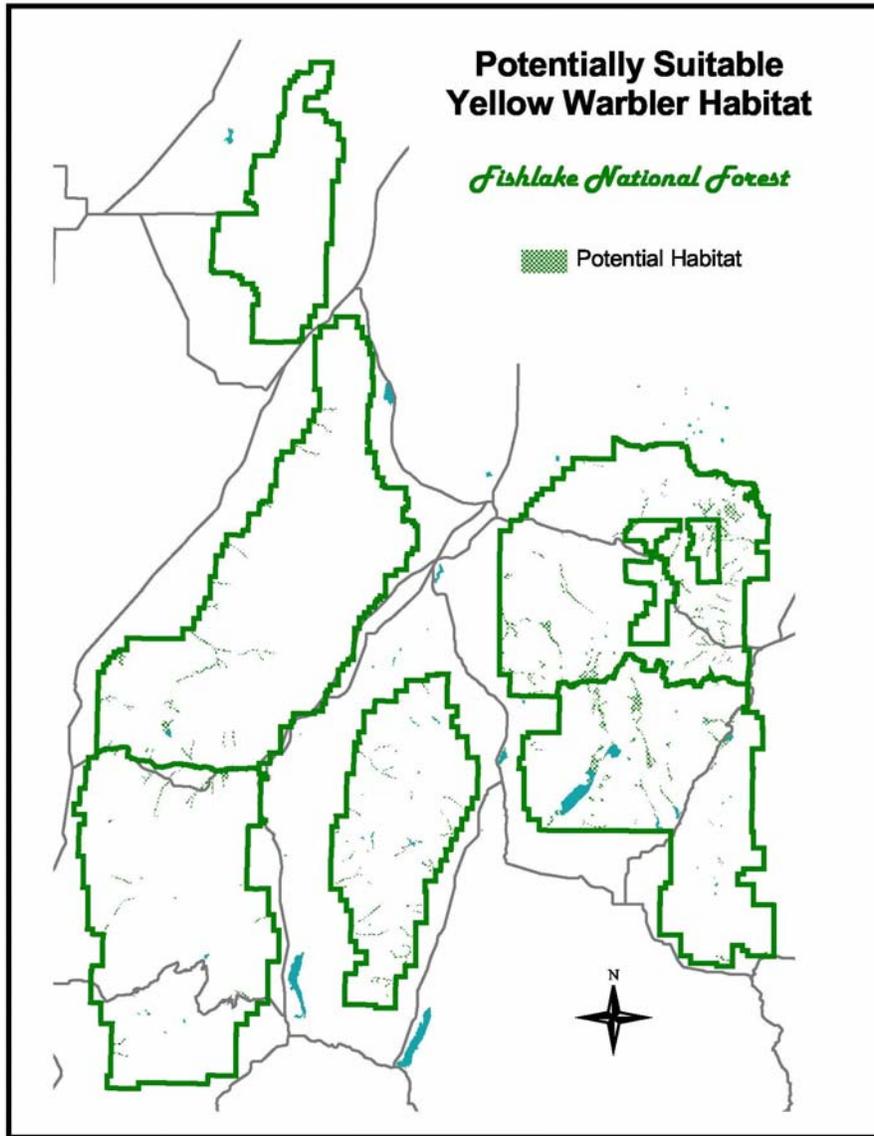
The yellow warbler breeds throughout most of Alaska across Canada, and south to southern California, northern Oklahoma, and northern Georgia. It winters in the tropics. They are found nesting in moist thickets, especially along streams and swampy areas (Udvardy 1994).

Yellow warblers select nest sites based upon characteristics surrounding the nest bush rather than the nest bush itself. Dense growth may be preferred in order to reduce nest predation and brood parasitism (Knopf and Sedgwick 1992). It is subject to predation by jays, predatory birds, small mammals, and snakes, and is apparently quite rarely parasitized by cowbirds (Bent 1953).

Yellow warblers nest in shrubs, willows, or low trees near water (Headstrom 1951). They breed in shrubby growth by swamps and watercourses, in wet scrub, tree foliage, mangroves, gardens, shrubberies and berry patches. The males are sometimes polygamous. The female builds a neat, compact cup nest in an upright twig fork 2-12 feet up, sometimes up to 40 or even 60 feet. The cup is made of plant down, dry weed stem fibers, and fine grass stems, then lined with plant fibers, cotton, plant down, and sometimes feathers. Incubation of the 3-6 (usually 4 or 5) whitish spotted eggs is for 11 days. Both parents tend the nestlings until fledging occurs at 9 to 12 days (Baicich and Harrison 1997). Yellow warblers are insectivorous, with larger bugs being ingested as the birds grow (Biermann and Sealy 1982).

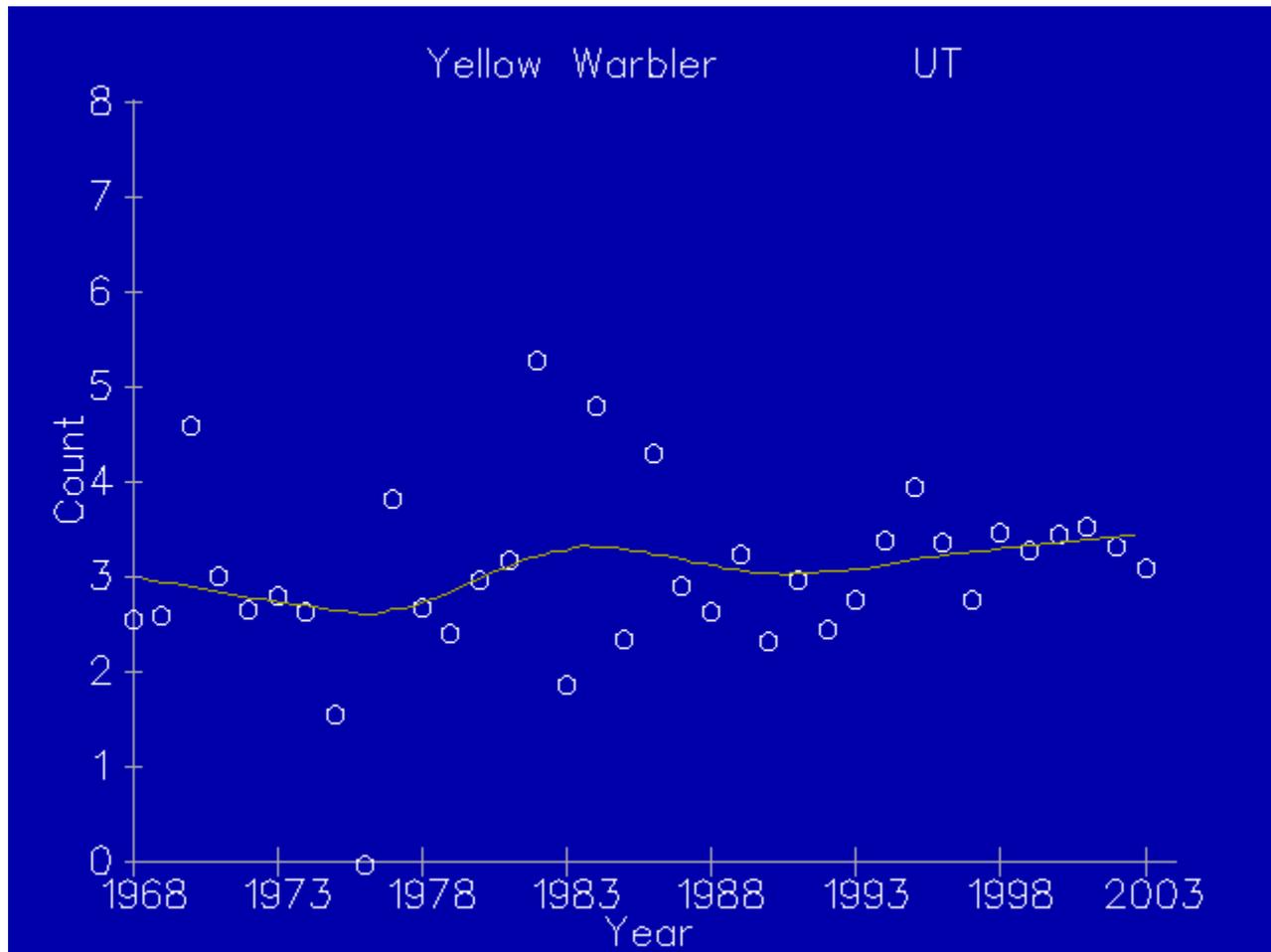
The male yellow warbler has golden yellow plumage with rusty streaks on the breast. The male's back may have a slight greenish tint. The females have plain yellow plumage and breast streaks are absent (Udvardy 1994). This species is known to occur within riparian areas on the Fishlake National Forest.

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

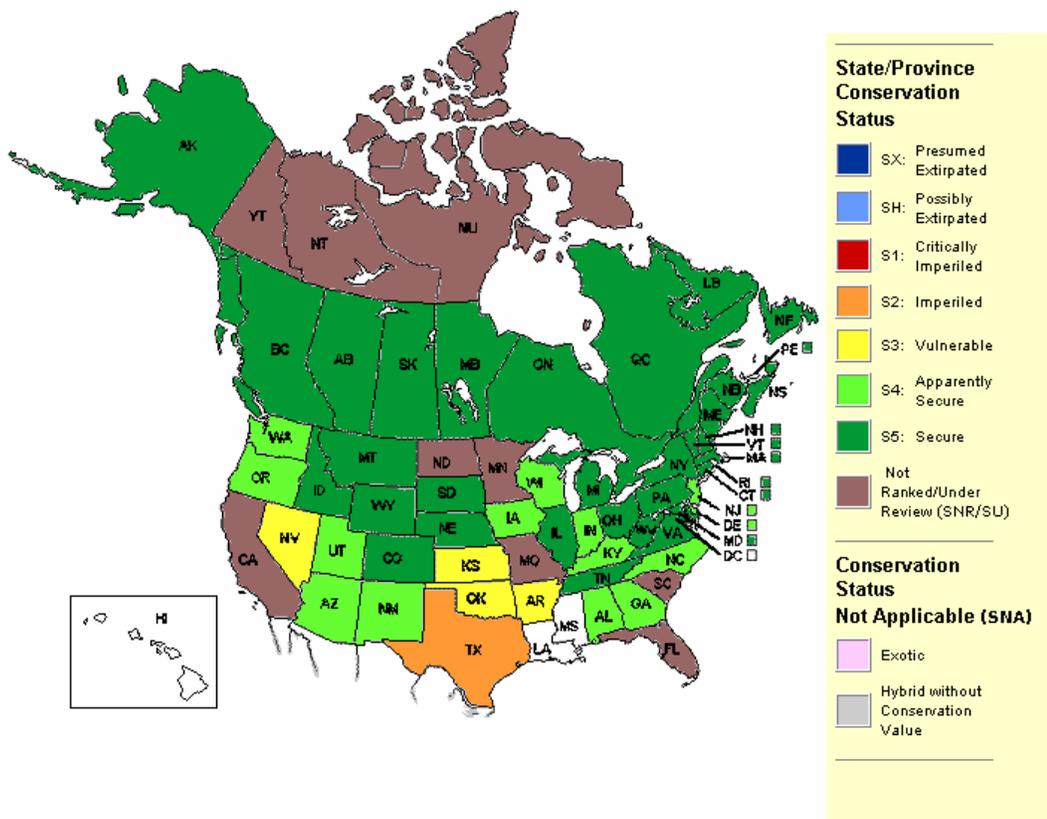
This BBS data ([www.mbr-pwrc.usgs.gov](http://www.mbr-pwrc.usgs.gov)) displays a stable to slightly upward trend of yellow warblers in Utah. These data represent a 35-year trend between 1968 and 2003. These data were collected throughout the entire state of Utah, including points on the Fishlake National Forest.



Surveys for avian MIS have been conducted on the Fishlake National Forest since the mid 1980's. Additional studies by "expert birders" were conducted in 1994, 1998, 2002, 2003, and 2004. These surveys targeted cavity nesting species, riparian species, and sage nesting species. All other avian species were also recorded while conducting survey routes.

The map below displays the status ranking from the Nature Conservancy database (NatureServe Explorer). The yellow warbler in Utah has been ranked as "apparently secure".

**Yellow Warbler (*Dendroica petechia*)**



NatureServe. 2005. NatureServe Explorer: An online encyclopedia of life [web application]. Version 4.2. NatureServe, Arlington, Virginia. Available <http://www.natureserve.org/explorer>. (Accessed: February 18, 2005).

Data has been collected between 1998-2004. 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. In 2004 4 detections were recorded. Data collected in 2004 was limited and not all transects monitored in 2002 and 2003 were revisited in 2004. Although these numbers have decreased, the sample size is small, and further data is needed to evaluate the status of the population on the Fishlake National Forest. Further data is being collected to fine-tune 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. Based on all the data presented in this discussion and professional interpretation of these data, the population across the forest is in a stable trend and viable.

### MacGillivray's Warbler (*Oporornis tolmiei*)

The MacGillivray's warbler is found in coniferous forest edges, burns, brushy cuts, or streamside growth. It breeds from Alaska and Yukon south to California and central New Mexico. Winters are spent in the tropics (Udvardy 1994).

The MacGillivray's warbler apparently eats mostly insects (Bent 1953), though 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 (Bent 1953).

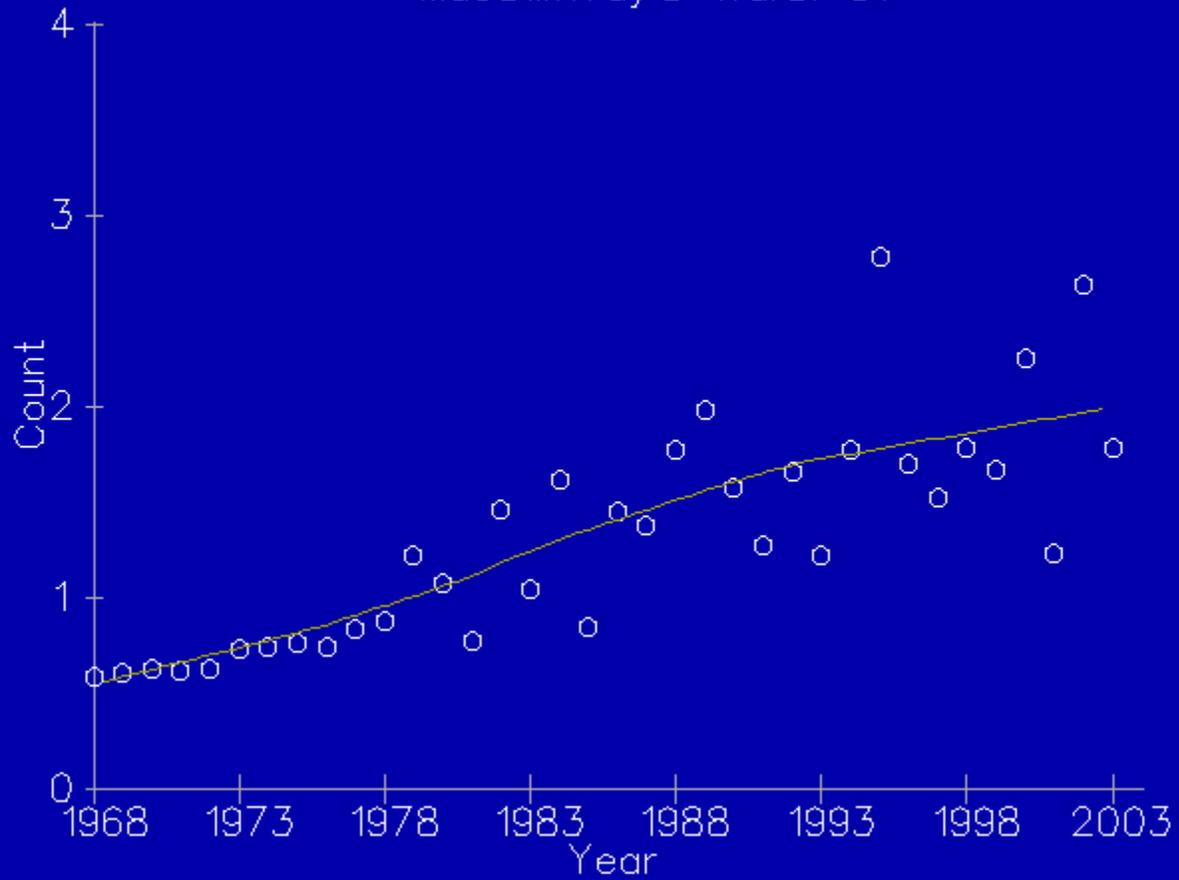
The MacGillivray's warbler nests between May and early August. It lays 3-6 eggs, usually 4 (Baicich and Harrison 1997). Incubation is 11-13 days, by the female only. Both parents tend altricial nestlings until the fledging stage in eight or nine days (Baicich and Harrison 1997, Bent 1953). This species prefers dense, moist, brushy habitat, or areas with tall weeds or ferns for nesting (Bent 1953). The nest is usually placed 0.5-2 feet above ground in a shrub, up to 6 feet in saplings or juniper trees (Headstrom 1951), or is attached to several stalks of plants (Bent 1953).

Density in Wyoming was 10 per 100 acres in a willow-sedge swamp, 30 per 100 acres in a flatland aspen stand, and 85 per 100 acres in a scrub-meadow (Salt 1957). This species may be territorial on wintering ground (Ehrlich et al. 1988). These warblers are rarely parasitized by cowbirds (Bent 1953).

### **Trend**

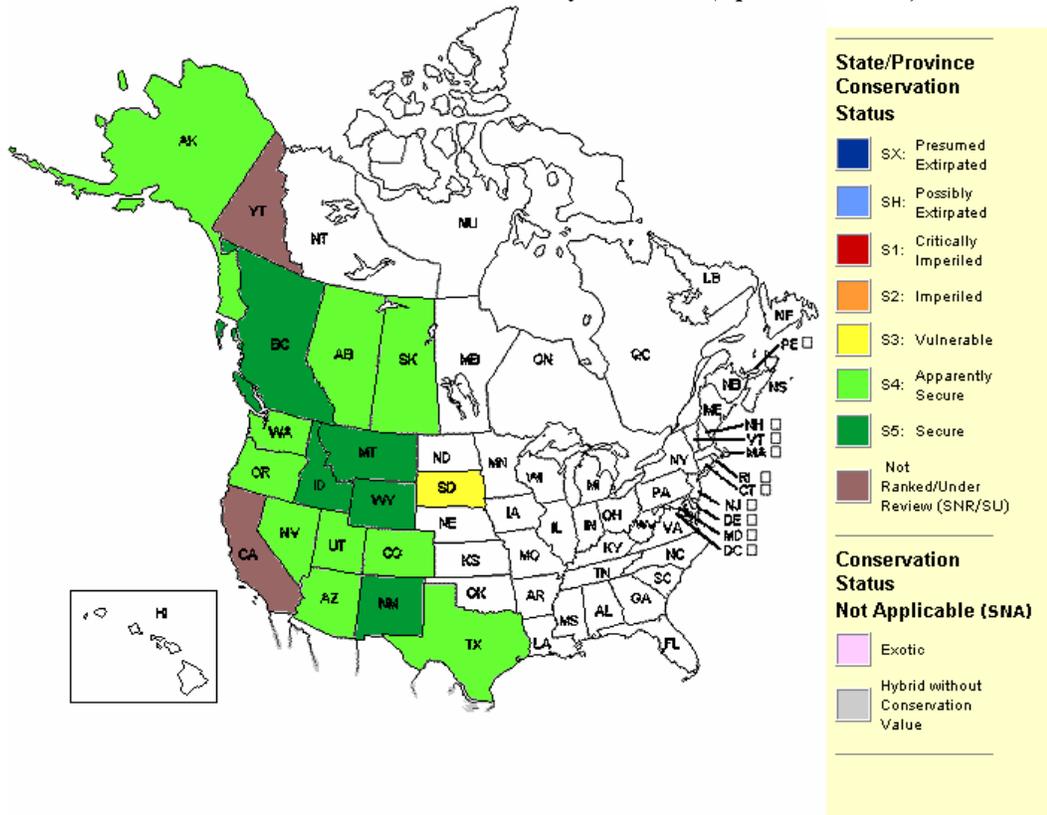
This BBS data ([www.mbr-pwrc.usgs.gov](http://www.mbr-pwrc.usgs.gov)) displays an upward trend of MacGillivray's warblers in Utah. These data represent a 35-year trend between 1968 and 2003. These data were collected throughout the entire state of Utah, including points on the Fishlake National Forest.

# MacGillivray's Warbl UT



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".

**MacGillivray's Warbler (*Oporornis tolmiei*)**



NatureServe. 2005. NatureServe Explorer: An online encyclopedia of life [web application]. Version 4.2. NatureServe, Arlington, Virginia. Available <http://www.natureserve.org/explorer>. (Accessed: February 18, 2005 ).

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. Due to limited surveys for this species no detections were recorded in 2004. Data collected in 2004 was limited and not all transects monitored in 2002 and 2003 were revisited in 2004. Although these numbers have decreased, the sample size is small, and further data is needed to evaluate the status of the population on the Fishlake National Forest. Further data is being collected to fine-tune the status of the population on 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. It is my professional interpretation of these data that the trend of this species is stable and viable on the Fishlake National Forest.