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Status:

In 1992 Saab and Groves determined that the population trend for yellow-headed blackbirds was slightly up. However, Dobkin (1994) wrote that yellow-headed blackbird populations were declining in Idaho, but recent surveys show increasing populations over the range of the species. Although recent surveys indicate a slight increase in yellow-headed blackbirds, the 26 year population trend was downward overall (Ritter 1996). Yellow-headed blackbirds are much less common than either the red-wing blackbird or Brewer's blackbird in the Jarbidge Resource Area. Stokes and Stokes (1996) indicated that BBS data for yellow-headed blackbirds show a strong upward trend in the West and Central United States. In 1996 the yellow-headed blackbird was included in the Idaho BLM Sensitive Species list.

Threats:

Wetland degradation and drainage continue to be threats to the habitat for this species. In a few areas of the South and Midwest blackbirds, including yellow-headed blackbirds, cause substantial damage to crops, resulting in limited control measures by Animal Damage Control.

Brewer's Sparrow (*Spizella breweri*)

Description:

Brewer's sparrows are 5 to 5.25 inch pale to medium brown sparrow with an unstreaked sandy colored breast (Ehrlich et al. 1988). Their crown is medium brown in color with fine darker streaking, their back is medium brown that has a mottled appearance, and they have a notched tail (Udvardy 1977, Peterson 1990). The sexes are similar in appearance (Udvardy 1977, Stokes and Stokes 1996). Other sparrows that may occur with Brewer's sparrows in Idaho include the vesper sparrow, lark sparrow, sage sparrow, chipping sparrow. and black-throated sparrow. Vesper

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sparrows have a streaked breast and white outer tail feathers (Udvardy 1977, Peterson 1990). Sage sparrows have a darker gray head and a dark breast spot with streaking on the side (Udvardy 1977, Peterson 1990). Lark sparrows have rusty colored stripes on their crown and cheek. Lark sparrows also have a breast spot and white tips on the outer tail feathers (Peterson 1990, Stokes and Stokes 1996). Chipping sparrows have a rusty colored crown bordered by white and black eye stripes and a clear grayish breast (Udvardy 1977, Peterson 1990). Black-throated sparrows have a black chin, a black throat, and black on the upper breast with a white eye-stripe and mustache on a dark gray brown head (Udvardy 1977, Peterson 1990, Stokes and Stokes 1996).

Distribution:

The winter range for Brewer's sparrows extends from southern California eastward to western Texas, then south to central Mexico (Udvardy 1977, Ehrlich et al. 1988). Brewer's sparrows are unique in having 2 distinct nesting populations. A northern nesting area is found in alpine meadows of the Yukon, whereas, the second nesting area includes southern British Columbia and Alberta, then south inland of the Cascade Mountain Range to southern California, eastward to northwestern New Mexico, and north to southwestern North Dakota (Udvardy 1977, Short 1984, Dobkin 1994). In Idaho Brewer's sparrow breeding distribution includes the southern half of Idaho with a separate breeding area in the Palouse area (Stephens and Sturts 1991). Brewer's sparrows are fairly wide spread within the Jarbidge Resource Area, wherever sagebrush cover remains. However, Brewer's sparrows seem to be much less abundant at elevations over 6,200 feet.

Habitat:

Brewer's sparrow habitat is generally classified as sagebrush/grass or shrubsteppe (Udvardy 1977, Reynolds 1981, Larson and Bock 1986, Rotenberry and Wiens 1989, Knopf et al. 1990, Medin 1990, Medin 1992). Short (1984) expanded the description to habitats composed primarily of evergreen shrub types or evergreen shrub savannahs to include chaparral communities in California and the alpine shrub meadows in Canada. In sagebrush habitats, Brewer's sparrows do not require that sagebrush dominates the site if other shrubs like rabbitbrush are present (Larson and Bock 1986). However, Reynolds and Trost (1981) reported that the conversion of sagebrush communities to crested wheatgrass seedings eliminated Brewer's sparrow nesting.

Biology:

Brewer's sparrows have been observed in Idaho in early May from their wintering areas. This is about 2 to 3 weeks after sage sparrows arrive. Medin (1992) suggested that Brewer's sparrows arrived after sage sparrows in Nevada. Courtship displays and much of the breeding biology of Brewer's sparrows are still poorly known (Dobkin 1994), however, males sing to defend their territory and to attract a female. Following nest building and breeding the female lays 3 to 5 bluish green brown speckled eggs which she incubates for 11 to 13 days (Reynolds 1981, Ehrlich et al. 1988, Rotenberry and Wiens 1989). The cup type nest is made of grass, rootlets, and forbs lined with finer material (Short 1984). Nests are frequently placed less than 12" above ground in a shrub, usually sagebrush (Best 1972, Schroeder and Sturges 1975, Rich 1980, Reynolds 1981, Short 1984, Petersen and Best 1987). Young Brewer's sparrows fledge in about 8 to 12 days (Reynolds 1981, Petersen et al. 1986, Ehrlich et al. 1988, Rotenberry and Wiens 1989). Petersen

et al. (1986) speculated that weather and/or food impacted the development of nestling Brewer's sparrows. Petersen and Best (1987) commented that Brewer's sparrows showed nesting territory fidelity and returned to the same areas for multiple years. Brewer's sparrows forage on invertebrates, and a variety of seeds. Invertebrates eaten by Brewer's sparrows include spiders, beetles, insects, and caterpillars (Best 1972, Short 1984) which are gleaned from shrub branches and foliage. Insects are consumed during the spring and early summer by both nestlings (Petersen and Best 1986) and adults (Best 1972). Seeds are included in the diet as the summer progresses (Best 1972, Short 1984). The winter diet is nearly exclusively seeds of grasses and forbs (Short 1984, Ehrlich et al. 1988). Short (1984) commented that Brewer's sparrows may satisfy daily water requirements from consumed food. This is supported by Ohmart and Smith (1970) and Dawson et al. (1979) who deprived Brewer's sparrow water for 3 weeks. Both groups of researchers also noted that Brewer's sparrows will readily drink free water when it is available. Ehrlich et al. (1988) commented that Brewer's sparrows frequently bathe in water when it is present. Reynolds (1981) and Rotenberry and Wiens (1989) report that Brewer's sparrow territory size averages from 0.5 to 1.6 acres, and varies between years. Ehrlich et al. (1988) and Dobkin (1994) remarked that nest parasitism by brown-headed cowbirds is uncommon. Based upon limited data, Reynolds (1981) found that brown-headed cowbird nest parasitism occurred at a rate of at least 14%. Brewer's sparrows abandon nests after parasitism by brown-headed cowbirds (Reynolds (1981). Brewer's sparrows commonly flock together with other sparrows during the winter (Cody 1971, Ehrlich et al. 1988).

Status:

Saab and Groves (1992) listed Brewer's sparrow as decreasing significantly. Dobkin (1994) stated that the decline in Brewer's sparrows is steep and significant in Idaho with a significant declining trend over the range of the species. He also noted that the recent surveys suggest continued significant decreases in Brewer's sparrows. A 26 year declining population trend and threats to winter range were mentioned by Ritter (1996) in the ranking of Brewer's sparrow. Based upon BBS data Stokes and Stokes (1996) concluded that Brewer's sparrows were declining throughout their breeding distribution. Brewer's sparrows were added to the Idaho BLM Sensitive Species list in 1996.

Threats:

Perhaps the greatest threat to Brewer's sparrows in its breeding range is the conversion of sagebrush grassland habitats to exotic grasslands (Braun et al. 1976). Best (1972) found a reduction in nesting Brewer's sparrows the year an area was sprayed with herbicide and also reported changes in diet. Schroeder and Sturges (1975) documented the abandonment by Brewer's sparrows of areas sprayed to remove shrub cover two years after treatment. Petersen and Best (1987) reported that prescribed fire reduced Brewer's sparrow numbers for only 2 years. In the area sampled by Petersen and Best (1987) the fire was patchy and had a number of mosaics with only 45% of the shrubland burned. It should also be noted that their area was slightly less than 16 acres in size. Reynolds and Trost (1981) documented that areas converted to crested wheatgrass lacked Brewer's sparrows. In Reynolds and Trost's (1981) study, the plots were located in large stands of either native sagebrush grass habitat or crested wheatgrass seedings. The stands exceeded 248 acres in size (Reynolds and Trost (1981). Data collected in the Jarbidge Resouce

Area shows a lack of Brewer's sparrows in large areas where sagebrush has been removed. However, Brewer's sparrows may occupy small sagebrush islands, 1 acre or more in size, within much larger crested wheatgrass seedings. Brewer's sparrows may respond negatively to grazing (Bock et al. 1993), possibly because of the reduction in seed produced by grazed grasses or because of consumed grass culms by livestock prior to seed set.

Grasshopper Sparrow (*Ammodramus savannarum*)

Description:

Grasshopper sparrows are 4.5 to 5.25 inches long with short tails (Udvardy 1977, Peterson 1990). They have an unstreaked buffy breast, a whitish belly, and a light stripe bordered by two broader dark stripes on the crown (Udvardy 1977, Peterson 1990, Stokes and Stokes 1996). A light colored eye stripe is present just above the eye that begins slightly yellowish then quickly changes to whitish (Udvardy 1977). The back has a striped appearance (Peterson 1990). The savannah sparrow and vesper sparrow may occur in the same area with grasshopper sparrows in Idaho. Both of these species have streaked breasts (Peterson 1990, Stokes and Stokes 1996). However, the savannah sparrow has a yellowish stripe above the eye and a notched tail, whereas, the vesper sparrow has a white eye-ring and white outer tail feathers (Peterson 1990). The songs of savannah sparrows and grasshopper sparrows are similar.

Distribution:

Ehrlich et al. (1988) and Udvardy (1977) wrote that the winter distribution of grasshopper sparrows extends from southern California eastward to Georgia, and south to Central America and northern South America. Grasshopper sparrows have a very large breeding distribution which includes central Washington, south to southern California, then east to Florida and north to southern New York, and across the southern parts of the Plains Provinces of Canada (Udvardy 1977, Ehrlich et al. 1988). A gap occurs in the distribution grasshopper sparrows over the Rocky Mountains (Stokes and Stokes 1996). Grasshopper sparrows have only been observed in the northern portion of the Jarbidge Resource Area, southeast of Bruneau and south of Glens Ferry.

Habitat:

Although the primary habitat for grasshopper sparrows is prairie, Dobkin (1994) lists grassland of all types at low elevation as habitat for grasshopper sparrows. Udvardy (1977) and Ehrlich et al. (1988) also mention agricultural crops, such as grains and alfalfa, as habitat for grasshopper sparrows. Johnson and Temple (1986) noted that there was higher nest success for grasshopper sparrows in grasslands that had been not grazed or burned. Grasshopper sparrows have only been detected in well rested or lightly grazed crested wheatgrass seedings in the Jarbidge Resource Area.

Biology:

Upon arrival from the wintering area, usually in early May, male grasshopper sparrows establish a territory (Wiens 1973). Singing males have been detected in late May in the Jarbidge Resource Area. Males perform a low fluttering courtship flight either quietly or while singing, and the

female answers the singing with a trill (Ehrlich et al. 1988). The male grasshopper sparrow may also chase the female while singing (Ehrlich et al. 1988). Wiens (1973) noted that the peak of breeding occurred in mid June in Wisconsin and may occur a little earlier in southern Idaho. A cup type nest is placed on the ground in a depression within dense or over hanging vegetation (Johnson and Temple 1990, Dobkin 1994). Grasshopper sparrows construct the nest from dried grass which is lined with finer material (Ehrlich et al. 1988). Three to six creamy white eggs marked with reddish brown speckles are laid by the female (Ehrlich et al. 1988, Stokes and Stokes 1996). The eggs are incubated for about 12 days and the nestlings fledge in another 9 days (Ehrlich et al. 1988). Males defend the nesting territory until the eggs hatch, then territory defense declines (Ehrlich et al. 1988). Grasshopper sparrows are known to produce 2 broods during the summer in some areas (Ehrlich et al. 1988, Stokes and Stokes 1996). Grasshopper sparrows forage on a variety of invertebrates and seeds (Dobkin 1994). Joern (1988) reported that grasshopper sparrows were able to change their foraging behavior to adapt to changes in their habitat. Johnson and Temple (1990) reported brown-headed cowbirds parasitized about 7% of the grasshopper sparrow nests in Minnesota. Ehrlich et al. (1988) wrote grasshopper sparrows often nest semi-colonially in small groups of 3 to 12 pairs. It is not known when grasshopper sparrows migrate from the Jarbidge Resource Area. Unlike a number of other sparrows, grasshopper sparrows do not form flocks during the winter (Ehrlich et al. 1988).

Status:

Idaho BLM placed the grasshopper sparrow on the Sensitive Species list in 1996. Population trend was not determined for grasshopper sparrows by Saab and Groves (1992) because of a lack of data. Dobkin (1994) described a steady decline in grasshopper sparrows in the West with a sharp significant decline range wide. A 26 year population decline and threats to breeding habitat were considered to be the major factors by Ritter (1996) in establishing the rank for the grasshopper sparrow. Data from western and central United States populations are significantly declining and a subspecies in Florida is listed as "Endangered" by the Fish & Wildlife Service (Stokes and Stokes 1996).

Threats:

Grasshopper sparrows are a grassland species that prefer ungrazed to lightly grazed pastures (Dobkin 1994, Bock et al. 1993). Bock et al. (1993) report that heavy grazing is detrimental to nesting grasshopper sparrows, because of the loss of herbaceous vegetation and litter to conceal a ground nest. The few observations of grasshopper sparrows in the Jarbidge Resource Area were in crested wheatgrass seedings that had either been rested the previous year or had only been lightly grazed. So called "wolfy" bunchgrasses in our area seem to serve as singing perches (Wiens 1973) or provide the best cover for a ground nest. Johnson and Temple (1990) stated that in the Midwest prairie vegetation should probably be burned every 3 years to maintain quality nesting habitat for grasshopper sparrows and that tree rows should be removed to reduce nest predation. Additionally, Johnson and Temple (1990) found that grasshopper sparrows nesting in fragmented habitat had higher rates of nest predation and brown-headed cowbird nest parasitism.