

## **Sage Thrasher (*Oreoscoptes montanus*)**

NMPIF level: Biodiversity Conservation Concern, Level 2 (BC2)

NMPIF assessment score: 13

NM stewardship responsibility: Low

National PIF status: Stewardship, Intermountain West Avifaunal Biome

New Mexico BCRs: 16

Primary breeding habitat(s): Great Basin Desert Shrub

Other habitats used: Plains-Mesa Sand Shrub (winter), Chihuahuan Desert Shrub (winter)

### **Summary of Concern**

Sage Thrasher is a sagebrush-obligate species of the western United States, reaching the southern limit of its distribution in northwest New Mexico. Population trends for this region have been sharply negative, and moderately negative trends are now emerging range-wide.

### **Associated Species**

Scaled Quail (SC2), Loggerhead Shrike (SC2), Brewer's Sparrow, Vesper Sparrow (SC2), Sage Sparrow (SC2), Horned Lark

### **Distribution**

Sage Thrasher is a species of the Intermountain West, breeding from southern portions of British Columbia and Alberta south through the Great Basin and Rocky Mountains states to central Arizona and New Mexico. It is a short distance migrant, with a winter range extending from southern Arizona and New Mexico and the western half of Texas south across Baja California and interior Mexico to Durango and Guanajuato.

In New Mexico, Sage Thrashers are summer residents in the northwest, extending east to Taos and south to Mount Taylor and, locally, to the northern Plains of San Agustin. In winter, this species is present in desert scrub habitats in southern New Mexico (Reynolds et al. 1999, Parmeter et al. 2002) as well as pinyon-juniper north to the Manzano mountains.

## Ecology and Habitat Requirements

Sage Thrashers breed in shrub-steppe dominated by big sagebrush; the species is considered a sagebrush obligate (Braun et al. 1976, Dobler et al. 1996). Breeding densities are generally correlated with the amount of sagebrush cover present. In Oregon, Sage Thrashers were positively associated with shrubs in the 30- to 60-cm height range, and with vertical heterogeneity of the habitat (Wiens and Rotenberry 1981). In Idaho, probability of site occupancy increased with sagebrush cover, total shrub cover, and shrub patch size (Knick and Rotenberry 1995). Canopy coverage of sagebrush measured at 175 nest sites in Idaho ranged from 11 to 44% (Rich 1980).

This species generally nests in or under big sagebrush, though occasionally other shrub species are used. Taller shrubs, and shrubs with wider crowns, are preferred for building nests. Nests are located either on the ground beneath the shrub, or low (less than 3 feet) in the interior branches. Average clutch size is 4-5. Breeding activity in New Mexico begins in April, southward migration begins in August (Reynolds et al. 1999).

## Conservation Status

### Species Assessment

DISTRIBUTION	3
THREATS	3
GLOBAL POPULATION SIZE	2
LOCAL POPULATION TREND	4
IMPORTANCE OF NEW MEXICO TO BREEDING	1
<b>COMBINED SCORE</b>	<b>13</b>

Sage Thrasher is a Biodiversity Conservation Concern, Level 2 species for New Mexico, with a total assessment score of 13. It receives a high vulnerability score of 4 from NMPIF for a negative population trend in the state.

### Population Size

PIF estimates a species population of 7.9 million, and that New Mexico holds less than 1% of the species population. Highest densities of this species occur in Oregon and Idaho. Breeding density estimates from

55 shrub-steppe sites in Washington were about 0.2 birds/ha; in Idaho densities ranged from 0.5-0.8 birds/ha (Reynolds 1981, Dobler et al. 1996).

### Population Trend

Although Reynolds et al. (1999) noted overall stability of populations citing BBS data from 1980-1996, more current BBS numbers show a significant decline range-wide from 1980-2004 (annual trend = -1.4,  $p = 0.01$ ,  $n = 308$ ). Declines have been sharpest in the southern portion of the breeding range, in Arizona and New Mexico, although the number of BBS routes recording the species in these states is low. BBS data for 1966-2004 are:

	Annual Trend (%)	P-value	Number of Routes
New Mexico	-6.6	0.00	9
FWS Region 2	-5.2	0.00	15
Western BBS	-0.8	0.08	301

### Threats

Reynolds et al. (1999) note that declines have been sharpest in suboptimal breeding habitat in the south, where effects of weather, habitat fragmentation, and predation may be greater. The greatest threat to Sage Thrashers is loss of habitat. In areas where sagebrush is cleared for agriculture, grazing or development, or is replaced by grasses following fire, the species disappears.

### Management Issues and Recommendations

Management for Sage Thrasher should focus on retaining large patches of dense sagebrush habitat.

### NMPIF Recommendations

- Maintain areas of sagebrush grassland where dense stands of large (>27-in high) sagebrush are present.
- Avoid clearing or burning suitable sagebrush habitat.
- Avoid overgrazing in areas where grasses are still present in sagebrush.

- Wherever possible reestablish native grasses in sagebrush habitat.

### **Species Conservation Objectives**

#### **NMPIF Objectives**

- Monitor this species to ascertain whether the sharp declines noted by BBS are accurate.
- Seek to stabilize and/or reverse recent negative population trends.

#### **Sources of Information**

Braun, C. E., M. F. Baker, R. L. Eng, J. S. Gashwiler, and M. H. Schroeder. 1976. Conservation committee report on effects of alteration of sagebrush communities on the associated avifauna. *Wilson Bull.* 88:165–171.

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