



## Sage Thrasher

Nesting habitat of this
Endangered species
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development.







Why are Sage Thrashers at risk?

witish Columbia's small nesting Jopulation of Sage Thrashers is limiled by availability of suitable habitat the south Okanagan. Near Oliver and Penticton, development of orchards and vineyards has destroyed some habitat where thrashers nested in the 1920s. Prime sagebrush habitat has been lost to alfalfa production and other areas have been degraded by heavy livestock use, or by range rehabilitation projects such as sagebrush mowing, burning, or spraying with herbicides. Increasing human populations and more intensive land use continue to threaten the remaining 50 percent of Sage Thrasher habitat in the south Okanagan and Similkameen valleys. Residential, or other developments, are of particular concern in the Richter Pass and White Lake areas.

As with most birds, Sage Thrashers suffer some losses due to nest destruction by ground predators, raptor predation on naive fledglings, human disturbance, or other factors. Where habitats are suitable, enough young are normally produced to balance these losses,

and thrasher populations do not decline. Loss of habitat, however, permanently reduces the number of thrashers that any area will support.

In the United States, large areas of Sage Thrasher nesting habitat have been lost due to livestock range No habitats critical for the survival of the species in British Columbia are currently protected.

alteration, cultivation of crops, strip mining, reservoir flooding, and land settlement. It is estimated that 60 percent of the original sagebrush-steppe in adjacent Washington state has been destroyed. Habitat loss in Washington could also jeopardize these birds by further isolating British Columbia habitats and reducing the number of birds that spill over into the province.

What is their status?

n British Columbia, Sage Thrashers are on the BC Environment Red List (species being considered for legal designation as Endangered or Threatened) and considered to

be "critically endangered" by the Conservation Data Centre. They are designated as Endangered by the Committee on the Status of Endangered Wildlife in

The Sage Thrasher is designated as Endangered by cosewic.

Canada (COSEWIC), and listed as a Species of Concern in Washington.

Like most birds in British Columbia, the Sage Thrasher, its nests and eggs are protected under the Federal Migratory Bird Protection Act and the provincial Wildlife Act. However, no habitats critical for survival of the species in British Columbia are currently protected against loss or degradation.

Typical of many birds at the northern limit of their range, Sage Thrasher numbers in British Columbia fluctuate from year to year, with some sites being occupied only rarely. Recently, however, there also appears to have been a substantial decline in the nesting population. At its historical high in the 1930s, or earlier, the spring population in British Columbia may have reached 30 or more pairs nesting at up to six sites. Only four to ten pairs

have been seen in recent years, at only one or two sites. At least two former nesting sites in the south Okanagan have been developed for farming or housing and no longer support nesting thrashers. The status of the Sage Thrasher in British Columbia is indeed precarious.

What do they look like?

than an American Robin, with a rownish-grey back, buffy white unlerparts heavily streaked with brown, yellow eye, robin-like bill, white tips on the outer tail feathers and two narrow, white bars on the wings. Males

and females have similar markings. Its general colouring provides good camouflage in sagebrush landscapes. It is a secretive bird of dense sagebrush thickets and prefers running to flying when searching for food. It is more often heard than seen.

Birders wishing to add this species to their British Columbia list should visit sagebrush stands in the south Okanagan-Similkameen area in late May or June, preferably with guidance from local naturalists who know the whereabouts of this sparsely distributed bird. Extreme care must be taken not to disturb nesting birds. Please do not approach the birds; listen and view from a distance of 25 metres or more.

What makes them unique?

Creoscoptes montanus, means "mimic of the mountains" but, unlike several members of the thrasher-mockingbird family, Sage Thrashers do not mimic other birds. Their song has been described as "ecstatic" and "energetic" and inspired American ornithologist, A.C. Bent, to call the Sage Thrasher "the poet of the lonesome sagebrush plain." The territorial song is a long series of warbled phrases lasting up to 2.5 minutes, usually made with head held



high, from the top of a big sage. Call notes include a sharp "chuck" and a high "churr."

True to their name, Sage Thrashers throughout their range prefer relatively dense stands of tall sagebrush for nesting. In the United States, nests are sometimes built in other shrubs associated with sagebrush, including rabbitbrush, antelope-brush, and juniper. In British Columbia, exceptions to sagebrush for nesting involved a nest in a peach tree in

a newly planted orchard, and a nest in a hawthorn tree at White Lake. Sage Thrasher nests are bulky structures that require sturdy shrubs for sup-

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port. They are made of coarse sagebrush twigs, rootlets and plant stems, and lined with fine grasses, bark-shreds, and livestock hair. Although nests are usually positioned where sagebrush foliage provides some shade, the enterprising thrashers sometimes build shade canopies over them.

How do they reproduce?

pon arrival from their winter range in April or May, males select suitable sagebrush stands where they sing from the tops of tall shrubs to attract females and to let other males know the territory is occupied. In British Colum-

> bia, nesting may begin in late May or early June, reach a peak later in June, and is largely finished by mid-July. Most Sage Thrashers in the Okanagan migrate south in late August or early September.

> Nests are mostly 15 to 36 centimetres above the ground; occasionally they are built on the ground under thick brush. The

woody nests of Sage Thrashers persist for a year or more, providing a reliable indication of breeding occurrence and habitat selection long after they are vacated. In good habitat, nesting territories are about 5 hectares in size.

Sage Thrashers usually lay four or five eggs. These are about 2.5 cm long, smooth and glossy, with a medium to light blue ground colour that is boldly spotted and blotched with reddishbrown. The eggs, incubated by both sexes, hatch in about 15 days; nestlings fledge about 13 days after hatching. The total nesting period, including egg-laying, is about 32 days.

Broods of one to five young have been reported in British Columbia. More intensive studies in the United States conclude that about two young are successfully fledged per nesting attempt. In the United States, where Sage Thrashers frequently produce two broods each summer, the male is believed to feed the newly fledged young for a few days while the female incubates the second clutch.

Although nesting information for British Columbia is limited, most thrashers here seem to have only one brood, which coincides in timing with the second brood of birds that nest farther south. This suggests that some thrashers may move into the province after a failed first attempt at nesting in Washington.

What do they eat?

Ithough largely insect-eaters, Sage Thrashers also take fruits and erries when available. Food habits

this species have not been well studied in British Columbia, but observations in the United States indicate that ground-dwelling beetles, grasshoppers, crickets, and ants are important items in the nesting season. Other invertebrates taken include caterpillars, weevils, leafhoppers, flies, and spiders. Sage Thrashers also show a fondness for berries, including currants, gooseberries, blackberries, and Saskatoon berries.

Where do they live?

sagebrush-dominated plains and ntermountain basins of western North America. Populations have declined in many areas because of habitat loss through urban development and agriculture. The species breeds from extreme south-central British Columbia, central Idaho and south-central

Montana, south to southern Nevada, northeastern Arizona, and northwestern New Mexico, and east to eastern Colorado and Wyoming. They also breed locally in southern Alberta and southwestern Saskatchewan. The winter range, largely south of the breeding range, includes Arizona, New Mexico, Texas, southern California, and northern Mexico.

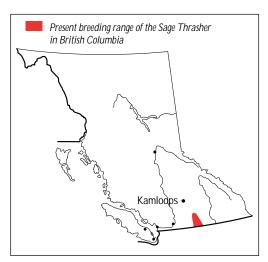
In British Columbia, Sage Thrashers nest regularly only in the southern Similkameen and Okanagan valleys, an area considerably less than one percent of the province. Although this species has a wide range outside British Columbia, this range extends only barely into the province. Nesting has been documented from the United States border north to Penticton, including Osoyoos Lake, Kilpoola Lake, Chopaka, Richter Pass, Oliver, White Lake, and West Bench.

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Sage Thrashers have also been reported during the breeding season in suitable nesting habitat near Vernon, Cache Creek, and Kamloops and may occasionally nest in those areas. As with many species of birds, vagrants are sometimes seen outside the

usual breeding areas. Such records for the Sage Thrasher include Vancouver Island, Revelstoke, the Fraser River delta, 100 Mile House, and Creston.

Sage Thrashers are migratory and occur in British Columbia only in spring and summer. Our small population migrates at least 1500 kilometres to its winter habitats. The earliest provincial record is April 4, but most individuals





arrive in May. Sightings of Sage Thrashers north of their usual south Okanagan nesting range have mostly been in April, and probably involve birds that overshoot the traditional breeding areas. This behaviour frequently occurs in birds, and has survival advantage for the species (if not the individual) by ensuring that any new peripheral habitats are discovered.

In late summer, autumn, and winter, Sage Thrashers use a variety of scrub, desert, and farmland habitats. In the nesting season, however, they are almost entirely associated with stands of sagebrush, but not any kind of sagebrush will do. The shrubs need to be tall (preferably 1 metre or more) and sturdy enough to support the bulky thrasher nests. The stands must be dense enough (15 to 40 percent ground cover) to provide hiding cover and shade. Some cattle grazing may be beneficial because the thrashers like areas with fairly open ground under tall shrubs. Heavy livestock use, though, can damage the sagebrush, and decrease

the native perennial grasses which thrashers prefer.

In British Columbia, sagebrush is mostly limited to the south Okanagan and Similkameen valleys, the Thomp-

son Valley from Spences Bridge to Pritchard, and the Fraser Valley from Lytton to the Chilcotin River. Only one Sage Thrasher nest has been found in the Thompson or Fraser River areas, even though some sagebrush stands look suitable and thrashers have occasionally been sighted there. Reasons for this are not known.

Even in the south Okanagan, where Sage Thrashers do nest, some sagebrush stands are too small, too sparse, or too short (young) to be useful for thrasher nesting. At most, only a few hundred hectares of suitable sagebrush habitat is available in British Columbia. Some of these areas are Crown lands, others are privately owned; livestock grazing is the major land use on all of them.

More intensive surveys are underway to evaluate the quality of sagebrush stands in the traditional nesting areas, and to map the occurrence of sagebrush in adjacent areas.

What can we do?

of the south Okanagan and Similkameen valleys are among Canada's most endangered habitats. Species entirely or largely restricted to these dry grasslands include the Night Snake, White-tailed Jackrabbit, Nuttall's Cottontail, Brewer's Sparrow, Grasshopper Sparrow and Sage Thrasher. Concern for these spe-

cies and habitats led to formation of the South Okanagan Conservation Strategy (SOCS) by the Nature Trust of British Columbia, BC Environment (Wildlife Branch), and other cooperating groups.



**AN ADULT SAGE THRASHER** Steve Cannings photo

The SOCS commissioned a Status Report and a Management Plan for

the Sage Thrasher in British
Columbia, which were funded by
the World Wildlife Fund and by
the BC Environment Habitat
Conservation Fund. These provide a basis for more active management and protection of Sage
Thrasher habitats. Key habitats of
the present breeding population
are now fairly well known, and
the Management Plan provides
recommendations for protecting
them by land acquisition or
through covenants with landowners.
Suggestions for management and

enhancement of sagebrush stands are also included.

To keep the Sage Thrasher as a breeding bird in Canada, a national recovery team was formed in 1993. As

> a result of their research, the team is recommending setting up three separate conservation areas, each providing habitat for at least ten pairs of Sage Thrashers. These conservation areas should be at least 200 ha in size, with adequate big sage for nesting and good perennial grass cover. More than one site is needed because disasters like range fires, not uncommon in this area, can wipe out a single nesting area. One such site was burned in a 1994 wildfire.

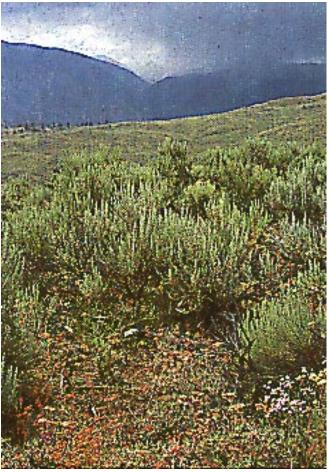
> Despite the precarious status of this bird in British Columbia, no habitats have yet been protected or managed specifically for it. Without such protection, nesting by Sage Thrashers is likely to become a thing of the past in British Columbia. Surely we owe it to this

songster of the sage, and the other rare species which share its habitat, to pro-

The goal is to set up three separate conservation areas, each providing habitat for at least ten pairs. vide for their future, which is also our future.

The public is urged to become more familiar with the plight of the Sage Thrasher and other British

Columbia "rarities," and to support programs for their conservation.



DENSE, TALL SAGE IS PREFERRED NESTING HABITAT. Rhonda Millikin photo



MUCH OF THE ORIGINAL SAGEBRUSH HABITAT IN THE SOUTH OKANAGAN HAS BEEN DEVELOPED FOR HOUSING AND AGRICULTURE. Rhonda Millikin photo



 $\begin{tabular}{ll} \textbf{SAGEBRUSH HABITAT HAS BEEN CLEARED FOR CATTLE GRAZING.} \\ \textbf{\it Bill Harper photo} \end{tabular}$ 

## FOR MORE INFORMATION ON THE SAGE THRASHER, CONTACT: Wildlife Branch BC Environment Ministry of Environment, Lands and Parks 780 Blanshard Street Victoria, British Columbia V8V 1X4





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