
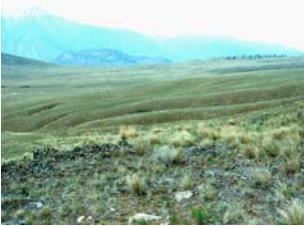














Grassland focal species of Canada's Great Basin: conservation issues and objectives.

Focal Species ^a	Population Data and Objective	Potential Conservation Concerns ^{a, e}	Habitat Description ^e	Conservation Focus ^{a, e} and Habitat Objective
<p>Long-billed Curlew <i>Numenius americanus</i> LBCU</p>  <p>Photo: Andy M. Bezener</p>	<p>Status ^b: BC: Blue-listed CAN: Special Concern Trend ^c: BC GB: No BBS trend GB: ↑ Size Estimate: ~ 500 (Cannings 1999) [accuracy rating – moderate]^d Objective ^d: At minimum, maintain current distribution and habitat until data deficiencies (i.e., population size and habitat requirements) are determined.</p>	<p>Loss of areas >30 ha to intensive agriculture and urbanization. Loss (from urbanization, intensive agriculture & fire suppression) of large, open nest areas with short vegetation & low shrub density. Disturbance of nest sites from recreation (e.g., ATV use). Loss of connectivity between dry nesting and moist brooding habitats to urbanization & fragmentation. Increased nest predation. Use of insecticides and herbicides ↓ prey abundance.</p>	<p>Throughout Canada's Great Basin, below 1220 m elevation: Nests among flat patches of low profile native bunchgrass cover <30 cm tall, in large native grassland areas connected to wetlands or seepages (Campbell et al. 1990; Forest Practices Code of BC 1997; Fraser et al. 1990).</p>	<p>GRASSLAND Conservation Focus: Flat native bunchgrass-dominated grassland with little or no shrub cover, and connected to wetlands or seepages.</p>  <p>Photo: Andy M. Bezener</p> <p>Habitat Objective: To be determined.</p>
<p>Grasshopper Sparrow <i>Ammodramus savannarum</i> GRSP</p>  <p>Photo: Andy Bezener</p>	<p>Status ^b: BC: Red-listed CAN: Not Assessed. Trend ^c: BC GB: No BBS trend GB: ↓ Size Estimate: < 100 (Paczek 2002; P. Krannitz unpubl. data 2003) [accuracy rating – moderate]^d Objective ^d: Increase current population by 50%.</p>	<p>Loss of tall bunchgrass habitat with low shrub density for nesting cover owing to agriculture & urbanization. ↑ grazing activity (continuous and/or intensive) ↑ shrub density & ↓ availability of tall, dense grasses for nesting. Seeding of rangelands with non-native grass species (e.g., crested wheatgrass) ↓ native bunchgrass cover. Use of insecticides and herbicides ↓ prey abundance.</p>	<p>In the Okanagan and lower Similkameen valleys, from 300 to 1160 m: Nests among dense perennial bunchgrass cover, including grass litter, in dry, ungrazed to moderately grazed native grassland with little or no shrub cover (Campbell et al. 2001; Forest Practices Code of BC 1997; Fraser et al. 1990).</p>	<p>GRASSLAND Conservation Focus: Native bunchgrasses with little or no shrub cover.</p>  <p>Photo: Andy Bezener</p> <p>Habitat Objective: To be determined.</p>

Focal Species ^a	Population Data and Objective	Potential Conservation Concerns ^{a, e}	Habitat Description ^e	Conservation Focus ^{a, e} and Habitat Objective
<p>Sharp-tailed Grouse <i>Tympanuchus phasianellus</i> STGR</p>  <p>Photo: Christian Artuso</p>	<p>Status ^b: BC: Blue-listed (<i>columbianus</i> ssp.) CAN: Not Assessed. Trend ^c: BC GB: No BBS trend GB: No BBS trend Size Estimate: 2500-5000 in grasslands, mostly concentrated in the Thompson-Nicola (E. Leupin pers. comm. 2003) [accuracy rating – fair] ^d Objective ^d: Restore productive populations to historic range.</p>	<p>Loss of 200 to 400 ha (2 km²) traditional leks, nesting habitat and wintering habitat to agriculture and urbanization. Recreation and development activities causing disturbance of traditional leks leading to abandonment. Loss of adequate native bunchgrass nesting cover owing to heavy grazing. Loss of forage & cover in tree copses & riparian woodlands from damage to understory cover by livestock. Increased nest predation. Small remnant populations vulnerable to local extirpation.</p>	<p>Throughout Canada's Great Basin, below 1220 m elevation: Large areas of native grassland with patches of flat ground and/or flattened ridgetops of low profile native bunchgrasses (<30 cm tall and <5% mean cover of native shrubs), and connected to riparian corridors and/or scattered tree copses (Campbell 2001; Fraser et al. 1990).</p>	<p><u>GRASSLAND-SHRUBSTEPPE</u> Conservation Focus: Large areas of bunchgrass-dominated grassland or shrubsteppe with flat, exposed areas and scattered tree copses and woodlands.</p>  <p>Photo: Andy M. Bezener</p> <p>Habitat Objective: To be determined.</p>
<p>Western Meadowlark <i>Sturnella neglecta</i> WEME</p>  <p>Photo: US F&W / John & Karen Hollingsworth</p>	<p>Status ^b: BC: Yellow (Not at Risk). CAN: Not Assessed. Trend ^c: BC GB: ↓ GB: ↑ Size Estimate ^d: 120,000 [accuracy rating – moderate] ^d Objective ^d: Double current population.</p>	<p>Loss of suitable breeding territories >10 ha to agriculture & urbanization. Loss of nesting cover to overgrazing (continuous and/or intensive). Use of insecticides & herbicides ↓ prey abundance.</p>	<p>Throughout Canada's Great Basin, under 1200 m elevation: Nests among tall, dense native grass cover, including grass litter, in ungrazed to moderately grazed native grassland with moderate to no shrub cover (Campbell et al. 2001).</p>	<p><u>GRASSLAND-SHRUBSTEPPE</u> Conservation Focus: Native bunchgrasses with moderate to no shrub cover.</p>  <p>Photo: Andy M. Bezener</p> <p>Habitat Objective: To be determined.</p>

Focal Species ^a	Population Data and Objective	Potential Conservation Concerns ^{a, e}	Habitat Description ^e	Conservation Focus ^{a, e} and Habitat Objective
<p>Lark Sparrow <i>Chondestes grammacus</i> LASP</p>  <p>Photo: Christian Artuso</p>	<p>Status ^b: BC: Red-listed CAN: Not Assessed. Trend ^c: BC GB: No BBS trend GB: ↓ Size Estimate: < 1000 (P. Krannitz unpubl. data 2003, Paczek 2002, R.J. Cannings pers. comm.) [accuracy rating – moderate]^d Objective ^d: Increase current population by 50%.</p>	<p>Loss of grasslands >6 ha with scattered tall shrubs (in low densities) for nesting to agriculture and urbanization. Use of insecticides & herbicides ↓ prey abundance.</p>	<p>In the south Okanagan and lower Similkameen valleys, below 600 m elevation: Nests at base of shrubs in open, disturbed and/or ecotonal shrubsteppe habitat, especially tall antelope-brush and/or sagebrush on poor sand-gravel soils, with an open or sparsely vegetated understory including bare soil, sand dropseed grass and/or cryptogamic crust (Campbell et al. 2001; Fraser et al. 1990; Paczek 2002).</p>	<p><u>GRASSLAND-SHRUBSTEPPE</u> Conservation Focus: Low elevation shrubsteppe, especially antelope brush, tall sagebrush and early seral sites with open, sparse understory.</p>  <p>Photo: Andy M. Bezener</p> <p>Habitat Objective: To be determined.</p>
<p>Brewer's Sparrow <i>Spizella breweri</i> BRSP</p>  <p>Photo: Steve R. Cannings</p>	<p>Status ^b: BC: Red-listed (<i>breweri</i> ssp.) CAN: Not Assessed. Trend ^c: BC GB: No BBS trend GB: ↑ Size Estimate: 1100-1300 breeding pairs (mean = 1184 pairs) in southern Okanagan Valley (N. Mahony unpubl. data 2002) [accuracy rating – good]^d Objective ^d: Double current population.</p>	<p>Loss of suitable breeding territories (6 to 225 ha) to agriculture and urbanization (including shrub removal). Loss of large patches of Big Sagebrush (> 60 cm tall) with dense understory of shrubs and forbs. ↓ insect prey when intensive grazing activity decreases understory vegetation, especially native perennial forbs</p>	<p>In the Okanagan and lower Similkameen valleys, from 340 to 1860 m elevation: Nests in big sagebrush. Requires extensive tracts of sagebrush cover with a forb-rich understory of large tufted perennials, especially lupine and parsnip-flowered buckwheat, and adjacent or nearby aspen copses with a dense understory, aspen-snowberry gullies and/or large deciduous shrubs (Campbell et al. 2001; Fraser et al. 1990; N. Mahony unpubl. data 2002; Paczek 2002).</p>	<p><u>SAGEBRUSH STEPPE</u> Conservation Focus: Large areas of big sagebrush with forb rich understory.</p>  <p>Photo: Andy M. Bezener</p> <p>Habitat Objective: To be determined.</p>

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<p>Bobolink <i>Dolichonyx oryzivorus</i> BOBO</p>  <p>Photo: Steve R. Cannings</p>	<p>Status ^b: BC: Blue-listed CAN: Not Assessed. Trend ^c: BC GB: No BBS trend; Historic range expansion? GB: ↓ Size Estimate: ~250 (Dick Cannings pers. comm. 2003) [accuracy rating – fair]^d Objective ^d: Double current population.</p>	<p>Loss of natural moist, ungrazed meadows with suitable nesting cover owing to urbanization and conversion from grass to alfalfa hay crops. Reduced productivity owing to increasing intensification of hay harvesting practices (i.e., hay-cropping during incubation and early nesting stage results in 100% mortality of offspring) (Martin and Gavin 1995). Use of insecticides & herbicides ↓ prey abundance.</p>	<p>Throughout Canada's Great Basin, below 950 m elevation: Open, contiguous moist meadows, pastures, weedy fields and hayfields with tall grasses, high accumulations of grass litter, high grass-to-legume ratios and no or delayed harvest (Campbell et al. 2001; Fraser et al. 1990).</p>	<p><u>AGRICULTURAL FIELDS</u> Conservation Focus: Moist, tall grassy meadows and hayfields left fallow or with delayed harvest.</p>  <p>Photo: Andy M. Bezener</p> <p>Habitat Objective: To be determined.</p>

^a Partners in Flight database (Panjabi et al. 2001) and/or Partners in Flight BC/Yukon Southern Interior Workshop (March 1999).

^b Population status from British Columbia Conservation Data Centre (srmwww.gov.bc.ca/atrisk/toolintro.html) and Environment Canada (www.speciesatrisk.gc.ca/search/default_e.cfm).

^c Population trends from Breeding Bird Survey data from 1976 – 2000 for the Southern Interior Ecoprovince (SOI), and on the longest run of data for the Great Basin Bird Conservation Region (GB). Anecdotal information from Cannings (pers. comm. 2000). BC listing from BC Ministry of Sustainable Resource (2001) and Canadian listing from Committee on the Status of Endangered Wildlife in Canada (May 2001).

^d See Appendix 4 for methods and description of accuracy ratings.

^e Other data sources include: Conservation Strategy for Landbirds in the Columbia Plateau of Eastern OR & WA (Altman and Holmes 2000); Birds in a Sagebrush Sea (Paige and Ritter 1999); Rare Birds of British Columbia (Fraser et al. 1999); Managing identified wildlife: procedures and measures, Volume 1 [and Attachment] (Forest Practices Code of British Columbia 1999a & b); Species and Plant Community Accounts for Identified Wildlife, Volume 1 (Forest Practices Code of British Columbia 1997); Habitat Atlas for Wildlife at Risk: South Okanagan and Lower Similkameen (British Columbia Ministry of Environment, Lands and Parks 1999); The Birds of British Columbia, volumes II (Campbell et al. 1990) & IV (Campbell et al. 2001); Birds of the Okanagan Valley, British Columbia (Cannings et al. 1987); Cannings 1999; Paczek 2002; Leupin 2003; Ernest Leupin pers. comm. 2003; Nancy Mahony unpubl. data. 2002; Pam Krannitz unpubl. data 2003; Orville Dyer (pers. comm. 2001); Dick Cannings (pers. comm. 2003); Rick Howie (pers. comm. 2000); Birds of North America accounts: Grasshopper Sparrow (Vickery 1996); Sharp-tailed Grouse (Connelly et al. 1998); Western Meadowlark (Lanyon 1994); Lark Sparrow (Martin and Parrish 2000); Brewer's Sparrow (Rotenberry et al. 1999); Bobolink (Martin and Gavin 1995).