

Grassland Set-Aside Breeding Bird Survey 2026

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May – June 2026



Photo 1: Savannah Sparrow Nest in Delta, June 2026

Project Summary

- Grassland set-asides (GLSA) are fields planted with grass and floral mixes to promote soil conservation and wildlife habitat, that remain in place for up to 4 years.
- DFWT biologists conduct point count surveys for breeding songbirds in May and June, following provincial survey protocols

Core Findings

- GLSAs are well utilized by songbirds with 31 species observed over 116 surveys
- Up to 15 species utilize GLSAs (or adjacent hedgerows) as breeding habitat based on behaviour and occurrence data
- Barn Swallows are a species at risk which rely on GLSAs for foraging habitat. They were observed at all sites in 2026, although are continuing to be seen infrequently, continuing a trend of low observations since 2024

Program background

Grasslands provide crucial nesting and foraging opportunities for many local birds, including Barn Owls, Northern Harriers and Barn Swallows. We collaborate with local farmers to establish grassland habitat in farmland through the grassland set-aside (GLSA) and blueberry rest set-aside (BRSA) stewardship programs

Grassland set-asides are enrolled in the program for up to four years and are planted with many types of crops including grasses, clover, sunflower or other floral mixes. Blueberry rest set-asides are planted with a grass and flower mix in areas where blueberry plants have been removed.

The aim of this survey is to determine which birds are using GLSAs and BRSA for foraging and breeding habitat. We are also interested in examining which aspects of set-asides (planting mix, seeding rate, etc.) affect songbird occupancy, to inform our planting recommendations and better support species at risk.

Methods

Surveys were conducted at 8 grassland set-aside fields in Delta, BC. Distance-based point counts of 50 m were conducted to measure songbird abundance within GLSAs (Resources Inventory Committee 1999). Five-minute point counts were conducted weekly from May 5 to June 19, 2025. Surveys began at sunrise and were completed within four hours. Surveys were not conducted when winds exceeded 12 km/hr, temperatures were below 7 °C, or during rain.

Within the 7 GLSA fields sampled, 12 point count locations were randomly selected. Point counts were located at least 200 m apart when there was more than one per field. Point count locations were placed at least 100 m from the field edge where possible, and at least 50 m from the edge when the shape of the GLSA did not allow for a 100 m buffer.

Point counts were limited to all species seen and heard within a 50 m detection radius. Distances of each species were recorded in meters using a Nikon Prostaff 1000 rangefinder. Birds flying through the 50m detection radius were counted with a note indicating that they were flyovers.

Results and Discussion

Species richness and breeding birds

The primary goal of this project is to identify which songbirds are using grassland set-asides as breeding and foraging habitats. We considered a bird likely breeding in or adjacent to the set-aside if it was observed during the survey at least three times out of seven visits (Resources Inventory Committee 1999).

By these criteria, we observed the following 5 species that were using the GLSA for breeding habitat or were nesting nearby and regularly used the set-aside for foraging habitat: Savannah Sparrow, Common Yellowthroat, Red-winged Blackbird, Marsh Wren and Barn Swallow.

A total of 31 species were observed across 116 individual point count surveys conducted throughout the season. The five presumed breeding birds are all locally common ground or near-ground nesting birds and were among the most frequently observed birds overall (*Figure 1*).

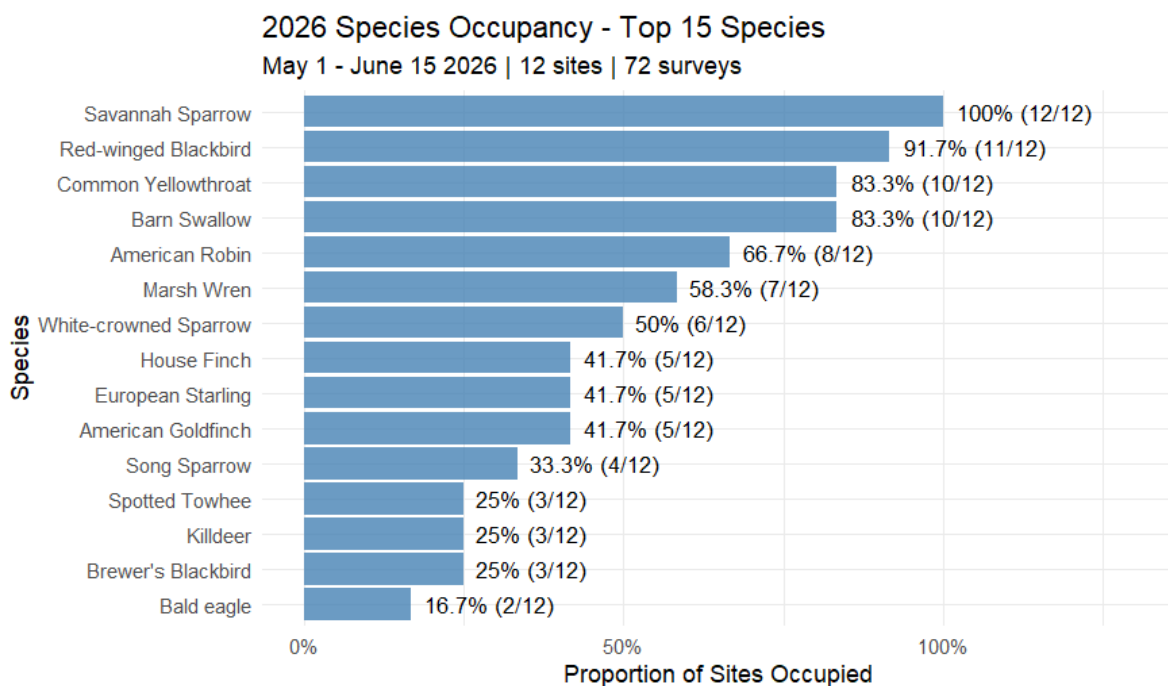


Figure 1. Cumulative species frequency across all grassland set-aside point count surveys (May-June 2026)

The core group of breeding birds observed continues to be Savannah Sparrows, Red-winged Blackbirds, Common Yellowthroats and Marsh Wrens. Marsh Wrens, Red-winged Blackbirds and Brewer’s Blackbirds are all typically seen more frequently at field edges where there are sloughs but are also seen establishing territory deeper into set-asides as well. Anecdotally, vegetation height tends to be higher closer to the edges of GLSA fields, presumably as they have better water availability during the summer, and there is mixing of the GLSA with naturally occurring sedges and reeds.

Barn Swallow Update

Barn Swallows use grassland set-aside habitat to forage on aerial insects and remain fairly commonly observed since this grassland bird survey started in 2022. In 2024, we observed a dramatic decline in observations, which has continued for 3 of the previous 5 survey years (*Figure 2*).

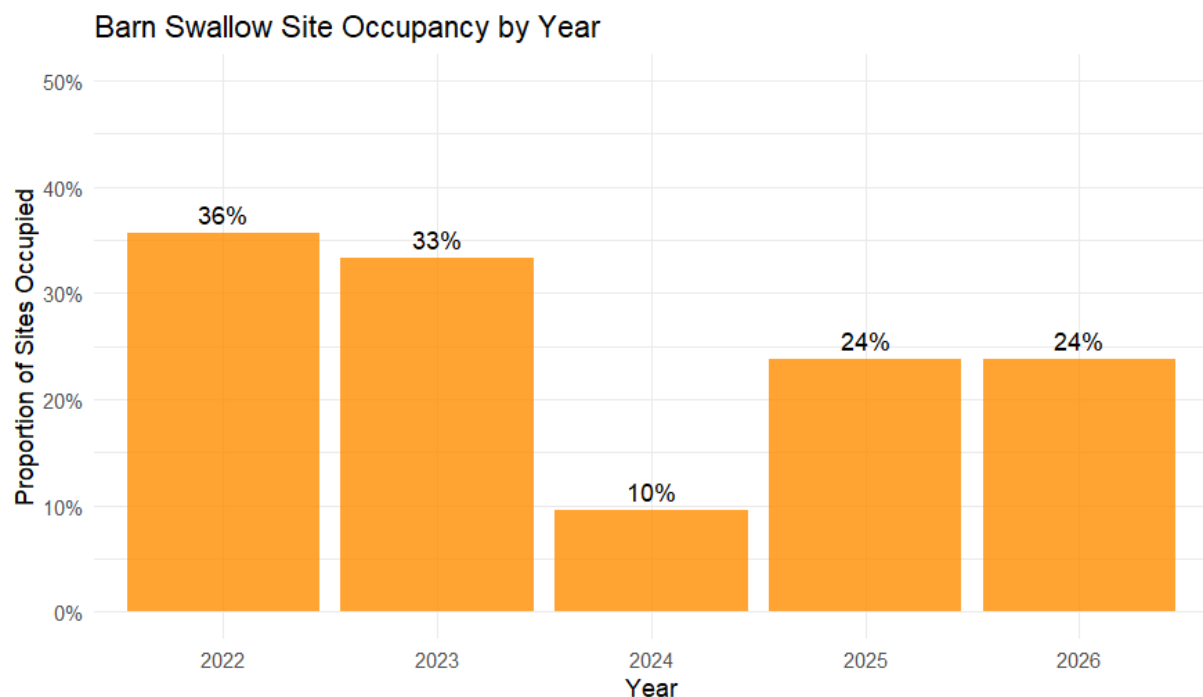


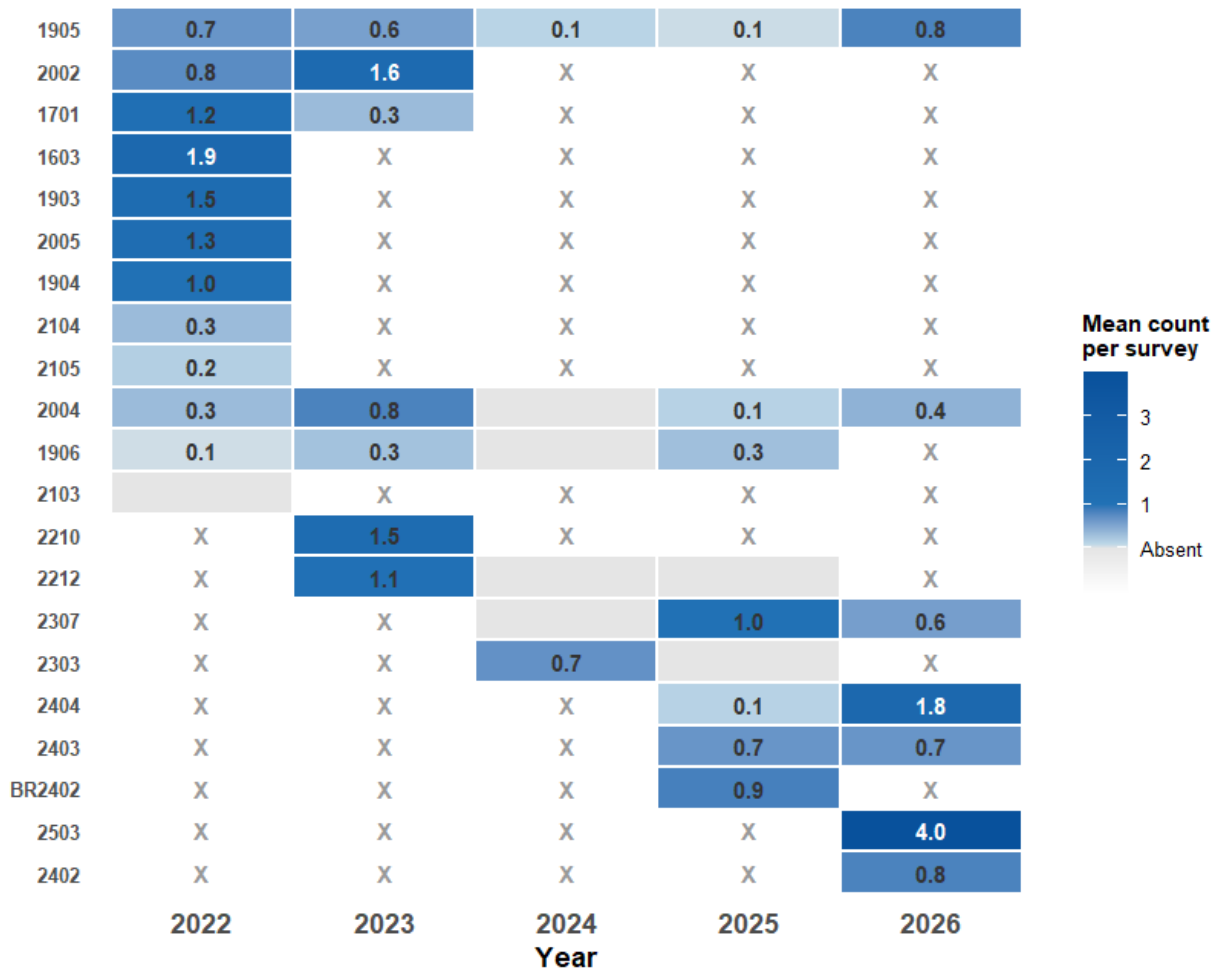
Figure 1. Proportion of point count surveys containing a Barn Swallow observation, by year.

Fields enrolled in the grassland set-aside program are typically in place for 4 years before returning to agricultural production. As fields are removed and new fields are planted, the fields included in the songbird surveys change yearly.

Although fewer fields were surveyed in 2026 compared to previous years, we continued monitoring at 5 of 9 sites that were surveyed in 2025. Each of these sites had Barn Swallows present last year, and swallow observations continued into this year (*Figure 3*). Additionally, two new sites were surveyed, both of which had Barn Swallows present.

Barn Swallow Site Occupancy & Abundance 2022-2026

21 sites | 15 always occupied | 5 intermittently occupied | 1 never occupied



While Barn Swallow observations remain stable compared to last year, they remain low compared to the initial 2022 and 2023 monitoring seasons. This spring was seasonally warmer than average, with all survey days having temperatures above 10 °C, even in early May. While the causes for the continent-wide decline of Barn Swallow populations is not fully understood, the most likely causes that would affect our local population are declines in insect populations and spring cold snaps (COSEWIC 2011).

Works cited

COSEWIC. 2011. COSEWIC assessment and status report on the Barn Swallow *Hirundo rustica* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. ix + 37 pp. (www.sararegistry.gc.ca/status/status_e.cfm).

Resources Inventory Committee (1999). Inventory methods for forest and grassland songbirds. Ministry of Environment, Lands and Parks, Victoria, BC.