

# Monitoring Avian Productivity and Survivorship (MAPS) Witty's Lagoon Regional Park

## 2024



*Rufous Hummingbird, Witty's Lagoon Regional Park, 2024.  
Photo: Jannaca Chick.*



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## Acknowledgements

Rocky Point Bird Observatory acknowledges with respect Scia'new and T'Sou-ke First Nations on whose territory we work, as well as the many other Lekwungen and WSÁNEĆ peoples of the region. We recognize their leadership, and that of all indigenous peoples, for time immemorial to protect the land and water for the benefit of birds and people alike.

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This project would not have been possible without assistance from the Capital Regional District (CRD) and their staff.

In 2024, MAPS monitoring by Rocky Point Bird Observatory was conducted primarily by volunteers. Personnel include MAPS Coordinator Cathy Reader, Volunteer Coordinator Robyn Byrne, Science Program Manager James Kennerley, Mark Byrne (Bander Trainee), and Bander-in-Charge Jannaca Chick (contractor). Station setup, monitoring efforts and education liaison were completed with the volunteer help of Melissa Anderson, Mark Byrne, Robyn Byrne, Jannaca Chick, John Costello, Anne Cotter, Skyler Freeman, Katelyn Fryer, Sonja Futehally, Sharon Godkin, Mara Hanneson, Christina Lam, Storm Morgan, Jo Motek, Mike Motek, Ann Nightingale, Emma Radziul, Cathy Reader, Rebecca Reader-Lee, Susan Thorne, Walter Thorne, Maddy Vallee, Mark Walker, and Tamara Wolowicz.

265.5 volunteer hours of field work, plus 122.25 hours of setup and take down, total 378.75 volunteer hours for the 2024 MAPS season at Witty's Lagoon. This does not include administrative volunteer hours or bander's compensation. Without everyone's generous donation of time, the season would not have been possible.



*The first banding session at Witty's Lagoon Regional Park, May 2024.*

*Photo: Robyn Byrne.*

## Summary

2024 marked Rocky Point Bird Observatory's (RPBO) fifteenth consecutive year running the Monitoring Avian Productivity and Survivorship (MAPS) program at Witty's Lagoon Regional Park in Metchosin, BC.

Sampling was conducted between 31 May 2024 and 2 August 2024 (MAPS periods 4 to 10), for a total of seven sessions, one for each 10-day MAPS period. Ten mist nets were used to capture birds; mist nets were deployed, and birds extracted, banded, and processed according to the MAPS protocol (DeSante et al. 2024) developed by The Institute for Bird Populations (IBP). Breeding status was determined by observing the body condition of individuals while in the hand, by location of active nests, and by the formulae prescribed by IBP. Each sampling day, detections of birds seen or heard were also recorded in accordance with the MAPS protocol.

In addition to following the MAPS protocol, RPBO also participated in two studies for the second consecutive year at both MAPS stations:

- 1) The SaP Project (Songbirds as Pollinators) which is being conducted by a PhD student at Colorado State University.
- 2) Environment and Climate Change Canada (ECCC) and Canadian Migration and Monitoring Network (CMMN) feather pull study.

In total, 240 individuals of 29 species were banded, 77 birds of 14 species were recaptured, and 5 birds of 5 species were unbanded. A total of 322 individuals were processed. The most frequently banded and recaptured species were Rufous Hummingbird (56), Bewick's Wren (35), and Chestnut-backed Chickadee (34). Of the total number of birds banded and recaptured, 60% were hatch year (HY). For new birds banded, the percentage of HY birds was 73%. It appears that 2024 was a better breeding year for birds than in 2023, when the percentage of HY birds was only 55% for newly banded birds.

Concurrently with banding procedures, 69 species were observed on site throughout the season. Highlights included catching two breeding pairs of Black-headed Grosbeaks in two nets in the opening net round of the first session! We did not catch a juvenile of the species until the last session on 2 August. We recaptured a Western Flycatcher that had been banded as a HY at the Rocky Point Migration station in 2023. That is the first inter-year, MAPS-Migration Monitoring recapture for RPBO.

## Background

The Monitoring Avian Productivity and Survivorship (MAPS) Program was established in 1989 by The Institute for Bird Populations (IBP) in California, USA. The program was designed to standardize collection of demographic data (vital rates) of North American landbirds. Analyses of MAPS data provide critical information relating to landbird ecology that can be applied to conservation and management initiatives.

The purpose of the MAPS project is to inventory breeding songbird populations using standardized methodology, and to record sightings of other species occurring at these locations to facilitate comparisons of populations and avian diversity at the site with those in similar habitats across North America. The data are submitted to Environment and Climate Change Canada (banding), Birds Canada (banding) and to The Institute of Bird Populations (banding, observation, breeding status, and habitat structure) to be made available to researchers and others.

MAPS data collection is a collaborative effort involving a network of banding stations run by government agencies, non-government organizations, and individuals throughout North America. Rocky Point Bird Observatory (RPBO) staff and volunteers have collected data for MAPS since 2003. The southern Vancouver Island banding stations at Rocky Point and Royal Roads University served as RPBO's MAPS sites until 2009, when Witty's Lagoon Regional Park was added and monitoring at Royal Roads was discontinued. In 2011, MAPS at Rocky Point was discontinued, and a second site was established at Madrona Farm in Saanich, BC. Monitoring at Madrona Farm was discontinued after 2019. In 2021 we started a new MAPS site at Power To Be on Prospect Lake. These five stations have provided data for over 200 species in previous monitoring years.

Witty's Lagoon is a 56-hectare estuarine area managed by the Capital Regional District (CRD), which purchased the land in the late 1960s from the Witty family. The area inland of the beach where RPBO banding operations are conducted was historically an agricultural site. CRD classifies Witty's Lagoon as a Regional Conservation Area, an area containing sensitive ecosystems that support rare or endangered plant and animal species, where recreational activities are limited to those that are minimally disruptive (CRD 2000).

As required by the CRD, an annual scientific research permit is obtained for this project at Witty's Lagoon Regional Park.

This summary report includes data collected at Witty's Lagoon in 2024. A summary report has also been prepared for our MAPS site at Power To Be on Prospect Lake, Victoria, BC.

## **Site Description**

The banding station at Witty's Lagoon is accessed via the stairs from the small parking area at the end of Witty Beach Road. It is in a disturbed riparian corridor in the southwest area of Witty's Lagoon Regional Park. There is a variety of native and introduced vegetation, including fruit trees. The surrounding area beyond the park is mainly rural residential development and agriculture. The banding area consists predominantly of temporarily flooded deciduous shrubland, where Nootka rose, Himalayan blackberry, European hawthorn, and grasses are abundant. On the east side of this habitat is the beach of the peninsula that contains the lagoon. Scotch broom dominates the vegetated portion here. The remaining habitat is mixed needle-leaved evergreen cold deciduous woodland, containing two forest subsets of Douglas-fir woodland and poplar grove (Figure 1).

Habitat types (>=5% cover of station)

- A Nootka Rose, Himalayan Blackberry / Seasonally flooded Shrub & Grassland
- B Douglas Fir / Deciduous Broadleaf woodland
- C Tidal Temperate grassland
- D \_\_\_\_\_
- E \_\_\_\_\_

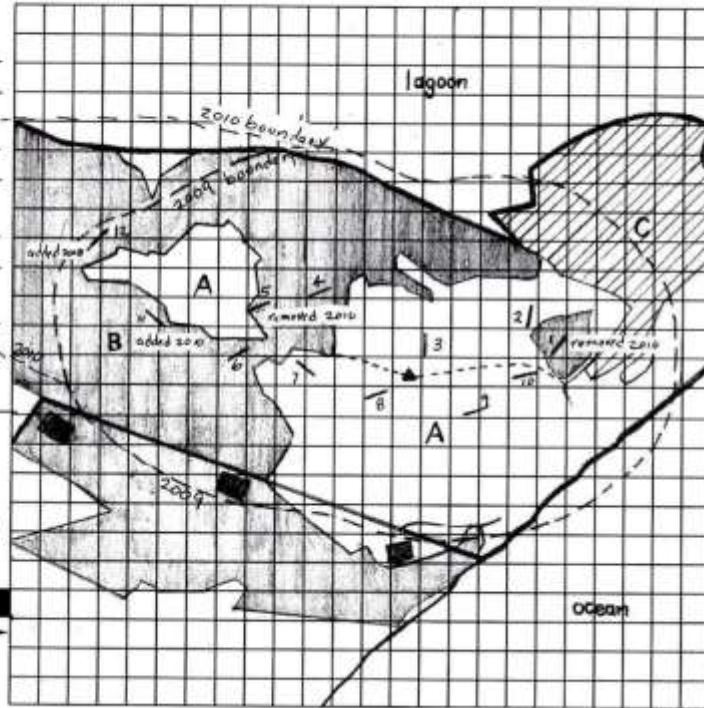
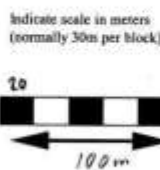


Figure 1. Map of the Witty's Lagoon MAPS site with habitat structure types.

## Methodology

Methodology followed the MAPS Manual 2024 Protocol (DeSante et al. 2024). Landbirds were captured in mist nets and banded during standardized sampling sessions conducted once in every ten-day period during the nesting season, from 31 May to 2 August. The safe handling and banding of birds followed the applicable sections of Rocky Point Bird Observatory's Field Protocol (RPBO 2022) and the MAPS Manual 2024 Protocol (DeSante et al. 2024). A component of the RPBO protocol is the Bander's Code of Ethics developed by the North American Banding Council, which emphasizes bird safety over data collection (NABC Revised March 2021).

Each sampling session involved the use of ten mist nets (12m x 2.8m, with 30mm mesh size; Figure 2) for a six-hour period commencing at dawn. If necessary, nets were closed in poor weather if winds exceeded 15 km/h or if there was significant precipitation. Nets were checked every 30 minutes, or more frequently if weather conditions warranted. Captured birds were removed from the nets and taken to a central location for processing. Each bird was then identified to species, assigned an age class according to criteria compiled by Pyle (2022) and banded with an aluminum U.S. Fish and Wildlife leg band with a unique nine-digit number. A

series of morphometric measurements was collected from each bird including wing chord, stage of breeding development, amount of fat deposit, age of each feather tract, feather wear, and mass. Sex and age were determined, if possible, in accordance with criteria in the MAPS Manual 2024 protocol. Date, time, and capture-net code were also recorded. Once processed, local-aged birds incapable of sustained flight were released near their capture net. Flocks of mixed ages captured simultaneously in the same net were released together to facilitate regrouping of family units.



**Figure 2.** Map of the Witty's Lagoon MAPS site.

Breeding status of each species encountered at Witty's Lagoon Regional Park was determined using multiple criteria. During each session, staff and volunteers observed bird behaviour and evidence of breeding birds. A bird is considered a breeder at the site if evidence such as a nest or recent fledgling is found, but also if other related behaviours such as territorial singing or carrying food are observed over an extended period. Breeding status is not limited to a single session or season, but rather is determined by observations over all MAPS periods, late May to early August. Recapture of an adult bird more than seven days after original banding is used as an indicator that the bird is on breeding territory.

## Results

A total of seven sampling days were conducted between 31 May and 2 August (Table 1). On 2 July, one net was taken down by a female elk. It was promptly replaced, resulting in the loss of half an hour. This resulted in a total of 419.5 net hours for the season. A total of 322 birds of 29 species were captured (Tables 1 and 2). This constitutes a 31% increase in birds processed from 2023.

**Table 1.** Daily summary of 2024 mist net effort and total captures at Witty's Lagoon. New captures per net hour do not include repeat captures of the same banding day.

Date	New	Recaptured	Unbanded	Total	Net Hours	New per net hour
May 31	25	13	0	38	60.00	0.42
June 12	24	11	0	35	60.00	0.40
June 21	47	10	2	59	60.00	0.79
July 2	39	15	0	54	59.50	0.65
July 12	27	8	0	35	60.00	0.45
July 20	31	10	1	42	60.00	0.52
August 2	47	10	2	59	60.00	0.78
<b>Total</b>	<b>240</b>	<b>77</b>	<b>5</b>	<b>322</b>	<b>419.50</b>	<b>0.57</b>

All birds that were captured and processed were categorized as new bands, recaptures, or unbanded. Of the total captures, 74.5% were newly banded, 24% were recaptures, having already been banded, and 1.5% were unbanded. Of the 77 recaptures, 20 were on the same day (34%). A total of 322 birds of 29 species were captured during this year's efforts and RPBO achieved an average of 0.57 newly banded birds per net hour (Table 1).

**Table 2.** Summary of 2024 captures by species and capture category at Witty’s Lagoon. The top species banded are highlighted in **bold**.

Species	New	Recaptured	Unbanded	Grand Total
American Goldfinch	3	0	0	3
American Robin	12	3	0	15
Anna’s Hummingbird	11	0	0	11
<b>Bewick’s Wren</b>	<b>22</b>	12	1	<b>35</b>
Black-headed Grosbeak	5	0	0	5
Brown Creeper	12	1	0	13
Brown-headed Cowbird	3	4	0	7
Bushtit	3	0	1	4
Cedar Waxwing	4	0	0	4
<b>Chestnut-backed Chickadee</b>	<b>23</b>	10	1	<b>34</b>
Chipping Sparrow	1	0	0	1
Common Yellowthroat	1	0	0	1
Downy Woodpecker	1	1	0	2
Golden-crowned Kinglet	1	0	0	1
House Wren	1	0	0	1
MacGillivray’s Warbler	4	0	0	4
Orange-crowned Warbler	3	4	0	7
Pacific Wren	4	2	0	6
Pine Siskin	1	0	0	1
Purple Finch	17	2	0	19
Red-breasted Nuthatch	2	0	0	2
<b>Rufous Hummingbird</b>	<b>56</b>	0	1	<b>57</b>
Song Sparrow	12	19	0	31
Spotted Towhee	13	8	1	22
Swainson’s Thrush	5	5	0	10
Warbling Vireo	1	0	0	1
Western Flycatcher	6	3	0	9
White-crowned Sparrow (Puget Sound)	4	0	0	4
Wilson’s Warbler	9	3	1	7
<b>Total</b>	<b>240</b>	<b>77</b>	<b>5</b>	<b>322</b>

Of the 240 banded birds, 176 (73.3%) were hatch year (HY), 14 (5.8%) were after hatch year (AHY), 16 (6.7%) were second year (SY), 33 (13.8%) were after second year (ASY), and 1 (0.4%) bird (Orange-crowned Warbler) was aged Local (L). The proportion of banded HY birds is markedly up this year from 2023 (55.5%) and more consistent with previous years (Chick 2023; Chick 2022; Chick 2021; Chick 2020; Talluto 2019; Moore-Reid 2017, 2018). (See Table 3).



**Table 3.** Proportion of birds by age at Witty’s Lagoon in 2024. Recaptured includes same day.

Age	New	Proportion of new	Recaptured	Proportion of recaptured	Total proportion
HY	176	73.3%	16	20.8%	<b>60%</b>
AHY	14	5.8%	2	2.6%	<b>5.6%</b>
SY	16	6.7%	13	16.9%	<b>9%</b>
ASY	33	13.8%	45	58.4%	<b>24.8%</b>
L	1	0.4%	1	1.3	<b>.6%</b>

Of the total 77 birds recaptured, 39 were from previous years and 38 were from this season. Of the 38 same season recaptures, 10 were same day (captured more than once during the same banding period). Five birds were released unbanded, either due to escaping or being released by the handler because of signs of stress. One Chestnut-backed Chickadee was taken to WildARC (Wild Animal Rehabilitation Centre) on 20 July. There were no mortalities this year.

Recapture highlights include: one Western Flycatcher banded as HY during Migration Monitoring at the Rocky Point station on 26 August 2023; two Orange-crowned Warblers banded in 2021 (both aged as SY) one of which, a male, was recaptured three times in 2022, twice in 2023 and twice this year; a male Wilson’s Warbler banded in 2021 as SY; a Pacific Wren banded in 2022 as ASY; a Swainson’s Thrush banded in 2022 as ASY. For a complete 2024 recapture history from previous years, please see Table 4 below.

**Table 4.** Recapture history of bird captured at Witty’s Lagoon in 2024.

Year banded	Recaptures (including banding date)	Species Age when banded
2020	4 3	2 Spotted Towhee (1 HY, 1 SY) 1 Song Sparrow (ASY)
2021	10 2 2 2	2 Orange-crowned Warbler (both SY) 1 Chestnut-backed Chickadee (SY) 1 American Robin (HY) 1 Wilson’s Warbler (SY)
2022	4 2 2 2 4 2 3	2 Chestnut-backed Chickadee (1 HY, 1 SY) 1 American Robin (ASY) 1 Swainson’s Thrush (ASY) 1 Spotted Towhee (1 ASY) 2 Song Sparrow (both HY) 1 Wilson’s Warbler (HY) 1 Pacific Wren (HY)

Year banded	Recaptures (including banding date)	Species Age when banded
2023	8 5 4 2 3 2 2	3 Bewick's Wren (HY, SY, ASY) 2 Spotted Towhee (SY, ASY) 2 Brown-headed Cowbirds (SY, ASY) 1 Chestnut-backed Chickadee 1 Song Sparrow (HY) 1 Orange-crowned Warbler (ASY) 1 Western Flycatcher (HY)

Since the start of the MAPS program at Witty's Lagoon in 2009, a total of 105 species of birds have been observed on site. In 2024, 69 species were observed. This year the following new species were observed: Steller's Jay, Common Merganser. As per the updated IBP 2024 Breeding Status List for Witty's Lagoon, 22 species have been determined to be regular breeders, 25 are usual breeders (>1/2, not all years), 25 species are occasional breeders (<1/2 years), 20 transient (in breeding range, but not breeding at the MAPS site), and 11 are migrant species (outside of known breeding range) (Table 5). This includes all birds ever captured or encountered up to 2023.

**Table 5.** Breeding status of birds observed at Witty's Lagoon from 2009 to 2023.

Species	Breeding Status	Species	Breeding Status
American Crow	Usual	MacGillivray's Warbler	Usual
American Goldfinch	Usual	Marbled Godwit	Migrant
American Robin	Breeder	Merlin	Transient
Anna's Hummingbird	Breeder	Mourning Dove	Transient
Audubon's Warbler	Occasional	Northern (Red-shafted) Flicker	Usual
Bald Eagle	Usual	Northern Rough-winged Swallow	Occasional
Band-tailed Pigeon	Occasional	Northern Waterthrush	Migrant
Barn Swallow	Occasional	Olive-sided Flycatcher	Usual
Barred Owl	Occasional	Orange-crowned Warbler	Breeder
Belted Kingfisher	Breeder	Osprey	Transient
Bewick's Wren	Breeder	Pacific Wren	Breeder
Black-and-white Warbler	Migrant	Peregrine Falcon	Transient
Black-headed Grosbeak	Usual	Pigeon Guillemot	Transient
Black-throated Gray Warbler	Transient	Pileated Woodpecker	Occasional
Black Oystercatcher	Usual	Pine Siskin	Occasional
Brewer's Blackbird	Occasional	Purple Finch	Breeder
Brown Creeper	Breeder	Purple Martin	Transient
Brown-headed Cowbird	Breeder	Red-breasted Nuthatch	Breeder
Bushtit	Usual	Red-breasted Sapsucker	Occasional

Species	Breeding Status
California Gull	Migrant
California Quail	Breeder
Canada Goose	Usual
Caspian Tern	Migrant
Cassin's Vireo	Occasional
Cedar Waxwing	Breeder
Chestnut-backed Chickadee	Breeder
Chipping Sparrow	Occasional
Cliff Swallow	Transient
Common Loon	Migrant
Common Raven	Usual
Common Yellowthroat	Usual
Cooper's Hawk	Occasional
Dark-eyed (Oregon) Junco	Usual
Double-crested Cormorant	Transient
Downy Woodpecker	Breeder
Eurasian Collared-Dove	Likely
European Starling	Usual
Evening Grosbeak	Transient
Glaucous-winged Gull	Occasional
Golden-crowned Kinglet	Usual
Great Blue Heron	Occasional
Great Horned Owl	Occasional
Greater Yellowlegs	Transient
Hairy Woodpecker	Occasional
Hammond's Flycatcher	Occasional
House Finch	Usual
House Sparrow	Occasional
House Wren	Usual
Hutton's Vireo	Usual
Killdeer	Occasional
Mallard	Occasional

Species	Breeding Status
Red Crossbill	Usual
Red-tailed Hawk	Transient
Red-winged Blackbird	Usual
Rock Pigeon	Transient
Rufous Hummingbird	Breeder
Savannah Sparrow	Transient
Semipalmated Plover	Migrant
Sharp-shinned Hawk	Transient
Short-billed Dowitcher	Migrant
Short-billed Gull	Migrant
Song Sparrow	Breeder
Spotted Sandpiper	Transient
Spotted Towhee	Breeder
Swainson's Thrush	Breeder
Townsend's Warbler	Occasional
Traill's Flycatcher	Occasional
Tree Swallow	Transient
Trumpeter Swan	Migrant
Turkey Vulture	Transient
Violet-green Swallow	Occasional
Warbling Vireo	Usual
Western Flycatcher	Breeder
Western Kingbird	Transient
Western Sandpiper	Migrant
Western Tanager	Usual
Western Wood Pewee	Breeder
White-crowned (Puget Sound) Sparrow	Breeder
Willow Flycatcher	Occasional
Wilson's Warbler	Breeder
Yellow Warbler	Usual
Yellow-rumped Warbler	Occasional

### Songbirds as Pollinators, the SaP Project

The SaP Project is a collaborative effort between Colorado State University, the Institute for Bird Populations (IBP), MAPS (Monitoring Avian Productivity and Survivorship), individual bird

banders, and members of the public. This project seeks to understand the relationships between North American songbirds and flowering plants through documenting flower-foraging behaviours of songbirds and using cutting-edge methods to sequence angiosperm DNA in pollen samples collected from songbirds. While some research on songbirds as pollinators has been done in Asia and Europe, the nature and frequency of pollination by North American songbirds has not been systematically investigated until now.

Through partnering with banding stations and nature enthusiasts, this project is collecting pollen samples in addition to foraging observations. This is a two-year study and 2024 was RPBO's second year participating in this cross-border partnership with Carolyn Coyle of Colorado State University. Pollen samples were requested from warblers, hummingbirds, Bushtits, Warbling Vireos, and Western Tanagers during our MAPS banding season. The study will draw inferences about what plants may be important to birds by using pollen samples collected by RPBO and other collaborators. By sampling spring-migrating songbirds, they can determine the plants most frequently visited during migration and use existing phenological databases to explore the sensitivity of songbirds to changes in flowering timing of those favoured plants.

To collect samples, banders used swabs to gently wipe the faces and bills of target species when these birds were in the hand. Hands were properly sanitized prior to sampling to avoid contamination. The swabs are specifically designed to pick up small particles, such as pollen. The swab was then put into a small, pre-numbered tube, and into an envelope where all the data are recorded (date, species, band number, age, sex, etc.). Each swab is associated with a single bird, which can then be used to make inferences about plants visited by that individual. The researchers will look for patterns across species and genera.

We took pollen samples from 90 birds, which included: Rufous Hummingbird (56), Wilson's Warbler (11), Anna's Hummingbird (10), MacGillivray's Warbler (4), Orange-crowned Warbler (4), Bushtit (3), Warbling Vireo (1), Common Yellowthroat (1). The samples and data have been sent to Carolyn Coyle of Colorado State University. 2024 was our second and final year of pollen sampling for this project.

To learn more about the SaP Project, please visit the website:  
<https://carolyncoyle.wixsite.com/saproject>



*Warbling Vireo, Witty's Lagoon Regional Park, August 2024.  
Photo: Jannaca Chick.*

### **ECCC and CMMN Feather Collection**

ECCC (Environment and Climate Change Canada) and CMMN (the Canadian Migration Monitoring Network) are seeking to fill geographic gaps in their feather collection to identify breeding/natal ground origin for songbirds. The ECCC project is using feathers of migrants to determine mercury content and relating that to habitat (upland vs. wetland), diet, and breeding ground origin. Feathers will be assayed for mercury and for several stable isotopes, including hydrogen. All analyses will be conducted by the ECCC labs in Saskatoon and/or Western University in London, ON. Resulting publications will acknowledge the crucial contribution of those who collected the samples.

This year RPBO was asked to contribute feather samples for this project, during MAPS and Fall Migration Monitoring. Retrix 3 from each side of the tail were collected from species as specified by ECCC. At Witty's Lagoon, we collected feather samples from 3 birds: Song Sparrow (1), Swainson's Thrush (1), Wilson's Warbler (1).

## Comments and Recommendations

The sixteenth year of the MAPS program at Witty's Lagoon saw a total of 322 birds processed, a 31% increase from last year. The species diversity (29) was up from last year (22) and more consistent with previous years – 2022 (31), 2021 (24), 2020 (30), 2019 (26), 2018 (27). The percentage of hatch year birds banded and recaptured was 60%, which is up from last year 2023 (47%). The percentage of HY birds in previous, recent years is: 2022 (68%), 2021 (59%), 2020 (69%), 2019 (69%), 2018 (71%).

Five Black-headed Grosbeak (BHGR) were banded on site this year. On 31 May, we caught 2 breeding pairs of BHGR in two nets, and on our final day 2 August, we caught a hatch year BHGR. Although this species is regularly heard here, the only previous time they have been banded was two birds in 2009, the first year of MAPS banding at WILA. Rufous Hummingbird (RUHU) numbers were back to normal this year, with 56 banded as opposed to 2023 (29). Purple Finches have been experiencing successful breeding seasons for the past several years here, and their numbers appear to be increasing. 2023 was the first time a House Wren has been banded here in many years – 2010 (1), 2009 (2). Although Golden-crowned Kinglets are regularly heard, this was the first time one has been banded, a hatch year, since 2014. We banded our second Pine Siskin to date; this was an irruptive year for this species in the Greater Victoria area. The number of warblers banded remained on the low side in 2024.

We continue to recapture both resident and migratory breeding birds that return to this site to breed. This provides valuable data. We recaptured an Orange-crowned Warbler banded here in 2021 as SY; he has been caught multiple times every year since then. See Table 4 for recapture history.



*Orange-crowned Warbler, banded in 2021 as SY at Witty's Lagoon Regional Park, 2024.*

*Photo: Mark Byrne.*

On 2 July this year, a banded Western Flycatcher was recaptured. It turned out this bird was banded at Rocky Point on 26 August 2023 as a HY. This is the first time a bird banded during Migration Monitoring has been recaptured at one of our MAPS sites.

Capture rates were moderate this year at 0.57 birds per net hour (0.43% in 2023, 0.65 in 2022, 0.67 in 2021, 0.71 in 2020, 0.62 in 2019, 0.63 in 2018). The highest capture rate at Witty's Lagoon to date was 0.81 in 2017. This does not represent any kind of statistical analysis but is only for general interest in comparative bird numbers between 2024 and the last five years.

The MAPS protocol advises that a five to ten-year period of data collection is required before meaningful analysis can be initiated by IBP. It is evident that Witty's Lagoon provides habitat for a variety of breeding birds and birds are regularly recaptured over a period of years. Sufficient data has now been gathered at this site for trend analysis. It is recommended that this be done.

The MAPS program provides an excellent opportunity for new banders and volunteers to improve their skills. This year, new volunteers were able to join us as scribe/helpers, for net setup and takedown, and extractor training. Mara Hanneson, Sonja Futehally and Christina Lam filled in as assistant banders on a few occasions. This year, Mark Byrne volunteered as a Bander Trainee, with the intent of obtaining a banding permit going forward. James Kennerley, our Science Program Manager, joined us for a few hours on 12 June.

Over the seven sessions, RPBO had 24 volunteers assisting, which totaled 379 volunteer hours.

We had a total of 12 visitors to the banding station this season.

Every effort should be made to continue the use of this site for the MAPS program.



*Male and female Black-headed Grosbeaks, Witty's Lagoon Regional Park, 2024.  
Photo: Robyn Byrne.*

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*Witty's Lagoon Regional Park, 2024.  
Photo: Jannaca Chick.*