



**The Black-and-White Warbler—The Newsletter of Last Mountain Bird Observatory (LMBO)**  
 VOLUME 22, NUMBER 1, SPRING 2024 EDITED by Ashley Vass & Alan R. Smith

**Inside:**

Message from the  
 Editor’s.....2  
 Rich History, Vibrant  
 Future.....3  
 LMBO Spring Update.....4  
 LMBO Fall Update.....5  
 Featured Species: Nashville  
 Warbler.....6  
 The Saskatchewan  
 Breeding Bird Atlas.....7  
 Featured Person: Alan  
 Smith.....8  
 World Migratory Bird  
 Day.....10  
 NatureHood & Education at  
 LMBO.....11  
 Book a Visit.....12  
 Thank you to Donors &  
 Funders.....13



The view from the observation tower in the Last Mountain Regional Park overlooking Last Mountain Lake, one of the first IBAs and now KBAs to be designated in Saskatchewan.

**Key Biodiversity Areas:  
 Transitioning from Important  
 Bird Areas**

- Jordan Rustad

Many of us will be familiar with the Important Bird Area program. This program is an international effort to monitor, protect, and conserve bird populations all over the world. Sites were nominated based off their use by

birds over the year. The site could be used for breeding, as a migration stopover site, or for overwintering. Saskatchewan has over 50 IBAs currently. Some of them are important due to the presence of colonial breeding birds, like the American White Pelican colony on Last Mountain Lake. Other sites are important because of their repeated use by endangered species, like Lake Diefenbaker supporting many Piping Plovers or the Blaine Lakes supporting migrating Whooping Cranes.



This approach has led to sites all over the world to be monitored, gaining legal protections, and engaging the public about bird conservation. It is easy to rally behind birds, sometimes too easy. In our fervour to protect our feathered friends, other species get left behind. In that spirit, Canada is now the first country in the world to transition Important Bird Areas to the Key Biodiversity Areas. The programs have similar goals but different targets. While IBAs targeted birds and the eventual protection of their habitats, KBAs aim to conserve all species. KBAs are currently being designated in Canada for birds, plants, amphibians, and other taxa. This expanded species list allows us to conserve habitats for all species, and not just birds. Both programs use rigorous scientific survey data to back up the reasoning for their designation. KBAs have updated the threshold guidelines though to better represent current species numbers. Sometimes the threshold has increased, like for successful conservation stories such as the Whooping Crane, and for others the threshold has decreased, revealing where our conservation efforts need to go.

KBAs also take things a step further. We are currently designating KBAs for species of animals, but organizations are also working towards designating KBAs for rare habitat types and ecosystem services. This is especially important for Saskatchewan as we have a large amount of native prairie, which is an ecosystem disappearing more rapidly than the Amazon rainforest. There are different types of grasslands being preserved but these KBAs are still in the identification phase. Hopefully we will have many new KBAs to share with you all soon.

All of this is to say, that IBAs are not going anywhere. Sites that have historically been designated as an IBA will continue to be an

IBA. Our volunteer caretaker network will continue to monitor and advocate for these important sites. KBAs are another designation that will be internationally recognized that will help us to prioritize and justify protection for these sites.



### Messages from the Editors

Migratory birds face a lot of challenges – firstly they must find a suitable summer home where they can raise their young, secondly, they must find a hospitable winter home, and thirdly they must safely move between the summer and winter homes. Scientists have designed studies to help understand the importance of each phase of the migratory cycle. For example, Breeding Bird Surveys help us understand what’s happening on the breeding grounds, Christmas Bird Counts are similarly used for the wintering grounds, while Migration Monitoring Stations are meant to improve our knowledge of migration.

At Last Mountain Bird Observatory we are proud of the progress we are making in understanding how birds overcome the challenges of migration, as well as the importance of places such as Last Mountain Regional Park for successful migration. We are thankful for the support provided by the many individuals and agencies over the last three and a half decades, and certainly hope we merit your continued confidence in our programs going forward.

- Alan R. Smith, Co-editor

Monitoring migratory bird populations across their breeding range gives us important insight to understanding what makes their summer home special; such as site use, habitat availability, and to identify potential threats. This can also help us measure recovery program success for species at risk. We are excited to be bringing back the breeding census for the endangered Piping Plover across the Canadian Prairies this June and looking forward to seeing how many of these rare birds are using Last Mountain Lake as their summer home this year!

- Ashley Vass, Co-editor



## Rich History and Vibrant Future



Grand opening of LMBO trailer.

The original photo is from the grand opening of the LMBO trailer in 1999. The young boy in the original, I think, is the son of long-time NS member, Melanie Elliott. The chap with me is the late Todd Radenbaugh who was very important in building the deck and generally maintaining the site in the early 21st century. He also helped to organize this opening and 2 fundraising pig roasts. His contributions helped LMBO through some lean times.

- Alan R. Smith

The banding station out at the Last Mountain Bird Observatory is filled with rich, tangible history. As we pause to reflect, we're not only struck by the station's remarkable scientific contributions but also the profound impact it has had on countless lives through the years. Our journey through time revealed a poignant snapshot from 1999,

capturing the

grand opening of our current station which has been a hub of activity for the past 24 years.

It was heartening to see the familiar fixtures of the checkered tablecloth, rainbow mug, and of course the picnic table that we use to this day. We are gearing up to say our final farewells to the old banding station to make room for an updated station that will allow this important work to continue for decades to come. We re-created this photo to celebrate the history of the station and to welcome its vibrant future. Through the passage of time, our mission and values remain steadfast upheld by a new generation committed to carrying on this vital work and legacy of the LMBO.

- Angela Tremka



Emily, Angela, and Jordan recreate a photo from an LMBO photo album.



## Last Mountain Bird Observatory - Spring 2023

**33rd consecutive spring of coverage** (32nd of standardized coverage).

- A. R. Smith, Data Manager; Jordan Rustad, Field Manager

### Migration Monitoring:

**First Day of coverage:** 8 May.

**Last day of coverage:** 31 May.

**Total days of coverage:** 24 of a possible 24 (100%).

**Number of staff:** 2 (Jordan Rustad - Field Manager/Bander-in-Charge, Angela Tremka - Banding Assistant).

**Number of volunteers:** 13 (Marla Anderson, Brian Ayers, Emily Dornstauder, Shelly Fisher, Harold Fisher, Melody Harris, Patti Kosteniuk, Russell Loire, Laura Messett, Debbie Penn, Ryan Squire, Tanner Stevens, Kale Worman).

**Number of person-days effort:** 60 (last year 52).

**Number of visitors:** 110 (last year 126).

**Observation effort:** census, casual and incidental observations.

**Trapping effort:** 13 12mx30mm mist nets for 793 net hours; 523 birds/1000 net hours (1992-2022 average: 438).

**Number of species observed:** about 100 (for daily census results *see ebird*).

**Number of species captured:** 46 (1992-2022 average: 48).

**New birds captured:** 415 (1992-2022 average: 576); returns to LMBO from previous years included 25 birds of 9 species.

**Species peak:** 9 and 10 May, 16 species.

**Banding peak:** 14 May, 50 birds.

### Top 10 Captures:

White-throated Sparrow	79	Swainson's Thrush	16
House Wren	64	Common Grackle	15
American Robin	22	Yellow Warbler	13
Brown-headed Cowbird	16	Least Flycatcher	12
Yellow-rumped Warbler	16	Cedar Waxwing	10

**Comments:** The total number of birds captured at 415 was well below the long-term average of 576, while total number of species at 46 was also below the average of 48. These results were primarily due to windy and smoky weather allowing for banding on only 14 of 24 possible days. The catch rate of 523 birds per 1000 net hours was, however, above the average of 438. Lapland Longspur on 21 May was the first captured at the Observatory, this was most unexpected as it is a bird of open country. This brings the number of species captured in the spring to 105. Notable returns include a minimum 10-year-old male Yellow Warbler which was banded as an adult on 13 August 2014.

**Last Mountain Bird Observatory - Fall 2023**  
**33rd consecutive fall of coverage** (31st of standardized coverage).  
 - A. R. Smith, Data Manager; Jordan Rustad, Field Manager

**Migration Monitoring:****First day of coverage:** 8 August.**Last day of coverage:** 7 October.**Total days of coverage:** 61 of a possible 67 (91%).**Number of staff:** 2 (Jordan Rustad - Field Manager/Bander-in-Charge, Kristen Mancuso - Bander-in-Charge Angela Tremka - Banding Assistant).**Number of volunteers:** 24 (Marla Anderson, Shirley Bartz, Emily Dornstauder, Ken Dornstauder, Ryan Dudragne, Erin Ennis, Shelly Fisher, Danae Frier, Tory Hartley-Cox, Brynn Jellicoe, Ash Latta, Sarah Ludlow, Heather Malazdrewicz, Jeff Malazdrewicz, Kat McCallum, Don McCarville, Nathan McCarville, Felix Messer (from Germany), Laura Cardenas-Ortiz, Dana Sandercock, Nat Slipak, Tanner Stevens, Hannah Wilson, Brand Yarnton).**Number of person-days effort:** 161 including 108 staff and 53 volunteer (155 last year).**Number of visitors:** 206 (193 last year).**Observation effort:** census, casual and incidental observations.**Standard trapping effort:** 13 12mx30mm mist nets for 2712 net hours; 809 birds/1000 net hours (1992-2022 average: 680).**Number of species observed:** 135.**Number of species captured:** 75 (1992-2022 average: 72).**New birds captured** (standard banding; includes birds released without banding): 2197 (1992-2022 average: 2698). Five birds of 4 species returned from previous years.**Species peak:** 23 August, 30 species.**Banding peak:** 27 August, 118 birds.**Top 10 New Captures:**

Yellow-rumped Warbler	340	Alder Flycatcher	92
Orange-crowned Warbler	268	Ovenbird	80
Yellow Warbler	216	White-throated Sparrow	78
Dark-eyed Junco	144	American Redstart	58
Tennessee Warbler	93	Ruby-crowned Kinglet	57

**Comments:** The autumn of 2023 was well below average in terms of number of birds captured. This was partially due the late opening of the Observatory. To avoid potential conflicts with the higher number of campers present in the park, LMBO is traditionally opened after the August long weekend; this year the long weekend was unusually late. In addition, heavy smoke necessitated the closing of nets on some days in August for the protection of birds and humans alike. The number of birds captured per net/hour was, however, higher than the long-term average.

A record high of 16 Nashville Warblers was captured eclipsing the previous highs of 9 in 1994, and 8 in 2003 and 2018. On the other hand, 8 Hermit Thrush tied 1996 for the fewest captures of the species. In a weird coincidence the only Bank Swallows banded in 2022 and in 2023 were caught on 23 August with 4 birds on both dates! No new species were banded - the total number of species banded in the fall remains at 112; for both seasons the total is now 126.

## Featured Species: Nashville Warbler

- Jordan Rustad

The Nashville Warbler is an uncommon warbler to see passing through the banding station. At first glance they can seem like a Yellow Warbler, but they are smaller, have a grey head and white undertail coverts, and a bright white eye-ring, giving them a spectacled look. They can also have a patch of chestnut on the top of their head, but that is not very helpful if you are staring high up at warbler butts in the canopy.

Despite their name, these birds only pass through Tennessee during migration. There are two distinct populations of this warbler: the eastern and the western. Historically the western subspecies was thought to be a separate species because it is much brighter than the eastern.



A Nashville Warbler captured at LMBO. Note the grey head and large white eye ring to help identify this small warbler. Photo: Nature Saskatchewan.

In Saskatchewan, the eastern subspecies breeds in second-growth forest in the southern boreal forest. They prefer to nest on or near the ground and carefully conceal their nests. Fun fact: they have been known to stick porcupine quills in their nest! Because of this bird's preference for regrowing forest, they have managed to stay more common than other boreal breeding warblers in a time of forest fires and logging. That was definitely the case this fall at LMBO. Normally, it is exciting to catch one or two of these small warblers, with the record being 9 in 1994. We blew that record out of the water with 16 captured! The numbers of birds captured fluctuates greatly between years, and it is not likely we will catch so many of these beautiful warblers again next year, but it will be exciting to see if we can break any other station records.



## Saskatchewan Breeding Bird Atlas Update

- LeeAnn Latremouille

The sustained effort to bring the Saskatchewan Breeding Bird Atlas publication into being continues, with steady progress made on several fronts.

In summer 2023, data from the Conservation Data Centre and other sources were at last wrangled into the atlas database. The 117,115 records from provincial and industrial surveys across the province account for nearly 20% of all atlas records. Data from Nature Saskatchewan's programs were also included, with sightings from Operation Burrowing Owl accounting for a full 80% of all 85 atlas squares reporting Burrowing Owls (68 squares) – truly a testament to the wide reach and success of Nature Saskatchewan's programs! Once the records were uploaded and given thorough review, the mapping team was given the go-ahead to begin the mapping process.

Mapping for Saskatchewan has taken a little more time than usual, as over the past year the Birds Canada GIS team has been collaborating with colleagues at Environment and Climate Change Canada to develop improved integrated models for mapping atlas data. These new models use data from a wider range of point count durations as well as information from general atlassing checklists to create more robust predictions, by also taking into account more landscape features. After much tinkering, we are just now seeing the first round of maps. While there is still finessing required for several species, we're pleased with the results so far compared to the older models. In particular, it is great to see the increased predictive power around landscape features, which is especially notable for riparian species such as Spotted Towhee and Bank Swallow.

On the write-up side, adapted text from the Birds of Saskatchewan has been finalized and translated into French, the introductory chapters are nearly drafted, and interpretations of atlas results for each species are underway. Photographs have been secured for each species thanks to generous contributions from atlassers and the many photographers featured in the Birds of Saskatchewan.

While we had anticipated being further ahead by this time, we can take some solace in knowing that we're on par with the timing of publication for other recent Birds Canada atlases, as well as atlases world-wide, with the average publication date being 3 years after data collection ceases. The structure of the Atlas publication will take the form of a website with similar architecture to the recent Manitoba Atlas and BC Atlas, and will reside at [sk.birdatlas.ca](http://sk.birdatlas.ca), the same homepage we've been using all along. We look forward to updating you next year with final publication news!

The Saskatchewan Breeding Bird Atlas is the result of a partnership between Birds Canada, Environment and Climate Change Canada, Saskatchewan Ministry of Environment, the Nature Conservancy of Canada, Nature Saskatchewan, and the Saskatchewan Wildlife Federation. We thank all of our supporters for their important financial and in-kind contributions. Information about the Atlas and interim maps can be found at [sk.birdatlas.ca](http://sk.birdatlas.ca).



Alan Smith bravely holding a small hawk while modeling his gorgeous rainbow suspenders.

## **Featured Person: Alan Smith - The man, the myth, the hippie living in the trailer**

- Jordan Rustad

The most vivid image I have of Al, is him in his rainbow suspenders, wine glass in hand, dancing to music (in his head). I had gotten to the station late that night and was trying to set up my tent. I think Al had come to help, but I knew that he wasn't going to be particularly helpful with that wine glass in hand (I was right). I had the immense privilege to work with Al at LMBO for many years before he was forced into retirement. During that time, I learned a great deal from him about birds, conservation, and science. Al has authored numerous books about Saskatchewan birds, and I'm sure many of you reading this own at least one. These include the Atlas of Saskatchewan Birds, Saskatchewan Birds (Lone Pine), and The Birds of Saskatchewan (co-authored with Dr. Stuart Houston and J. Frank Roy). Al has also coordinated the Christmas Bird and Mammal Counts, and the Breeding Bird Survey in Saskatchewan. He personally oversees a large amount of data that we still use today to make management decisions about birds. Throughout his career, Al studied many different types of birds with the Canadian Wildlife Service, but he always had a soft spot for Saskatchewan birds. Some of his favourites



include the Ferruginous Hawk, Piping Plover, and Long-billed Curlew. Throughout his career, Al has (and rightfully so) been the recipient of many awards and accolades, which I will not attempt to list here. This is meant to be a brief article.



Cape May Warbler captured at LMBO by Al and Jordan.

I first met Al through his partner Randi. As a nerdy kid in a small town, of course I befriended the librarian. I had told her about a really cool experience that I had gotten to do, called bird banding, through a career work placement during high school. She knew just the place where I had to go next: Last Mountain Bird Observatory. Al originally banded in the regional park in 1989 with the intention of setting up a migration monitoring station for boreal breeding warblers. Little did he know that the station would continue to this day, and through that he would create a legacy that still inspires banders, the public, birders, and researchers today; including myself. During the spring, we capture warblers in their breeding plumage. It is a very real treat though to capture a male and a female warbler in breeding plumage together in a net. That was the case one spring day when we captured two Cape May Warblers. The male is a vivid orange tiger, and the female its duller companion. This pair was the first birds that I stopped to take a photo of in photographer's grip. I still have these photos and it blows my mind that Al allowed me to band these birds.

Another of my favourite inspiration stories from the station is the Dornstauders. Emily began coming to the station as a toddler and came to the station every August throughout her childhood. Today, she is one of our most passionate volunteers and shares her enthusiasm and knowledge about birds with other staff and volunteers and the public. Al built a small army of volunteers that we still use and rely on today.

I truly owe so much to Al. His enthusiasm, passion, and knowledge for birds is what eventually lead me down the path to becoming a biologist and researcher. I do not think I would be the person I am today without the experiences at LMBO. I know this is true not only for myself but countless other people who have passed through the station and come in contact with Al. My only hope with this article is to convey even a fraction of my gratitude and admiration of a truly remarkable man.



Emily Dornstauder happily holding a Common Grackle after extracting the menace, I mean bird, from the mist net.



## **World Migratory Bird Day Event 2024**

**Saturday, May 11, 2024**

**10:00 - 3:00**

**Green space beside the Saskatchewan Science Centre**

Nature Saskatchewan will be hosting the World Migratory Bird Day event on Saturday, May 11<sup>th</sup>, 2024 in Regina, SK. The event will take place in the green space beside the Saskatchewan Science Centre from 10:00 am to 3:00 pm.

These organizations will be leading nature based activities at the event:

Saskatchewan Science Centre, Royal Saskatchewan Museum, Wascana Centre, Entomological Society of Saskatchewan, Salthaven West, Nature Regina, Nature Saskatchewan, Bird Friendly Regina, Friends of Wascana Marsh, Last Mountain Lake – National Wildlife Area and more!

Insects are essential sources of energy for many migratory bird species, not only during the breeding seasons but also during their extensive journeys and greatly affect the timing, duration, and overall success of bird migrations. Along their migration routes, birds actively seek out insects in fields, forests, wetlands, and various habitats during stopovers. The timing of bird migration often coincides with peak insect abundance at stopover locations, supplying nourishment for birds to replenish their energy reserves before continuing their journeys.

Join us in celebrating the return of our migratory birds!

## NatureHood Outdoor and Environmental Education programming at LMBO

- Shannon Chernick



A great big thanks to Nature Canada and Environment and Climate Change Canada for providing funding to Nature Saskatchewan for the NatureHood program! This year we were provided with additional funding to expand our NatureHood programming into all 4 seasons. We were able to offer NatureHood field trips in spring, summer, fall and winter!

The NatureHood program in Saskatchewan provides much needed nature connection and exploration programming for inner city youth who otherwise have limited access to outdoor education opportunities. NatureHood provides a unique opportunity for students to experience outdoor education at the Last Mountain National Wildlife Area and the Wascana Migratory Bird Sanctuary.

In 2023-24, Nature Saskatchewan was able to provide 71 fully funded field trips to inner city schools for 1,893 students! We also partnered with many organizations including the YWCA, City Kidz and the Regina Open Door Society for summer Naturehood field trips.



Nature Saskatchewan was able to establish a unique youth leadership opportunity with the University of Regina by providing a winter outdoor education training workshop for third year outdoor education students in partnership with SaskOutdoors. These students then used their new skills to lead a NatureHood field trip with two classes from an inner city school in Regina at the Wascana Migratory Bird Sanctuary.

Nature Saskatchewan partnered with Wascana Centre for multiple large public events at the Wascana Migratory Bird Sanctuary including the Christmas Bird Count for Kids event. Nature Saskatchewan partnered with local Knowledge Keepers and Elders to lead knowledge sharing sessions for the Frost Fest event. Knowledge Keepers and Elders led buffalo tanning, buffalo art, Elder Storytelling and a Tipi raising ceremony. At Frost Fest, 10,692 people participated in these activities!



It's so important to make the connection between the critical habitat at Last Mountain National Wildlife Area and our urban habitat in the Wascana Migratory Bird Sanctuary. These areas are important for birds to rest and refuel on their migration journey. Giving families, students, and community members a chance to connect to nature and particularly birds is an important step in habitat conservation!



Interpretive Sign at LMBO.

## Book a Visit at Last Mountain Bird Observatory!

LMBO is open to the public by registration only starting May 8th. To ensure small group sizes we must have guests register before planning a trip to the banding station.

Please register by emailing Jordan Rustad, the LMBO Field Manager, at [jrustad@naturesask.ca](mailto:jrustad@naturesask.ca) with the date and time of visit and group size.

For more information on LMBO please visit our webpage at:

<https://www.naturesask.ca/what-we-do/lmbo>

If you would like to learn more about the bird banding process, check out the promotional video for LMBO at <https://www.youtube.com/watch?v=EGZ99ueO0C0>

A huge thanks to Daniella Ponticelli and Nature Saskatchewan staff and volunteers for helping to make this short promotional video.



**We thank our 2023-24 Donors:**

- |                               |                               |                               |
|-------------------------------|-------------------------------|-------------------------------|
| A. W. Hartley                 | Katharine and John Schulz     | Pat Sargent                   |
| Bob Gehlert                   | Kendra Rink & K. Koerting     | Paul Steffens                 |
| Clint & Jody Blyth            | Leonard Fisher                | Philip Wright                 |
| Colette & Richard Stushnoff   | Lorne Scott                   | Roberta Cox                   |
| Dan Zazelenchuk               | Margaret Mehler               | Sandra Allen                  |
| Don Delhomeau                 | Margaret Skeel & David Donald | Sheila Weber                  |
| Donna Bruce                   | Marilyn Meyer                 | Shirley Bartz & Andrew Miller |
| Dorothy I. Rhead              | Mary Christie                 | Susan Weir                    |
| Jared Clarke & Kristen Martin | Mary L. Wright                |                               |
| Jeannette Luttmmer            | Monique and Glen Smith        |                               |

*Donations of \$10 or more are tax deductible. Donate online at [www.naturesask.ca](http://www.naturesask.ca) or mail cheques payable to Nature Saskatchewan to 206-1860 Lorne St, Regina SK S4P 2L7. Please note that the donation is for LMBO.*

**We thank our 2023-24 Sponsors:**

**The LMBO is managed by:**

This project was undertaken with the financial support of:  
Ce projet a été réalisé avec l'appui financier de :



Prairie Conservation and Endangered Species Conference



Nature Saskatchewan receives funding from:



G. Murray and Edna Forbes Foundation



[www.naturesask.ca](http://www.naturesask.ca)

