LESSER SLAVE LAKE BIRD OBSERVATORY

The Warbler

Summer 2010

Sept 10, 2010: Richard Kirkun, Bander in Charge, shows off the 100th species banded at the LSLBO!!

Executive Director Update
By Patti Campsall

I knew that there was a reason that I had delayed getting my Warbler article done; there was some exciting news heading our way. NO sooner that I had sat down, we received a mysterious text message from our Bander in Charge, Richard Krikun...he had just **banded our 100th species**!! And to top it off, in the same net was the second Cooper's hawk ever captured at the LSLBO...both in the same net at the same time. Talk about excitement for a sleepy September morning at the banding lab. Of course, he made us wait until they returned to the centre so that he could tell us the entire story in great detail...and do the big reveal. So if you haven't guessed by the pictures above, the official 100th species banded at the LSLBO was an **Eastern Kingbird**!! Congratulations Richard and Nicole on reaching another milestone for the LSLBO...you made our day!

We always joke that you never know what is going to happened each day at the Boreal Centre for Bird Conservation. Banding milestones, interesting visitors, excited children, or even deer playing tag outside your window. The building may be exciting, but what makes it unique are the staff and volunteers that put their energy and dedication into everything they do! So here is a brief introduction to the people who made our summer season such a success.

Research: Richard Krikun just spent his 7th summer at the LSLBO! Visitors and birds love him, and he even gets fan mail! He did a great job of managing a very busy and diverse research program with our extra projects this summer (see page 5). Just as dedicated and hard working; ***Nicole Linfoot*** returned with banding permit in hand to be our assistant bander for the second year. People get excited about the LSLBO because of their excitement for their very unique career. And there was a new face at the lab this summer. ***Javen Green*** provided extra support for the LSLBO banding programs in addition to field work on a U of A ovenbird project. Our favorite bat researcher, ***Cory Olson***, with the University of Calgary completed his research at the BCBC field station this summer. Once again, his public presentations were a huge hit and we are going to miss him next summer. But the great news is that there will be a lasting legacy of this project at the BCBC. An automated bat detector has been installed near the LSLBO banding lab to keep an eye on our bat populations in the upcoming years.

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Education: ***Chris Dodds***, Visitor Services Specialist had a smaller education team this summer, but they managed to pull off some great programming. Since the beginning of May, over 5000 students and public have enjoyed fun and informative programs from the BCBC staff. ***Fawn Jackson*** was our Boreal Interpreter this summer, and her weasel amphitheatre show received rave reviews. And of course, ***Cori Klassen***, our Boreal Educator provided wonderful programming support during the busy summer season. And in her spare time, Cori excelled at the fine art of bird extraction (see page 13)...and even got to band her first bird!

Operations*: *Charity Martin officially became ***Charity* Beadow** in July in a lovely wedding ceremony at the beach at Lily Creek. No rest for the newly married though, she has been busy setting up our new computer retail and booking system for the centre, plus helping out with vegetation surveys. She has been able to have fun at the lab, thanks to our summer information officer. ***Shauna Kristoff*** was that smiling face that greeted our visitors to the centre this summer.

Volunteers and members: The energy and commitment of our volunteers and members makes this centre happen. Thank you to everyone that came out to help out with Songbird Festival and other events. We would not be able to do it without your support. We also had some wonderful long term volunteers at the centre this summer as well. ***Thomas Bennett*** joined us for most of the summer, and will be helping out until early October before he departs to sunny Mexico. To say that he has had a diverse experience at the BCBC is to put it mildly. You can read about his adventures on page18. And we were thrilled that ***Bill, Sue, Mike and Becky Walsh*** found time to spend the month of July with us once again. This was their third summer at the BCBC, and their love for the centre and pure positive energy is always a highlight for staff and visitors. Finally, ***Deborah Lawrence*** volunteered for the month of May at our banding station.

Board of Directors: the LSLBO would not be where it is at without our dedicated volunteer board members that donate their time, knowledge, and enthusiasm to the management and direction of the society. Just to remind you, here are your board members: ***Bob Deacon***—Chair, ***Terry Kristoff***—Vice-chair, ***Ronda Groom***–Fundraising Director, ***Tyler Flockhart***– Director of Field Research, and Directors at Large: ***Neal Knoot, Nelson Lutz, and Cherie Friesen***.

To paraphrase...it takes a community to build a centre, and I would like to thank everyone who has helped to support us during this past season and we look forward to sharing our continuing adventures with you in the next newsletter...or on our BCBC Facebook Fan page. Enjoy the Warbler!

Congratulations Walsh Family!

Our wonderful volunteer family, Bill, Sue, Michael and Becky Walsh from Ardrossan , AB were the well deserving recipients of the ***Host Hospitality Award*** at the Alberta Parks Volunteer Conference held on September 11, 2010. Each summer, the Walsh family spends their vacation sharing their love for the Boreal Centre with our visitors and helping out in every way possible…and always with a smile on their face!! The nomination form asked what their biggest contribution was...and our answer...their love and excitement for the Boreal Centre is the energy that gets us through a very busy summer, and we just love having them here.

Congratulations from everyone at the BCBC!!

The Walsh family receive their Host Hospitability Award. From L to R, Bill Werry—AB Parks Deputy Minister, Coral Grove—Volunteer Steward Coordinator, Bill Walsh, Sue Walsh, Becky Walsh, and Michael Walsh sporting his Boreal Centre t-shirt.

Major Donation received by the Lesser Slave Lake Bird Observatory

By Patti Campsall, LSLBO Executive Director

The Lesser Slave Lake Bird Observatory Society is thrilled to announce the receipt of a major donation this summer. In July, we received a visit from a mysterious stranger. An avid birder and nature lover from North Vancouver, Stephen Partington came up to Slave Lake to visit an old school friend and explore the boreal forest. During his visit, he made a special request to visit the Boreal Centre for Bird Conservation. Over his few days with us; he fell in love with the Centre, the staff, our programs, the banding lab, and most importantly, our vision for the future. He believes strongly in what we do, and before he left, he presented us with an amazing donation for $22,222.22. Wow!!

We have since discovered that Stephen is a renowned naturalist in BC. He is an active member in Nature Vancouver and was recognized for being instrumental in the establishment of the Port of Vancouver Conservation Area. For this work, he received a commemorative 125th Anniversary of the Confederation of Canada medal in 1993 for being an outstanding naturalist and the Vancouver Natural History Society Davidson Award for Extraordinary Achievement in Conservation & Education in 1994. He has spent his life volunteering with numerous conservation organizations and public advisory committees across the Vancouver and Fraser Valley areas. We continue to chat about boreal ecology, nitrogen fixation along the shores of Lesser Slave Lake, share some laughs, and BCBC future dreams...and we know that we have made a life long friend. Our plans are to use this funding to support some of our special projects at the LSLBO and Boreal Centre. It is always a challenge to secure annual funding for all the exciting programs that we would like to undertake at the Boreal Centre...and this donation was a real gift during a difficult time for non-profits organizations.

We would like to thank Stephen for his generous commitment to our society. We do this work because we love it...and it is wonderful when other people share that excitement and passion. Everyday, we talk about the importance of creating connections between people and nature; little realizing some of the incredible connections that can happen as a result! Thank you Stephen for making this a summer to remember.

Left, Stephen Partington, Below: Stephen on the shores of Lesser Slave Lake with his friend.

Have you renewed your LSLBO membership???

Your 2009/2010 membership expired on June 1st, 2010

If you would like to:

- Support the important research and monitoring work of the LSLBO
- Assist our education programs for regional schools, community programs, and special events.
- Receive up-to-date info on the LSLBO & BCBC events
- Receive bi-annual Warbler Newsletters
- Have an all-access pass to the banding station
- Have *exclusive* access to Northern Saw-whet owl banding
- Receive 5% off at the BCBC giftstore
- Receive discounts on classes and workshops at the BCBC

Then we urge you to please renew your membership soon!

The LSLBO is a non-profit society and we rely on the generosity of our members to continue our current projects and create exciting new ones in the future.

LSLBO History Continued… Research and Data Collection

By Nanci Langford, former editor

Land bird migration monitoring, the first activity of the LSLBO, began in 1993, and over 53,000 birds have been banded during spring and fall seasons of the period 1993-2010. The 50,000th bird was celebrated on September 29, 2008. Ninety nine different species of birds have been banded at the LSLBO over its 17 years on the site (*make that a 100 species as of Sept 9/10!)*

Other monitoring projects have followed over the years. Monitoring Avian Productivity and Survivorship (MAPS) began in 1994, and the LSLBO operates four of only six MAPS sites in the boreal forest. The LSLBO is Alberta's northern-most migration monitoring station and became a member of the Canadian Migration Monitoring Station in 1999. Christmas bird counts, initiated in 2000, involve about twenty volunteers and have been conducted every year since 2000. A census of nesting and staging waterfowl, in conjunction with Bird Studies Canada and the Federation of Alberta Naturalists was started in 2001. The Canada Warbler Research Project was introduced in 2004 and the Northern Saw-whet Owl banding program was inaugurated in August 2004 in cooperation with other banding stations in Western Canada.

The LSLBO achieved an important research milestone by earning an Important Bird Area designation in June 2000 for the Western Grebe and Tundra Swan at Lesser Slave Lake, and for its concentration of land birds. Frank Fraser points out that the IBA designation is a unique one as it covers three categories, and in particular recognizes the concentration of land birds in the fly - through area between the lakeshore and Marten Mountain. This concentration designation is a very rare one in Canada. Fraser is unequivocal about both the reason for the designation and its importance. He credits the excellent research conducted on both land and water birds by the LSLBO for the IBA designation, and indicates that they brought access to new funds for an IBA educator position for the society.

Volunteers are integral to the success of research programs. Bird Banding reports show the hours of service by volunteer banders throughout the LSLBO's existence. Former banders in charge Stefan Jungkind and Jul Wojnowski provided countless volunteer hours and still provided their expertise after their formal LSLBO commitments were over. Steve Lane took the initiative to establish the Christmas bird count as an annual LSLBO program, and organized the first four counts. The Christmas count relies on volunteers and LSLBO members always show up, even when temperatures are extreme. Wayne Bowles was the chief organizer of the Project Feederwatch program, in which Aaron Lehman was also involved, and both were volunteer researchers, under Frank Fraser' s direction for the birds of forested landscape project, recording sounds and activity of the Swainson's Thrush and the Hermit's Thrush. Aaron has been a steadfast volunteer over the years, assisting Stefan Jungkind with his spring breeding bird surveys, contributing to the Alberta Bird Atlas project since 1997, the Baillie Birdathon, the tundra swan study, and working on the Lakeshore Protection Committee.

Aaron Lehman extracting a yellow warbler

By 2008, the research projects of the LSLBO expanded to include the Canada Warbler Project . The Canada Warbler (Wilsonia canadensis) is one of the least studied warblers in North America, however evidence suggestions populations have been in decline for the last 30 years. This study of locally breeding populations helps researchers to better understand the breeding ecology of this species.

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Here is some more background information on the many core research and monitoring programs at the LSLBO:

The Owl Monitoring Project – The Northern Saw-whet Owl (Aegolius acadicus) is a nocturnal owl species with a large breeding range that includes the boreal forest in the Lesser Slave Lake Provincial Park. This research monitors long term population trends to provide further insight into the demographics and biometrics of the owls.

Migration Monitoring – The Lesser Slave Lake Bird Observatory is part of an international effort to monitor land bird migrations using daily mist netting (capturing birds in nets using a procedure developed at the Manomet Bird Observatory), visible migration counts (recording every bird species observed within a defined space at set intervals) and casual observance.

The Christmas Bird Count – The LSLBO is a participant in the annual Christmas Bird Count conducted between mid-December and early January in over 1800 locations across Canada, the United States and Latin America. This supports a huge ongoing database of information on the distribution and numbers of North American Birds.

Project Feederwatch – Is a winter-long survey of birds that visit feeders in backyards, nature centres, community areas and elsewhere in North America. This helps scientists track the broad movements of winter bird populations, and the long-term trends in bird distribution and abundance.

MAPS –The Monitoring Avian Productivity and Survivorship program was created by the Institute for Bird Populations to assess and monitor vital rates and population dynamics of over 120 species of North American land birds. As one of just six Boreal MAPS sites in operation throughout Canada, the BCBC lies within the Boreal & Arctic Canada Region and contributes data of national significance.

The LSLBO also prepares and conducts unbiased research on behalf of corporate and government agencies needing to collect data on the boreal forest. The creation of the Boreal Centre for Bird Conservation has allowed the LSLBO to expand its mandate, to offer independent researchers opportunities to study the ecosystem of Lesser Slave Lake Provincial Park. The LSLBO facilitates and welcomes interest from a variety of researchers including:

- birders and naturalists, both as individuals or in clubs, with interests in conservation initiatives and citizen science
- individuals working on requirements for Masters or PhD programs
- educators looking to deepen their knowledge in related areas, and
- Corporations needing to conduct environmental impact assessments of existing or planned activities in forestry, oil & gas and other industries.

In the fall of 2007 the LSLBO hosted the General Meeting of the Canadian Migration Monitoring Network, a group representing all of the migration monitoring stations across Canada. In 2009, the LSLBO and Alberta Parks entered into a research partnership that would see the establishment of academic research projects at the Boreal Centre field station. Core funding was provided by AB Parks and key research questions were identified by the LSLBO. In 2010, Dr Erin Bayne from the University of Alberta joined the project and the first field season for these projects was undertaken this summer. We are anticipating that it is the first step in a long term research program with the U of A and the LSLBO.

Former BIC, Stefan Jungkind tailgate banding

Jul Wojnowski (right) with a banding lab tour at "Fraser House"

Research Projects at the LSLBO

By Richard Krikun, Bander-in-Charge

The summer of 2010 marks the 17th year that the LSLBO has been monitoring songbird populations. The three core monitoring programs we have operated over the 17 years have been spring and fall migration monitoring and Monitoring Avian Productivity and Survivorship (MAPS). Maintaining standard operating protocols is necessary to derive population trend data, so only minor operational changes have occurred to the core projects over the past 17 years. Standard protocols include operating the same number of mist nets in the same location over the same period of time each year. Even with standard protocols there is always yearly and seasonal variation in the number of birds banded.

However, based on our capture rate data, the LSLBO is banding fewer birds. For example, the 2010 spring migration banding was one of the lowest in the LSLBO's history with 636 birds banded. Why was the banding so slow this spring? This is one of a few questions that we hope to answer with a new research partnership between the University of Alberta, Alberta Parks, and the LSLBO. This partnership allowed for several new projects to be initiated over the summer of 2010 which will help better understand migration patterns observed at the LSLBO as well as focus on studying movement patterns and habitat needs for specific species.

1 of 2 new aerial nets

The banding totals over the past few spring and fall migrations indicate that the LSLBO has been catching fewer birds. However, it is unclear if the declining capture rate is a result of fewer birds migrating through the area or if another factor is affecting our ability to catch birds. The vegetation around the standard net lanes has been growing and the canopy is now well above the maximum height of the existing mist nets. It is quite easy for birds to fly safely through the trees and right over the nets. We have erected two new pilot aerial nets that double the height of the regular nets used at the LSLBO to determine the effects that vegetation growth has had on banding. These aerial nets will have better coverage of the canopy and will determine the number and species composition of birds missed by the normal mist nets. These aerial nets were tested through the fall migration of 2010. The results of the aerial netting may be used by the University of Alberta in the future to determine the rate of vegetation growth to climatic shifts and how it affects migration patterns.

An additional migration question that the research partnership will attempt to shed light on is the timing of fall migration at the LSLBO. The LSLBO is located in the boreal forest and many of the species we are interested in monitoring the migratory populations of also have local breeding populations. For accurate migration monitoring data the breeding population should be separated from the migrants. Fall migration monitoring begins mid-July at the LSLBO. By the third week of July we are banding a large volume of young birds, many of which are in heavy juvenile plumage and have not completed their first moult. This indicates that these are

The elusive ovenbird

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locally produced young, but it is impossible to determine how far these birds have travelled. To determine the timing of when local birds have moved out of the area and migrants from further north begin to pass through, we are using stable isotope analysis. Feathers collected from fall migrants will be analysed for the proportions of hydrogen isotopes, which will help to determine the region in which the feather was grown. Correlating dates and feather growth locations will help determine the migratory timing which will ultimately improve the migration monitoring data collected at the LSLBO.

A third project conducted over the summer of 2010 focused on ovenbirds. Though the LSLBO provided some assistance to the project, the majority of the work was conducted by Javan Green, an honours student from the University of Alberta. This was a comparative study to determine natal dispersal distances between ovenbirds in two different forest types. It is hypothesised that young ovenbirds will disperse over larger distances in the boreal forest of Alberta compared to the Acadian forests in New Brunswick because of different historic disturbance regimes. Javan's role was to collect feather samples from breeding ovenbirds. These feathers will be analysed for stable isotopes to determine which geographic region the feather was grown. Then Javan will be able to determine how far the first year breeding ovenbirds travelled from their natal grounds.

Javen Green extracting a bird from the net

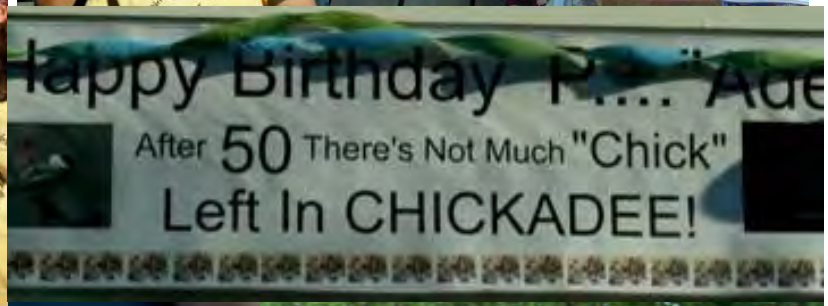
The final project conducted over the summer was the first step in developing a very important study. In February 2010 Canada warblers were listed as a threatened species under the Government of Canada's Species at Risk Act because of severe population declines over the past 40 years. Habitat loss on both the wintering and breeding grounds is suspected to be the major factor of the decline. Unfortunately, Canada warblers are a poorly studied species and its habitat requirements are not fully understood. The forest surrounding the LSLBO supports a high density of breeding Canada warblers. We have conducted preliminary work on the individuals breeding around the banding lab and know the timing of breeding events for this species. However, we do not know what makes this patch of forest such good breeding habitat for Canada warblers and if there are other areas in the Lesser Slave Lake Provincial Park which have similar breeding densities. Our first step was to conduct random point counts over the Provincial Park to find more Canada warblers and compare vegetation features of those areas. The second step was to conduct extensive vegetation surveys of the area at the LSLBO to discover what makes good Canada warbler breeding habitat. This data will be extremely important for identifying critical breeding habitat for this threatened species, and also provide focus for future work on this species. The LSLBO is hoping that in the future we will be able to continue our research partnerships with the focus on learning more about Canada warblers.

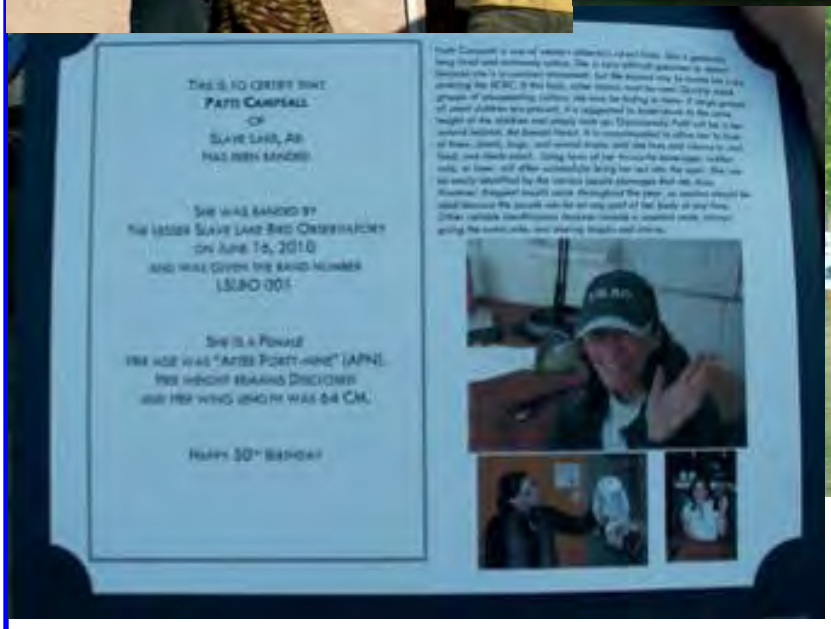
The Canada warbler

By Richard Krikun

Patti's 50th Birthday Party

Our lovely Executive Director had a milestone birthday this year. The staff, the LSLBO board and her friends decided to throw her a roast.. errr... I mean party to celebrate. It was a lot of fun for everyone!





Yoga Retreat

By Charity Beadow
Executive Assistant

On July 24th I was lucky enough to get the day off so that I could go on the Boreal Centre's first ever Yoga Retreat. What a treat! Nearly 20 of us met our instructor, Heather Loeppky and our BCBC guide, Fawn Jackson at the Marten River Campground on a beautiful Saturday morning. From there we hiked and chatted our way along the Trans Canada Trail, taking in the lovely scenery while we went. After about 45min on the trail we entered the bushwhacking portion of our journey. This was quite an adventure for some participants, but it proved to be worthwhile when we got to our destination. At the bottom of a somewhat slippery slope awaited our very own private beach. There couldn't have been a more soothing, relaxing place for our retreat, it was perfect!

As we all took our places for our ashtanga flow yoga session we could see the clouds rolling in across the lake. The winds pushing them were a little chilly, but it created a real sense of being in touch with nature. Everyone was all smiles as we dug our toes into the cool sand and moved between positions. Yoga mats are not required when doing yoga on the sand! Heather, our instructor, who teaches a class at the

Lion's Breath Studio in Edmonton, was amazing. She had such an infectious smile and warm heart that you couldn't help but feel good while stretching. For each pose she provided a few alternatives for people with different levels of experience and flexibility.

The most fun (and the funniest) part of the session was the group Utthita Hasta Padangusthasana pose that we successfully attempted. To do this, we formed a big circle and then one by one lifted our neighbour's heel for them to help with balance. Visually this was very amusing as our giant chain of people wigged and giggled on one leg each. We were quite impressed with ourselves that we pulled this move off! Another highlight for me was the meditation after doing the yoga session. The rain drops were falling ever-so-lightly on us as we lay on the sand smelling the lavender aroma-therapy oil that Heather kindly applied to our necks. It seemed like an extra challenge to keep my mind clear with the drip drip drip of rain drops hitting my forehead-I liked it!

The group doing the Utthita Hasta Padangusthasana pose

Luckily, the storm moved just to the north of us and the sun began to shine just in time for our picnic lunch. We all pulled up a log or a spot on the sand and enjoyed a well deserved meal. Just about the time everyone was ready to start our journey back to the campground, it started to rain again, making the bushwhacking portion a little more adventurous. No worries though, since as soon as we got back onto the Trans Canada Trail, the sun and the heat came out in full force to warm us up again. We very much enjoyed our hike back, talking about how much fun we had just had. The united consensus among the group was that we ABSOLUTELY MUST DO IT AGAIN!!

The BCBC has received an Access and Activity Grant from Mountain Equipment Co-op! It will be used for promoting winter activities in our community. Thank you to MEC for enabling us to acquire a FULL CLASS SET of snowshoes and several more sets of cross county skis and boots.

ALL SNOWSHOES AND SKIS ARE AVAILABLE FOR EVERYONE TO USE FOR FREE!!!

Frequently Asked Questions

By Nicole Linfoot, Assistant Bander

Hi, my name is Nicole Linfoot and I am back for my second summer as the Assistant Bander at the LSLBO. Over the last couple years I have fielded a lot of questions from interested visitors coming out to see what we do. I have been asked just about every question under the sun and I thought I would compile a few of the most frequently asked ones to share with you.

What is the rarest/biggest/smallest/meanest/coolest etc. bird you catch or have caught?

This question is often asked with great enthusiasm by younger children who rapid fire through all the 'ests' that they can think of… But everyone, not just the children, love hearing the answers. The rarest is a tricky one, if by rare one means most out of its range then the answer is probably the northern mockingbird banded in 1998. According to *The Sibley field guide to Birds* the mockingbird's normal breeding range extends as far north as Utah and the listed range where it can be found rarely (no more than a few sightings per year) extends as far north as Edmonton. However; if by rare, a person means a bird with a vulnerable population, then the answer could be the Canada warbler. We actually catch a fair amount of these birds but they have just been listed as a federally threatened species this year due to dramatic population decline over the last 40 years.

A diminutive golden-crowned kinglet

The biggest is easy, it was a northern goshawk. These large forest hawks have a wingspan of 2 ½ feet and can tip the scales at over 2 pounds.

The smallest bird we catch is the ruby-throated hummingbird. These tiny little birds end up in our nets about once a year and we do not have the permits to band them so they are promptly released. The smallest bird we catch that we can band is the golden-crowned kinglet that has a wingspan of 7 inches and weighs in at a paltry 6 grams.

There are some strong contenders out there for the meanest bird… Woodpeckers are notorious for drawing blood when they drill into the back of a bander's hand, grosbeaks have a tremendously strong bite, and sharp-shinned hawks won't hesitate to sink their talons into any finger that isn't diligent… but pound-for-pound the Black-capped chickadee puts them all to shame with its sheer tenacity! They are fighters and don't stop biting, pecking, screaming, kicking and clawing from the minute they hit the net until they are released.

As for coolest, that is very subjective, every person you ask will likely give a different answer and every person will be right.

How long do birds live?

A very hard question. Very hard indeed. There are two ways of looking at this question. One: What is the average lifespan of a bird? and Two: What is the potential lifespan of a bird? These may sound like the same thing but they are quite different. The average lifespan of a bird is quite low because an average looks at the entire population. Most migratory songbirds (~50%) don't make it through the first year of life because the pressures of migration are so high. This high juvenile mortality rate pulls the average down to probably only 1 to 2 years. As for the potential lifespan of a bird it is a lot higher than many people think. This is where banding plays a huge role; once a bird is banded we can start to see it returning year after year and know how old it is. Some examples of older birds we have seen include a black-capped chickadee originally banded as an adult in 2000 that was recaptured in 2006 making it at least 8 years old and an alder flycatcher originally banded as an adult in 1996 that was recaptured in 2005 making it at least 10 years old!

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How do you age birds?

This question is usually asked directly after the previous question. Aging birds is a fairly complicated process but basically it involves understanding each bird's moult strategy and comparing different feather tracts. I'll explain better by outlining a couple years in the life of a

This is an example of a younger bird where you can see the difference between the black adult feathers and the worn grayish juvenile flight feathers

bird. First the bird is born; soon after birth it grows its first set of feathers called its juvenile plumage. These feathers are low quality (pointy, dull and narrow) because the bird grows them in extremely quickly so that it can move off the nest to a location where it is less vulnerable to predators. Its juvenile plumage looks different than the adult bird's; it is more cryptically coloured so the chick can camouflage. These birds are easy to age, simply put they look like baby birds and they are what we call a Hatch Year bird. Soon after leaving the nest the bird will replace all of body feathers with adult feathers but retain most of its juvenile flight feathers, this is called the formative moult and now this bird looks like an adult. These birds are still classified as Hatch Year birds and we recognize them by seeing the contrast between the high quality new body feathers and the lower quality retained juvenile feathers. The bird will then migrate south, spend its winter in the south and come back here. We are now in the spring and the young bird is still sporting its formative plumage: adult body feathers and juvenile flight feathers. This bird would be aged as Second Year, not because it is two years old but because it is in its second calendar year of life. This bird would then breed and right after breeding in the fall it will go through another moult, this one complete. It will replace every feather on its body with high quality feathers. We would call this bird an After Hatch Year bird because with all adult plumage we have no way of knowing what summer it was born in, only that it wasn't this one. This bird would then migrate and when it returns in the spring we would see that it has all adult plumage and call it an After Second Year bird. This is the most basic strategy, its get a lot more complicated when we start looking at birds that have extra moults (such as warblers that have an alternate moult on the wintering grounds where they grow in their flashy breeding plumage) and birds that moult at strange times of the year or have more than one incomplete moult. Overall the concept is easy but applying it takes lots of experience, practice and patience.

What are the yellow sticks for?

Anyone who has come out to lab will have probably noticed the yellow sticks that are lying at the base of each net pole; these sticks are vital to our operation. The yellow sticks have a unique shape, they are long and have a forked prong at the end. This basic form makes them ideal for compensating for the difference between the average reach of the banding staff and the average height of the top of the nets. Their prong is perfect for slipping under the top line of the net and their length ideal for sliding that top line up the pole to its full height. So, basically, we are too short to push our nets up all the way and so we find awesome sticks and paint them yellow so that we don't lose them.

Find our videos on You Tube by searching Boreal Centre for Bird Conservation. We have 4 posted so far!

Find us on Facebook

Find info on upcoming events, view photos, read banding lab reports and chat with fellow birders!

Upcoming Events

LSLBO members and friends are invited to our...

3rd Annual Saw-whet Social
(and AGM)

7:00 p.m.
Saturday, October 2nd, 2010
at the Boreal Centre

Come out and help us celebrate another great season for the LSLBO with a Potluck social and Owling!!
Featuring a special owl presentation by Richard Krikun

For more information or to RSVP please call 780-849-8240

The Search for the Northern Beach Fern

By Chris Dodds, Visitor Services Supervisor

On July 24th and 25th, the Lesser Slave Lake Provincial Park was visited by a small number of dedicated volunteer and professional botanists looking for rare plants. I joined them as they searched for two different species of plants which live in two very different habitats. These plants are the sitka willow and the northern beach fern. While both plants were found during their visit to the Lesser Slave Lake Provincial Park, this article is concerned with only the northern beach fern.

The northern beach fern is a small fern that is on the southern extent of its range here in the Lesser Slave Lake Provincial Park. In Alberta the fern is labelled as an S2 plant, which means that there are between 6-20 occurrences or that there are many individuals within fewer occurrences. The northern beach fern can be found further south in other parts of Canada, but the northern boreal forest provides an excellent home, while more southern habitats like the aspen parkland and the prairies do not. It can be found here in moist areas on Marten Mountain and on the Lily Lake Trail.

Northern Beach Fern Photo By Leslie Monteleone

The fronds grow 10 to 50cm in length. I like to think of the plant almost like a miniature fern lawn chair. Two of the blades extend in the opposite direction from the other blades and slightly rise up before drooping back down, giving it that reclining lawn chair look. The northern beach fern should not be confused with the oak fern or the northern oak fern, which have 3 blades of equal length.

We were not the first group to search for the northern beach fern in this area; another person had already visited Lily Lake and found the fern along the trail by the boardwalks. Our group discovered our first specimen approximately 1.5km down the trail by the first board walk, then we found another, and then another. It turns out that this fern really likes moist areas and that when one fern was found, others were soon found with it. As soon as we moved out of the moist areas, the fern disappeared. The trend continued at almost all of the boardwalks right up until we reached Lily Lake. Around Lily Lake we found one more occurrence near the south end of the beaver dam in a small depression. Unfortunately, time did not permit us to do much more searching to find any more plants. However, it was reassuring to know that the northern beach fern is still alive and well in the Lesser Slave Lake Provincial Park.

Chances are there are many more occurrences of northern beach fern on Marten Mountain, and other rare plants and lichens as well. With a little bit of time and patience, they very well could be discovered in the future.

If your are interested in learning more about native plants in Alberta, especially endangered or threatened ones please visit; http://www.anpc.ab.ca/content/index.php for more information.

My new summer hobby

By Cori Klassen
Boreal Educator

I'd like to share a little known fact about myself with you. I am a 3. Now, for those of you who are unfamiliar with the bird identification skills grading system, I'll sadly let you know that being a 3 means I can only correctly identify less than 50% of the birds that can be seen at the LSLBO's migration monitoring station. I blame the fall warblers and all the other small birds that fly just out of my binocular range at high speeds. I have to admit- they all look the same to me at that altitude and speed! I have complained about my number to Richard, the LSLBO bander in charge, who also happens to be in charge of deciding what number people are. He, being the kind person he is, reassures me that pretty much everyone who comes out to the migration monitoring station, except for him and Nicole, the assistant bander-in charge, is a 3. Okay, that makes me feel a bit better.

Cori extracting a Myrtle warbler

Well, I may be very bad at identifying the majority of the small flying birds but if a bird happens to sit still on a nearby tree within binocular range, or if I am lucky enough to extract one from the mist net then I would have to argue that I am a solid 2-and can identify between 50-75% of the species.

I spent a week this summer volunteering at the LSLBO's migration monitoring station and even though some of the birds I extracted from the nets had me stumped,

Cori holding a swainson's thrush

there was one thing I was certain of: this was the best thing I've ever volunteered my time for. There is something so incredible about holding a tiny songbird that is migrating to Central or South America for the winter, in your hands. I extracted my first bird on my first day volunteering; it was a Black and White warbler. On my second day I extracted a handful of birds and by the end of the week I had taken close to 50 birds out of the nets.

Needless to say, I didn't want to go back to work when I knew I could be doing this instead so I struck a compromise and continued to volunteer at the lab for a few hours in the early morning a few days a week. Some highlights so far: extracting an Evening Grosbeak from the net (ouch!), extracting a flock of American Redstarts from netlane 6 all by myself and seeing a black bear with 3 cubs one morning on the road to the banding lab. Of course learning a new skill, enjoying many beautiful mornings in the great outdoors and spending time getting to know Richard and Nicole better has also been pretty great. I am really looking forward to banding my first bird which should happen any day now and I'm also looking forward to many more mornings spent at the lab! Did I mention how addicting this is? Oh and I also look forward to improving my bird identification skills number and hope to go from a 3 to a 2 to maybe even a 1 someday!

PS...and yes...she finally did get to band a bird!

Nicole's Cool Bird Facts

By Nicole Linfoot, Assistant Bander

On cold winter nights black-capped chickadees are able to lower their body temperature by 10-12 degrees in order to conserve energy.

Crossbills are the only type of bird in the world that can move their upper and lower bill side to side in opposite directions.

Photo by Ken Orich

The first bird banded in Canada was an American robin in 1905.

Juvenile robin photo by Thomas Bennett

The red-eyed vireo has the record for being the most vocal bird, one bird was recorded singing 22,197 songs in 10 hours.

The common name "whiskey jack" for the gray jay is the anglicized version of Wisakedjak: the trickster in aboriginal mythology.

Photo by Thomas Bennett

Photo by Ken Orich

The first bird banded in North America was a black-crowned night-heron in 1902

Over 40% of all conflicts between rival male loons end in a fatality.

The bird capable of the fastest sustained level flight is the red-breasted merganser at 161km/h.

Birds have hollow bones, making them so light that for many species their feathers weigh more than their entire skeleton.

Songbird Festival 2010

This June, the LSLBO celebrated our Annual Songbird Festival with over 300 of our closest friends. Great workshops, delicious pancakes, fun activities, wonderful staff and incredible volunteers. Thank you to everyone who took part, and here is just a small taste of all the fun. Hope to see you next summer!!

Songbird Festival 2010

Volunteer Journal

By Thomas Bennett

In the spring of 2010, I enquired into getting a volunteer job for the summer in a park. I called Brad Marshall, who is the Director of Volunteer Services for Alberta Parks. I was expecting to get a campground host job, which means registering late arrivals, selling firewood and helping out wherever needed in the campground. But when Brad found out that I was an avid birder, he offered me the job of working at the Boreal Centre for Bird Conservation. I love birds and this seemed like the perfect job for me. I spent February, March and April anxiously waiting for my job to begin.

In May I arrived at the Boreal Centre and met the staff. You could not ask for a better group of people to work with. Everyone is very friendly and made me feel very welcome.

Since my arrival I have done many interesting things. I spend many days greeting the visitors at the Centre and answering their questions about birds and other animals. I really enjoy talking to all the different people about the birds that they have seen or would like to see.

I was given some very unexpected tasks as well. One day I was asked to make an ovenbird decoy that was to be used as a lure for a person who was doing Ovenbird research. I am not much of an artist but to my surprise, the Ovenbird turned out fairly well and

Thomas teaching some students bird song ID

next I was asked to make a squirrel for a presentation at the amphitheatre in the campground. Then I spent a few days peeling bark off of small trees to be used as tipi poles.

Thomas teaching the Nature Photography Workshop

For several days I was asked to help with some school groups that came to visit the Centre. I taught the students how to identify a few birds by sound and then took them into the forest to learn the names of some plants. One of the objectives of the Centre is to inspire an interest in nature in children.

One day I taught a nature photography course. The students learned to photograph birds in the air and butterflies on the beach, about macro photography of insects and many other nature photography topics. I used some toy birds, frogs, rabbits, snakes and insects as models for the lessons. The course went very well and the students were pleased with it.

Starting in August, I was the leader of the “Bug Safari”, which involves taking a group of people into the forest to search for insects and to learn a bit about them. This program runs every Sunday morning

Thomas leading the Bug Safari

during the summer. I really enjoyed doing this. One person found a Splendid Dwarf Spider which is a very tiny spider that is half black and half red. I found a couple of Ribbed Pine Borers which is a type of tree-boring beetle. From about mid-July to mid-August the Police Car Moths were in abundance. This is a pretty diurnal moth that most people mistake for a butterfly. They only live for about one month. They are called the Police Car Moth because they are black and white like most police cars were at one time. I talked about insects in general and a few in particular including the

Police Car Moth Photo by Thomas Bennett

Mountain Pine Beetle which is causing extensive damage to the pine trees in British Columbia and has now spread to Alberta. I also showed people an aphid farm. This occurs on a plant where a group of ants care for aphids much like shepherds looking after their sheep. Normally the aphids eat the plant and other insects, such as lady beetles, eat the aphids. But since the aphids produce a sweet nectar that the ants love to eat, the ants protect the aphids from predators in return for this nectar. It is a very interesting relationship.

I saw six new birds during my time here, bringing my total to 310. The most unexpected was a couple of Surf Scoters that flew past the centre one day. Surf Scoters do not live in Lesser Slave Lake Provincial Park but they pass through on migration. Scoters are ocean birds that breed in fresh-water lakes north of the Boreal Forest. In mid August they are on their way back to the coast. The centre often has many interesting lectures and I attended several. The topics cover all types of nature items such as songbird migration, invasive plants, bats and owls. I am always looking to increase my knowledge of nature. The program about bats was very interesting and I was able to get some good photos of a captive bat that the presenter brought for display. Later, we took a walk in the forest to look for bats using a

Little Brown Bat—The star of the Bat Presentation!
Photo by Thomas Bennett

detector that enabled us to "hear" their sounds which are normally out-of-range of the human ear. I am looking forward to an upcoming program on owls.

I made a few trips to the banding lab where birds are captured in mist nets and banded. When banded birds are recaptured we learn information about their migration routes and longevity.

It was a great way to spend the summer. I spent my spare time hiking in the boreal forest and looking for birds and other critters to photograph. The work was fun and the staff was very enjoyable to work with. If you like camping and being in the great outdoors, I would highly recommend doing some volunteer work for Alberta Parks.

Do you enjoy receiving updates and newsletters from the LSLBO? If the answer is yes then consider taking the next step. If you are not already a member, please join us!

Become a part of our research and education programs as a member or volunteer at our banding station this spring.

To our current members and volunteers, we greatly appreciate your continued support. Thank you!

Fawn's Fun Facts

By Fawn Jackson
Boreal Interpreter

I started this summer out as a general nature enthusiast but must admit that my birding knowledge was lacking luster. Bird facts continued to amaze me throughout the summer, so I've decided to share some of these "Really? Wow!" moments with you. Enjoy!

1. An Eagles nest can weigh up to one tonne and be up to 2.5 meters across.
2. Common Loons have solid bones that make them less buoyant than other birds.
3. American White Pelican's work together to herd fish into schools for easier preying.
4. The Red Breasted Nuthatch smears the edge of their nest with sap to stop insects such as ants from making themselves at home.
5. The Swainson's thrush has the most beautiful song in my highly valued opinion and you should look it up!
6. Yellow warblers are often victims of cowbird parasitism; however they are often able to identify the eggs as foreign and abandon the nest or build another nest on top of the old one.
7. The ovenbirds song has a ventriloquist quality to its voice that makes it difficult to locate.
8. The pygmy owl has false eyes on the back of its head to defend itself against mobbing chickadees and birds of the like.
9. Woodpeckers' tongues can be up to four times as long as their bill.
10. The drumming sound of the roughed grouse is often believed to be the sound of the wing beating against a log; however it's actually the cupping of their wings beating against the air that makes this memorable sound.

Provincial Park Explorers Grade 4 program

Fawn's Weasel Amphitheatre Show
Photos by Thomas Bennett

Tipi Building Lessons

By Charity Beadow
Executive Assistant

This spring the BCBC purchased a tipi made by our Artist-in-Residence, Margaret Cardinal.

At our Songbird Festival we received a lesson on how to put it together from David McConnell and Margaret. I really enjoyed this process, and it was especially gratifying to see the tipi standing after spending a couple of days in the rain stripping the bark off the logs for the tipi poles! I say it all the time, but at the Boreal Centre you really never know what you might do during a day's work!

Step 1: Sorting the poles. You need 3 straight, equally-sized poles for the tripod and one slightly longer one for the tipi pole.

Step 2: Learning how to tie a half-hitch knot and tying poles together

Step 3: Building the tripod. Ensure you create an equilateral triangle. 8 more poles are then placed equally around the circle. It is important that the door faces east, so there must not be a pole where the door will be.

Step 4: Attaching the canvas. The canvas is tied to the tipi pole. Once the tipi pole is placed, the canvas is unrolled around the frame.

Tipi Building Lessons

Step 5: Installing the flap poles. This task requires A LOT of patience! There are 2 little pockets that you must get the tips of the poles into in order to set the flaps up. Very tricky business!!

Step 6: Joining the two sides of the canvas. Use wooden pins, starting from the top set of holes and working down to the door.

Step 7. Pegging the tipi to the ground. Use Saskatoon pegs to stretch the canvas evenly around the tipi and attach to the ground securely.

Isn't it beautiful? I think so. Thank you to Margaret and David for this tipi and for all of the help in learning to set it up!

Thank you to everyone who volunteered at the Boreal Centre for Bird Conservation and at the Lesser Slave Lake Bird Observatory this spring and summer! We could not do what we do without your help. We appreciate it very much!

Wondering what is happening at the LSLBO and BCBC??

Check out our Calendar of Events on

myslavelake.com

http://www.myslavelake.com/dir/calendars/boreal-centre.php

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To become a member of the LSLBO, please fill out the information below and send this form, along with a cheque or money order to the address below.

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Thank you for supporting the Lesser Slave Lake Bird Observatory!

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