LESSER SLAVE LAKE BIRD OBSERVATORY

The Warbler

Summer 2013

Celebrating 20 years of Migration Monitoring at the LSLBO!

Left: One of our founders (Steve Lane) tailgate banding in 1994.
Above right: New banding lab goes up in 1995.
Below right: Welcome to the Lesser Slave Lake Bird Observatory!

Executive Director Update
By Patti Campsall

To put it simply... time flies when you're having fun!

It is hard to believe that it was 20 years ago that a small group of birding enthusiasts decided to start up a Migration Monitoring Station on the shores of Lesser Slave Lake. Today, those visionary individuals reminisce about the days of tailgate bird banding, work bees at the banding lab and the challenge (and fun) of learning the world of bird banding. In their wildest dreams, our founders never imaged the growth and excitement that the LSLBO would experience over the next 20 years.

As we wrap up our 20th season of migration monitoring at the LSLBO, it is time to celebrate our some of our many accomplishments!!

- Successful completion of 20 continuous years of monitoring of the migratory and breeding birds at Lesser Slave Lake. Over 60,000 birds banded, 251 species observed and 104 species banded! That is a huge accomplishment for our small non-profit society! Yeah!!
- The LSLBO has just signed a new 5 year Operating Agreement with Alberta Parks to continue the delivery of great programs and services at the Boreal Centre for Bird Conservation. A wonderful showcase for the conservation work of the LSLBO!
- Just completed 2 years of field work on our special LSLBO Research Project on the breeding territory requirements of the Canada Warbler—a threatened boreal species.
- Development of a long term research partnership with the University of Alberta and Alberta Parks to gain a deeper understanding of our monitoring data.
- Delivery of education and community programs to over 40,000 participants over the past 7 years thanks to the Boreal Centre and our education partnership with the Lesser Slave Forest Education Society. Our two organizations currently share two full time educators that provide innovative, fun and hands-on programs for all ages.

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- Long term Biodiversity monitoring projects delivered for local forest industry on breeding birds and owls.
- Wonderful connections fostered with our members and local community.
- Dedicated board support to provide valuable and strategic vision for our operations.

The LSLBO has accomplished many things over the past 20 years, but my highlight is the team of dedicated and passionate individuals that deliver our programs. They love their jobs and it shows. Each day they are "living the dream" as a young volunteer recently observed. The wealth of staff knowledge, and experience at the LSLBO is astounding! And it has provided us with great program continuity in our data collection and program delivery. Did you know…..

Richard Krikun:	10th season banding at the LSLBO
Patti Campsall:	8th year with the LSLBO.
Cori Klassen:	7th year as our Boreal Educator
Nicole Linfoot:	6th season of banding

Now I have the pleasure of watching them mentor the new staff each summer as they begin their exciting careers in science or education. We have an incredible team and we are really looking forward to the excitement of the next 20 years.

So LSLBO members, friends and supporters....stand up and take a bow!

CONGRATULATIONS ON 20 YEARS OF MIGRATION MONITORING!

Right: Some of the original members are still a huge part of them LSLBO 20 years later. Aaron Lehman is still a beloved member, volunteer, Christmas Bird Counter, and even donated his amazing collection of resources to our education program.

Above and Right: Future LSLBO Bander? In early August, special banding lab volunteer Myles Grieve (age 12) spent a week "living the dream" with his mentor Richard. We loved his enthusiasm for bird banding!

2013 LSLBO Team Picture!

Each summer, the LSLBO delivers awesome research and education programs….thanks to the hard work of an awesome team! Meet our 2013 staff!

Left to right: Ryan O'Neill (Research Assistant), Della Drury (Research Assistant), Michelle Karpa (Information Officer), Cori Klassen (Boreal Educator) Susie vanderVaart (FireSmart Educator, Patti Campsall (Executive Director), Richard Krikun (Bander in Charge), Nicole Linfoot (Assistant Bander).

An Interview with a Bander

An Interview with a Bander
By: Kirk Undarich (Top Secret LSLBO Reporter)

Richard Krikun began bird banding straight out of university. He worked at the Beaverhill Bird Observatory for three seasons. After taking some time to pursue other goals, he was recruited to the Lesser Slave Bird Observatory (LSLBO) in 2004. This summer marks the 10th year that Richard has been banding at the LSLBO. We had the chance to sit down and chat a little with Richard to get an insider's perspective on what banding at the LSLBO is all about. It was assumed that banders were a reclusive bunch, but once we got him chatting he had a lot of insightful comments about his work.

Q: How did you get this job?
A: I was trying to get back into field work, but having sour luck finding a job. Out of the blue, my good friend Tyler Flockhart called me (I worked with him at Beaverhill) asking if I wanted this job. I immediately said yes. I had no idea it would lead to this. Thanks Ty for that phone call. It changed everything.

Above– Tyler (right) and Richard….still a great team after 10 yrs!

Q: You must enjoy the work, you've been here for 10 years?
A: I think this is now a career. I truly believe that our operation is making a good contribution to science and bird conservation. The fact that I really enjoy the work and spend my summers beside a lake counting birds is just a bonus. People pay good money to do this sort of thing for a vacation.

Q: Your job involves counting migrants and banding birds to collect data for population trends?
A. Yes, we are trying to get an idea the number of birds that are moving through the area every day during spring and fall migration. We use complimentary counts and bird banding to get a more accurate picture of the numbers and species moving though the area. That data is sent to Bird Studies Canada and they derive population trends. Bird banding gets a lot of attention because it gets you up close and personal with each bird and we are able to gather extra data. But the visual counts are just as important as banding, that's why we're always staring at the sky or trees when we are not banding a bird.

Q: What made you decide that this was the place you wanted to work?
A: I got hooked on this place on May 12, 2004 with my first taste of heavy migration at the LSLBO. It was a rainy morning, so we couldn't set the nets, but birds were migrating through in huge numbers despite the weather. I mean thousands of songbirds. Flocks of chipping sparrows and blackbirds were flying down the main path at head level and buzzing by our ears. We had three people on that day and all of us went on census. Tyler Flockhart and Jul Wojnowski, both extremely good birders, were calling out species and numbers faster than I could write. By mid-morning the rain stopped and we set up the nets and managed to band about 120 birds in a few short hours.

Q: So after 10 years, you must have seen a lot of birds.
A: Yes, it's actually starting to blend into one big birding blur. I don't keep track of how many or of which species I've personally seen or banded. The LSLBO has recorded about 257 species and has banding records for 103 species. Happily I've been involved in seeing a good number of the species on both those lists.

Q:What's your favorite bird?
A:The red-breasted nuthatch. We need more of those in the world. We band about one a year. I have automatic banding dibs when we get one.

Left - Richard and one of his favorite birds

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Q: What's the coolest bird you've ever caught?
A: This is a vague question. Every year we get a wide variety of common and uncommon species. Of course uncommon species get a little extra attention, because we don't see too many of them. The awesome part of biodiversity is that every species has some unique feature to it, whether morphological or behavioural, and that makes every species pretty cool in its own distinctive way.

Q:Okay, what is one of most unexpected birds you've ever banded?
A: Northern Pygmy Owl. I saw the bird in the net, but the light was poor and from a distance I thought it was a thrush of some sort. Some pretty colourful language escaped my mouth when I fully realized what we had just caught.

Q: What was one of the most fun birds you've ever captured?
A: The northern goshawk. However, this story is a very animated one and I can't do it any justice without being able to wave my arms around. Swing by the banding lab sometime and I'll tell the story the proper way.

Q: Is there one species that you would like to catch?
A: There are a lot of species that I would like to catch that are common around the lab, but because of their behaviour stay well out of the reach of the nets. Evening grosbeaks, snow buntings, American pipits, and Say's phoebes are a few examples. Oh ya, and the Lazuli bunting. We caught one in 2004, but I had to leave to lead a hike and completely missed it. It was probably in a net when I left. I have never seen a Lazuli bunting before. I have never left early to lead a hike since.

Q: What are your priorities every morning when you arrive at the lab?
A: The welfare of every bird is our top priority. We have legally and ethically binding agreements to follow rules and guidelines to ensure we follow the best practices to maintain bird safety. Additionally, we are constantly striving to improve our operation to make it that much better. Our second priority is the data collection. The LSLBO has gathering high quality migration data for 20 years, and we need to make sure we maintain that standard to create accurate population trends. We also get a lot of visitors out at the lab and we like to provide them with an enjoyable and educational experience, but if things get busy the top two priorities take precedence. This is perhaps why we sometimes appear aloof.

Q: So you like the birds, how do you like working for the organization?
A: The people are very nice. Not only that, I like to think that my supervisor and the Board of Directors recognize the work the banders put into the research projects and allow us the freedom to do what we need to do. Of course things fall through cracks and Patti makes sure I don't forget about them. Especially emails. I am absolutely brutal for following up on emails.

Q: Any shout outs?
A: Yes, to all the banders I have had the opportunity to work with here at the LSLBO: Tyler Flockhart, Nicole Linfoot, Sara Bumstead, Sara Scobie, and Aurore Perot.

Left: Richard on one of his Owl Monitoring Project adventures.
Right: Richard holding a group of students spellbound during one of our Northern Saw-whet Owl Programs.

Canada Warbler Project

By Richard Krikun
LSLBO Bander in Charge

In 2012, the LSLBO began an in-depth project studying the habitat use of Canada warblers breeding in the Lesser Slave Lake Provincial Park. The methods of the study were relatively easy: put radio-transmitters on 16 male Canada warblers and track the transmitter's signals to obtain location points for each male during the breeding season. After obtaining a minimum amount of location points we can delineate the boundaries of the males' territory, using fun analysis techniques that incorporate both minimum convex polygons and kernel density estimators! Then, when the breeding season is over, the field staff go into the territories and collect vital data on the vegetation characteristics within each territory. The goal of this is to determine the primary habitat features that Canada warblers require for breeding. This knowledge can then be incorporated into future conservation plans that will help this threatened species.

We designed this project to collect data over two field seasons. Obtaining the desired sample size of Canada warbler habitat data over one season would be extremely difficult since they are on the breeding grounds for such a short period of time. This summer we conducted the second field season following the same procedures as in 2012. Being able to repeat methods is convenient because you don't have to battle through the learning curve, but certain aspects of the project were difficult and sometimes I was kept awake at night thinking "man, we have to do that again!" But through the hard work of this year's field crew, Ryan O'Neill, Della Drury, and Nicole Linfoot, we met all of our goals and collected an absolute tonne of data. I can't wait to see the results.

The next step of the project is to actually sit down and begin the analysis on the data we collected, which will easily take a few months. Our goal is to publish the results in a peer reviewed journal. We also have the opportunity to contribute our data to a similar type project coordinated by the University of Alberta. The U of A is focusing on looking at how Canada warbler habitat is affected by various land use practises. Our data will compliment this study perfectly since we conducted our study in a protected area.

Thank you to West Fraser Timber and the Alberta Conservation Association for their funding support for the 2013 field operations. We couldn't have done it without you!

Above– Transmitter in place on a Canada Warbler
Below– Male Canada Warbler ready to be released

Banding Lab Highlights from A to Z

By Nicole Linfoot,
LSLBO Assistant bander

2013 marks the twentieth year of continual migration monitoring at the Lesser Slave Lake Bird Observatory. To mark this tremendous milestone, this year's LSLBO highlight/update for the warbler needs to be extra special. How about something cool for every letter of the alphabet?

Attached sixteen radio transmitters to sixteen male Canada warblers allowing us to collect an amazing amount of territory data for our second and final year of the Canada warbler project.

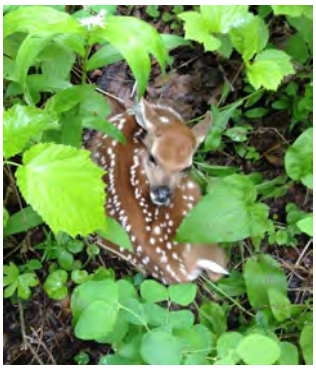
Banded the second ever northern shrike at the LSLBO!

Captured not one, not two, but three Oregon juncos; species number 103 for the LSLBO.

Dug the netlanes out from over two feet of snow to get things set up for spring migration monitoring.

Energized ourselves daily with countless litres of coffee and tea, bushels of apples and hundreds of cookies.

Forded the foot deep water that covers much of the trails at our RESI MAPS site.



Got bit by at least a billion mosquitoes, blackflies and no-see-ems while banding.

Happened upon an adorable baby deer while tracking Canada Warblers.

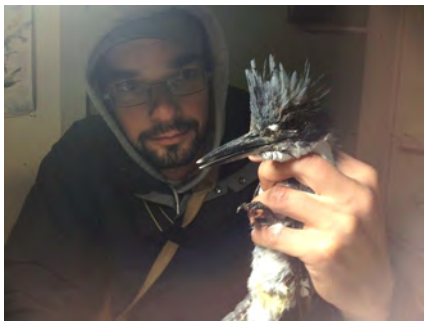
Inspired a love of birds in everyone who visited the lab??

Jumped over lots of fallen logs while walking the trails at our four MAPS (monitoring avian productivity and survivorship) stations while checking the nets for captured birds.

Kept count of over 5000 myrtle warblers joined by thousands of blackbirds and hundreds of other warblers and sparrows in a single morning.

Loving our jobs!!!!

Melted in the tremendous heat waves that have hit this summer.



Netted a belted kingfisher on the second day of fall migration!! The 104th species for the LSLBO

Observed 100 species of bird during our annual Baillie Birdathon

Plucked lots of tail feathers to contribute to the University of Alberta's biological databank for isotope analysis. This analysis will determine where the birds grew their feathers which tells us where they bred helping us to determine our catchment area and the migratory timing of the birds that pass through the LSLBO.

Quantified daily estimated totals for all bird species encountered on each of the 46 days of spring migration.

Richard has been here for TEN YEARS!

Saw a Eurasian collared dove. The 251st species to be observed at the lab.

Three threatened trumpeter swans graced the lab with their beautiful presence.

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Underwear, of the long variety were worn by banding staff for almost a whole month to combat the frigid early morning temperatures. One morning it was -15°C Brrrrr!

Visited with 463 visitors of all ages and from all over Canada. From school programs to drop-ins to events, many happy people saw many striking birds.

Spring banding took a little shoveling this year!

Wore snowshoes for almost two weeks at the beginning of spring to negotiate the deep snow at the banding lab.

Xamined the primary feathers of all 722 migratory songbirds caught during spring migration to determine their age.

Yelled, "OH MY GOD, IT'S A WOOD DUCK, I'M SERIOUS!!"

Zeroed in on ~640 exact location of male Canada warblers within their breeding territories.

Enviro-Quest Summer Camp

In early July, Slave Lake youth had the opportunity to enjoy a variety of outdoor experiences with staff from the Lesser Slave Lake Bird Observatory and Lesser Slave Forest Education Society. This was part of a new science camp called "Enviro-Quest". Some of the activities camp participants enjoyed were fishing, hiking, an amazing race, orienteering, FireSmart fun, geocaching and a tour of the Slave Lake Air Tanker Base!

Above left– campers tour a bird dog at the Slave Lake Air Tanker Base.
Above right- Keith Reason enjoys some fishing near the Weir on Lesser Slave River.

Out of the Ashes

By Susie vanderVaart,
FireSmart Educator
The FireSmart Educator is a one year project position funded through a grant from the Lesser Slave Lake Tri-Council to develop and delivery youth FireSmart Education Programs. Welcome Susie!

So being here and being the FireSmart educator, I have great opportunities to see fire ecology in action. I thought I'd share. Welcome students to my classroom.

The Boreal forest can be said to have pyro-diversity which means variety caused by fire. Wildfires can help maintain the diversity of the forest by clearing out dead, dying and diseased trees and allowing new and younger trees to grow up. Small wildfires achieve this with grace. Large wildfires (which may or may not be due to human fire suppression) may or may not be as graceful as their smaller cousins. If they are too hot, they will kill the soil and any seeds released. Currently 40% of wildfires in Alberta are caused by human error.

Jack Pine and Lodgepole Pine hold on to their cones for many years, unless they are broken off or fall off due to fire. The cones are shut like a bank vault and then super-wrapped in a waxy substance. They are pretty spiky (right) so that squirrels and other critters don't just make snacks out of all of those easily accessible and seed filled cones.

When fire comes, most times the cones just stay on the trees. Then the wax melts because of the heat and they open slowly like a flower to drop their seeds. In the forest at Lesser Slave Lake Provincial Park, there is new life rising. In the background (left) is the burnt out stump of a pine tree and these little spiky things are new pine trees beginning to grow.

The fire adds nutrients to the soil and helps new life to grow. The new life attracts all sorts of herbivores who attract the carnivores and omnivores.

Fire also attracts insects. I read an article about insects that are able to detect a wildfire and could judge based on the heat intensity whether it would be a good place to colonize. They swarm in, and start laying eggs. Then woodpeckers (who have de barked this tree to the right) and other insect lovers swarm in and start eating at the buffet.

Aspens, birch, poplars and willows don't burn as well as the pines They also don't have fire-dependent seeds like the pines, their seeds just burn. So being difficult to burn is kind of like their fire defense mechanism. They also have a few more tricks up their sleeves. One of the reasons these woody plants are so successful in the North is due in part to their quick flowering, seeding and growth rates. But mostly it's because of root suckering. Many of the trees in an area are genetically identical (clones) of one another. A very hot fire can kill the tree out right, but most fires just kill the big visible part above ground. The unseen part is what is under the soil… the roots. These roots can put up suckers in the event that the main stem is damaged or killed, just like this willow (right)

Different animals have different needs. Through forest succession, the poplar/pine forest becomes the spruce forest which is perfect for squirrels and squirrel munchers like the marten. Although some animals prefer younger forests, others like moose depends on the time of year. The ruffed grouse for instance needs: 2-10 year old trees for raising young, 10-20 year old trees

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for foraging and 20+ trees during the winter. Having small wildfires helps the grouse be able to have all of these different forest ages in a small enough area.

The Boreal Forest needs fire to be healthy. And we need the boreal forest to be healthy. The air we breathe come from trees and other plants who produce oxygen. The clean water we drink was filtered with help from the trees. And trees do a splendid job of preventing erosion and muddy water by keeping all the soil in place. Not to mention all of the products, jobs and wild game that comes from the boreal forest.

Class Dismissed

Above: View across the lake from the Boreal Centre shoreline.

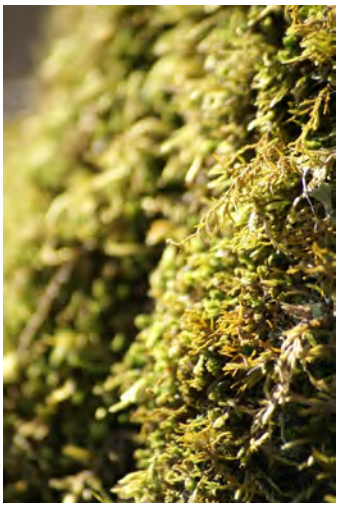
Finding Nitrogen in the Boreal Forest

By Nicole Linfoot,
LSLBO Assistant Bander

During this last winter, I had the opportunity to work on a special project funded by one of the LSLBO's most generous patrons, Stephen Partington. This project created a number of educational tools, displays and programs centered on the great mystery of nitrogen fixation in the boreal forest. So what's the big deal about nitrogen and what is the mystery surrounding it?

All living creatures require various elements to survive. Most of these elements are usable in their natural state. Oxygen, for example, is present all around us in the atmosphere and we are able to use it simply by breathing it in. Other elements we get from the foods we eat. Plants are able to assimilate and use most elements in their most common forms; the elements taken up by the plants are passed along the food chain and thus sustain all other organisms. Nitrogen is an exception. Although it is extremely common in the atmosphere, it is almost completely unusable in its natural state. There are a select few plants that are able to convert, or **fix**, nitrogen from the atmosphere into a usable state. The most well-known and widespread of these are members of the legume family (the pea family); through a partnership with bacteria they are able to use nitrogen in the air. The nitrogen then ends up in their tissues and enters the food chain. This is where the big mystery comes in; there are no legumes in a mature boreal forest, or the tundra, or bogs, or many other habitats for that matter… Where do they get their nitrogen? For years scientists have been baffled by how nitrogen gets introduced into these large and fairly inhospitable habitats. They assumed it had to be bacteria of some manner working in symbiosis with a species of plant but they couldn't figure out the key players. Only as recently as 30 years ago they discovered a type of cyanobacteria called Nostoc. Nostoc can live freely in the soil and fix nitrogen, but what is truly special about Nostoc is that it can live with various species of mosses, liverworts and fungi in a partnership. The nostoc colonies provide the plant or fungi with all the nitrogen it needs and the plant gives the nostoc sugars and a safe environment.

It is cool to think that some of the most current research being done in the ecological field is being done right here in our boreal backyard and it was interesting and enjoyable getting to learn about it and create programs to share this research with others. Next time you walk through a deep carpet of forest moss take a moment to appreciate the fine balance of a million tiny processes occurring in perfect balance to maintain life. To learn more you can stop by the Boreal Centre for Bird Conservation and check out the Nitrogen Fixation Display.



Nitrogen fixing feather moss

Outside my window

By Michelle Karpa
Information Officer

This is my first summer working at the Boreal Centre and I've got to say, I'm enjoying it. Not only do I get to meet some extremely interesting visitors but I get to see so many beautiful birds. Every morning when I walk from the parking lot to the front doors, the birds are singing and dancing in the air. Once I'm inside and sitting at my desk, the beautiful sights don't rest. There is a boulder outside my window, about 10 feet away and it seems to always be in direct sunlight. No matter what time of day or where the sun might be positioned, the rock is almost never in the shade. This is the perfect place for a bird to sunbathe and many in the area take advantage.

During June, there was almost always some type of bird sitting on the rock. I would be working at my computer and catch a glimpse of movement from the corner of my eye. Sure enough, a bird perched on the rock. Whether they were eating, sunbathing, or singing for its mate, I would sit and watch until the wind picked up and they flew away.

Some of the birds I've seen so far have included an American Robin, a Least Flycatcher, a Yellow Warbler, an Eastern Phoebe, a Canada Warbler, and a Black and White Warbler. There was also a Yellow-bellied Sapsucker that basically made the rock its home for a week. Apparently on one of my days off a Yellow-shafted Northern Flicker decided to try it out. I'm very upset I missed that one.

Along with the birds, a few mammals have taken a liking to my rock. There is one squirrel that resides around the Boreal Centre who, for a while there, would spend a fair amount of time on the rock, warding off any birds that want to stop by. On another one of my days off I was informed a woodchuck claimed the rock for a while. Also, upset about that since I've never seen one.

But despite missing a few cool sights I have really enjoyed the rock outside my window and I hope to see a lot more interesting animals of the boreal forest in the future.

American Robin on lookout

Eastern Phoebe dining on a dragonfly

Eastern Phoebes nest every year above the front deck of the Boreal Centre. This summer, they raised two families!

What Can I do to Help Birds?

By Nicole Linfoot,
LSLBO Assistant Bander

This is easily one of the most common questions I get asked by people who know I work with birds. Although not everyone is a bird enthusiast and some people are even afraid of birds, most people genuinely care about the wellbeing of birds and appreciate their presence in their yards, parks and wild spaces. Few would argue that nature is not complete without birds singing and flitting about. I have come up with a short list of ten easy things that everyone can do to help birds. Many of these are completely free and will have a huge impact on the welfare of our bird populations.

1) **Keep your pets indoors** (or supervise their outdoor time). Cats are especially bad; they kill over 3.7 billion birds every year in the United States alone and are the leading human-linked cause of bird mortality, even surpassing habitat destruction, collisions with structures and windows, and pesticide poisoning.
2) **Provide birds with the three basics** needed by all animals to survive: food, water, and shelter. Bird feeders, baths and houses make a bigger difference in the welfare of birds than you can even imagine. As more and more habitat disappears every year, birds have fewer places to nest and find food and your yard could become just the place they need. Going hand-in-hand with this is to regularly clean your feeders and baths to prevent harmful build-up of bacteria and the spread of disease.
3) **Prevent window strikes.** Put up silhouettes of hawks or other shapes in large windows to help stop birds from flying into them. Also turn off all major light sources in your home and office building during the night if possible. Most birds migrate at night and large light sources confuse them and can lead to strikes.
4) **Create bird-friendly landscaping.** Planting native trees and shrubs in your yard will attract and benefit a myriad of bird species. Many birds are attracted to fruit and berry trees as both a nesting site and a food source. Thick shrubs are also used frequently as nesting locations. Many bedding plants like columbine, anise sage, Texas sage, wild bergamot, coral honeysuckle, and larkspur will attract hummingbirds.
5) **Purchase "bird-friendly" coffee** that is grown in the shade. Forested coffee plantations support much higher numbers of bird species than deforested coffee plantations. Look for coffee that is marked as shade-grown or carries the logo for bird-friendly or rainforest alliance.
6) **Leave baby birds alone.** Thousands of baby birds die every year because well-meaning people "rescue them". Remember, their parents flew as far as 4000 kilometres just to have them, they won't abandon them. Here are some guidelines for what to do if you find a baby or fledgling bird.
    a. If the bird is on the ground but in no immediate danger, simply leave it alone, the adult is probably nearby. Most young birds will leave the nest and spread out before they are able to fly, this is an instinctual behaviour, and it is essentially the 'don't keep all your eggs in one basket' principle. By spreading out, the chance of all the young birds being discovered by a predator is lessened. The parents will still actively feed each of the baby birds that are spread out around the nest.
    b. If the baby bird is on the ground and in immediate danger (i.e. predators nearby, heavy rainfall, busy traffic area) pick it up and move it to a safe location as near as possible to the place you found it. Put the nestling up in a shrub or in heavy cover. Don't worry, its parents will find it, baby birds are very vocal and will call out to their parents once they know there is no predators nearby.
    c. If you find an entire bird nest with babies still in it that has blown out of the tree you can simply pick the nest up and put it back in the tree. If it won't stay you can put it in a small basket

Cedar waxwing enjoying a fruit tree

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and tie the basket into the tree. As I said, the adult birds have invested a lot into producing young, and they only get one chance each year; they won't abandon them because your scent is on them.

d. If you find babies birds and you know that **both** parents have been killed (one parent, either the female or the male, can still successfully rear young) you can call a local wildlife rehabilitation centre and ask for their advice. This is the only situation in which you should try to rescue young birds.

7) **Recycle, use reusable bags and don't litter.** Plastics are very bad for birds, many will mistakenly eat bits of plastic or bags and become very ill and potentially die.
8) **Support citizen science programs.** There are many projects such as the Christmas bird count, great Backyard Bird Count, Project Feederwatch and the Baillie Birdathon that rely on people just like you to gather data on birds and their habitat. You can support these programs by volunteering your time or donating money.
9) **Avoid Chemicals.** It is no secret that pesticides are extremely harmful to birds. Avoid using herbicides and insecticides on your yard or property. Not only the birds, but all wildlife will thank you.
10) **Share your love of birds.** Talk with people and tell them how much you appreciate birds! Education is conservation's strongest tool. Sharing a love for birds with others will help to foster an appreciation within them and then they too can join the effort in making our world a happy place for birds.

Baby chipping sparrows in the nest

Boreal Baby- A Toddler!

Boreal Educator Cori Klassen's daughter Delta Bott, affectionately known as the Boreal Baby, is now a toddler! And at the age of 2 she already has international bird-watching experience as seen in this photo taken in Hebden Bridge, England.

Her favourite Canadian birds are magpies and she really enjoyed listening to adult magpies "sing" to her cat Lincoln in the backyard this spring and summer! She even got to see some baby magpies up close when her mom had to gently relocate them after they fledged but before they could properly fly out of harm's way (see 6b above!)

18th Annual Songbird Festival

The LSLBO celebrated their 20th year of spring migration at our **18th Annual Songbird Festival** on June 1 & 2nd, 2013. Although the weather didn't look too promising early on, by mid morning the sun was out and so were the crowds. Over 250 people took part in the weekend festivities. On Saturday, there was a pancake breakfast with "special pancake art" , face painting, marsh monsters, birdhouse building, banding lab tours, birding hikes, workshops, children's activities and a barbecue lunch. Thank you to our special guests from the Northern Lakes College Native Cultural Arts Museum who showed our visitors a "day in a life" of the historic first nations people in our area. To mark the occasion, we had a very delicious cake for all the guests at Songbird Festival. Then despite the gloomy skies, we had over 45 people come out on Sunday for the **9th Annual Bird Run./Walk**. Dressed in rain gear, participants ran or walked 5 km with a few choosing to do it twice! A big thanks to all of the people that have supported the LSLBO and helped make these last 20 years possible!!

Below: 9th Annual Bird Run/Walk participants ready to hit the trail.
Right top: Volunteer Shawna Kristoff ready to decorate our Fundraising Director
Right Middle: Nicole showing off a bird at a banding lab tour. Right Below: CAKE!!

Boreal Rescue League to the Rescue!!

Meet some of the superheroes of the Boreal Forest! In August, these enthusiastic leaders lead a group of young "superhero wanabees" through a two day fun filled adventure to help save the Boreal Forest from the dreaded villain, Blue Green Algae. Our favorite moment...when one of the kids showed up in his Superman costume for day 2!! This special program was a partnership between the LSLBO and the Lesser Slave Forest Education Society.

Left to right: Super Equisetum, Captain Walleye, Captain Boreal, Super Bee, Aquagirl, Professor Aurora Borealis, and Super Chickadee (Super Chick for short).

Sundew Surprise!

By Cori Klassen
Boreal Educator

Every spring educators with the Lesser Slave Lake Bird Observatory (LSLBO) and their education partner, the Lesser Slave Forest Education Society (LSFES), bring thousands of students out of the classroom and into the boreal forest- one fieldtrip at a time! From bug safaris to banding lab tours to bog walks, students from Kindergarten to grade 12 experience the boreal forest, first hand and up close. I have been the Boreal Educator for the LSLBO and LSFES for 7 years now and I am usually just as thrilled as the students to be outside observing, learning and teaching about the flora and fauna that can be found in the boreal forest.

You'd think after 7 years of doing the same fieldtrips in the same locations I would have seen it all by now. Not a chance! The boreal forest is such a dynamic landscape and even though many of the field sites are the same for a particular fieldtrip from year to year there are still lots of surprises. And this spring on a rainy, overcast day in June and I got one of the biggest surprises I've had in awhile.

Cori leading the bog hike

I was over in the Jackpine area north of High Prairie for a grade 5 Wetland fieldtrip. The forecast for the day was not good and it had rained heavily most of the drive over from Slave Lake. There was about a 50/50 chance the fieldtrip would get cancelled altogether so we weren't terribly optimistic about the day. The bus from High Prairie Elementary showed up at about 9 am and when the students got off we were surprised to see the majority of them in rubber boots and raincoats. And the rain was holding off. The day was starting to look better!

We started our first session shortly after 9. I was leading the bog walk and so I took the students into an area in the bog where there is an opening big enough for a class to stand in. After a brief introduction to this particular wetland ecosystem I got the students to work in groups to do a plant scavenger hunt. I had been to their class earlier in the week to talk about wetlands so the students had some idea what the common plants looked like and were called. This particular bog has a great variety of plant life and students showed me many different kinds of mosses and lichens as well as Labrador tea, bog cranberry, and black spruce and tamarack trees.

We were just about to move on when a shy looking boy quietly asked me "What's this?" and he held up a very tiny plant only about 2 cm tall with a very slim stem. At first I thought it was a blade of grass but when I looked closer I saw a round leaf with long reddish hairs coming out of it. I was so excited I shouted "Pitcher plant! I mean Sundew plant! You found a round-leaved sundew!" Thankfully, the students knew what I was talking about because during the presentation I did in class we had discussed the types of carnivorous plants found in bogs in Northern Alberta and the reasons for this adaptation. Sundew plants grow in nutrient poor bogs and so one way the plants get the nutrients they need is by trapping and 'eating' insects. And now I was seeing my very first sundew plant ever! It was very exciting for the teacher too because she had been coming on our wetland fieldtrip every year for over a decade and this was a first for her too. All thanks to the very keen observation skills of a grade 5 student.

The round-leaved sundew plants we found!

The Hunter is the Hunted

By Della Drury
Canada Warbler Project Field Assistant

Just the other day I was walking down an oil road to meet up with my coworker, Ryan, who'd be driving up, hopefully, in just a few minutes.

I had finished my day doing vegetation surveys for the CAWA (Canada Warbler) Project, and had walked through the bush to get to our meet up spot at an oil well site.

When I got to the power line nearby, I spotted a bear walking in my direction coming upwind, so it had no way to smell me. A few days before, we had observed a mother bear and one cub across that same well site. If this bear was the same one, she was an exceptionally pretty bear. She was a black bear with glossy black fur, and where sometimes black bears have a white patch on their front chest, she had healthy, glossy crimson fur instead! It wasn't cinnamon or brown, nor was it stained or discoloured, but a beautiful red! Either way, I wasn't willing to wait to see if it was the same one walking my way. So I started walking down the road.

As I got a little further, I started singing loudly to help the bear to avoid me. Once I felt satisfied that I had enough space and could stop for a minute, I got my cell phone out to call Ryan to let him know my situation, and to see how far he was. It was a hot day and I took advantage of the shade from the willows at the side of the road.

I resolved to keep walking when my first call couldn't get through. Just then, I looked up from my phone, and there was a moose! It had just started crossing the road about 40 metres ahead of me and stopped in the middle after briefly looking my way. There was a grader coming up the road, and the moose stood there trying to sense what it was. Moose have a great sense of smell if the wind is coming to them, and great hearing, but their sight isn't perfect. So, this moose stood there for many long moments. He was huge! The further North you go, the bigger moose get. This one was particularly large. I stand about 5'4", and if I'd been closer to it, my head would have been around its armpit. He was already starting to grow his antler buds, and from the size of him, his antlers are going to be impressive.

Once the grader came close enough for the moose to recognize it, he vaporized into the bush. His entire massive being entirely, silently, concealed.

The operator and I exchanged half waves as he passed by, and I carried along down the road.
Not too many minutes later, Ryan arrived with the work truck. I jumped in and told him my sightings, when just around the next corner we saw a mother deer and her tiny fawn! They were travelling across the road here as well. Baby had all of its spots, and was small enough to be less than a week old. They were both obviously frightened by our truck, so we stopped and waited until they sorted themselves out. The baby ran along the road a little ways, kicking its little back feet up and back in a very excited way, while mama trotted along right beside him in the bush line, with an anxious look on her face and body. As soon as the fawn cut into the shrubs with his mother, they were gone into the woods as easily as the wind.

I get to see these sorts of animals frequently. I feel really lucky to work in the Lesser Slave Lake Provincial Park.

A momma bear with her two cubs

Confessions of a Plant Nerd

By Ryan O'Neill
Canada Warbler Project Field Assistant

While it goes without saying that the BCBC is a great place for bird watching, plant enthusiasts will be happy to know that the area is also home to wave after wave of beautiful wild flowers. The many trails in the area, including the Trans-Canada trail, are great places to spot flowers, shrubs, and some wonderful old growth forest.

One sided Wintergreen

There is a great deal of diversity in the boreal forest, so what you see will depend greatly on what time of year you visit. In May and early June, many of the small wild flowers are in bloom. You will see Western Canada Violet, Tall Lungwort, Star Flowered False Solomon's Seal, Fairybells and many others flowering.

Pin Cherry

From mid June to Early July, many fruit producing species in bloom. Twinning Honeysuckle, Low Bush Cranberry, Red Current, Bunch Berry, Strawberry, and Dewberry just to name a few. The fruit will start to ripen and mature from early July, right through august. Different species flower and ripen at different times; this increases the chances of both pollination and seed dispersal.

Hemp Nettle

Even later in the summer, there is still plenty for a plant watcher to see. From mid July on, there are treats like the Wood Lilly, One Sided Wintergreen and Hemp Nettle to see. There is also Indian Paintbrush, Canada Anemone, Fireweed, Tall Larkspur, Canada Goldenrod and so much more.

My summer working for the LSLBO has been a wonderful experience. Being able to live and work, surrounded by what excites me the most is incredible. Watching the plant communities develop and grow over the summer has been entertaining, interesting, and very educational.

So take it from a plant nerd. Come for the birds, stay for the vegetation.

Wood Lily

Bog Violet

Western Canada Violet

Creamy Peavine

Twining Honeysuckle

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Lesser Slave Lake Tri-Council FireSmart Regional Action Team

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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.

Name: _____ **Telephone:** (_____) _____
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Thank you for supporting the Lesser Slave Lake Bird Observatory!

LSLBO

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