



# WILDLIFE CORRIDOR IN THE CLEAR

In March we acquired an 11.2 hectare property that extends a sensitive wetland and launched a fundraising campaign to protect a further 4 hectares of wildlife corridor for migratory mammals in Clearwater. Thanks to the enthusiastic support of TLC members and donors, I am happy to report that we have reached our goal! TLC now protects a combined 46 hectares of wetland, forest and meadow corridor in the Clearwater River Valley.

Working closely with lichenologist Trevor Goward, TLC founder and naturalist Briony Penn, and Lyn Baldwin and Nancy Flood of Thompson Rivers University (TRU), TLC is now working to establish a nature mentoring program on our lands. TRU owns an adjacent property that features a refurbished schoolhouse, cookhouse, and rustic camping site. Utilizing these facilities, TLC will be launching a new educational program starting next summer.

The goal of the education and mentorship program is to provide students with an intensive immersion into the natural environment in order to encourage a deeper commitment to mitigating climate change. Guided by naturalists,

participants will have the opportunity to learn, explore, contemplate and share discoveries with their peers. A setting that is truly 'off grid', TLC's Clearwater Wetland & Wildlife Corridor is in close proximity to Wells Gray Park, B.C.'s fourth largest provincial park. The location, in addition to the program's incredible instructors, will make this opportunity truly exceptional.

On our recent visits, we have witnessed fireflies, stood in awe at the lip of a thundering waterfall, listened to the beating drumroll of a male grouse, and smelled the pungent aroma of the mysterious witches' broom rust fungus.

Sitting at the edge of the wetland, with Trevor naming the individual birds as they called out their sweet song, was a unique privilege.

I eagerly anticipate the day, or should I say night, when the touted Aurora Borealis makes its majestic appearance.

This summer saw TLC staff and volunteers combining conservation efforts in Clearwater, as far east as Trail, and all over Vancouver Island. In this edition of the LANDmark you will read more about our work throughout the province and our continued commitment to putting the vision of TLC's members and donors into action every day.

*Cathy Armstrong  
Executive Director*



*Trevor Goward, lichenologist and TLC volunteer warden at TLC's wetland in Clearwater. Photos Torrey Archer.*



*Helmcken Falls,  
Clearwater, B.C.*



Volunteers learn about and explore TLC's Sooke Hills Covenant. Photo Rae Costain.



Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

# So, What's the Plan?

**D**id you know that TLC's mission and the United Nations Sustainable Development Goal #15 (Life on Land) have a lot in common?

This United Nations Goal was created to protect and restore ecosystems with the aim of halting biodiversity loss. It urges countries to take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity, and protect and prevent the extinction of threatened species.

This UN goal aligns with TLC's work to safeguard important habitat for plants, animals and natural communities, and is supported by our mission statement: *To protect and restore the biological diversity of British Columbia for present and future generations through action and education.*

## How can you support this UN goal?

One of the easiest ways you can help is through planned giving to environmental non-profits like TLC.

## What is planned giving?

Planned giving simply means making a commitment now to provide funds in the future.

## What does it look like?

The simplest forms of planned giving at TLC are monthly donations, monthly membership gifts, and automatically renewing annual membership gifts. By making a commitment to provide funds to TLC on an ongoing basis, members and donors help create long-term financial security to support TLC's projects and programs.

## What are the benefits?

The benefit for land trusts like TLC is a predictable inflow of funds to help ensure the monitoring and protection of important habitat.

The benefits for our members and donors:

- Monthly gifts are an affordable way to contribute toward saving biodiversity. Every contribution made toward this goal matters, regardless of size!
- There are tax benefits in the form of charitable tax receipts.

## What are some other forms of Planned Giving?

**Donations of Securities:** Instead of selling your securities, which will trigger capital gains taxes, you can donate them directly to TLC. By giving gifts of stock and securities in this way, you receive tax credits based on the value of the stock donated while supporting the important work of TLC.

## Contributions to TLC Endowment Funds:

Making a donation to a TLC endowment fund is like giving a gift that will keep on giving. Once added to an endowment, your money is invested by a fund manager, who guarantees a specified rate of return. Each year, TLC receives interest on the investment to use on projects as designated by the donor. The principal is reinvested, giving TLC the stability to make long-term plans toward protecting biodiversity.

## Remembering TLC The Land Conservancy of British Columbia in your Will:

By remembering TLC in your will, you are supporting our ongoing efforts to protect important land and ecosystems that you care about throughout this beautiful province.

## Want to know more?

Contact TLC (250) 479-8053 or [membership@conservancy.bc.ca](mailto:membership@conservancy.bc.ca) for more information about how you can help support UN Sustainable Development Goal #15 through these and other planned gifts. It's also a good idea to speak with a financial planning professional about how to best make planned giving work for you.

Lisa Cross  
Member and Donor Care



# SAFE PASSAGE

**“Once destroyed, nature’s beauty  
cannot be repurchased at any price”  
– Ansel Adams**

**A**s human population size increases, demand for housing and infrastructure development also rises, which can lead to habitat fragmentation. With urban populations expected to double by early mid-century, we must consider the consequences of urban sprawl and learn to sustainably cohabitate with nature rather than see it as an inconvenience.

It can be difficult to stop thinking in terms of ‘us versus them’ but without the ecosystem services that natural systems provide, humans cannot survive. Urban wildlife spaces are critical to sustainability.

## How this affects species

Human-caused habitat fragmentation is the leading threat to biodiversity. Greening cities by planting trees, building green roofs, and planting backyard gardens can provide some relief for birds and pollinators during their migrations, although the noise, air quality and complexities of buildings is not sufficient habitat for shelter, breeding and food.

Some species are adapting to urban environments, such as the crow, but this is not the case for the 17% of North American birds that are in decline as found by the Audubon Society.

## What is a corridor

A corridor is a natural pathway connecting patches of habitat. Perhaps most familiar are the wildlife corridors in Banff National Park which provide paths under or over the highway, and these have effectively reduced car-animal collisions by 80%.

Urban wildlife corridors are these connecting patches of natural land in urban neighborhoods, industrial and commercial areas. These corridors have been in use since the 1960s and today are still often cited as the best way to support species and ecosystems to preserve genetic viability, save small populations from extinction and adapt to climate change. For any species that migrate, corridors are crucial for their survival. It is important to continue to build wildlife corridors as part of urban development because once a habitat is destroyed it’s difficult to recreate it and have populations return. Restoring contaminated or degraded habitats is costly and is no substitute for conservation of original land.

## How this affects humans

Biodiversity has intrinsic value and its loss has negative impacts on the human ecosystem. Urban wildlife corridors



Red-Legged Frog (*Rana aurora*)  
spotted at TLC's Elkington Forest  
Covenant. Photos Rae Costain.

provide a vast list of ecosystem services which directly benefit humans including: cleansing air of pollutants, filtering water, providing carbon sinks, and reducing the effects of climate change. Aside from preserving biodiversity, wildlife corridors facilitate positive human-wildlife interactions. Human-wildlife conflicts are reduced when wildlife is given refuge. These corridors reduce property damage, interactions with pets, and create safer neighborhoods.

## Why it's important

We have to acknowledge that we are sprawling into wildlife habitat and that this brings consequences. If we plan for urban wildlife instead of fearing it, we can develop stronger relationships with nature. Disturbances both urban and rural are posing threats to wildlife across the planet. Planning for the future by committing to green spaces held by conservation covenants will contribute to a sustainable and biodiverse world. ■

*Karen Iwachow  
Conservation Programs Coordinator*

# ON THE ROAD

7 days, 6 nights, 5 covenants, 4 women, 3 TLC properties, 2 ferries and 1 truck: In June TLC staff hit the road to visit covenants and properties throughout B.C. Our team was filled with gratitude at the welcome that was extended to TLC wherever we went.

From TLC's Eikelenboom Covenant in Maple Ridge to our Fort Shepherd Conservancy Area in Trail, we discovered networks of support, formed

by passionate, conservation-minded individuals, waiting for us. We have a strong community ensuring continued conservation across the province.

We've shared a few of our personal highlights below, but for more photos, video and anecdotes from our road trip visit [www.conservancy.bc.ca](http://www.conservancy.bc.ca) and check out our live social media updates on Facebook, Twitter and Instagram.

"The most impactful moment of the trip for me was standing on the edge of the Columbia River, within the Fort Shepherd Conservancy Area, and seeing animal tracks overlapping and completely filling the sand at the water's edge. Imprints from coyote, elk, deer, turkey co-mingling and fresh, in an area that would be heavily impacted if motor vehicle access was permitted. It brought me to the thought of 'who owns this?' and 'why does mankind think we have the right to destroy a natural landscape?'"

Cathy Armstrong  
Executive Director

"Our road trip was full of good conversation and breath-taking scenery as we wound our way through southern B.C. Favourite moments for me included the sight of the powerful Columbia River, deep blue and free-flowing for 8 kms alongside TLC's Fort Shepherd Conservancy Area near Trail; a shy trio of elk hiding in the pine forest; a bold coyote trotting past us in Manning Park; the breathtaking majesty of Helmcken Falls, plunging 141 thundering metres into the eroded lava canyon below; all capped off by a dance-troupe of fireflies putting on a farewell light show for us over the wetlands in the Clearwater River Valley!"

Lisa Cross  
Member & Donor Care



Trevor Goward and Lisa Cross at TLC's Clearwater Wetland & Wildlife Corridor. Photo Cathy Armstrong.



Gardom Lake Covenant. Photo Dianna Stenberg.

"Kneeling at the window of a one-room wooden cabin, four women gather to stare out into the dark June night like children hoping for a glimpse of Santa Claus. Outside fireflies (*Photinus obscurellus*) are signaling; what appears to be bright dots and dashes to us are actually the winged beetle's bioluminescence to attract mates. It's early in the season for such a performance, but thanks to a combination of factors including temperature and humidity we have lucked out. The Clearwater River Valley is one of a handful of places in B.C. that get fireflies."

Dianna Stenberg  
Communications & IT



The Clearwater River in Wells Gray Provincial Park in Clearwater. Photo Torrey Archer.

"One of the most impactful people we met at our Max Lake Covenant in Penticton was Elliott Tonasket, member of the Penticton Indian Band. He reminded us that we are all stewards of the land, here for a moment and gone for eternity, but that we have a tremendous opportunity to impact our surroundings and each other with the simple acts we choose to do, or not do, every day. This trip, more than anything, reminded me to go - go see, go do, go experience - because your own experience is what causes conviction. No one else's can do that for you."

Torrey Archer  
Biologist & Land Manager



Partners gathered at TLC's Max Lake Covenant in Penticton. Photo Lisa Cross.



Lorquin's Admiral (*Limenitis lorquini*) Fort Shepherd. Photo Cathy Armstrong.



Lisa, Torrey and Cathy across from TLC's Valhalla Mile Covenant. Photo Dianna Stenberg.



Torrey, Dianna and Lisa at Skaha Conservation Area. Photo Cathy Armstrong.

# The Bees Needs

**T**he bees are vanishing, save the bees! The only question is which bees are we focused on saving? The invasive European honey bee plays a significant role in the honey industry (an industry which is continuously expanding) which brings with it economic benefits, but the honey bee also disrupts native insect populations and negatively impacts our ecosystems. In B.C., there are more than 450 native species of bee (nearly equal to the total number of native bird species in Canada), and each species is adapted to specific habitat and sources of pollen. Bees pollinate the orchards in the Okanagan Valley, support the bountiful flower gardens on Vancouver Island, and contribute to crop health across the province. Two of the most specialized native B.C. bees are Mason bees and Bumble bees. These bees can withstand lower temperatures than honey bees and become active earlier in the season.

Native bees are much more docile than honey bees so the risk of a sting is very low; this is encouraging for anyone thinking about planting a pollinator garden! As a rule, native pollinators are a very positive influence in any backyard or community garden. Learning to encourage beneficial insects, especially bees, can contribute to local food security which is a growing issue on Vancouver Island. The simplest way to attract native pollinators is to plant a pollinator garden with a

variety of native flowers. Bees love purple flowers, partially because they rely on distinctive ultraviolet light (UV) patterns (invisible to human eyes) which many flowers have adapted to display. Studies have shown that bees develop a favourite colour over their lifetime, and that this colour is related to the nectar-richness of the bloom. Simply put, nectar-rich flowers have adapted to display UV light patterns to attract more pollination while bees have adapted to recognize that flowers with more UV light patterns are more fruitful.

Providing safe habitat also encourages native bee populations because habitat loss is currently a major threat. 'Bee condos' or nesting boxes are easy to set up and may provide vital hibernation habitat to promote next year's population. Relying on natural alternatives to pest control (such as promoting bat populations) instead of using harmful chemical pesticides reduces the number of bees killed along with the pests. Finally, for the benefit of bees and all wildlife, you can help preserve undeveloped habitat by supporting conservation efforts like TLC's Covenant Program.

Bee populations could use some help, but the next time you see a promotion for a 'save the bees' campaign consider which bees need saving. ■

*Rae Costain  
Communications Intern & Guest Editor*



Bumblebee (*Bombus impatiens*) observed at Welland Community Orchard. Photo Rae Costain.



Mason Bee 'condos' provide stable habitat. Photo Rae Costain.



Male Honeybee drone (*Apis mellifera*). Invasive and Native species pollinate Welland Community Orchard. Photo Rae Costain

## Support Native Pollinators!

1. Plant native wildflowers
2. Maintain pesticide free spaces
3. Build bee condos
4. Protect undeveloped habitat



Participants at TLC's Fruit Thinning Fiesta Passport to Nature event at Welland Legacy Park & Community Orchard. Photo Rae Costain.

# For the Love of Nature

**T**LC's Passport to Nature events are part of a new program created to encourage our communities to engage with and experience nature in meaningful ways. The Passport to Nature program also provides opportunities for TLC volunteers and supporters to join forces with other organizations in the conservation community.

Passport events are free and presented by field experts who are delighted to share their knowledge with you! Whether you're mad about mosses or want to brush up on nature photography, we've got you covered.

This is your opportunity to connect with B.C.'s wonderful conservation

community and participate in the work that we do.

If you love nature and learning, then these events are perfect for you! They range in difficulty, ensuring that there is something for everyone to enjoy. Join us for one of our fall Passport to Nature events by registering at [conservancy.bc.ca](http://conservancy.bc.ca) or calling our office at 1-877-485-2422. Reserve your space today; **TLC's October 24th Mushroom ID Walk is fully reserved!**

Have an idea for an event for TLC's 2019 Passport to Nature program? We would love to hear about it! Please reach out to [kiwachow@conservancy.bc.ca](mailto:kiwachow@conservancy.bc.ca) or call (250) 479-8053 to connect



Get out this fall with one of TLC's Passport to Nature events. Photo Rae Costain.

with Karen Iwachow, TLC's Conservation Programs Coordinator. ■

Rae Costain  
Communications Intern & Guest Editor



## Nature Photography Basics

Learn nature photography basics at a beautiful site that includes a salmon-bearing creek, estuary and mature forest. Topics include working with

macro (close up photos), variable light conditions (i.e. dappled sunlight in a forest) and natural light portraits. When you register, please let us know if there are additional topics you would like to see covered! **Please bring your camera, lunch and water!**



## Mulch Madness

**Presented by JJ Ford, Orchard Coordinator at Welland Community Orchard.**

Help us put the orchard to bed for the winter season. We'll be tucking trees in with about 18 yards of mulch material, so are calling all wheelbarrow wizards to join us in making sure each tree gets a nice warm blanket. Mulching our trees helps keep down weeds, preserves moisture in the summer and supports the microbiology of the soil.



## Ayum Creek Restoration

Join TLC and the GVGT in combatting invasive periwinkle and false lamium using the sheet mulching ("lasagna gardening") technique to smother

them out! Work will include removing any sprouting plants from the treatment area. By laying down cardboard and mulch to remove the light from invasive species, we can give the native species a chance to recolonize the area. **Tools, gloves and snacks provided!**



## Moss Walk

**Presented by author Kem Luther.**

Identifying mosses can seem daunting, so come learn in the forest from an expert! Common mosses, and hopefully rare ones too, will be identified and you will learn basic moss features to help you ID in the future. A short walk along the old pipeline trail will take a long time to complete as we stop every few feet to identify the dozens of mosses found in this beautiful, privately owned, mature forest.

## POSTCARD

Hi! I'm Natasha, a biology major at UVic.

I started volunteering with the TLC Covenant Program to gain field experience that would prepare me for future opportunities in my area of study. Little did I know that TLC would not only give me the field experience that I desired, but also the chance to be part of an incredible community of kind hearted, knowledgeable and passionate individuals, who seek to protect and share the beautiful ecosystems here on Vancouver Island and across B.C.

After a summer with TLC, my knowledge about flora and fauna ID, ecosystem ecology, basic geography, and data collection in the field has substantially grown thanks to fellow volunteers and coordinators. I look forward to many more adventures and laughs with TLC - thank you for an unforgettable summer!



Volunteer Natasha at TLC's Elkington Forest Covenant. Photo Rae Costain.

Volunteer

Covenant

Monitoring



Rae Costain, TLC's Communications Intern. Photo Karen Iwachow.



With her camera always at the ready, Rae was a welcome addition to every covenant we visited this summer. Photo Karen Iwachow.

## From Another Perspective

Thanks to a grant from Canada Summer Jobs, this year we were incredibly lucky to add a talented student to our small team. Rae Costain joined us in May as our Communications Intern. An Anthropology student at UVic, Rae is an avid photographer and painter, and loves spending time exploring the woods.

You can see Rae's work in TLC's summer social media updates and on our blog at [conservancy.bc.ca](http://conservancy.bc.ca).

Her final task: Guest Editor of our fall LANDmark.

Rae says her time with TLC has been "extremely rewarding" and that she is returning to university "with a renewed passion for the more-than-human world."

*Rae, thank you for your passion and hard work this summer. We look forward to seeing what projects you tackle next!*

Dianna Stenberg  
Communications & IT

### TLC Board of Directors

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