

Fraser Salmon & Watersheds Program



Fraser Basin Council



2011/12 FINAL REPORT

FSWP File Number* FSWP 11 4 XX EE

* Please use the FSWP File Number provided in previous FSWP project correspondence.

1. Project Information

1.1. Project Title

Fraser Valley Youth Stewards Program

1.2. Proponent's Legal Name

Fraser Valley Conservancy

1.3. Project Location

Fraser Valley

1.4. Contact for this report

Name: Navi Saini

Phone: 778-240-6919

Email: navi@fraservalleyconservancy.ca

1.5 Funding Amount

Original Approved Grant Amount:	Total FSWP Expenditures:	Final Invoice Amount:	Final Non-FSWP leveraging, including cash and in-kind:
\$10,000.00	\$10,000.00	\$10,000.00	\$28,370.00

2. Project Summary

Please provide a single paragraph describing your project, its objectives, and the results. As this summary may be used in program communications, clearly state the issue(s) that were addressed and avoid overly technical descriptions. Maximum 300 words.

This project created a Youth Stewards Program, specifically targeted for youth aged 8-20, for training in various stewardship activities such as tree planting, invasive species removal, and salmon and amphibian monitoring. The objectives of this project were to create a program to increase participation in stewardship actions by 2012, to increase the capacity of environmental work in the Fraser Valley, and to increase the financial capacity of the Fraser Valley Conservancy. We were able to successfully complete the first two of these objectives, and are confident that we will be able to meet the last objective by the end of 2012. This program helped address the lack of organized programs that highlight youth's potential to make change and implement solutions here in the Fraser Valley.

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OPTIONAL: Please give a short statement (up to 100 words) of the most compelling activity or outcome from your project.

3. Final Project Results and Effectiveness

3.1 Please copy THE EXPECTED DELIVERABLES from your detailed proposal and insert into this table. Add additional rows as needed. Then describe the FINAL DELIVERABLES (the tangible end products resulting from this work) associated with each expected Deliverable.

If FINAL DELIVERABLES differ from the original EXPECTED DELIVERABLES, please describe why, and the implications for the project.

EXPECTED DELIVERABLES	FINAL DELIVERABLES
1. Deliver 6 training and stewardship activities for youth.	To date, we have delivered 3 training and stewardship activities for youth. An additional 3 activities will be delivered by the end of June 2012. These activities were held off because of poor weather conditions and timing with the school we work with.
2. Provide opportunities for families to sign stewardship agreements outlining commitment to environmental stewardship at home.	We have revised this deliverable to "securing agreements with school classes and park user groups/municipal staff" because we have changed our direction to work mainly in public schools in the Valley, and have been collaborating heavily with the municipalities of Abbotsford and Mission. We may still get some stewardship agreements with individual youth steward families, but most likely not before June 31 st , 2012.
3. Provide fee-based membership program	Because our Youth Stewards Program is in the early stages of development and we have not yet developed a solid program platform, we haven't been able to implement a membership fee. We are confident, nonetheless, that through further promotion and community engagement, we will be able to collect an annual membership fee by 2013.
4. Increase volunteerism	By delivering workshops to staff and students in public schools, and promoting them through both social and print media, FVC has generated a greater interest in environmental stewardship activities. As a result, we have increased the potential number of volunteers available for

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	upcoming spring activities and projects such as riparian tree planting, salmon monitoring, fish trapping, endangered amphibian surveys, and other relevant activities.
5. Provide coordinated and organized effort	We have met with a variety of groups and organizations throughout the Fraser Valley that are interested in collaborating with us on a wide variety of stewardship activities and projects. We have support from School District No.34, the City of Abbotsford, the District of Mission, Zajac Ranch in Mission, and many other groups. We are excited to collaborate with them as we move ahead with this project in the coming months and years.
3.2 Please evaluate the EFFECTIVENESS of your project in achieving Project Objectives, using the specific measures of success identified in your proposal. Please include any notable successes or challenges.	
<p>Based on the measures of success identified in our proposal, our project has been quite effective in achieving project objectives. Our first objective was to create a program to increase participation in stewardship actions by 2012. Success was to be measured by the number of youth attending the program, and the number of stewardship agreements secured with school classes and park user groups/municipal staff. To date, we have had over 60 youth participate in our programs, and we expect many more to participate in the activities we have planned for the coming spring and summer. However, because this is a new project, much of our efforts have been focused on planning and promotion, so we have not yet been able to sign any stewardship agreements. This is something we hope to accomplish over the next few months and years.</p> <p>Our second objective was to increase the capacity of the Fraser Valley Conservancy. Success was to be measured by the number of paid memberships increasing and the number of volunteers increasing. We have successfully increased our volunteer base by working with students from public high schools and municipal staff, but we have not been successful in providing a fee-based membership program. Again, because our Youth Stewards Program is in the early stages of development and we have not yet developed a solid program platform, we haven't been able to implement a membership fee. We are confident, nonetheless, that through further promotion and community engagement, we will be able to collect an annual membership fee by 2013.</p> <p>Our last objective was to increase the capacity of environmental work in the Fraser Valley. Success was to be measured by the number of groups working together and the amount of volunteers involved in other programs. We have met with a variety of groups and organizations throughout the Fraser Valley that are interested in collaborating with us on a wide variety of stewardship activities and projects. We have support from School District No.34, the City of Abbotsford, the District of Mission, Zajac Ranch in Mission, and many other groups. Although it was challenging and time-consuming to establish an effective and diverse network for our Youth Stewards Program, we are excited to collaborate with these groups as we move ahead with this project in the coming months and years.</p>	

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3.4 If applicable, please describe project outcomes that relate to one or more of the following strategic approaches (Section 2.1 of RFP; section 8 of detailed proposal template), and include specific examples.

Engagement of First Nations. Please specify who, and in what capacity.	To date, we have not engaged any First Nations in our Youth Stewards Program.
Active partnerships with one or more organizations.	In the spring and summer of 2012 we will be partnering with the Fraser Valley Watershed Coalition to provide opportunities for FVC Youth Stewards. FVWC will also provide equipment such as hip waders, shovels, and gloves.
Engagement and participation of diverse and under-represented groups.	Youth are a group that is under-represented. Our project specifically targets youth and the power of youth to implement solutions. For example, our Youth Stewards Coordinator has delivered three in-class workshops on topics such as basic ecology, invasive species, and ornithology to students in a public high school.
Relationship building, as a foundation for sustainable, enduring activities.	By networking with School District No.34, the City of Abbotsford, the District of Mission, Zajac Ranch, and the Fraser Valley Watershed Coalition, we have built relationships and meaningful experiences between people and with nature that transcend and bypass traditional social and cultural relationship norms.
Capacity building, including mentorship models, leadership training and skills development.	This program has built capacity of the Fraser Valley Conservancy for volunteer management and program design. We are confident that in the near future, it will also increase the FVC's financial capacity through the implementation of a membership fee.
Recognition and support of champions and their initiatives.	Through funding from the Abbotsford Community Foundation, we have secured a \$500.00 award for a Grade 12 Youth Steward who as shown dedication to environmental work. The student will be chosen in the coming months, and the award will be presented to the student in June 2012.
Opportunities to influence policy and decision making,	The power of youth is not typically heard in the policy and decision making world of adults. We hope to utilize the youth stewards to advance sound policy and decision making on watershed sustainability through FVC programs. FVC's reach will be broadened by this program in the coming months and years.

3.5 Please describe how the benefits of this project will be sustained and/or be built upon into the future. What are the planned next steps, or recommendations for further work, if applicable?

As previously stated, our Youth Stewards Coordinator spent most of the late fall and winter planning activities and projects for the program, and building a support network. Now, in the spring and summer, we will finally be able to move ahead with hands-on field work such as tree plantings, invasive species removal, and bird/bat box installations. This work will be done on both Fraser Valley Conservancy properties and in public natural areas.

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3.6. What are the top three lessons learned from this project that could be useful to communicate to others doing similar work in the Basin?

1. When starting a project that is large in time and scope such as this one, it is important to network with diverse environmental and community groups and focus on collaborative projects.
2. It is a good idea to reach out to other environmental groups that already have similar programs in place and seek advice. These groups are usually more than happy to offer advice, feedback, and support that can be invaluable when starting a new project.
3. Have a plan in place. It is easy to overwhelm yourself when taking on such a large project, but by establishing realistic timelines and goals, it is easier to work effectively without losing track of the big picture.

3.7 REQUIRED: Attach all DOCUMENTATION of Final Deliverables, and LIST attachments in Section 8. These may include technical reports, maps, photos, evidence of communications, lists of meeting participants, etc.

4. Outreach and Communications

Please describe how you have communicated project activities and results within local and basin-wide communities, across organizations and/or to decision makers.

Please list and attach copies of (or links to) any communications materials from these efforts that you have not previously submitted.

Project activities and results have been communicated within local and basin-wide communities, across organizations and /or decision makers through the use of both print and social media. We have published an article regarding the program in the *Valley Steward*, newsletter of the FVC, and provide over 1500 Facebook and Twitter followers with program updates and photographs.

Link to article in the *Valley Steward* (see page 2): http://fraservalleyconservancy.ca/wp-content/uploads/2011/12/Winter-2011-Color.pdf?utm_source=FVC+Newsletter&utm_campaign=275730ce12-December+E-News+2011&utm_medium=email

Link to Facebook page: <http://www.facebook.com/FraserValleyConservancy>

Twitter link: <http://twitter.com/#!/FVConservancy>

5. Project Expenditures



Fraser Valley Conservancy

Placing lands in trust for our future

YOUTH STEWARDS PROGRAM

Who Are We?

- The FVC is a NGO and charitable society that was established in 1998, to protect land and water for future generations.
- We have already secured 37 acres of habitat, which contains important ecosystems such as forests and wetlands
- We believe that natural areas in the Fraser Valley are home to the richest biodiversity in the Lower Mainland, but due to unprecedented growth and sprawling development patterns, remaining natural areas are in jeopardy.



Above: The Maclure wetlands were donated to FVC in the fall of 2008.

What Are Our Goals?

- To protect and preserve land and watercourses that have ecological value**
- To promote, facilitate, and engage in land stewardship activities**
- To protect, preserve, and enhance habitat for native species, including rare and endangered species**
- To protect and preserve land of recognized local and regional historic value**

What is the Youth Stewards Program?

- The Youth Stewards Program is a new program that is specifically targeted at youth aged 8-20.**
- This program will train youth (you guys!) in various stewardship activities such as tree planting, invasive species removal, bird-watching, and bat, salmon, and amphibian monitoring.**
- We hope these activities will inspire you to become more involved in environmental stewardship.**
- They will help you see how your actions influence the ecosystems around you, and how you can make a difference in your home, school, and community.**
- and most importantly, we hope that this program will be FUN!**

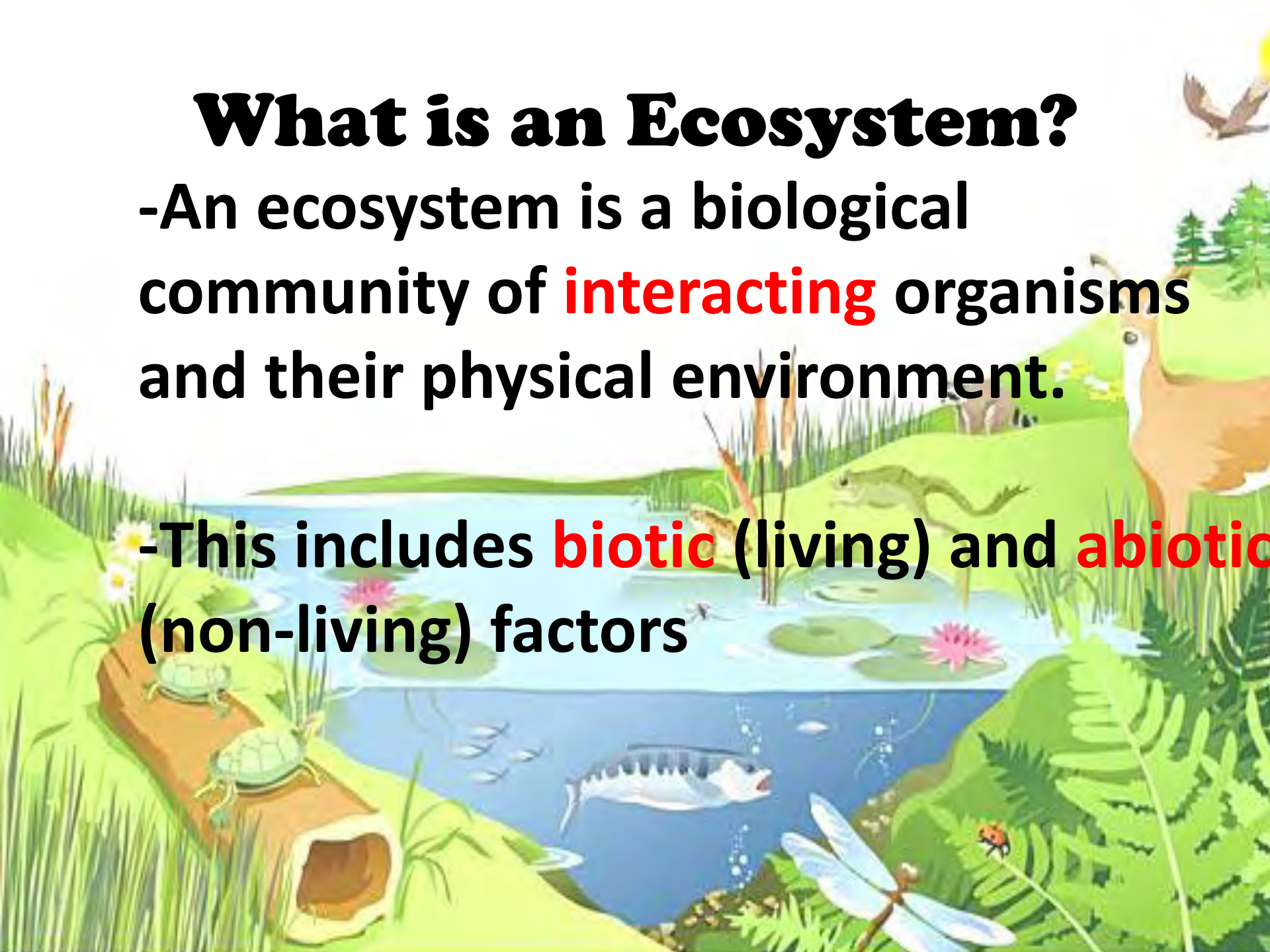
What is an Ecosystem?



What is an Ecosystem?

-An ecosystem is a biological community of **interacting** organisms and their physical environment.

-This includes **biotic** (living) and **abiotic** (non-living) factors



Why are Healthy and Diverse Ecosystems Important?



Why are Healthy and Diverse Ecosystems Important?

-ecosystem services

-tourism

-aesthetic appeal

-potential resources for our future (importance may not yet be known)

-religious, spiritual and/or historical importance

What Types of Environmental Activities are You Interested in?



Who Am I?



RULES OF THE GAME:

-I am going to read out hints, and then put up a picture of a species that is native to British Columbia

-the first person to RAISE their hand, and tell me the correct common name of the species wins a prize (bonus points if you can tell me the scientific name!)

-NO CALLING OUT ANSWERS WITHOUT RAISING YOUR HAND PLEASE!















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Youth Stewards Program

BIRDS


**Navi Saini
Youth Stewards**

-The scientific study of birds is referred to as **ornithology.**

-Ornithologists** (scientists that study birds) do not work exclusively with birds. They may be ecologists, geneticists, wildlife biologists, land managers, teachers, researchers, outdoor educators, or tour leaders.**

-An ornithologist might work in





What Questions do Ornithologists Hope to Answer?

-What does the species eat?

-Where do the species live? (range)

-Where does the species **breed**, **nest**,
winter, and spend its summers?

-What factors threaten this species?

-Does the species **interbreed** with similar
species to create **hybrids**?

-What are the **population dynamics** of this
species (how many eggs does a female
usually lay, how many of these eggs
hatch? How many make it through their
first year? Are there more males or
females? At what age do they begin mating
etc.)



Why Should We Bother Studying

Birds?
-Important food source for many other species
such as snakes, predatory birds, foxes, lizards etc.

-Seed dispersal

-Pollinators

-Tourism

-Spiritual/Religious Importance

-Aesthetic appeal

-Teach us a lot about evolutionary trends

Resident vs. Migratory Species



-Bird **migration** is the regular, seasonal journey undertaken by many species of birds

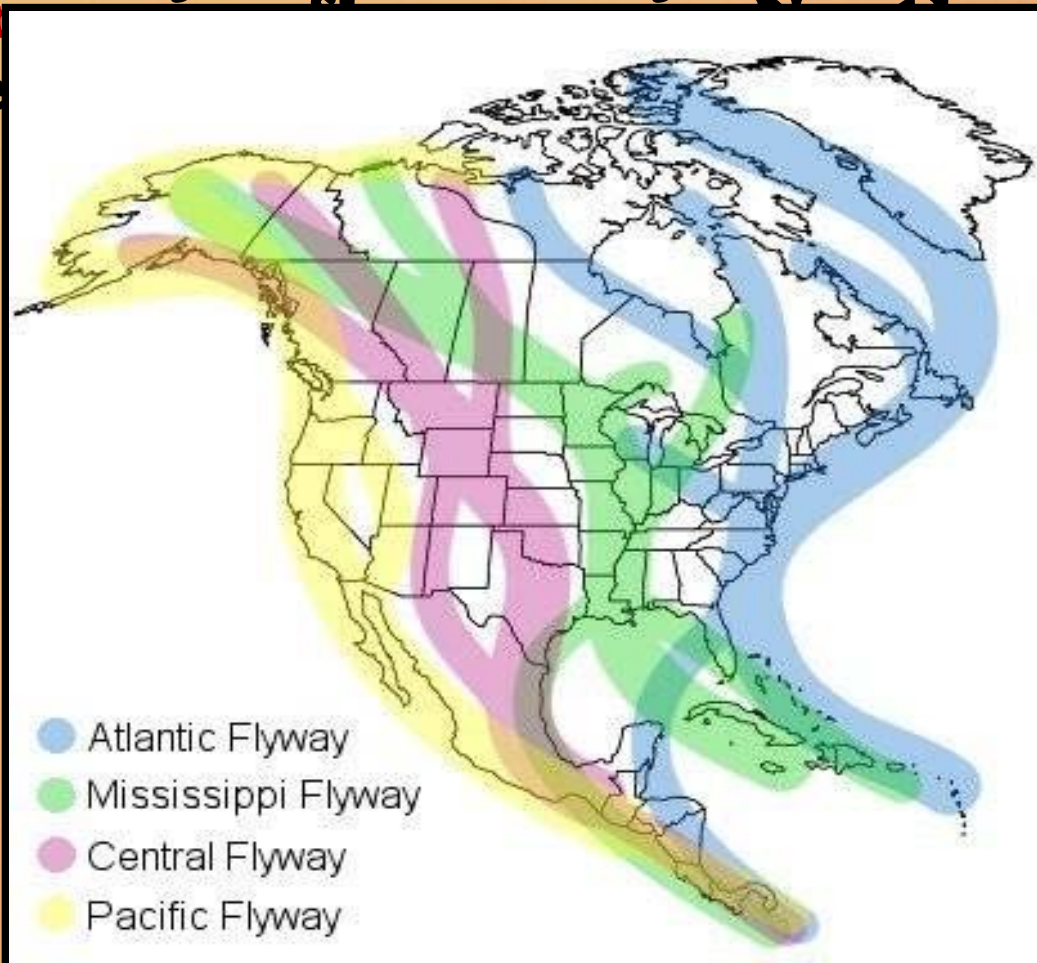
-Bird migrate do to changes in food availability, habitat, weather, or physiological constraints.

-Some journeys are not termed “true migrations” because they are irregular (ex. invasions, eruptions) or they are only in one direction (ex. **dispersal**- movement of young away from their natal area)

-Migration has to be a **ROUND-TRIP** and it has to be marked by **ANNUAL SEASONALITY**.

Major Flyways in North America

-A **flyway** is a route that is regularly used by large numbers of migrating birds. There are **four** major flyways in North America.



How do Birds Navigate?

Birds have excellent vision and rely on visual landmarks for local and long-distance migration. They use key land features such as mountains, rivers, coasts or even large buildings. There are three types of "compasses" a bird uses to find its way.

1. Birds can use the sun, the stars and the Earth's magnetic field.

Birds use the sun as a compass. They use the positions of the sun during the day to navigate. They also can use the setting sun as an indication of due west.

2. Night flyers use celestial navigation, which means they find their way by knowing the patterns of the stars in the sky, and by knowing special stars like the North Star. In their first year of life, birds memorize the position of the constellations in relation to the North Star. These star patterns stay the same even though the Earth moves through space,

Amazing Migration Stories!

-Bar-tailed Godwits have the longest known non-stop flight of any migratory species.

-They fly over 11,000km from Alaska to their non-breeding areas in New Zealand

-Prior to migration, 55% of their bodyweight is stored as fuel to use during this journey



-Nocturnal migrants minimize predation, avoid overheating, and feed during the day. One cost of nocturnal migration is the loss of sleep. Migrants may be able to alter their quality of sleep loss.




Above: The Wood Warbler is a nocturnal migrant.

-Molting is the process in which birds shed their old feathers and grow new ones.

-The feathers of a bird suffer from wear-and-tear and require to be molted. The timing of this molt - usually once a year but sometimes two - varies with some species molting prior to moving to their winter grounds and others molting prior to returning to their breeding grounds.



A black silhouette of a bird, possibly a crow or raven, is perched on a thin, leafless branch. The branch is part of a larger, more complex network of bare branches that fills the left side of the frame. The background is a solid, light orange color.

What Factors Threaten Bird Populations Here in British Columbia and Around the World?

- Invasive Species**
- Habitat Fragmentation**
- Hunting and
overexploitation**
- Global Warming**
- Increasing predator
populations (ex.cats!)**
- Pesticide effects**

Today: Pinecone Bird Feeders





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YOUTH STEWARDS PROGRAM

**Navi Saini,
Youth Stewards Coordinator**



Who Are We?

- The Fraser Valley Conservancy (FVC) is a NGO and charitable society that was established in 1998, to protect land and water for future generations.

- So far we have secured 37 acres of wildlife habitat containing woodland forest, mature forests, creeks and wetlands, in Abbotsford, Chilliwack and Mission.



Above: The Maclure wetlands were donated to FVC in the fall of 2008.

What Are Our Goals?

- To protect and preserve land and watercourses that have ecological value**
- To promote, facilitate, and engage in land stewardship activities**
- To protect, preserve, and enhance habitat for native species, including rare and endangered species**
- To protect and preserve land of recognized local and regional historic value**



Biodiversity in Abbotsford

-We believe that natural areas in the Fraser Valley are home to some of the richest biodiversity in the Lower Mainland.

-However, due to unprecedented growth and sprawling development patterns, remaining natural areas are in jeopardy

-Therefore, it is more important than ever to create environmental programs that not only educate youth, but also inspire them to become leaders in the development of a just and sustainable community.



From left to right: Bard Owl, Pacific Sideband Snail, Giant Pacific Salamander, Western Toad (Juvenile), Coastal tailed frog, Red-legged frog, Phantom Orchid, Bald Eagle, Great Blue Heron, and Oregon Forest Snail.

What is the Youth Stewards Program?

- The Youth Stewards Program is a new program that is specifically targeted at youth aged 8-20.**
- This program will train youth in various stewardship activities such as tree planting, invasive species removal, bird-watching, and bat, salmon, and amphibian monitoring.**
- We hope these activities will inspire youth to become more involved in environmental stewardship, and help them see how their actions influence the ecosystems around them.**



- This unique program will build environmental literacy through both traditional, classroom-based learning, as well as hands-on learning in the field environment.**
- We will ensure that all activities and lesson plans are in-line with the British Columbia learning curriculum and guidelines for the respective grade level.**
- Lisa Fox, the Executive Director at FVC holds a Masters in Education, and has been using environmental theory and practice to guide youth aged 3 to 8 for the past 20 years.**



Who's Already on Board?

-So far, we have secured approximately \$33,000.00 in funding from organizations and agencies such as The Abbotsford Community Foundation, Vancity, The Fraser Salmon and Watersheds Program, Alex Mitchell's Campaign, and BC Hydro.

-We have spoken to and met with several teachers in School District No.34 who would really like to get their classes and extra-curricular clubs involved in environmental stewardship projects.

How can the District of Mission Help/Get Involved?

- We would really like to collaborate with the District of Mission's Municipal Forest Department for our Youth Stewards Program.**
- We would like to know if there are any areas of the forest that we can work on together.**
- Are there any projects that youth can get involved in, such as bird-box installations, invasive species removal, native tree plantings, trail maintenance, etc.**
- Can the department provide any equipment and tools for the Youth Stewards?**
- Would the District of Mission's Forestry Department be willing to write letters of support for future grant applications?**

We are hopeful that you are on-board with our new Youth Stewards Program, and that we have your support to go ahead with this initiative.

Together, we can ensure that the youth in our community are equipped with the skills that are necessary to develop an environmental ethic, and engage in life-long learning.

THANK- YOU.

