

LET'S LEARN ABOUT THE

Spring Equinox



OVERVIEW

Thanks for learning about the Spring Equinox with us! In this curriculum, you'll find seasonal activities, stories and teachings to support connection with the lands, skies, waters and beings we share our home with. We invite learners of all ages to engage with this resource, but the lessons are ideal for those in Grade 3 and older.

This curriculum has been developed to celebrate a significant seasonal event observed every March in our Northern Hemisphere: the Spring Equinox. The Equinox reminds us of the interconnection between the Sun, the Earth and the web of life. This resource is intended to support learners in understanding the impact of the Spring Equinox from cultural and scientific perspectives.



WHAT TO EXPECT FROM THIS CURRICULUM

We've broken this resource into 4 different lessons, with suggested activities aligned with the BC Curriculum:

- 1. Equal Night The Physical Science of the Spring Equinox
- 2. Hope & Renewal Exploring Culture through Story and Tradition
- 3. Awakening & Unfurling Animals, Humans, Plants and Earth Cycles
- 4. Sustainability & Celebration of Learning

Each of these **lessons** is **comprised of 3 components** to explore:

- Introduction to build context and give background information
- Related media to use with questions and activities
- Suggested activities to engage with content and build understanding

ACKNOWLEDGEMENTS

While the energy and time of intentionally curating this curriculum is ours, the stories and supporting media are not. The information we have gathered comes from public domains, and still we acknowledge that there is some knowledge that is sacred and only intended to be shared with permission and/or in certain situations. We own the responsibility to include and honour Indigenous voices and to ensure that unique Nations and worldviews are respectfully acknowledged.

This curriculum invites learners to align exploration with the First Peoples Principles of Learning, a set of principles published by the First Nations Education Steering Committee and the BC Ministry of Education. These Principles thoughtfully alchemize the teachings of Indigenous Elders, knowledge keepers, and scholars to highlight relationships rather than capture the processes of a singular First Peoples' society.

We encourage folks to reach out with any questions or feedback in regards to the content shared in this curriculum. You can connect with us at education@sierraclub.bc.ca. Huy ch' q'u, thank you, merci for witnessing this work.

LESSON 1 • EQUAL NIGHT

The physical science of the spring equinox

INTRODUCTION

Spring Equinox occurs when the sun crosses the equator, more or less in line with the imaginary midline of the earth. The earth rotates on an axis that is tilted about 23.5°. When the Northern Hemisphere experiences winter, the north pole faces away from the sun. On it's journey around the sun, the tilt doesn't change, but as you might be able to imagine, the north pole will gradually face towards the sun as the earth tracks it's circular path.

On the March or Vernal Equinox, the Northern Hemisphere and Southern Hemisphere receive almost equal amounts of sunlight, which explains its name of Latin origin; Vernal (spring) Equi (equal) nox (night) — the phenomenon of equal parts day and night that occurs roughly on March 21 every year.

Spring Equinox marks about a quarter of the way through the Gregorian calendar year (the calendar most used throughout the world in classrooms, offices, and digital apps). The physical world experiences all kinds of seasonal changes. Have you felt any changes to your physical body from the longer hours of daylight? Or the increased rain and temperatures?

Lesson 1 explores the physical event of the Spring Equinox.



This next section includes website links for deeper learning. To explore these resources, please visit <u>sierraclub.bc.ca/spring-equinox-resource</u>



RFI ATED MEDIA RESOURCES TO EXPLORE

WSÁNEĆ 13 Moons Curriculum

https://racerocks.ca/13-moons-acknowledgement/

What is Snowmelt and Why is it Important?

https://www.treehugger.com/what-is-snowmelt-and-why-is-it-important-5181470

Snowmelt Cause and Effect Worksheet

https://sierraclub.bc.ca/wp-content/uploads/2024/04/Snowmelt-cause-and-effect-chart-Education-Worksheet.pdf

Vernal (Spring) Equinox - Learn the Sky

https://www.youtube.com/watch?v=dWI8nFop2Vk

Explaining Equinox - Weather Network

https://www.youtube.com/watch?v=Sz7OREEO6AY

Staying the Course, Staying Alive (Stories) - BC Biodiversity

http://www.biodiversitybc.org/assets/Default/BBC Staying the Course Web.pdf



LESSON 1 • EQUAL NIGHT

Activities

Here are some suggested activities to engage with the content and build understanding!

ACT

Watch this video shared by Janine, a Science educator from Pennsylvania whose "Learn the Sky" resources encourage us to explore our shared sky together and learn about the importance of preserving dark skies. After watching her video (or just 0:50 - 2:26) it's your turn to act out the earth's rotation using found materials to show your understanding of the Earth's position during the Spring Equinox.

APPIY

Treehugger is an online library committed to sharing educational resources that promote sustainability. This article is about an important climatic event that happens this season — snowmelt. After reading this article, apply your learning through this cause-and-effect worksheet and crossword puzzle.

REFLECT

Take a look at this graph from the National Oceanic and Atmospheric Administration, and watch this video from Sierra Club BC that connects old-growth forests and snowmelt. How are snowmelt and climate change related? How can old-growth forests help keep communities safe from flooding and landslides?

FIRST PEOPLES PRINCIPLES

One of the First Peoples Principles of Learning states that learning "involves recognizing that some knowledge is sacred and only shared with permission and/or in certain situations." Read or have someone help you read the Foreword & Acknowledgement sections of this document (or more!) published by Biodiversity BC. Afterwards, use this map from NativeLand.ca to locate the homelands of the Knowledge Keepers that co-created this resource.

EXTEND

Move around your area and take note of signs of spring you can sense (touch, taste, smell, hear or see). Think of 3 ways plants and animals are responding to the seasonal changes observed in your place, and 3 ways they could be impacted by changes in seasonal patterns. Create a 4-or-more panel comic strip that shows a being changing to adapt to seasonal conditions.













IFSSON 2 • HOPF & RENEWAL

Exploring Spring through story and tradition

INTRODUCTION

Here in the Northern Hemisphere, around March 21 marks the date of the Spring Equinox. Beings are awakening, unfurling, growing, mating, giving birth and other awesome expressions of seasonal behaviour! These behaviours can be a source of inspiration for writers, artists and storytellers.

Some of the themes that emerge during this transitional time are rebirth, growth, renewal and hope. This day marks the time of year that we start to experience longer hours of sunlight, which deeply impacts the behaviour of all earthly beings. Have you felt any shifts in your emotional or spiritual experience? The equinox reminds us of the interconnection between the Sun, the Earth and all of its inhabitants.

We will explore biological and observable phenomenon in Lesson 3, and holidays and community celebrations in Lesson 4, but first, you're invited to witness, create and listen to thematic stories that honor the brighter days ahead.

Lesson 2 explores stories and traditions of the emergent days of Spring.



This next section includes website links for deeper learning. To explore these resources, please visit sierraclub.bc.ca/spring-equinox-resource



RELATED MEDIA RESOURCES TO EXPLORE

Spring Poem by David Quigg

https://sierraclub.bc.ca/wp-content/uploads/2024/04/Spring-Poem---by-David-Quigg.pdf

Template for a Spring Haiku

https://dallaslibrary.librarymarket.com/sites/default/files/2022-03/Haiku%20Worksheet%20KIDS.pdf

Spring Cleaning for Your Mental Health

https://www.camh.ca/en/camh-news-and-stories/spring-cleaning-for-your-mental-health

Heiltsuk Story, Nuyum: "Gift of the Herring" on page 19 of the Staying the Course, Staying Alive PDF http://www.biodiversitybc.org/assets/Default/BBC Staying the Course Web.pdf

WSÁNEĆ Moon of the Opening Hands

https://wsanec.com/pexsise%E1%B9%89-the-moon-of-the-opening-hands-the-blossoming-out-moon/



LESSON 2 • HOPE & RENEWAL

Activities

Here are some suggested activities to engage with the content and build understanding!



Read this poem by Father, Musician, Educator, Writer and Sierra Club BC Organizer, David Quigg. Come up with your own song, poem or dance that embodies the sights and sounds of Spring. Here is a template for a Spring Acrostic Poem and the instructions for a Spring Haiku.

APPIY

In the <u>Spring Poem</u>, what do you think is meant by "we've forgotten the steps and have replaced them with stomping"? Consider all of the ways that your daily activities impact the planet (e.g. how you get around, what you eat, how your home is heated etc.). Come up with 3 actions you can take to reduce the impact of your "stomp".

RFFI FCT

The Centre for Addiction and Mental Health shares this article about the importance of "Spring Cleaning for your Mental Health". Read it and try setting one short and one long term goal for your mental wellness. Spring Cleaning is a popular tradition this time of year, is it important to you? Try tackling a small cleaning project and reflect on your feelings before and after. Brainstorm some ways your community can pitch in to support a cleaner future.

FIRST PFOPI FS PRINCIPI FS

One of the First Peoples Principles of Learning is "learning involves recognizing the consequences of one's actions." Read the Heiltsuk Story, Nuyum: "Gift of the Herring" by Athalis, Frank Brown on page 19 of the "Staying the Course, Staying Alive" document. What happened when the boys helped the herring? Who are some of the other beings that were impacted by their actions? Can you think of some actions you can take this time of year to help the more than human beings in your area?

FXTFND

Share a springtime story from your community! Send your springtime picture or write up to education@sierraclub.bc.ca — we'd love to see what you come up with!





LESSON 3 • AWAKFNING & UNFURLING

Animals, humans, plants and Earth cycles

INTRODUCTION

The Spring Equinox marks a pivotal moment of movement in our planet's cycle. Along with this movement comes seasonal changes to plants and animals in our community. We can learn so much from how these community members survive and thrive with the changing seasons.

Residents along the coast might note this time of year by the fishy smell that fills the air on parts of Vancouver Island. With that smell comes a significant event in the nutrient cycle for marine and terrestrial beings — the herring spawn. Herring are a keystone species which signify the movement of seabirds, whales, and sea lions.

You may have noticed blooming daffodils, supple new spruce tips, or some cheery cherry blossoms in your area. The coming of spring is a pivotal point for plants. Their buds which have been dormant all winter open to display a brilliance of color to attract pollinators. Take a minute to stop and smell the flowers and you might notice some scents are more appealing than others. This is because certain plants like to be pollinated by different animals including flies, bees, and hummingbirds.

Lesson 3 explores local biological changes and invites learners to observe their surroundings.



This next section includes website links for deeper learning. To explore these resources, please visit <u>sierraclub.bc.ca/spring-equinox-resource</u>



RELATED MEDIA RESOURCES TO EXPLORE

Herring Spawning Video

https://www.youtube.com/watch?v=u08viCTTG1Y

What Native Plants Attract Pollinators in British Columbia? - David Suzuki Foundation https://davidsuzuki.org/living-green/what-native-plants-attract-pollinators-in-british-columbia/

https://linnet.geog.ubc.ca/biodiversity/eflora/identification.html

Strong Nations Plant Knowledge Cards

https://www.strongnations.com/store/item_display.php?i=7484

Seasonal Rounds Activity

https://bcinvasives.ca/for-educators/activity/seasonal-rounds/

Sound Maps

https://www.lifelab.org/school-garden-resources-all/2021/01/sound-maps



LESSON 3 • AWAKENING & UNFURLING

Activities

Here are some suggested activities to engage with the content and build understanding!



ACT

Do you know which plants attract Native Pollinators in B.C.? This resource from the David Suzuki Foundation will help you identify Native Plants from your specific Eco-Region. Using this resource as a guide, find a nursery in your community that distributes native pollinator-attracting plants and plant them in your garden.



APPIY

Search for flowers that are blooming near you. Are there any on the ground? What are some gifts unique to the flower you saw? Try using Sierra Club BC's Ecomap, E-Flora BC, the "Seek" App by iNaturalist, a guide book like this one (check out your local thrift store or bookstore for a copy) or Strong Nations' The Pacific Northwest Plant Knowledge Cards.



RFFIFCT

What sounds and smells do you notice in the springtime? Can you challenge yourself to pick a scent beyond flowers and a sound beyond birds? Try connecting to the sounds around you by making your own sound map as explained in this video.



FIRST PEOPLES PRINCIPLES

One of the First Peoples Principles of Learning is "learning recognizes the role of Indigenous knowledge". Educators can refer to this lesson plan from Invasive Species Council of BC to foster a deeper understanding of Seasonal Rounds. Try connecting with a Knowledge Keeper or Elder in your community to learn some of the traditional foodways, plants and animals from the place you live. As a supplement, use the First Voices language resource to find the names of the important seasonal beings in your place - https://www.firstvoices.com/languages.



FXTFND

Watch this video, a visual story of herring spawning activity around Vancouver Island. This important spawning event happens every spring. The Island Marine Aquatic Group encourages the public to share key information observed during this spectacular natural event to help with research and conservation. This is an example of "Citizen Science", read more about citizen science projects happening in your area here and share the power of your stories and experiences with a project that feels important to you.



LESSON 4 • SUSTAINABILITY

Sustainability and celebration of learning

INTRODUCTION

Turtle Island (a name used by some Indigenous communities to describe North America) is a land of diverse communities. Our globalized nation's biodiversity leads to many unique intersections of identity and ways of knowing. A fun way to learn about people and places is through cultural celebrations and from budding trees to buzzing bees, we can think of so many wonderful seasonal reasons to do just that!

Holidays and celebrations often call for food, decorations and activities — while we celebrate we mindfully acknowledge that the consumables we choose all have a cost and a footprint; resources and energy are required to produce them.

Lesson 4 explores cultural expressions of the Spring Equinox. It also offers suggestions for festive practices that are mindful of our connection with (and responsibility to) the web of life and future generations.



This next section includes website links for deeper learning. To explore these resources, please visit <u>sierraclub.bc.ca/spring-equinox-resource</u>



RELATED MEDIA RESOURCES TO EXPLORE

Hoobiyee

https://www.cbc.ca/news/canada/british-columbia/indigenous-vancouver-hoobiyee-1.7131266

Earth Day

https://www.earthday.org/earth-day-2024/

Ramadan

https://www.bbc.com/news/explainers-56695447

Easter

https://www.thecanadianencyclopedia.ca/en/article/easter-in-canada

https://time.com/5799354/what-is-holi/

Maslenitsa Festival

https://www.56thparallel.com/maslenitsa-festival/



LESSON 4 • SUSTAINABILITY

Activities

Here are some suggested activities to engage with the content and build understanding!



ACT

Choose one of the springtime celebrations shared in the related media section, or another one you've heard of or found on your own. Create an invitation or poster that shows your understanding of the festivities.



APPIY

In your family, community or school, choose a way to celebrate the Vernal (Spring) Equinox in a way that responsibly uses resources and connects with nature.



REFLECT

Here are some questions to reflect on. Do you already celebrate Spring Equinox? What traditions do you observe? What celebrations do you recognize in March, April, May or early June?



FIRST PEOPLES PRINCIPLES

One of the First Peoples Principles of Learning is "learning requires exploration of one's identity". Consider where your roots are from. Does your lineage have any ways of celebrating this time of year? Ask a family member or an older person that is close to you to share a story of springtime.



FXTFND

Try an attitude of gratitude! Make a list of 5 things from this year that you are grateful for. Creating space to acknowledge the good things in life helps cultivate personal resilience. Getting outside and connecting with the lands and waters can help boost your mood as well, especially with the sunnier spring days!



Keep learning with Sierra Club BC!

FXPI ORF OUR LIBRARY OF FDUCATIONAL RESOURCES AND ACTIVITIES

If you enjoyed this curriculum, we invite you to check out our growing library of materials that can help learners in your community connect with the web of life. You can access those learning tools at sierraclub.bc.ca/educators.

We also offer in-person environmental workshops for youth and professional development opportunities for educators to help bring place-based learning into the classroom. If you'd like to schedule a session with our facilitators of learning, please request a workshop here.



ABOUT SIFRRA CLUB BC

At Sierra Club BC we are creating a more inclusive movement, empowering new partners and local leaders to take positive steps in their communities that help restore balance to vital ecosystems in B.C.

As part of this work, we've run environmental school workshops and developed educational resources for over 20 years. Our programs use a place-based approach that centres ecological and cultural knowledges. They facilitate a shift to respectful, reciprocal relations with the land, water and all living beings.

We believe that education, especially for children and youth, is key in ensuring future generations are well-versed in stewarding abundant ecosystems and a stable climate. After all, they're the decision-makers of tomorrow!

We are so grateful that you're on this journey with us. Together, we can build a brighter future for all.





HAVE QUESTIONS?

It's a pleasure to connect with you and the learners in your community. Please don't hesitate to contact us if you are looking for ideas, other supports, or just to chat!

You can reach us via email at education@sierraclub.bc.ca.

