MIGRATORY BIRD STUDY

SOCIAL JUSTICE ASSIGNMENT EDSO 3200 EMMA PITTMAN







We would like to acknowledge that we are on the traditional and unceded territory of the Tk'emlúps te Secwépemc, within Secwepemcúl'ecw. We honour the rich history, culture, and contributions, both past and present. We recognize their enduring presence and cultural heritage and commit to supporting reconciliation efforts and honouring their rights and traditions. We are grateful for the opportunity to live, learn, and grow on these lands.



MIGRATORY BIRDS & THEIR STUDY

- This is scientific research aimed to understand the behaviours, populations, movements, habitiats and conservation needs of migratory bird species.
- Using the best available migration science to protect birds and the places they need across their full annual life cycles.
- Migratory birds face threats during all stages of the annual cycle, and these threats are accelerating.
 - Fortunately, scientific data, particularly during migration, are accumulating; however, we need to act swiftly and collectively to protect birds and the places they need before the opportunities to do so disappear.

- Migratory birds are species that travel from one region to another at specific times of the year.
- Birds migrate due to changing in seasons, food availabilty and nesting habits.
- Without migration many bird species would struggle to survive harsh weather and food shortages.
- There are different types of bird migration.
 - Seasonal: based on weather and food (ex. geese).
 - Altitudinal: birds move between high and low elevations. (ex. hummingbirds).
 - Nomadic: move irregularly in search of food (ex.waxwing).

AMIGO ALADOS

"WINGED FRIEND"

Amigos Alados is an international environmental eduction project that offers instruction on migrator bird study for students in Western USA, Canada and Mexico.

 Works with students to raise awareness of birds and their habitats, watershed ecology and environmental restoration.

Amigo Alados was created in 2007 this started as an educational project in Western USA and mexico between elementary schools. These schools started studying birds in their area that migrated and shared their research and observations with each other.





CURRICULUM GR.3/4

- Grade: Can be suited to any grade.
- Subject: Science, Social Studies and Art.

INDIGENOUS CONNECTIONS & FIRST PEOPLES PRINCIPLES OF LEARNING

We will apply Secwepemc traditional knowledge to current environmental issues, helping protect migratory birds and support healthy ecosystems in our region today.

"Learning involves patience and time."
Migratory birds follow a seasonal cycle, which means it takes time to observe patterns. This is a great way for students to value patience and observation.

BIG IDEA

"People from diverse cultures and societies share some common experiences and aspects of life." - SS 3

Students in Canada and Mexico both care about nature and birds showing that people from different places can have similar values.



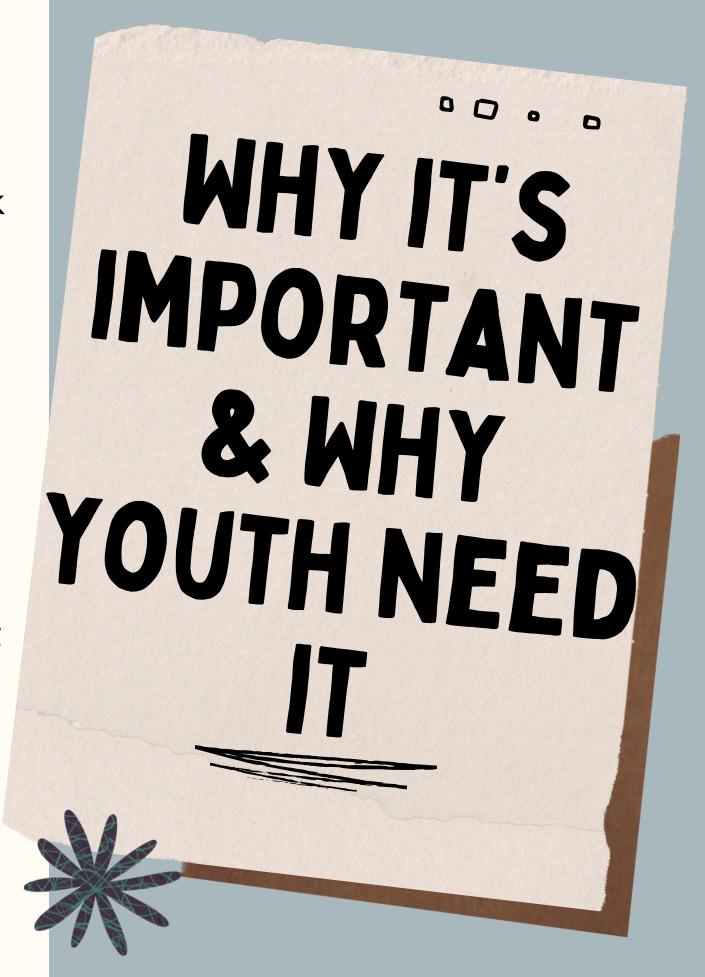
Curricular Competency:

- "Explain why people's beliefs, values, worldviews, experiences, and roles give them different perspectives on people, places, issues, or events" - SS3
 - Students learn how people in different cultures understand birds and the environment in their own unique ways.
- "Recognize the causes and consequences of events, decisions, or developments" - SS3
 - Students explore how things like pollution or habitat loss hurt bird populations and why it's important to take action.

Content:

- "Relationship between humans and their environment" SS3
 - Students see how people impact nature and learn how they can help care for the earth.
- "Aspects of life shared by and common to peoples and cultures" - SS3
 - Students discover that both Canadian, American and Mexican communities have traditions and ideas about birds and nature.

- Help bring attention to migratory birds and their ecosystems so they can be saved.
 - Finding solutions to problems.
 - Encourages students to observe nature closely, track patterns and analyze data (critical thinking and problem-solving skills)
 - Promotes global awareness.
- Inspire students to become interested in environmental sciences.
 - allows students to explore topics in biology, ecology, and geography.
- Connect to nature and environmental awareness.
 - Sensitize students to environmental issues of habitat loss, toxic contamination, global warming and rapid extinction.
- Engagement with technology tools and feildwork.
- Inspiration for creative and artistic expression.
 - Can explore art, photography, and writing projects to express their findings.



There are only 3 schools in Canada to participate in the Amigos Alados project. "Students are learning about migratory birds that follow the Pacific Flyway migratory route - through collaboration with pen pals in another country. Objectives of this program are "learning about birds and the conservation of species and habitat to develop a sense of environmental stewardship." It is our collective responsibility to consider wildlife beyond our community - in a global context." (SD27)

WHAT ARE OTHER SCHOOLS DOING AROUND THE SAME TYPE OF INITIATIVE?

PEN PAL PROJECT



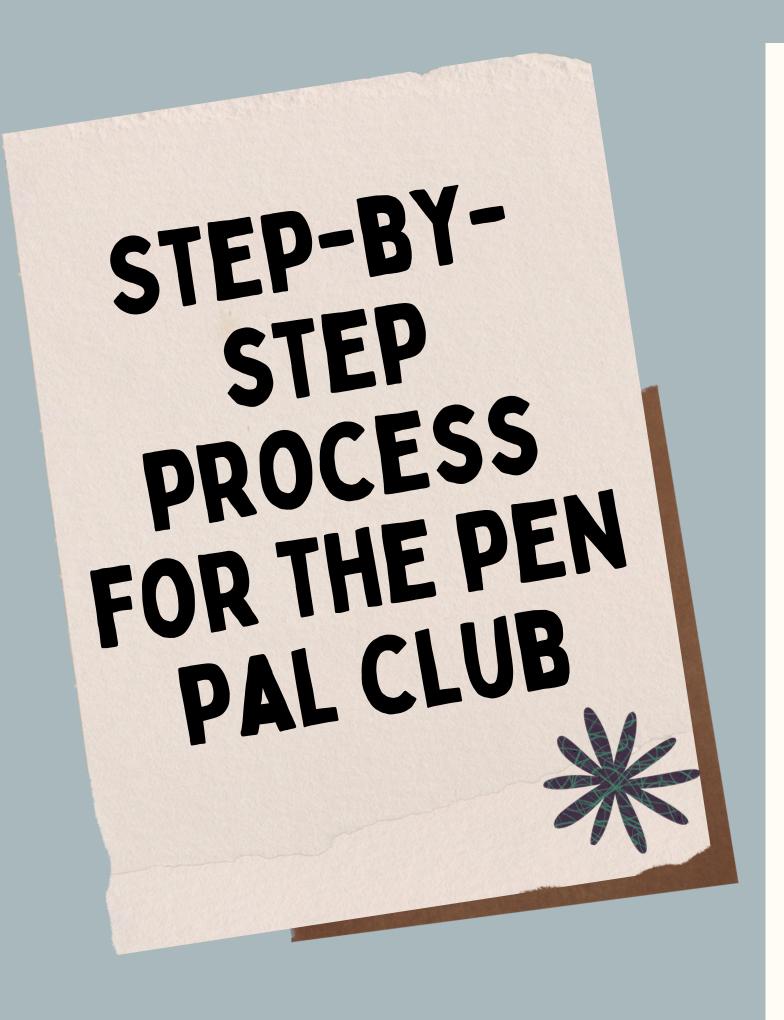
CONTEMPORARY CHALLENGES & OPPORTUNITIES

Challenges:

- Habitat Loss: Many migratory birds rely on specific habitats for feeding, breeding and resting during their migrations. Destruction of these habitats due to urban development, deforestation, and climate change is a major threat
- Climate Change: alters migration patterns and the availability of food and nesting sites. Birds may arrive too early or late, or find the habitats they depend on have shifted.
- Pollution: plastic and pesticide contamination, harms birds' health, migration success and food sources.
- Human-Wildlife Conflict: Migratory birds often face risks from hunting, power lines, wind turbines, and other human-made structures.

Opportunities:

- Global Conservation Efforts: Initiatives like the "Amigo Alados" program provide an excellent model for collaboration and creating awareness around the importance of conserving migratory birds.
- Educational Outreach: Schools and communities can engage students through interactive lessons, field trips, and science projects that track migratory birds.
- Technology and Innovation: Using GPS and satellite tracking technology, students can follow migratory paths and understand the challenges these birds face.
- Local Community Engagement: Schools can work with local organizations and governments to protect local migratory bird habitats and raise awareness



- **Recruit Students:** Invite students to join an afterschool or lunchtime club.
- Introduction Session: Teach about migratory birds and Kamloops' role along the Pacific Flyway.
- Incorporate Indigenous Knowledge: Learn from Secwepemc Elders about traditional teachings and local birds.
- Bird Observation & Journaling: Students observe birds and record their findings.
- Pen Pal Exchanges: Students write letters to peers in Mexico and USA, sharing bird sightings and cultural experiences.
- Student-Led Conservation Actions: Create posters, plant native plant species, and promote bird-friendly school spaces.
- Community Sharing: Present projects to the school and PAC, celebrating students leadership.



BIRD SPECIES

Students will study 16 birds that migrate between lower British Columbia/ Northern California and Jalisco, Mexico.









- 1. Black-chinned Hummingbird.
- 2. Rufous Hummingbird.
- 3. Ash-throated Flycather.
- 4. Warbling Vireo.







1. Tree Swallow

3. Barn Swallow

2. Violet-green Swallow

4. Swainson's Thrush











- 1. Hooded Oriole
- 2. Bullock's Oriole
- 3. Orange-crowned Warbler
- 4. Black-throated Gray Warbler

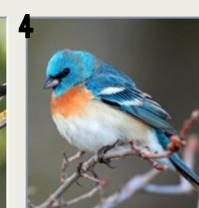


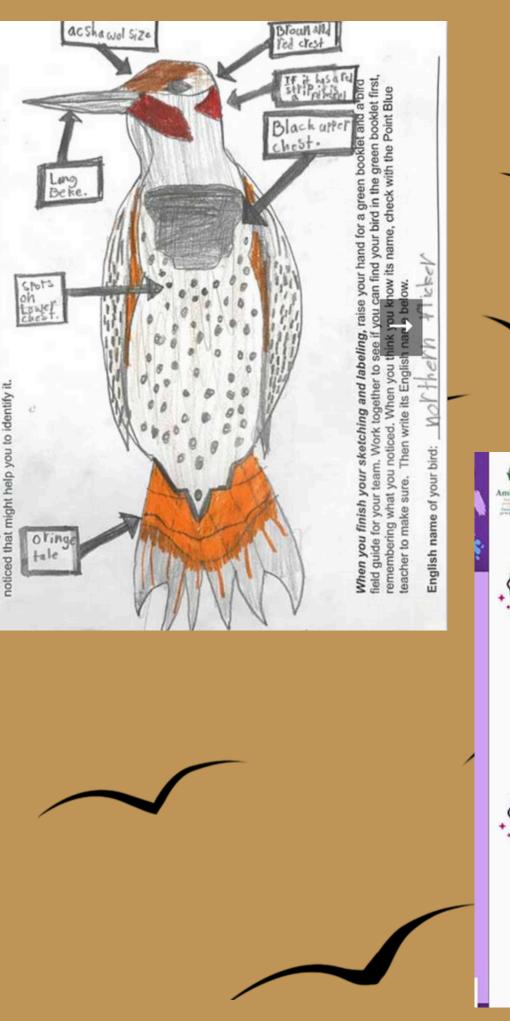
- 2. Western Tanager
- 3.Black-headed Grosbeak
- 4. Lazuli Bunting











WHAT WE ENVISION









INDIGENOUS ORGANIZATIONS AND COMMUNITY CONNECTIONS

TK'EMLÚPS TE SECWÉPEMC

The local Secwepemc Nation in Kamloops holds knowledge of the land and animals.

They are potential partners who can share cultural perspectives on migratory birds.

SECWEPEMC CULTURAL EDUCATION SOCIETY

This organization preserves and teaches Secwepemc language, culture, and traditions.

We could partner with them to integrate Indigenous teachings into the bird club.

LOCAL ELDERS AND KNOWLEDGE KEEPERS

Elders or Knowledge
Keepers can share
traditional stories and
teachings about birds and
the seasons.

Their knowledge helps students understand long-standing relationships with the land.



LITERATURE REVIEW

• Amigos Alados Program (2023).

 Connects students across borders through migratory bird studies, promoting environmental stewardship and cultural exchange.

 Pacific Birds Habitat Joint Venture (2023).
 Focuses on conserving vital migratory bird habitats in British Columbia through collaborative projects with Indigenous communities and conservation partners.

• <u>Survival by Degrees: 389 Bird Species on the Brink</u>, National Audubon Society (2019).

 Two-thirds of North American bird species, including many migratory birds are at risk due to climate change.

• <u>An Idiolectal Secwepemctsin Ethnozoological Database</u>. Compton et al (1993).

 Summarizes some Secwepemc traditional knowledge of animals, including culturally important species and their roles, with contributions from a Secwepemc Elder.

• Indigenous Climate Hub.

 Highlights Indigenous-led initiatives that protect land, water, and wildlife from the impacts of climate change across Canada.





RESOURCES

https://ecovegetation.com/what-are-migratory-birds/#google_vignette

https://amigosalados.org/teachers.php

https://en.wikipedia.org/wiki/Pacific_Flyway