

Name: _____

Date: _____

RESEARCH TO HELP AMPHIBIANS CROSS PACIFIC RIM HIGHWAY PART 1

StoryMap Scavenger Hunt

This activity was developed by West Coast NEST, an initiative of the Clayoquot Biosphere Trust, based on the 'Research to Help Amphibians Cross Pacific Rim Highway' [StoryMap](#) created by Associations of Wetland Stewards of Clayoquot and Barkley Sounds, with funding provided by the NSERC PromoScience program.

Photo Credit: Barb Beasley



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StoryMap Scavenger Hunt

Pre-Reading: The goal is to activate and connect to prior knowledge: *Full sentences*

What type of experience do you have with salamanders and frogs?	
What does it take for you to safely cross the road?	
What types of actions have you taken to protect or take care of an animal? (Think: A pet? Wild creature?)	

Activity: Work through the StoryMap to assist you with answering. Take your time and think critically. *Point form accepted, make sure to answer all parts of the question*

Scientists estimate that more than 40% of frog and salamander species are declining around the world. Why is this such a serious concern for our planet?	
Why are so many amphibians in trouble? What are some main threats they face?	
Who designed this StoryMap? What is the organization's main goal?	

What prompted this mitigation work? (consider: what does "mitigation" mean?)	
When was the best time of day to do a road survey? Why do you think this is?	
What details were recorded when they found an animal on the road?	
Which wetland site near the highway was identified as having one of Canada's largest breeding populations of red-legged frogs?	
What are some of the key features recommended for the culvert/passage (to work best for amphibians)?	
What tool was used to monitor amphibian movement through the culvert?	
What role did community volunteers play in this project?	
What is one challenge or limitation mentioned about using culverts or tunnels for amphibians?	
Why might it be worse to build a new road through a wetland rather than retrofit mitigation on an existing one?	

Critical Thinking Questions: Apply your understanding, think bigger, deeper and connect. *Full sentences*

How might amphibian crossings like this project inspire similar conservation efforts for other species?	
What responsibilities do local communities and governments share when balancing development with species protection?	
If you were designing your own wildlife crossing project, what would you do differently or add to improve success?	



TEACHER RESOURCE

This key uses typical answers based on the StoryMap content; adapt as needed

Scientists estimate that more than 40% of frog and salamander species are declining around the world. Why is this such a serious concern for our planet?	Frogs and salamanders are key indicators of ecosystem health. Their decline signals pollution and habitat loss, and it disrupts food webs and biodiversity worldwide.
Why are so many amphibians in trouble? What are some main threats they face?	Habitat loss, pollution, road mortality, climate change, and diseases such as chytrid fungus.
Who designed this StoryMap? What is the organization's main goal?	Designed by the Association of Wetland Stewards for Clayoquot and Barkley Sounds; their goal is to conserve wetlands, educate the public, and support community-based research.
What prompted this mitigation work? (consider: what does "mitigation" mean?)	High amphibian mortality on the Pacific Rim Highway during seasonal migrations between forest and wetland habitats.
When was the best time of day to do a road survey? Why do you think this is?	At night, especially during warm, rainy conditions; volunteers walked or drove slowly along the highway recording amphibians seen or found on the road.
What details were recorded when they found an animal on the road?	Species, location, condition (alive or dead), and other notes such as weather or behavior.
Which wetland site near the highway was identified as having one of Canada's largest breeding populations of red-legged frogs?	Swan Lake Wetland near Ucluelet.
What are some of the key features recommended for the culvert/passage (to work best for amphibians)?	Large, moist tunnel with natural soil substrate, open ends for light and airflow, and fencing to guide amphibians into it.

What tool was used to monitor amphibian movement through the culvert?	Motion-triggered or time-lapse cameras.
What role did community volunteers play in this project?	Conducted road surveys, recorded data, helped install fencing and monitor the underpass, and educated the public.
What is one challenge or limitation mentioned about using culverts or tunnels for amphibians?	Not all species use them; effectiveness depends on design, maintenance, and ensuring fences remain intact.
Why might it be worse to build a new road through a wetland rather than retrofit mitigation on an existing one?	Building new roads destroys intact habitat and fragments ecosystems; mitigation only partially reduces damage after it's done.

Critical Thinking Questions: Answers will vary

Suggested Extension Activities & Continued Learning Opportunities

- Conduct a problem-based learning inquiry with a hypothetical local development. Have students explore different habitats of concern around the development and potential impacts. Explore how to mitigate negative impacts to the local ecosystem.
- Research a different animal corridor and share out
- Visit an amphibian calvert in Clayoquot Sound - invite Barb Beasley!

Curriculum developed by **Monique Comeau** of the West Coast NEST, an initiative of the Clayoquot Biosphere Trust, based on the 'Research to Help Amphibians Cross Pacific Rim Highway' [StoryMap](#) created by **Barbara Beasley** of the **Associations of Wetland Stewards of Clayoquot and Barkley Sounds**, with funding provided by the NSERC PromoScience program.

What is West Coast N.E.S.T.?

The West Coast N.E.S.T. (Nature. Education. Sustainability. Transformation.) is a regional initiative led by the Clayoquot Biosphere Trust that connects communities, organizations, businesses, and knowledge holders on the west coast of Vancouver Island.

Through education, collaboration, and capacity-building, the NEST creates meaningful learning opportunities, promotes the region's diverse educational programs, and supports a resilient and diversified local economy.

The NEST also facilitates place-based learning by connecting learners with local experts, creating educational resources, and hosting community events.

Learn more at westcoastnest.org.

Looking for more place-based educational content?

The West Coast NEST connects visitors and residents with unique and impactful learning opportunities. Many of these come in the form of place-based, face-to-face, and hands-on activities, but the NEST also helps share the region's abundant knowledge with schools and learners from afar. You can explore local research and conservation work through our online collaborative resources such as our interview series and our StoryMaps collection.

For high school, university, and adult groups seeking immersive educational experiences, we also offer customized itinerary planning, on-site orientation, and ongoing support for each visit. Delivered by regional partners, each program can be tailored to include hands-on learning in areas such as Indigenous culture, ecology, sustainability, science, language, history, outdoor education, and the arts.

Contact info@westcoastnest.org to start planning.

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Have feedback?

We would love to hear from you! Reach out to info@westcoastnest.org to share feedback on our resources, suggest ideas for new learning materials, or ask questions. Your input helps us create tools that better support educators and learners.

