

# Bryophyte Detectives (Mission “Bryo”)

Have you ever been a detective? To identify small plants such as mosses and liverworts it helps to use your detective skills. By the end of this detective activity, you will learn more about some species and this PhD project.

Laura collected these three mosses somewhere in the Lower Mainland.

## 1. Where did these bryophytes come from?

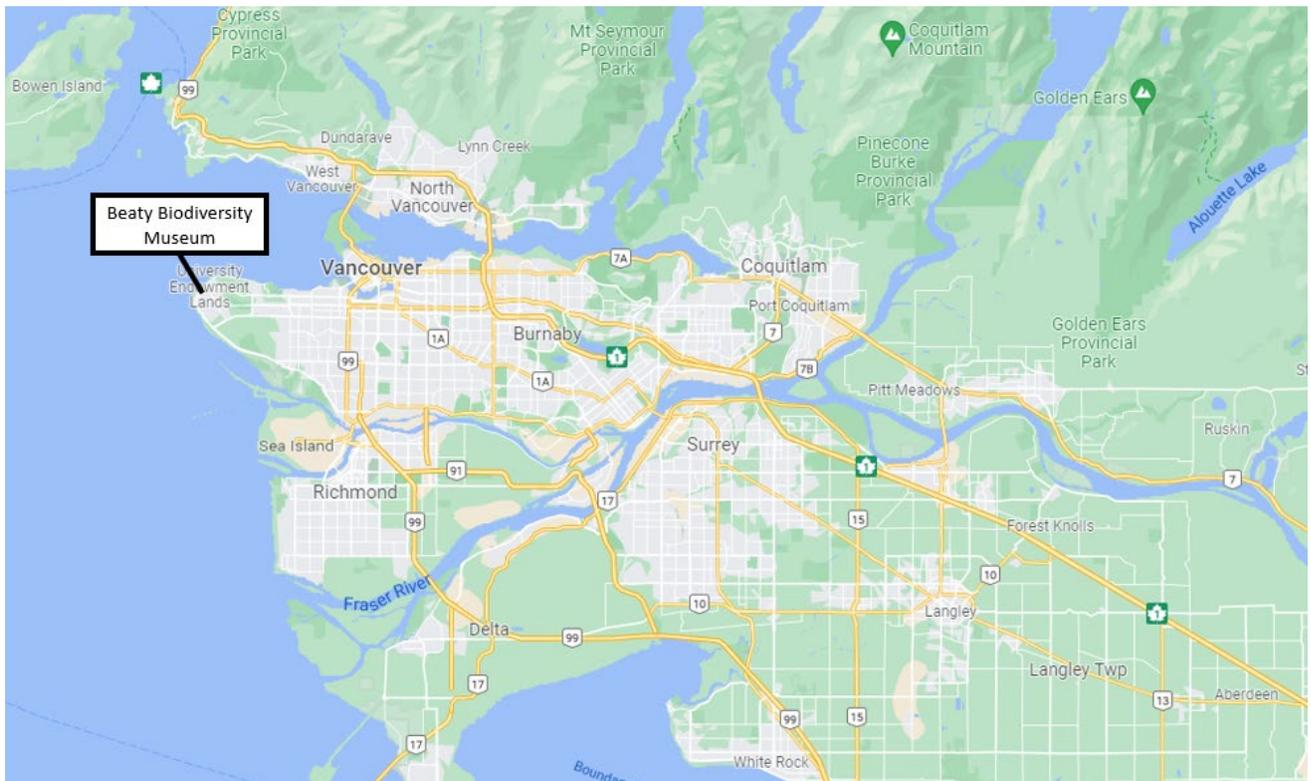
It is in a Pacific Northwest rainforest, but where and what specific name?

The Beaty Museum is listed on the map for reference but is NOT the location!

Clue: 49.263532, -122.5754148

Name of the location: \_\_\_\_\_

Draw it on the map below!



**2. Similar to many other organisms, bryophytes of particular species are often found in particular habitats.**

**Which habitats were these bryophytes collected in and why?**

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This PhD research is looking at how plants, associated organisms, and their environment are interconnected like an ecosystem.

*Clue: At the base of the tree seedlings what might that be? It starts with "g" and ends with "d"!*



3. Now we have the *background* information for the scene of the bryophytes investigation (“Mission Bryo”)! There are many species of bryophytes found in her research, but let’s use the links and videos to identify these three:

- Species 1: \_\_\_\_\_

*Clue: Latin name please!*

<https://www.inaturalist.org/observations/102800251>

<https://www.youtube.com/watch?v=4Yd3P9T5QCc>



- Species 2: \_\_\_\_\_

*Clue: Latin name please!*

<https://www.inaturalist.org/observations/103027695>



- **Species 3:** \_\_\_\_\_

*Clue: Latin name please!*

<https://www.inaturalist.org/observations/100821152>

<https://en.wikipedia.org/wiki/Dicranum>

<https://bryophyteportal.org/portal/collections/individual/index.php?occid=4584046>



**Thank you for being good sporophytes (sports!) Please email Laura Super at [phytobiomeresearch@gmail.com](mailto:phytobiomeresearch@gmail.com) if you have more questions about bryophytes or phytobiome research!**

**Check out the Phytobiome Research Working Group (and other offshoots like PhytoRCLASS here: <https://blogs.ubc.ca/phytorclass/>).**

*Image credits, references, and hints can be found on the answer sheet!*