

Instructional Video 5. Needleleaf Forest, Stop 2

So, we have just entered the needle-leaf forest. Have a look at the size of the stems. They are, some of them, very large. We have three species here that you need to identify to be really proficient with the ecosystem species composition here. There are three needleleaf species. Here's one of them. This species is actually also, this individual has been affected by a practice that has been going on by Musqueam and other Indigenous peoples for many many hundreds of years, and it's a process called bark stripping. And this particular species, very important for them for clothing, for all sorts of uses, including: they would put their documents, their legal documents between Cedar bark to show that you couldn't break that document [the contract therein]. So again, I've given it away [revealed the species name]: It's a Cedar, but I want you to have a look at the leaves from this tree, and they're right here. If you have a look, we recognize that this leaf form is scale-like. So, have a look at your key and compare it to this particular leaf and look at that bark. Again, one of the three conifers.

I'm going to move over in this direction to a second of the three species that we want to identify here – conifer species – and it's this one right here. Now, I actually took a core of the wood from this tree, this particular individual, right from there, and I determined that it was about 85-90 years old based on the annual rings. So that's how old this tree is, and it has very distinctive bark, and it has needles that are needle-like, and that is what the needles look like. And they're quite soft. So, spruces tend to look a bit like this but have sharp needles, this one's quite soft and not too pokey. It also has a very distinctive cone, and I want to just look around, see if I can find one, and there indeed is one, and they again are distinctive. They're the largest cones of the three conifer species, and we say that they have these little mouse tails in them, because during fires the legend is that the mice would crawl into those little scales and just their tails would be showing, and if you bend up those conifer scales, actually they look a bit like mouse ears, but this guy's getting a little bit hard so I can't do it. And again, that's its cone. The third of the conifer species, I'm going to walk in this direction, and this is right here, is a member of that species. And I'm hoping to find, and yes! I did find a branch that illustrates what it looks like. The undersides of the needles tend to be a little silver and its distinctive in that the needles have two lengths, we call them sort of that they have two leaf morphs, some are long some are short. So that again is the third of our conifer species that you should identify, and I'm looking for some cones, they're very small for this species, so I can't actually see any, they must have kind of crumbled, but again, quite small cones for this particular species. It tends to, if you can get up and look at the canopy, it tends to have a top that kind of tilts over, in a sort of a tilting fashion. So, there we have it. And again, very shady, thinking about the conditions here, young Alder species, which are fairly early-successional, are not going to be very successful at recruiting here. We do have another species that does survive inside this shady forest and I'm actually going to get the camera-man to wander over to here because I think I see it, and it is a member of the Maple genus, *Acer*, and it has a name that has the word "vine" in it. So, this is it here. Again, because it's deciduous, you can't see its leaves at this time of year. But, if you use the clues that I've given you, you may actually be able to find the member of the *Acer* or Maple genus that is an understory tree that tends to survive in the heavy shade of this conifer forest, and we're done!