

What Invertebrates Hide Under The Nursery Logs?

By:

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Purpose

The purpose is to find what the most common invertebrate to Kalopa is.

Hypothesis

We thought the most common Invertebrate would be the Armadillidiidae, also known as a pill bug or roly poly.

Background

Kalopa State Park is a lodging and camping park with a 0.7 mile loop trail in a native 'ohi'a forest at 2000 ft elevation. Kalopa is known for its very old 'ohi'a forest. Nursery logs are a big part of the Kalopa ecosystem. Nursery logs are large decaying fallen trees that provide support and shelter for other plants and invertebrate. They are covered in mosses and ferns which help accelerate the decaying process of the log. Invertebrates are animals that neither possess nor develop a vertebral column. Some common invertebrates that you might notice at Kalopa, are Earthworms, Earwigs, Spider, slugs and Armadillidiidae, also known as a pillbug or roly poly.

Variables

Independent = Logs we looked under at Kalopa

Dependent = What type of invertebrate we found

Constant = Time we spent at each log looking for result

Methods

Materials =

2 magnifying glasses
1 dissecting jar
3 cameras
1 map of Kalopa

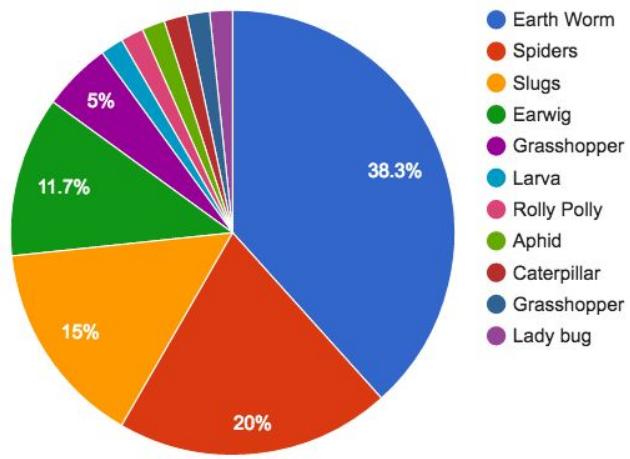
Procedure =

1. First, we went in the forest to locate a nursery log to dissect
2. Then we take out the materials
3. Lift over the log and look inside of and around it to find invertebrates or bugs
4. Lift up the log to put it back into the original position in which we found it

Results

Amount of Specimens under each log

Specimens	Tallies
Earth Worm	23
Slugs	9
Spiders	12
Earwig	7
Centipede	1
Larva	1
Rolly Polly	1
Aphid	1
Caterpillar	1
Grasshopper	3
Lady bug	1



Discussion

Our hypothesis was incorrect. We thought that there would be a lot of Armadillidiidae, also known as a pill bug or roly poly, but in the end there was only one. Our research question was, what is the most common invertebrate underneath the nursery logs at Kalopa? As you can see in the results, the most common invertebrate was the earthworm. We found 23 earthworms in our time at Kalopa. As well as, 9 slugs, 12 spiders, 7 earwigs, and much more.

One problem was, trying to get the insects into the dissecting jar. We attempted to get a Earwig and a spider in the dissecting jar, but it was too squirmy. Another problem we had at the beginning was trying to find a nursery log that was good enough to dissect. Those were the only problems we had during the project.

Conclusion

We learned a lot about nursery logs, like there are a lot of bugs under them and they are home to a lot of Invertebrates. We also learned that this area of nature is very different from the other forests around the world. An 'ohi'a tree grows a meter in diameter every 1000 years. It is a one of a kind forest.