



Operator Project Path

The Operator's job is to design a mechanical tool that can deliver resources to the grand tree. Explore the **Project Path** to see how ecologists use mechanical tools in real life. Use what you learn to design your mechanical tool!

Vocabulary Words:

Forceps

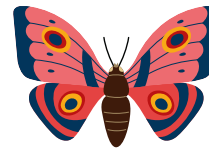
Nets

Ecology

Species

Reforestation

Operator Role/ Game Connection:



About Ecologist Job Tools

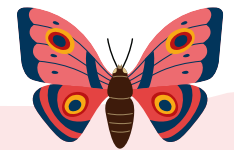


Plant Study Tools

In the rainforest, plant **ecologists** - who study how living things like plants and animals work together in nature - use tools like **forceps** to pick up tiny seeds without hurting them or the plants nearby. They might use **nets** to catch seeds that fall from tall trees or long poles to reach branches high above.

By studying these seeds, they learn how plants grow and survive, which **species** are most important for animals, and which ones need protection. This helps with **reforestation** and keeps the rainforest healthy for all living things.

Plants, animals, water, and soil all depend on each other to stay healthy, and even small changes can have big effects. Ecologists can sometimes spot problems early and make suggestions to improve the ecosystem. This work helps people make better choices about how to use and protect rainforest resources so that nature and communities that rely on the forest can thrive in the future.



Use the guiding questions to continue researching the Project Path. You can use additional resources like trusted educational websites, books, and news articles written for students, videos of expert interviews, and tools provided by your teacher or coach.



How could you start a conservation project to help a nearby ecosystem?

Topic	Guiding Questions
People & Careers	• How do plant ecologists study and protect rainforests? • Why is the work of plant ecologists important for animals and people?
Technology	• What simple tools do plant ecologists use to collect seeds and plant samples? • How do nets and poles help plant ecologists reach seeds in the rainforest?
Impact	• How does studying seeds and plants help scientists protect biodiversity? • Why is it important for ecologists to understand the connections between plants, animals, water, and soil in an ecosystem?