The Cat Shirts (60% Off)

**Describe the key ecological, economic, aesthetic, or other problems your group identified related to your scenario.**

White pine forests are highly valued for their beauty and recreational potential, and are economically important for timber and tourism. Ecologically these forests are important for gooseberry growth in the understory.

Ecologically, if there are decreases in pines, it’s likely that there are downstream effects on the community, there are food resources, nesting resources, and differences in light availability that will influence the community.

Problem- if this parasite has been around since 1900, how do you asses this from a conservation standpoint?

**Describe the questions that guided your group’s model building.**

What is the infection pathway for this rust? – I.e. it’s important to consider how this rust infects, is it a contact to leaf parasite? Does it infect via trunk damage?

Is there a dilution/amplification effect? If you add organisms/plants to the system it could either dilute the total number of parasites or increase the total number of parasites available in the environment.

How does the rust get transmitted between trees?

What organisms should be included in the model?

What affects transmission? Is it wind transmitted? Animal transmitted?

Is there treatment that kills fungus before it kills trees? If there’s a way to manage this, that’s important, but it’s also important to know if there’s any type of immunity that develops over time

How do we track this geographically/what scale do we need to use?

Can you tell if a tree is infected? How? IS there a visual clue to infection or is sampling labor intensive?

How impactful are human interactions in this?

Are there seasonal dynamics to this?

Does this influence timber harvest?

How long does the pathogen remain viable in the environment with or without a host?

Are there invasive species that exacerbate transmission?

Does this pose a threat/risk to recreational activities (i.e. tree climbing, obstacle courses, even hiking, is there an increased risk of tree falls?)

Is this a new epidemic?

Can you look at tree cores and see if this has happened before?

Are there seasonal changes that influence disease dynamics?

**Which items in in Epstein’s Sixteen Reasons Other Than Prediction to Build Models helped guide your group’s model building process?**

Illuminate core dynamics, discover new questions, promote a scientific habit of mind, eliminate core uncertainties, offering crisis options, discipline the policy dialogue, educate general public, challenge the robustness of prevailing theory

**Briefly describe each group member’s contributions to the activity.**

All team members contributed to discussion equally

Kato – generated questions, shirt inspiration for the team name

Evan – generated questions

Matt – generated questions

Jackie - generated questions

David- generated questions

Elyse – generated questions, typist