Americans in the Outdoors

Dr. Kelly Goonan

25 May 2021

Quiz #4 – Ecosystem Services

3 Things I Learned

To start off, the *How much is nature worth* article introduced me to new vocabulary. For example, I had never heard of the terms natural-resource accounting or green accounting and the term ecosystem services. This article was very enlightening to how people view natural resources in communities and quantifying nature was something I have never thought about. The author states: "And to the extent ecosystem services are noticed at all, people have tended to regard them as free" (Stevens 1). When I was younger my dad would always tell me that nothing in this life is free, someone at some point would have to pay. After reading this article I cannot help but think about how at some point in time someone will have to pay for the mistakes that societies are making now, and we are paying for the mistakes made in the past. Like I mentioned in quiz 3, forest fires are one of the ways we are paying for past mistakes/misunderstandings. Another example I thought about is global warming. It makes me wonder what impacts will occur if society realizes that ecosystem services will not last forever and we are using them up at an alarming rate.

From Tree to Shining Tree was a fascinating podcast, and I learned some new tree facts. "So if all a tree could do is get carbon from the air, you'd have a tree the size of a tulip. A floppy tulip. Huh. A tree needs something else. And what a tree needs are minerals.... The fungus has this incredible network of tubes that it's able to send out through the soil and draw up water and mineral nutrients that the tree needs." Fungi provides a service for the trees by collecting and

storing minerals and sugar that the tree needs to survive and thrive. Additionally, when a tree starts to die the fungi receives the trees nutrients and gives it to other healthier trees. This network systems shows the sophistication of a forest environment. In relation to forest related ecosystem services, it is important to understand forest networks. Lodging and deforestation projects not only harm individual trees but also can destroy the fungi environment that supports the trees growth. It goes to show how little humans understand their impacts and the world around them.

"People make economic choices involving nature all the time, according to this view, but they do so without taking all the costs into account" (How much is nature worth). This is an interesting statement that poses some questions. What economic choices have we scene in our own communities and what have we personally voice our concerns over? I think this article gave me a new perspective on how to view natural resources and the necessity of them. I believe that as humankind we need these resources therefore treating them with respect and ensuring their survival is as important as human survival. One cannot live without the other and the other will become extinct if the other does not have frugal practices in mind.

2 Questions

"We don't normally ascribe intelligence to plants, and plants are not thought to have brains, but when we look at the below ground structure, it looks so much like a brain, physically, and now that we're starting to understand how it works, we are going wow, there's so many parallels" (From Tree to Shining Tree). Do you believe that trees and other plants are intelligent? As discussed in this radio show, trees have a network system that allows them to share resources

like food with each other and communicate with each other when under attack. How have humans disrupted this network?

The *How much is nature worth* article poses some good questions about the pros and cons to using natural resources at the rate society is using them today. What do you think nature is worth in a quantifiable number as well as in a personal sense? Could you survive without it? What does nature mean in your life and what would you be losing if natural resources and natural places become extinct?

1 Piece of Feedback

I appreciated the audio option for the "From Tree to Shining Tree" option. Sometimes a lot of reading can be daunting so other sources, videos, audio, pictures, can help break up all the reading! P.S. I really enjoyed all the articles this week, I felt that they were both informative, relevant, and interesting.