**Some of the best questions posed by students in preparation for the BIOL 510 2021 course seminars**

1. Dr. Little Bear explained that the western metaphysics revolved around the assumption that there was an underlying order in place. It seems like this is a huge aspect of many religions that revolve around creationism. Because adopting the metaphysics of sustainability would require accepting that the situation is reversed, would people be able to make this shift in thinking without “foresaking” their religious beliefs? In order to accept the indigenous metaphysics, would individuals need to rework or even give up their religion? Can sustainability co-exist with religion?
2. How does our language framework shape our interpretations of human exceptionalism, and can its transformation allow for us to overcome our genetic disposition for selfishness?
3. Upon reflecting on the content of Kimmerer’s Asters and Goldenrods chapter I wonder If beauty isn’t a measurement and is in the eye of the beholder, then how can we determine if science is beautiful or not?
4. In the chapter “The Gift of Strawberries”, Kimmerer states “But some invented a different story, as social construct in which everything is a commodity to be bought and sold.” In seminar, we discussed how our genetic code is part of the reason for the way we interact with the Earth, and how we need to overcome this genetic predisposition. Considering how both Indigenous peoples and those of Western culture have been evolving alongside each other, how or why has our trajectory of thoughts and actions to our planet become so different? Does Kimmerer’s statement hint toward these different behaviours being taught/learned? Have Indigenous peoples already overcome this predisposition, or did they even have it at all? If these behaviours are taught/learned, does this mean that we can ‘unlearn’ our current ways of interacting with the planet?
5. Can you say that our perspectives and experiences are what influences the language we develop? Peoples’ ways of life around the world differ because they have adapted to their local environments and climates. Languages would help people focus on important aspects of the particular world as they try to explain what they experience. Do their different experiences and histories shape their languages?
6. Dr. Kimmerer argues that the importance of language is in designating personhood to other non-human organisms, and so respecting them as ‘beings’. I find it interesting however that she (and many writers of mythology and fiction) refer to the maple species, and nature more generally, as ‘her’. Men and women are not yet equals in today’s society. Does this choice to gender nature as female inadvertently assert that nature is inferior and exploitable?
7. Kimmerer proposes that combining Indigenous knowledge with Western science helps us to see the world more fully. What aspects of science have led us to look down on Indigenous knowledge, and what approaches should we take to open people’s minds to other ways of knowing, and understanding why we came to be this way, and help us to deconstruct minds? Judaism originated in the Middle East, but Yaweh is seen in Indigenous tribes here and in the Middle East. Are we predisposed or predetermined to act in a certain way such that living unsustainable lives is inevitable?
8. The desire to take care of other people, and to ‘heal with love’ are traits associated with females and mothers in general. Kimmerer’s desire to create a happy home for her children justified her decision to destroy the pond creatures home. Even in a matriarchal society, how would we balance our desire to take care of our own without doing so at the expense of other people or other species?
9. Many non-European worldviews have created relationships between the various natural resources and religious or cultural figures. For example, the Potawatomi people maintain women as ‘keepers of the water’, and Lord Varuna is the God of the Ocean in the Hindu religion, and Poseidon is the God of the Sea in Greek mythology.Since modern Western culture does not collectively carry similar beliefs ingrained in its cultural worldviews, could this be a driving force explaining the excessive resource use by the global North as compared the global South?
10. In ancient Greece, selected animals were asked permission before being sacrificed by pouring water over their heads and watching to see if they nodded. This act parallels that of the Indigenous Salmon Ceremony where salmon were “destined to die” after their return to their spawning grounds because “they bound themselves to life in ancient agreement”. At what point did our human exceptionalism deem animals unworthy of our respect? If ceremonial rituals such as described above were still common practice today, would we be facing such severe environmental sustainability issues?
11. In ‘Putting Down Roots’, Kimmerer describes a mutual exchange between humans and plants that have influenced the development of both partners. She describes a mutually beneficial relationship wherein the plants provide food for humans, and the humans enhance the growing environment for the plants. As a consequence, humans tend to make settlements where beneficial plants can grow, and those plants evolve to grow in strongly managed habitats such as agricultural fields. In this way, could it be that there is a mutual taming that limits the potential of both groups? For example, agricultural developments have increased our ability to feed more people, but have ultimately resulted in overpopulation. Crop plants that have been ‘tamed’, have increased their fitness (in comparison to native species) by developing traits that humans find appealing, but that require monoculture, fertiliser, herbicide and insecticide addition.
12. The Three Sisters’ Garden represents a companionship, with each plant species having traits that promote its own growth, and the whole community flourishing because of this. The Three Sisters represent an emerging relationship between Indigenous Knowledge and Western Science, where the corn is traditional and spiritual knowledge, the beans are modern science, and the squash creates an appropriate habitat for mutual flourishing. The shift from intellectual monoculture science to a polyculture of complementary knowledges may be benefical overall, but what are the risks associated with integrating Indigenous and Western ways of knowing? Do these philosophical differences and power inequalities favour settler traditions?
13. When you consider the origin of every object you interact with, or as Kimmerer says “follow back the thread of life in everything” even mundane objects begin to feel like gifts. If this aspect of Indigenous knowledge was taught within our early education system, would it help to discourage future mass consumerism?
14. What did Kimmerer mean by the teacher “coming when you are ready but, in order to hear them, you must be quiet?” How can we learn to set aside egoism to fully attain mindfulness? Why would this new perspective be important to develop greater attention towards the living world around us, instead of fixating on the self?
15. There is a division in Western society between loving people, and loving land, where loving a person has power, but loving the land is an internal affair that has no energy ourselves. In a colonist society, ceremonies for the land didn’t survive emigration. Only ceremonies about family and culture, or values that were transportable survived from the old country. How do we bring about deeper cultural shift needed to transform our colonial/settler-based society into one that celebrates the land? Can an approach based on loving drive this change and transform us into a more sustainable society?
16. Dr. Kimmerer consistently describes the importance of nature and the knowledge that we can learn from it. Specifically, page 236 describes the pathway and importance of root systems, and concludes that “through them I get to remember what it is to open to the world as a gift, to be flooded with the knowledge that the Earth will take care of you, and provides everything you need right here.” With this quote in mind, do you think that roots can be used as an analogy to represent what society would look like if we transitioned to an Indigenous way of thinking. For example, roots stretch to gain nutrients from different soil locations, bringing resources/necessities back to support plant growth. If the nutrients were taken as need from different locations and ultimately used for growth, can we gather the knowledge and resources we need to develop our society in an analogous way?
17. Kimmerer describes how the cautionary Windigo creature emerged in a a commons-based society in which sharing was crucial, and greed lead to Windigo’s eventual banishment from the community. If there was a stronger promotion of collectivism and possibly individual moral guilting, would it promote a decrease in self-destructive practices that are associated with insatiable consumption?
18. Kimmerer describes the benefits of old growth forests as self-sustaining ecosystems. But I don’t think reaching an old growth forest’s sustainability is possible without ‘weeding’ out the earlier successional and primary pioneer species. In this regard, do you think human society can attain the ideals of an old growth forest without the competition and fight for survival that comes before? (Paul: Maybe that is what is happening right now on our journey toward a society with old growth forest properties?)
19. Kimmerer claims that “being with salamanders gives honour to otherness, ... [offering] an antidote to the poison of xenophobia.” This made me think about perceiving ecological injustice through a moralistic lens that I always allocated towards humans but only rarely toward other species. What insights could xenophobia directed towards biotic nature provide us about xenophobia directed towards different human cultures? Why would overcoming xenophobia toward otherness in ecology and humanity aid the achievement of the U.N. Sustainable Development Goals? How can we turn the xenophobic power of destruction into one directed toward embracing otherness?
20. Kimmerer describes how the Windigo-based economy fuels injustice by restricting the interactive flows between the source and consumer, thus creating an artificial, separated society. If there is an alternative commons-based economy in which material wealth is readily circulated, could that lead to an increase in individual rates of consumption thereby having adverse effects on the environment?
21. In our society, we rarely slow down and reflect. Is being more ‘present’ and mindful beneficial in evaluating our need for self-gratification compared to what we actually need? Or is looking long-term at the repercussions potentially more benefical because then we’d see how our actions will impact others? How can our awareness in time be used to tackle our need for self-gratification?
22. There are many genetic/evolutionary traits that have evolved in our history and continue to affect us to this day. For example, the fight, flight or freeze response, and our competitive instincts are very influential in our day-to-day decision-making. However, many of these traits can be unlearned by understanding what stimuli are truly harmful, and how best to handle particular situations. Similarly I believe that reciprocity between the land and humanity can be restored; however, it requires that we as a society are aware of our preference for self-gratifying choices/decisions. Further it requires that society as a whole is able to respect the non-human beings of our environment, and understand their resource needs, and to consider these needs when making decisions pertaining to climate change and sustainable living. How can reciprocity between the land and humanity be restored if our need for self-gratification is primal? This question is centered on whether can society be taught to respect the world and non-human beings when individuals struggle with respecting each other. Can society really be brought to a mindset of viewing both human and non-human beings as equal, when even many humans are not considered equal?