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1st period Physics

Environmental Engineering paper

Ever think of how the same animal can live in many different environments? It’s a incredible ability in which every animal posses to adapt to their living circumstances. A big role in this intriguing survival technique is a climax community. This process is between the animals, plants, and fungi. They all reach a steady state in a community to which ever animal can adapt to the average conditions of this area will survive. Also another part to a community are invasive species, such as an ostrich fern, himaylan blackberry, and scotch broom. Secondary succesion has taken place in this community in order to repair the damages done. Secondary succesion is the ecological succesion that occurs on a preexisting soil after the primary succession has been disrupted or destroyed due to a disturbance that reduced the population of the initial inhabitants.

The burn to this environment was incredibly sevre in terms of damage done. This area was not native, it was full of invasive species that supported other species but are now gone. These invasive species will have to be replaced with new ones so this area can continue to support the animals throughout this area. This area is getting a chance to start over by the clearing of all the reminants of the burn. If new invasives species are introduced to this area then they will expand and create a climax community because the animals will be able to adapt and this area will once again support these animals.

In order to find and/or identify certain species you would need to find a sit spot or a spot that really calls to you. When you find this spot you start recording everything you see and then begin identifying it. GIS was used in order to show the reader exactly where each student was located when they were identifying certain creatures. Using the Google Earth application we were able to pin point our exact location and then transfer it to the map.

I collected my data by standing in a specific area that called to me. As I was standing in the spot that I chose I was able to identify several different types of species. I identified an ostrich fern, scotch broom (which are invasive species), a cottontail rabbit, American crow, and several hummingbirds. Different sit spots can consist of different species so it is critical to know all of them so when reconstruction of the area starts we don’t put a species by another species that isn’t suppose to be. On the GIS map you can see exactly where I seen these animals (<http://www.arcgis.com/home/webmap/viewer.html?webmap=4d0e6dc5e6024046a4f3cc31178b1530&extent=-122.8448,47.41,-122.8207,47.4179>).

This whole process is called restoration ecology, which is the speeding up of the recovery of an ecosystem (wiki). What can be done to this area is the reintroducing of the correct plant species to this area (bio). Without these specific species to this area it throws off the balance of nature, what I mean by that is animals will not come back to this area because they cannot feed or bed down because certain species are no longer there so there are not as much nutrients in the soil to support each other, so overall it gives the animals no benefits to coming here anymore (climax). How this will be done is reintroducing the plant life that once existed there, such as ostrich ferns, scotch broom, and sword ferns. It will be balance back the ecosystem in this area.

This project was done in order to decide how to properly restore this area in a positive way towards the species. The process will be speeding up the process of recovery by replanting all the plant life. With these great tools we have today we were able to figure out just how to do all this. I cannot wait to see the day when balance is restored once again.

Works Cited

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