

Connecting to the Environment in Non-Majors Ecology

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RESULTS – ENRICHED APPRECIATION

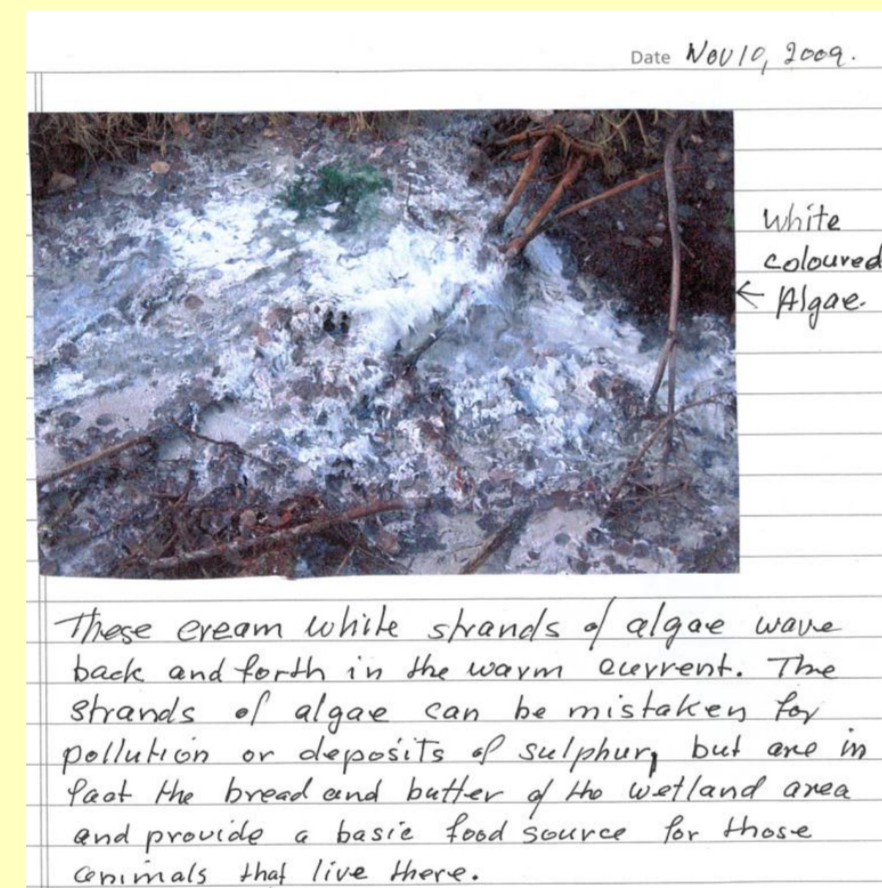
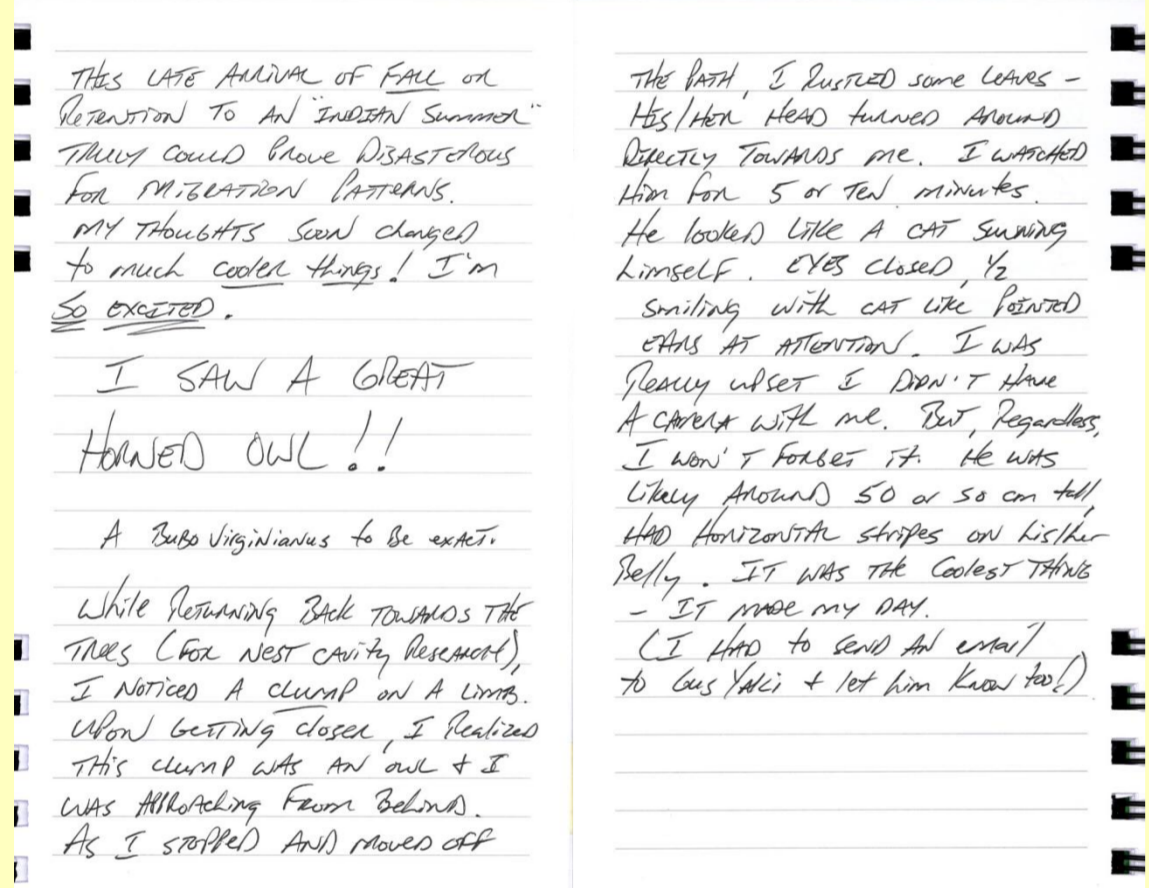
Students appreciated the wealth of knowledge of the naturalist and the complexity of their environment

"I want to thank you for bringing in Gustave Yaki. I have never had that experience and I truly enjoyed having him show us around. It was wonderful."

RESULTS – ENRICHED OBSERVATION

Students had more opportunities for observation by being outside more frequently

"I never really took the time to look at the things around me and the way everything is connected together."



ABSTRACT

Far too many students know little of the ecosystems around them. They have acquired the idea from media and videos that diversity and ecological significance are elsewhere - Madagascar, the Amazon or anywhere but their local environment. They don't know the species of birds, mammals, plants or insects that surround them. Since protection of the local environment requires a body of interested, concerned and knowledgeable citizens to speak for it, it is vital that students become acquainted with and begin to appreciate their natural surroundings.

In non-majors ecology I use field notes following a walkabout to accomplish these goals. During the first week of classes in the fall, we join a local naturalist for a walkabout in the provincial park adjacent to St. Mary's. He leads the class on a walk across the park, and we stop and talk about everything we see and hear, whether it be a flicker, an invasive shrub, the presence of earthworms, or the difference between 2 poplar species. This simple activity has a profound effect on the students, who begin to realize how much there is to be seen and heard in a place they take for granted.

The walkabout prepares students for writing field notes each week. These emphasize observations of the natural world (changing seasons, a spider in the bathtub, location of willows by streams or anything that catches their attention). Field notes are graded every week on the quality of observations and the integration of observations with topics discussed in class.

METHODS

- local naturalist with decades of experience
- walkabout scheduled during class (90 min) second week of the fall term
- park right next door so walked down the hill to meet the naturalist in the park
- we walked across the park to the creek talking about everything we saw
- naturalist was "paid" by a donation in his name to a local naturalist charity
- Field notes:

1-2 p/wk (less often was less effective)
handwritten; writing engages different parts of the brain than typing
illustrations encouraged close observation
local guide books recommended to identify species

grading:
accuracy and significance of observations
connections between observations, theory and class discussions
use and significance of images as well as words

ACKNOWLEDGMENTS

I am very grateful to the students who allowed me to use their field notes: Henning Christensen, Alicia Hubka, Suzanne Larson-Wall, Rick Russell, Andrea Weldrick, Jonathan Wong. It was a pleasure reading them.

RECOMMENDATION

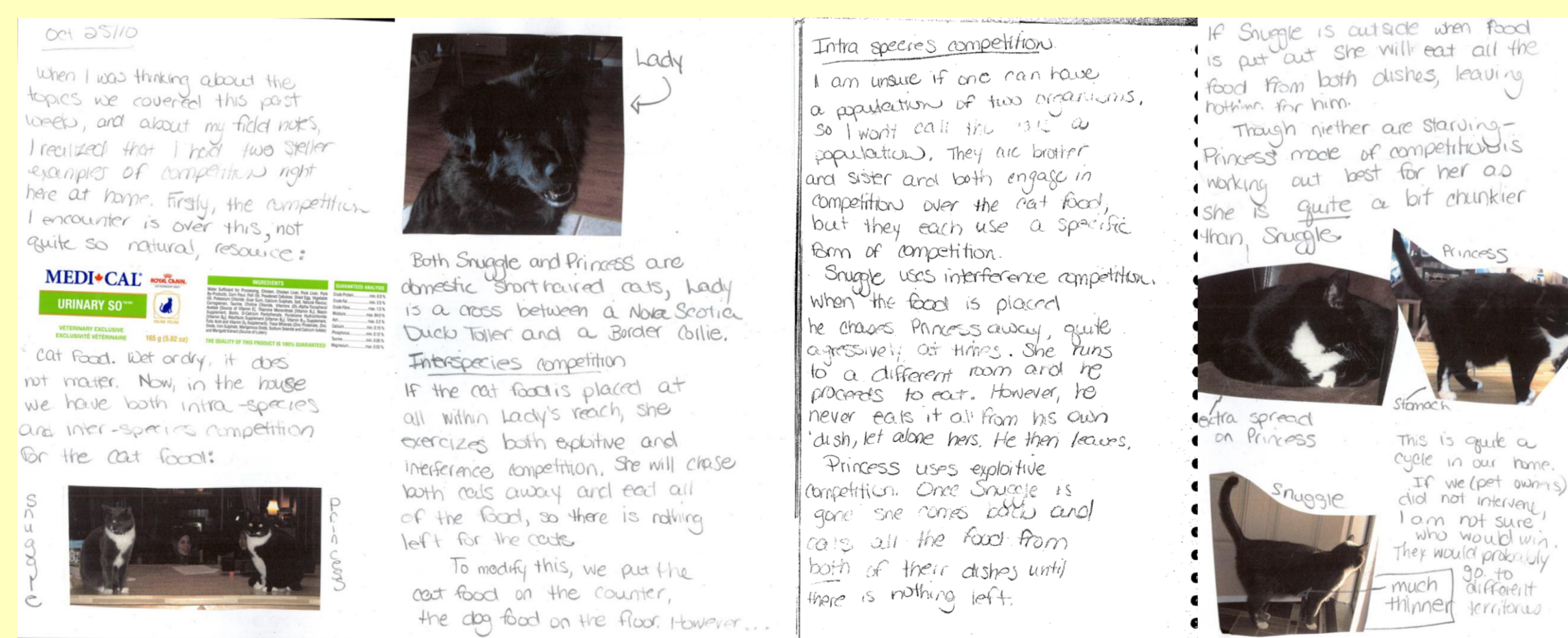
Contact your local naturalist club and ask if someone would be willing to do a walkabout with your class. The opportunity to walk in a natural area with someone knowledgeable is a real eye-opener for many students - they have never met anyone with that kind of knowledge.

The combination of the walkabout and the field notes enhanced the students' ability to observe and appreciate the world around them.

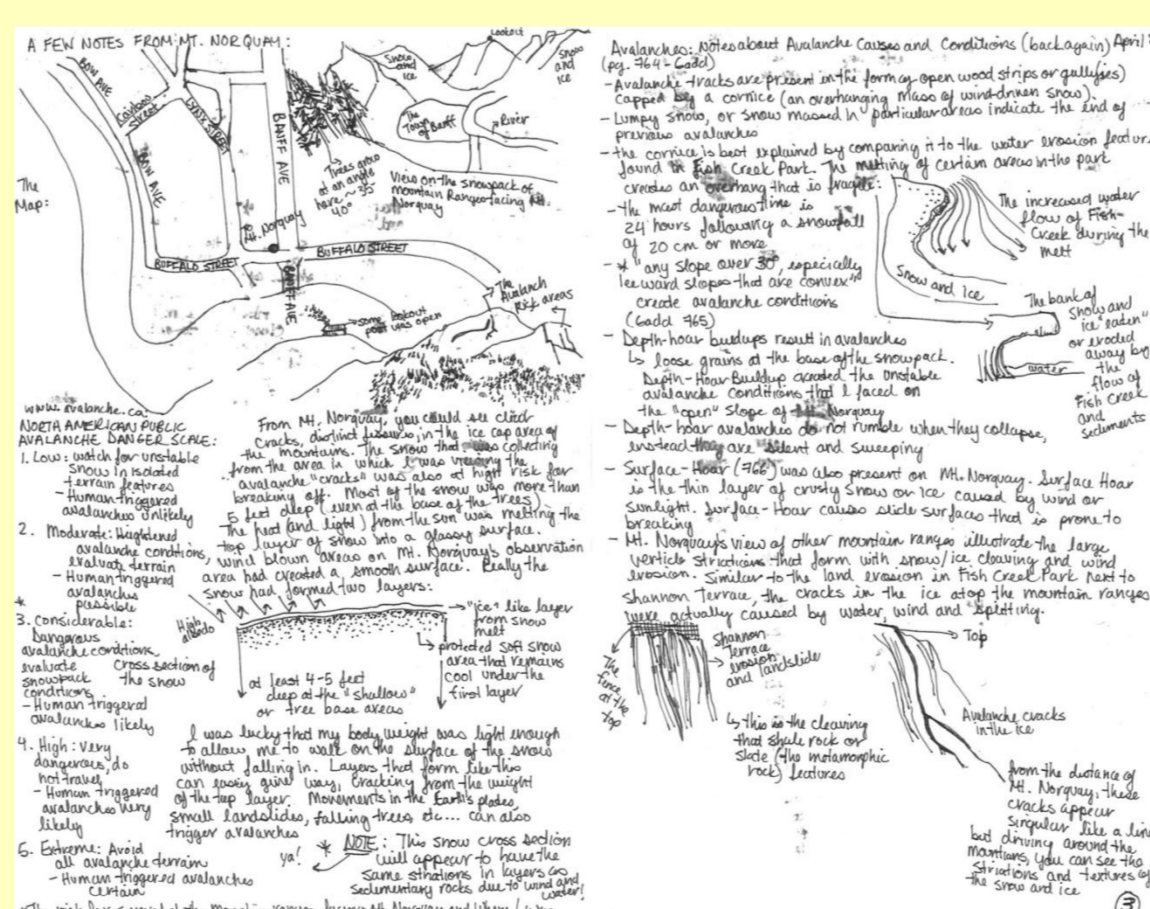
Students made more connections between the lecture material and their environment

"The weekly field notes were great, they help solidify the readings."

"I always knew in the back of my mind that there was a reason for why things happen but now that I have had an opportunity to actually 'observe' things surrounding me it's really interesting. Having the time to reflect on issues that were discussed in class enabled me to get a better feel for the topics. I was able to get first hand experience and understanding by connecting the information learnt & read in the text to practical & concrete things. I will admit that finding the time to do the journal entries was challenging but to have the personal time was quite rewarding!! I suppose that was the whole point of the 'journal entries!!'"

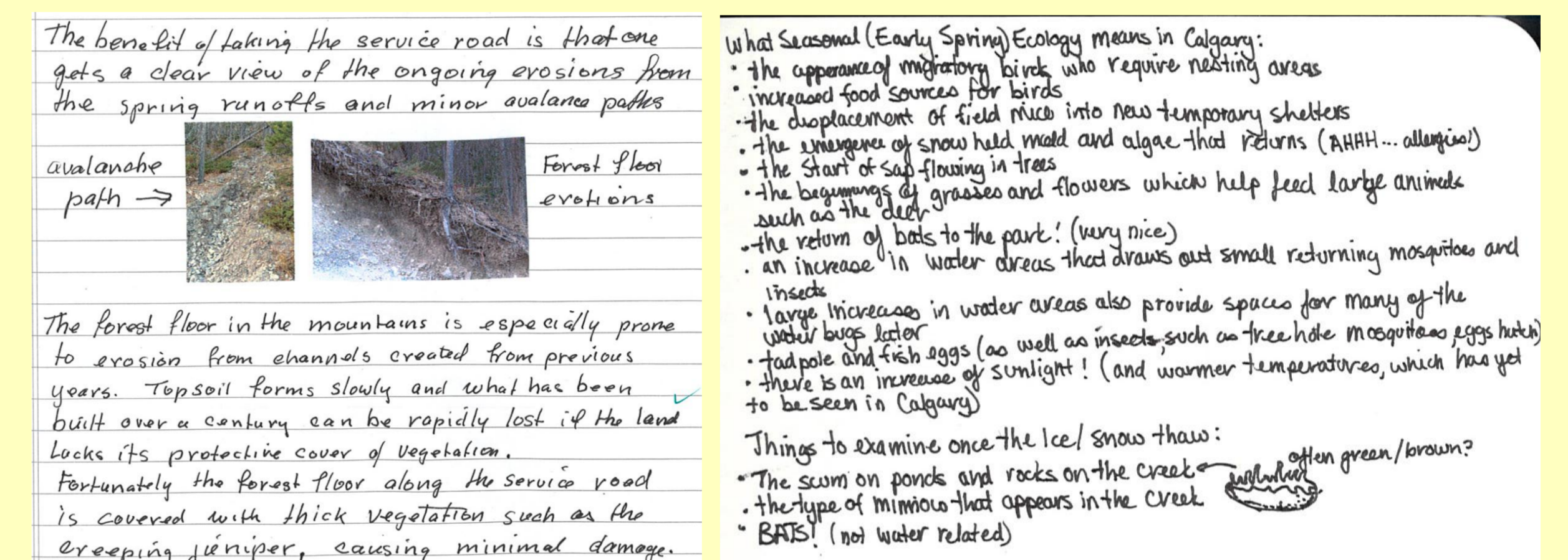


Students noticed similarities between processes

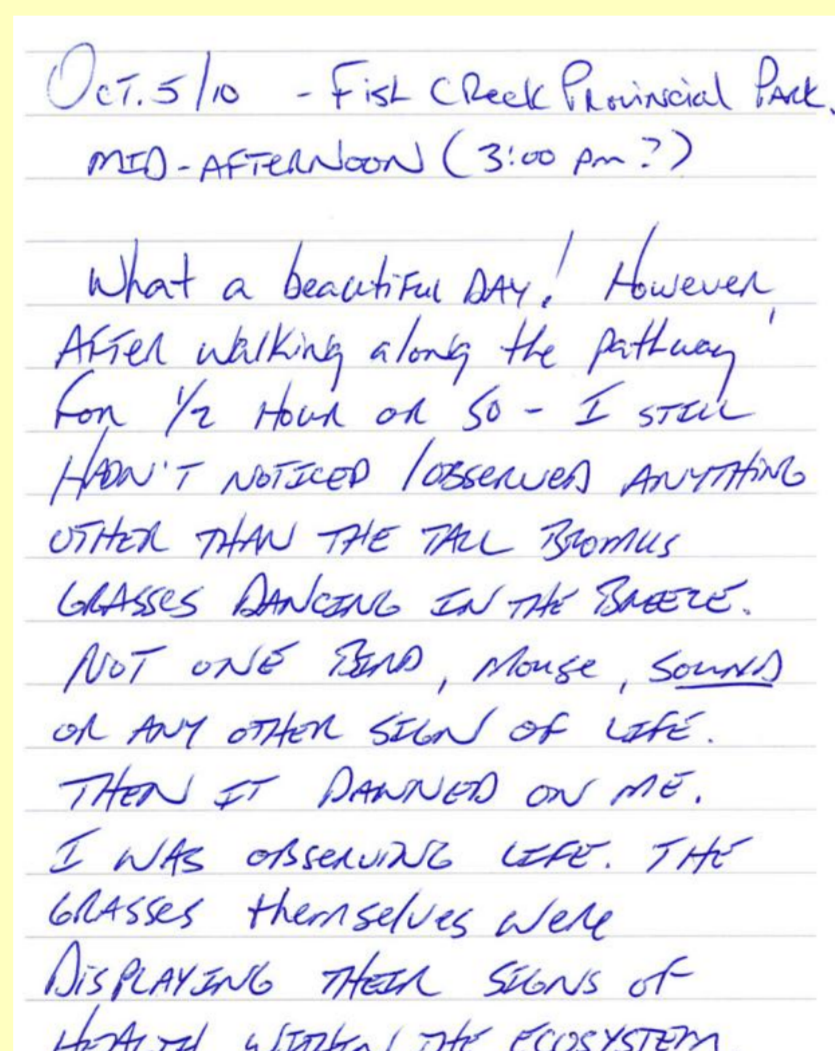
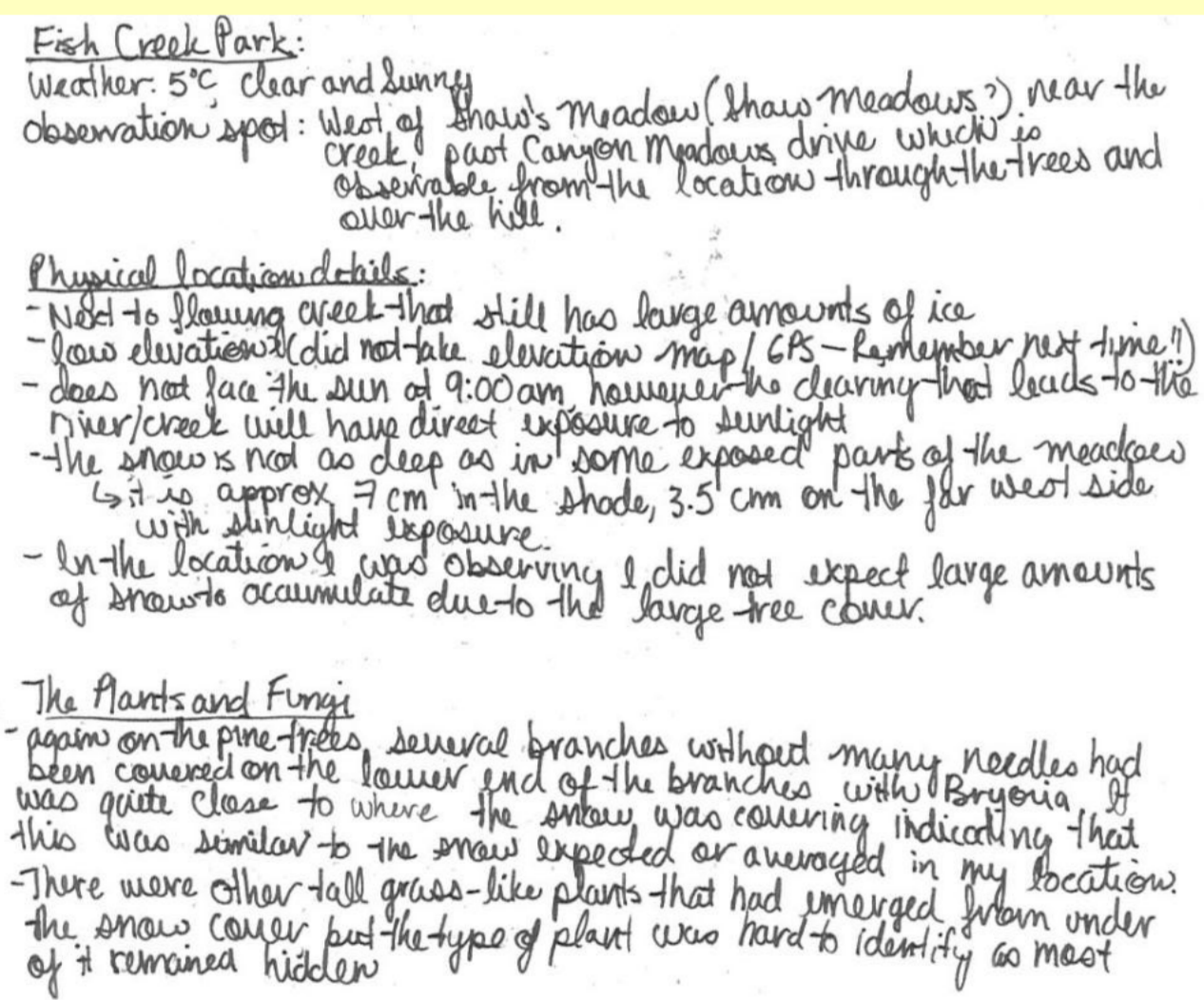


RESULTS – INCREASED CONNECTIONS

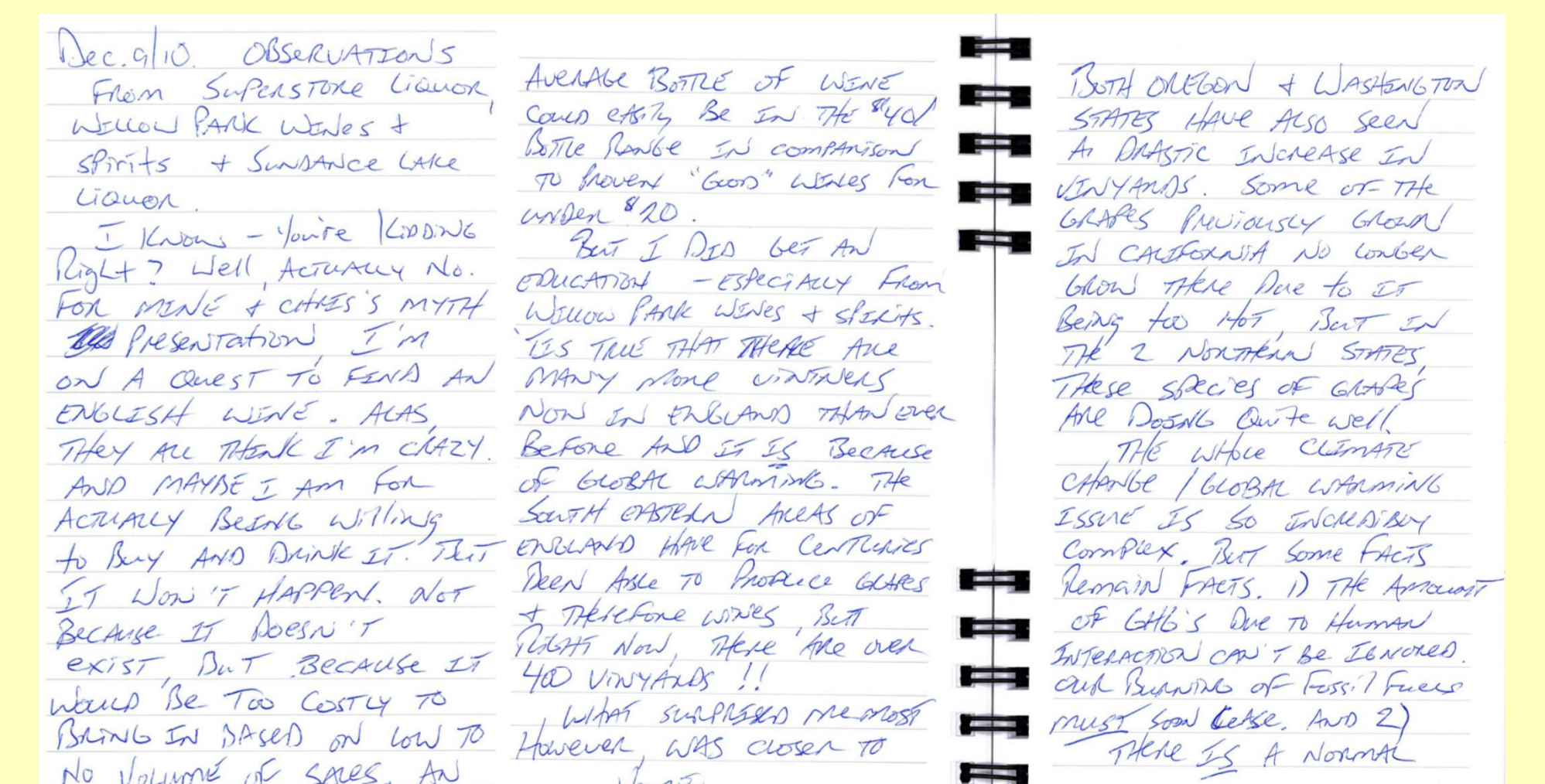
Students made more connections between organisms and their environment



Students paid more attention to details in their environment that had been mere background previously



Students made more connections between large scale processes eg climate change, and human activities



Students made more connections between human activities and their impacts on the ecosystem

"...composters never fill up. There is always room for more vegetative matter. They are very effective waste reducers. It is a wonder more people don't compost. I wonder if it is because of the "ick" factor - because it is messy and smelly to take the veg. matter out of the house. Once it is in the compostier it isn't smelly though. I wonder if society's obsession with cleanliness and sanitation is actually creating a dirtier earth with regards to more waste in landfills, larger landfills & dirtier oceans because individuals don't want to deal with the icky part of the waste we create. We now have toilets that compost human waste into helpful, proper manure, but we don't use them. Instead we send it to our rivers, lakes & oceans. It doesn't make much sense."