

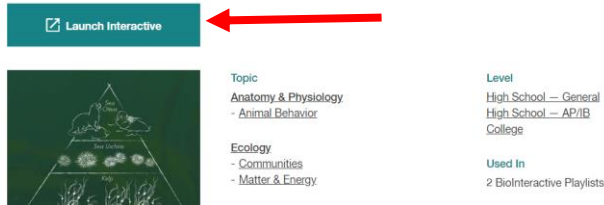
Week 4 Assignment 2 (worth 12 %): Exploring Trophic Cascades

due Sunday October 11.

Visit the website listed below, press the blue-green "launch interactive" button to start activity

<https://www.biointeractive.org/classroom-resources/exploring-trophic-cascades>

Exploring Trophic Cascades



Complete the online activity “Exploring Trophic Cascades”: Go through the introduction (watch the videos), the kelp example and complete the four case studies. Choose either the “Arctic Tundra” or the “Midwestern Lake” case study (both are similar to systems that are present in Alberta) and compare and contrast it with any of the other three case studies.

Questions you could consider are: What are similarities and differences? What about the direct and indirect interactions between the organisms featured, what are key positive or negative interactions? Are there any feedback loops present, in one or both systems? What trophic levels are represented or is one level missing? Are the producers/consumers similar or different?

Use one of your chosen examples (case study) and discuss how human activity might or might not impact the system (one paragraph, the last one before conclusion). Which species interactions would change (or not) with human activity, would any positive or negative interactions or feedbacks be interrupted or changed?

Start with your main idea (= thesis/claim, e.g. The two systems show many similarities..... or the two systems show many differences), characterize/describe both systems briefly and analyze (evidence, give specific examples), compare and contrast details of the two case studies (reasoning, support your claim/main idea)

Submit a written response with a maximum of 300 words (provide a word count). Since this is a longer written response, include a short heading. Use CER to structure your answer: e.g. a short introductory paragraph as your claim, 2-3 paragraphs for your evidence (specific examples, observations, cite sources: the webpage and other sources you might use), 1-2 paragraphs for reasoning (apply key concepts from this or previous topics, cite where needed, e.g. textbook or other sources), 1 paragraph for the effects of human activity on one of your examples (cite if referring to a study that has been done or other sources), and a brief conclusion.

This assignment should take you about 2 hours or a little more: < 45 min to go through the case studies, 60 to 90 min to write your response.

Rubric (next page)

Category	Excellent (1)	Good (.8)	Fair (.6)	Poor (.4)
Heading /1	Concise insightful heading, naming two ecosystems and a key point/relationship	Heading includes two chosen ecosystems	Missing some information, only one ecosystem referred to	Heading incomplete
Content Example 1 /3	-the answer is fully developed using key terminology and concepts, relates to topic - insightful (exceeds expectations of this course) explanations provided, backed up by effective, specific and relevant examples and evidence that relate to comparison	- the answer is clear and defined, relates to topic and backed up by evidence but not quite developed OR missing some key terminology or concepts - good explanations provided, backed up by examples and evidence that might be a little general or less relevant for comparison	- basic content of the activity is present or related to, but missing most of the key terminology or concepts, partly off topic AND/OR - explanations or examples provided are superficial (not quite correct or fully applicable or very general) AND/OR only partially backed up by evidence (e.g. only listed sources)	-content of the answer is not related to activity, topic or prompts given OR - information or concepts used may be inaccurate or incorrect OR -no examples or explanations provided OR -not backed up by evidence
Content Example 2/ 3	-the answer is fully developed using key terminology and concepts, relates to topic - insightful (exceeds expectations of this course) explanations provided, backed up by effective, specific and relevant examples and evidence that relate to comparison	- the answer is clear and defined, relates to topic and backed up by evidence but not quite developed OR missing some key terminology or concepts - good explanations provided, backed up by examples and evidence that might be a little general or less relevant for human influence	- basic content of the activity is present or related to, but missing most of the key terminology or concepts, partly off topic AND/OR - explanations or examples provided are superficial (not quite correct or fully applicable or very general) AND/OR only partially backed up by evidence (e.g. only listed sources)	-content of the answer is not related to activity, topic or prompts given OR - information or concepts used may be inaccurate or incorrect OR -no examples or explanations provided OR -not backed up by evidence
Human Influence /2	-the answer is fully developed using key terminology and concepts, relates to topic - insightful (exceeds expectations of this course) explanations provided, backed up by effective, specific and relevant examples and evidence that illustrate effects of human activity	- the answer is clear and defined, relates to topic and backed up by evidence but not quite developed OR missing some key terminology or concepts - good explanations provided, backed up by examples and evidence that might be a little general or less relevant illustrating effects of human activity	- basic content of the activity is present (e.g. human activity effects ecosystem) or related to, but missing most of the key terminology or concepts, partly off topic AND/OR - explanations or examples provided are superficial (not quite correct or fully applicable or very general) AND/OR only partially backed up by evidence (e.g. only listed sources)	content of the answer is not related to activity, topic or prompts given OR - information or concepts used may be inaccurate or incorrect OR -no examples or explanations provided OR -not backed up by evidence
Writing/ 3 0.4 deduction for missing word count	-complete, well developed sentences - no grammatical errors and spelling mistakes -excellent structure (CER) including an excellent main idea or thesis statement -cited and listed all appropriate sources - sources are provided and correctly formatted - 300 words or less	- all complete sentences - no spelling mistakes - sources are cited and listed but have minor issues in formatting or missing publishing detail - good structure (CER) including a good main idea or thesis statement, BUT could be more concise OR - minor grammatical mistakes OR -up to 320 words	- mostly complete sentences BUT -occasional grammatical mistakes OR - very few misspelled words OR - paragraph without an identifiable main idea or thesis statement OR -source provided is problematic OR - up to 340 words	- not written in complete sentences OR - grammatical errors make it hard to understand, OR - many misspelled words OR - no obvious structure OR - no attempt at providing a source OR - more than 340 words