

IF YOU HAVE ALREADY HANDED IN 4 ASSIGNMENTS (FOR MARKS) YOU SHOULD NOT HAND IN THIS ONE, IT WILL NOT BE GRADED

Week 10, Assignment 5: Anthropogenic changes to the biosphere

This activity is worth 12 % of your mark and is due on Sunday (11:59 p.m.), November 29

Part A: Fill out the table

Based on the hhmi biome viewer **in the anthrome tab**, fill out the table for Edmonton, a central Asian location and a location of your choice with the anthrome for these location for the last centuries. A general example has been provided below (information might not be correct)

Anthrome in	Edmonton	Dominant anthrome in the larger Edmonton region *	Central Asia Location Bishkek, Kyrg.	Dominant anthrome in the larger __Syke_ region *	Your location: __Syke, De
1700	wildland	seminatural		rangeland	villages
1800	wildland	seminatural		rangeland	villages
1900	villages	seminatural		cropland	villages
2000	villages	rangeland		villages	villages

*this refers to what is, by your visual estimation (what is your 'color impression'), the dominant anthrome in a larger circle around this settlement/village/city: Is the whole area settled or just this little area (e.g. because of a trade post or a local fort/castle etc)?

For the **second region** you can either chose the Central Asia location or your favorite location
Ellis et al. (2010) described the global change of landscapes due to human activities from a mostly natural biosphere (biome) or wildlands in 1700 to mostly human influenced landscapes (anthromes) in 2000. This transformation is depicted in the hhmi Biome viewer, in the Anthrome viewer (tab).

Part B: written answer (300 words max), provide a word count

Include a concise heading for your assignment relating to your main claim.

A: Compare and contrast the changing anthromes from 1700 to 2000 for the Edmonton region and one other region (Central Asia or your favorite location). Are the anthromes similar in 1700, do they change over time? At what time is the largest change? Are the anthromes similar now? (ca 150 words)

B: written answer: Going back to activity 3, choose a primary **or** secondary consumer for the location** (Edmonton and the other location) and discuss the changes to the landscape with regard to the change in habitat for these species: Do you think the habitat quality for these species is affected **by habitat loss, fragmentation or degradation?** How do you think this relate to an increase or decrease in biodiversity in these areas? Is any of these species threatened according to the Alberta's Endangered Species Conservation Committee? (ca 150 words)

** if you did not submit this activity, choose the "biome tab" of the biome viewer, go to "more information", choose wildlife and scroll down the species list. Detailed information is given in Week 5 for activity 3 and in the Week5 BB collaborate session recording.

Reference:

Ellis, E.C., K. Klein Goldewijk, S. Siebert, D. Lightman and N. Ramankutty. 2010. Anthropogenic transformation of the biomes, 1700 to 2000. *Global Ecology and Biogeography*, 19, 589–606

No need to read the whole article, but reading the abstract (first page) would likely be very helpful: paraphrase and cite!

Rubric

Category	Excellent (1)	Good (.8)	Fair (.6)	Poor (.4)
Heading /0.5	Concise insightful heading, naming two locations and trend	Heading naming two locations	Listing only one location	Heading incomplete
Table content /1.5	All required information is presented to a level of detail or depth that exceeds expectations of this course	All required information is presented to an appropriate level of detail or depth (as outlined in instructions)	Most of the required information is presented to a superficial (not quite correct) level of detail or depth	Lacking in required information
Part A content /3.5	-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	- 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	- 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
Part B content / 3.5	-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	- 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	- 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
Writing/ 3 0.4 deduction for not including a word count	-complete, well developed sentences - no grammatical errors and spelling mistakes -excellent paragraph 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 paragraph structure (CER) including a good main idea or thesis statement, BUT could be more concise OR - minor grammatical mistakes OR -up to 330 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 360 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 360 words