BIOL5030 – Foundations of Environmental Science

Annotated bibliography Assignment

Students will compile and develop an annotated bibliography of research papers that they have read during the semester in their area of study within the Environmental Sciences program. Students will turn in portions (groups of five) of their annotated bibliography throughout the duration of the semester. The final annotated bibliography will summarize at least 25 peer-reviewed papers that are pertinent to the students’ graduate research.

See the following URL for additional information about UNT library resources specific to this course and a description of annotated bibliographies:

http://guides.library.unt.edu/biol5030

The format of the literature cited is the students’ choice, but they must stay consistent throughout the duration of the assignment, i.e., use the same format for all 25 entries.

The annotated bibliography will include a combination of “summative”, “evaluative”, and “reflective” types of annotation, using complete sentences (no phrases or bullet points). The goal is to produce an annotation that is brief yet informative that can be used by the student for future reference purposes.

**Summative:** present the main arguments and supporting content of the source, but without any critique.

**Evaluative:** examine the author’s presentation and discuss whether the methodology and reasoning are sound, whether the findings and conclusions contribute to the field, how it compares to other sources, and other evaluative issues.

**Reflective:** how does the source fit into your body of research?

Each annotation should possess the following:

1. One to three sentences describing the research question (e.g., hypothesis) and why it is important
2. One to three sentences describing the study design and other pertinent information about the methods (no need to be overly exhaustive; only cover the important aspects of the methods)
3. One to three sentences describing the important findings of the research
4. One to three sentences describing how the research paper is pertinent to your graduate research at UNT

The students must use their own words, i.e., do not copy text from the Abstract nor the body of the paper.
Each student will turn in four sets of 5 annotated references (each set of 5 due at a specific date during the semester; see syllabus) plus an additional 5 at the end of the semester for a total of at least 25 annotated references.

**The Final Annotated Bibliography due at the end of the semester will include your “corrected” entries from the first 20... plus a set of 5 new entries following the same format for a total of at least 25 references.**

Example (one entry):


Johnson and Burnham study the geographic patterns of plumage color (white, silver and grey) among gyrfalcons (*Falco rusticolus*) in west Greenland where a cline exists from dark to light with increasing latitude. The research explored how demography, specifically nesting chronology and offspring number, correlated with plumage color using a multivariate statistical approach. In the Kangerlussuaq study population, white males initiated nesting or lay date significantly earlier than silver and grey males, while no correlation was observed among females while accounting for multiple parameters. Significantly more young were also produced among white male and female gyrfalcons compared to grey individuals, while silver morphs were intermediate. Results suggest that directional positive selection for earlier lay date exists for lighter colored gyrfalcons, thereby providing a mechanism for the clinal pattern observed in Greenland with shorter reproduction periods existing with increasing latitude. This research is important because it provides a potential mechanism influencing geographic plumage color patterns in an Arctic species. To what degree similar plumage color patterns exist with respect to reproductive output and nesting chronology among other Arctic species deserves further study. Changes in climate may have important implications on how Arctic species persist with respect to geographic patterns in plumage color.