

ECOL 4000/6000 paper discussion

“Impact of food and predation on the snowshoe hare cycle” Krebs et al. 1995,  
Science

General aims: to critically read a published article in population/community ecology  
to better understand...

1. Why the study was done
2. How the study was done
3. What the authors found
4. Why the results are important

When we “critically read”, we do not set out to find fault with a paper. Our primary goal is to understand the research; to clarify the aims and scope; and to evaluate the contribution of the research in terms of the importance of the question, the appropriateness of the method(s) and the value of the results. This paper was chosen because it has had an enduring impact. It’s a good paper. That being said, once you have covered tasks 1-4 above – it is important to consider any limitations:

In a perfect world what would have been done differently?

Can we extrapolate the findings to all cycling populations?

Was there room for improvement in the structure, writing and use of graphics?

(bear in mind the journal imposes a strict word/page limit)

At about 20mins before end of class we will reconvene for a general discussion. Each group should be ready to answer questions relating to 1-4 as well as thoughts on limitations. Each group should nominate a recorder (to take notes) and can nominate a spokesperson (though everyone should feel comfortable speaking to the class). Remember to be respectful to your classmates. Listen to their full comments before interjecting. Be mindful of those that haven’t had a chance to speak and include them in the discussions. Keep to time – leave time to discuss all the aspects.

Specifics:

Make sure you understand the experimental design

Make sure you understand the different treatments

How were things measured (methods, units)?

What is the difference between additive and non-additive effects?

How do we know that differences are significant?

What question did the research answer?

What remains unclear?

Why is this considered a “classic” paper?

Make use of instructors. When not available, write down questions you want to ask them.