

BIO342 Animal Behavior Seminar Report #2
Seminar: Friday November 2nd 4:10 PM in B19

Gail Patricelli,
Dept of Evolution and Ecology,
University of California Davis
*"Courtship negotiations in sage-grouse:
experiments using a robotic female"*



If you are going to attend the seminar, you should read her recent review paper (Patricelli, et al 2011 (available on the sever)). After the seminar, you will receive credit for attending by writing a brief, ½ page summary of the seminar.

In your seminar write up:

- 1) What was the main concept in this seminar?
- 2) How is it novel or different than our past understanding of mate choice.
- 3) Describe the experiment that best supported her hypothesis.
- 4) In your own words, explain how these concepts relate to the greater field of sexual selection.

If you cannot attend the seminar, you may receive full credit for the seminar by reading a recent primary research paper written by Dr. Patricelli in collaboration with her graduate student (Patricelli and Krakaur, 2010 (available on the course website)) and writing a brief, ½ page write up. This primary research paper uses a robotic female to elicit and record the multimodal signals produced by the male sage grouse. tests the biological hypothesis that “Predator-mediated behavior plays a key role in promoting diversification of feeding strategies.”

In your paper write up:

- 1) Clearly state the experimental hypothesis for the work that is presented.
- 2) In your own words, describe the results that are presented in figures 3-5.
- 3) Explain how each result is used to support the biological hypothesis.

You may also want to attend Biology Seminar Journal Club to discuss these two papers. The Journal Club meets in B200A on Thursday at 5:00.