

Teaching Tips/Notes



A Taste of Teaching

Many undergraduate students in the sciences go on to obtain M.S. and/or Ph.D. degrees, because it is part of their long-term goals (e.g., they want to be a professor or obtain another position requiring a graduate degree) or because they are pushed that way, receiving advice that a graduate degree will be necessary for any career advancement. Many of the graduate students in the sciences, including wildlife science, serve as teaching assistants to obtain part or all of the funding for their graduate education. Many of these students are unaware that they will be serving as a teaching assistant and have little experience and expectations regarding instruction or being a teaching assistant.

To better prepare prospective graduate students for the possibility of teaching and provide an experience allowing them to make a more informed decision as to whether they want to teach in the future, we developed an undergraduate student teaching assistant program. This program provides undergraduates with information on teaching, a “taste” of the teaching experience, and an opportunity to interact with instructors during the design of class activities and assignments. During the past 6 years, 14 students have been involved with our program entitled Teaching Wildlife. Students in the program serve as teaching assistants in a junior-level, Wildlife Ecology and Management course, which typically contains 100 to 150 students. The only prerequisite is that they have successfully completed the course. Students can participate in Teaching Wildlife as a one-credit, graded course or as an extracurricular voluntary program. In either case, students read several papers on pedagogy, including one dealing specifically with teaching courses in wildlife science; meet regularly with us to discuss the readings, instructional methods in general, and the instruction of the specific course they are assisting with; assist us with the development of assignments, including problem sets and other homework, term papers, quizzes, and exams; work with graduate teaching assistants and us on grading assignments; attend all class meetings; and keep a journal detailing how the content and delivery of the course can be improved in the future. Additionally, we work with each student to develop and deliver at least one 15 to 30 minute lecture, including associated assignments and discussions. Students choose a topic from a set of predetermined major concepts or issues for the course. For each topic, we provide the minimum content to be covered, but they can add more. We provide undergraduate assistants feedback on their lecture and presentation and suggestions for improvement, and they received similar feedback from the graduate teaching assistants and students enrolled in the course they are assisting.

At the end of each semester, we meet with the undergraduates who participated in Teaching Wildlife to get feedback on the course, and to review their observations, encourage suggestions, and enable them to synthesize their reflections on their experience as an assistant. In a few cases, we have been able to speak to students who participated in the program and are now in graduate school. All feedback from students from Teaching Wildlife has been positive. After completing Teaching Wildlife, several students determined that teaching was not something they wanted to do and adjusted their career path accordingly. Others, who had not intended to go to graduate school or become teachers, concluded that teaching was a strength and are now following that career path. And, several, including two who became graduate teaching assistants, reported that their undergraduate experience in Teaching Wildlife prepared them for their current roles as graduate teaching assistants and gave them a “leg up” on the other graduate students.

Several specific experiences from Teaching Wildlife may be particularly noteworthy and of benefit to other instructors: 1) participating students were unaware of the challenges of designing high-quality course assignments, particularly exams, and reported an increased awareness of how other instructors develop courses and assignments; 2) most students gained an appreciation for and skill in public speaking, effective teaching, and “handling” a relatively large class, and as one student put it, “experiencing and overcoming the terror of being in front of that many people;” 3) the students enrolled in the course in which these undergraduates assisted indicated that they did not feel the addition of the undergraduate teaching assistants was detrimental to their learning experience and the overall class, and in some cases thought it enhanced their experience and piqued their interest in teaching; and 4) it has provided us with tremendous feedback from students who have taken the Wildlife Ecology and

Management course and then observed it a second time from an instructor's point of view, which has allowed us to significantly improve course content and delivery (e.g., we have added new and enhanced old content to more clearly illustrate the relevance and value of certain homework and reading assignments, and more clearly linked the various topics covered during the course.

We believe Teaching Wildlife illustrates the benefits of such undergraduate experiences to the participating students and the course itself, and promote the development of similar programs in the sciences elsewhere. In the case of our program, we are working to expand it to more students and additional courses. We would appreciate suggestions for improving Teaching Wildlife from other instructors.

Submitted by:

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