Guidelines for Thesis Defense & Lay Summaries in the HSU Wildlife Master's Program

A Thesis Defense is required of all graduate students who began the program in Fall 2004 or later. The goal of the defense is to help students produce the highest quality work possible. The defense is defined as "a public oral presentation and a closed formal defense."[1] After the presentation the public will be invited to ask questions, then the candidate and committee will privately convene for a closed session with additional questions and evaluation.

Students should organize a Thesis Defense date to ensure attendance by all committee members, while being aware of extenuating circumstances (e.g., sabbaticals) when substitutes must be arranged. The Defense cannot be scheduled until after all members of the graduate committee have reviewed the thesis manuscript and consented to the student scheduling a Defense date. The Defense must be scheduled before the final thesis version is approved and signed by the committee.

Graduating MS candidates from the Department of Wildife will prepare a Lay Summary of their thesis research. Hard copies of the Lay Summary should be available to the Thesis Defense audience. An electronic version will appear on the Department's website as part of our community outreach. The purpose of a Lay Summary is to interpret the context and significance of our research in a manner that will gain the interest of nonspecialists, thereby increasing the accessibility of our work to the larger community (see Lay Summary guidelines, below).

Recommendations to students regarding expectations:

1. The student's major professor will determine when the draft is ready for committee review.
2. Typically, students should expect up to 3 weeks for committee members to review thesis drafts, but recognize that committee members may have absences from campus that prolong this period.
3. Students should not assume that faculty will be available to review thesis drafts during regularly scheduled breaks or the summer session without prior arrangements.
4. The Thesis Defense should not be scheduled during regularly scheduled breaks or the summer session without prior approval from all committee members.
5. The Lay Summary must be approved by the major professor before it is distributed at the Thesis Defense.
6. Students should plan on the need to revise the manuscript after the Thesis Defense.
7. To be reasonably confident of graduating at the end of given a semester, students should have a draft of their thesis delivered to all committee members by the 4th week of the term.

[1] Definition provided by Memorandum "Policies & Practices of the Natural Resources Graduate Program," from Dean Jim Howard, dated February 24, 2004. Confirmed with Gary Hendrickson, Graduate Program Coordinator, on 17 January 2006.

Lay summary guidelines for authors[2]

A Lay Summary is a short (max. 250 word) statement that, in nontechnical language, provides a view of the thesis from the perspective of the broad questions of the field, summarizes briefly the current state of knowledge - emphasizing what is not known or understood - and explains the contribution of the thesis. A Lay Summary is not a "dumbed down" version of the Abstract of your paper: its aims are rather different. Nor is a Lay Summary specifically about potential or real applications of the results (unless these were the topic of the paper). The Abstract of your paper emphasizes the findings for other specialists who know the history of the field and the context of your questions, who will understand and be interested in details of your methodology, and who will be able to evaluate for themselves the significance of your results. Most of the readership of a Lay Summary will not be in this category.

Assume that the reader of your Lay Summary is an intelligent and interested person who may know something about wildlife and ecology, but may not know terms such as EPC, altricial, or phylogeny. Therefore, avoid technical language and jargon. Many readers of the Lay Summary have not been schooled in the history of the discipline, so provide the necessary background, focusing on generalities rather than specifics. Generally, details of the methods are of little importance. Summarize succinctly what the paper contributed.

Format and process

The Lay Summary will be published on the deparment's Web site where nonspecialists generally have best access. It is not required as part of the formal review process of the thesis, but you should work with your major Professor to prepare an approved Lay Summary in time to distribute to the Thesis Defense audience.

Sample Lay Summaries

From Broom M and Ruxton GD, 2005. You can run—or you can hide: optimal strategies for cryptic prey against pursuit predators. Behav Ecol 16:534–540:

We consider the behaviour of a hiding prey individual, as a predator approaches it. Although the predator has not yet discovered the prey, it is increasingly likely to do so as it gets closer. Further, the closer the predator is to the prey when it discovers it, the more likely it is to capture the prey. These arguments suggest that prey should flee before the predator discovers it. However, fleeing will alert the predator to the presence of the prey and trigger an attack that might not have occurred otherwise. We capture these conflicting pressures in a mathematical model, which we then use to predict the optimal behaviour of both the prey and predator. We argue that the optimal strategy for the prey is either to run as soon as they detect a predator approaching or to only flee in response to having been detected by the predator. The optimal strategy for the predator depends on whether its current trajectory takes it closer or further from the prey. If it is moving away from the prey, the

[2] Lay Summary Guidelines used by the International Society for Behavioral Ecology for manuscripts published in *Behavioral Ecology* were adapted; http://www.oxfordjournals.org/our_journals/beheco/for_authors/general.html (8.26.10)

predator should attack immediately on discovering the prey; but if it is moving towards the prey, it should delay its attack until it reaches the point where it is closest.

From McDonald PG, Olsen PD, and Cockburn A, 2005. Sex allocation and nestling survival in a dimorphic raptor: does size matter? Behav Ecol 16:922–930:

If both male and female offspring require the same level of resources to raise (cost), and have an equal likelihood of breeding (benefit), theory predicts parents should produce equal numbers of sons and daughters. In many falcons, females are larger than their male counterparts. Given this, daughters may be expected to require more food from their parents than sons, thereby inflicting a greater cost upon parents and resulting in more sons than daughters being raised. To test these ideas, we examined some of the relative costs and benefits associated with raising sons and daughters of brown falcons, a medium sized falcon where male body weight is 75% that of females. Despite large differences in body size, daughters were not feed more food than sons, indicating that body size differences alone are not good indicators of the food level requirements of nestling birds. However, the smallest nestling in every brood was fed much less than their broodmates, resulting in these small birds remaining relatively small at breeding age. Small male falcons are still able to inherit breeding territories, but small females are unlikely to do so. This difference in the benefits of raising a small member of each sex may explain why small sons were still raised by parents in this study, whereas small daughters were given such a reduced food supply that they all perished soon after hatching.