

**GRADUATE PROGRAM IN WILDLIFE BIOLOGY
AT THE UNIVERSITY OF MONTANA
POLICIES AND PROCEDURES FOR GRADUATE STUDENTS**
(Approved September 2000 by WBIO faculty – Revised Fall 2018)

I. DESCRIPTION OF PROGRAM

The Wildlife Biology Program (WBIO) at The University of Montana is a joint program of the College of Forestry and Conservation (CFC), the Division of Biological Sciences (DBS), and the Montana Cooperative Wildlife Research Unit. This interdisciplinary makeup provides broad exposure to diverse viewpoints and approaches. The Program is housed within the College of Forestry and Conservation and has a Director (from either DBS or CFC) who reports to the Dean of CFC. Graduate degrees offered through WBIO include the Master of Science in Wildlife Biology (Thesis and Non-thesis Options) and the Doctor of Philosophy in Fish and Wildlife Biology (offered by The University of Montana-Missoula in collaboration with Montana State University-Bozeman).

The graduate program in WBIO emphasizes the theoretical foundations, scientific research techniques, and general biological understanding necessary for graduates to pursue further research or to seek employment as wildlife biologists, managers, administrators, and academicians. Types of research questions addressed in WBIO graduate programs include theoretical and applied aspects of specific species and species groups, biological systems, and socio-political systems as they relate to conservation of wildlife.

Complete applications must include:

- A. completed application form (available on-line from the Graduate School);
- B. 1 official transcript of all college and university courses;
- C. a short statement (1-2 pages) of your interests and goals;
- D. a resume detailing work experience from college entry to present;
- E. 3 letters of recommendation (submitted separately or through CollegeNet);
- E. GRE scores for verbal, quantitative, and analytical;
- F. nonrefundable application fee (\$60); and
- G. Test of English as a Foreign Language (TOEFL) scores (foreign students only)

NOTE: No special application form is required for financial assistance: financial assistance is considered for all acceptable applicants.

Submit application materials to:

Wildlife Biology Program
W. A. Franke College of Forestry and Conservation
The University of Montana
Missoula MT 59812

II. ADMISSION REQUIREMENTS

Application to the Wildlife Biology Program is very competitive and we must turn down many applicants who meet the minimum criteria (below).

THE WILDLIFE BIOLOGY FACULTY SPECIFICALLY WARNS THAT ENROLLMENT IN GRADUATE NON-DEGREE STATUS DOES **NOT** PROVIDE FAVORED STATUS TOWARD ACCEPTANCE TO ANY WILDLIFE BIOLOGY DEGREE PROGRAM.

A. M.S. (Thesis Option). Admission under this option normally requires a bachelor's degree in Wildlife Biology or related field. Major course work deficiencies will be made known to the applicant at the time action is taken on the application. To enter the program without major deficiencies, the candidate should present the following course work: mathematics (at least an introductory course in calculus and at least 1 course in statistics); chemistry (at least 1 year of college chemistry, including organic chemistry); and appropriate course work in biological science and management/conservation. Knowledge of a foreign language is not required for this degree, but candidates anticipating a future doctoral program are encouraged to study an appropriate foreign language.

Preliminary decisions regarding acceptance into the M.S. program are made using the following criteria:

1. minimum grade point average (GPA) of 3.0 in undergraduate work;
2. Graduate Record Examination (verbal, quantitative, and analytical) is required of all applicants before admission. GRE scores at the 50th percentile are considered minimums for students from English speaking countries, and any scores below 50th percentile trigger more stringent evaluation; and
3. minimum TOEFL score of 92 (Internet-Based Test for applicants from non-English speaking nations).

Further evaluation is based on letters of recommendation, the applicant's statement of specific interests and goals, and a resume detailing work experience from college entry to the present. The statement of specific interest is used to identify faculty members whose interests most closely match those of the applicant. The final criterion for accepting an applicant is the explicitly-stated willingness of a faculty member to serve as Graduate Advisor ("Major Professor"). *Under no conditions are applicants accepted without the agreement of a faculty member to serve as the major professor.* Applicants are therefore encouraged to communicate with potential advisors before applying.

The Graduate Admissions Committee determines acceptability of applicants based on the above criteria, and any exceptions to stated minimums must be approved by a vote of the WBIO faculty. Students must enroll in the semester stated in their acceptance letter.

B. M.S. (Non-thesis option). The non-thesis M.S. Option is available only to established wildlife professionals who wish to update their qualifications and to students in the Peace Corps Program. Students who enter the WBIO Graduate Program under the thesis option cannot change to the non-thesis option. The professional paper is an extensive work relating directly to management issues the student deals with in a professional capacity. A resource management plan for a region (historical review, inventory analysis, evaluation of options, action plan, etc.) could be appropriate. Other aspects of admission requirements are the same as for the M.S. Thesis option.

C. Ph.D. Degree. Most applicants to the Ph.D. program have completed or are completing M.S. degrees, but students without M.S. degrees are considered if they demonstrate outstanding potential to complete a Ph.D. program. Successful applicants usually have at least 1 degree in Wildlife Biology or a closely related field; students with other backgrounds may be accepted depending on overall potential.

Preliminary decisions regarding acceptance into the Ph.D. program are made using the following criteria:

1. minimum grade point average (GPA) of 3.0 in undergraduate work and 3.5 in graduate work;
2. Graduate Record Examination (verbal, quantitative, and analytical) is required of all applicants before admission. GRE scores at the 60th percentile are considered minimums for students from English speaking countries, and any scores below 60th percentile trigger more stringent evaluation; and
3. minimum TOEFL score of 92 (Internet-Based Test for applicants from non-English speaking nations).

Further evaluation is based on letters of recommendation, the applicant's statement of specific interests and goals, and a resume detailing work experience from college entry to the present. The statement of specific interest is used to identify faculty members whose interests most closely match those of the applicant. The final criterion for accepting an applicant is the explicitly-stated willingness of a faculty member to serve as Graduate Advisor ("Major Professor"). *Under no conditions are applicants accepted without the agreement of a faculty member to serve as the major professor.* Applicants are therefore encouraged to communicate with potential advisors before applying.

The Graduate Admissions Committee determines acceptability of applicants based on the above criteria (any exceptions to stated minimums must be approved by a vote of the WBIO faculty). Students must enroll in the semester stated in their acceptance letter.

III. ADVISORS AND COMMITTEES

The Graduate Advisor and the student will work together closely throughout the student's tenure. The advisor must approve all proposal and thesis materials before they are circulated to the rest of the committee, and notify the WBIO Office of the time, date, and place of the final examination. The advisor is also responsible for helping the student choose committee members and for helping develop the research topic.

- A. M.S. Degrees (Thesis and Non-thesis options).** The M.S. Graduate Committee consists of 3 faculty members (the advisor as chair and 2 others), including representatives from both CFC and DBS. Federal employees of the Montana Cooperative Wildlife Research Unit may serve as either DBS or CFC Faculty in this context. In all cases, a majority of committee members must be UM Wildlife Biology faculty members. This Committee assumes the general sponsorship and control of the student's program. Non-UM faculty may serve on the Committee in addition to the 3 UM faculty members when appropriate, but may not vote on committee actions unless they possess Faculty Affiliate or Adjunct Faculty status at The University of Montana.

The Graduate Committee must be assembled by the end of the *first semester* in residence and must meet by that time to discuss course work. After discussion with the advisor about appropriate committee members, the student is responsible for obtaining verbal commitment to serve from prospective committee members. The advisor will then e-mail a list of the committee members to the Wildlife Biology Office. The Director of the Wildlife Biology Program, after checking to make sure the committee meets the above criteria, forwards it to the Graduate Dean, who notifies the program of the committee's appointment. Makeup of the committee may change as the research proposal develops, but the Director of Wildlife Biology must be notified of, and approve, any such changes.

Duties of the M.S. Graduate Committee are:

1. Evaluate the schedule of courses presented for the degree;
2. Evaluate the proposal for thesis or professional paper;
3. Insure that all Graduate School requirements are met;
4. Provide direction and supervision for the candidate;
5. Evaluate the Master's thesis or professional paper and attend related seminars; and
6. Evaluate the candidate's performance on the defense.

B. Ph.D. Degree. The Ph.D. Dissertation Committee consists of the major professor as chair and 4 other members. A majority of committee members must be UM Wildlife Biology faculty, with at least 1 faculty member from DBS and 1 faculty member from CFC. Federal employees of the Montana Cooperative Wildlife Research Unit may serve as either DBS or CFC Faculty in this context. Members of the committee must have attained a Ph.D., and any exceptions require approval by the Director of Wildlife Biology and the Dean of the Graduate School. Non-UM faculty may serve on the Committee in addition to the UM faculty members, when appropriate, but will not vote on committee actions unless they possess Faculty Affiliate or Adjunct Faculty status at The University of Montana. The Dissertation Committee assumes general sponsorship and control of the student's program.

The Dissertation Committee must be assembled by the end of the *first semester* in residence, and must meet by that time to discuss course work and the research statement. After discussion with the advisor about appropriate committee members, the student is responsible for obtaining verbal commitment to serve from the prospective committee members. The advisor will then e-mail a list of the committee members to the Wildlife Biology Office. The Director of the Wildlife Biology Program, after checking to make sure the committee meets the above criteria, forwards it to the Graduate Dean, who notifies the program of the committee's appointment. Makeup of the Dissertation Committee may change as the research proposal develops, but the Director of Wildlife Biology must be notified of and approve any such changes. Duties of the Ph.D. committee are the same as those listed above for the M.S. committee, with the additional requirement of conducting the written and oral comprehensive exam (see X).

IV. COURSE WORK AND ACADEMIC STANDARDS

All students must be familiar with the requirements and procedures established by the Graduate School for their particular degree, as published on the Graduate School website, www.umt.edu/grad. Students on a Research or Teaching Assistantship must register for at least 6 credits each semester during the academic year. All students must maintain a cumulative grade point average ≥ 3.0 . Upon completion of course requirements, degree candidates must register for at least the minimum number of research or thesis credits required by the Graduate School (www.umt.edu/grad) each fall and spring semester until graduation. Some circumstances will require students to register for a different number of credits; students must consult with their advisor to determine the appropriate number for them. All graduate students must enroll in WBIO 594, Graduate Seminar, for at least 2 semesters, and must attend during every semester in residence (see VI-A).

A. M.S. Thesis Option. The minimum requirement for the M.S. Degree, Thesis option, is 30 graduate semester credits beyond the Bachelor's degree. Of these, at least 20 must be in formal classes, and at least half of the course work credits must be at the 500 level or above. Up to 10 of the 30 credits may be taken as research and/or thesis credits. The majority of course work normally is taken in WBIO, Biology, and Forestry, but the Graduate Committee may require work in other departments.

A copy of the approved course work outline must be approved prior to the end of the first semester in residence; it will then be placed in the student's file in the WBIO office.

B. M.S. Non-thesis Option. Minimum requirement for the M.S. Degree, Non-thesis Option, is 36 graduate semester credits. Of these, at least 29 must be in formal course work and at least half of the course work credits must be at the 500 level or above. Up to 7 of the 36 credits may be taken as professional paper credits.

C. Ph.D. Degree. Primary emphasis in the Ph.D. program is on professional development, stimulation of intellectual curiosity, and competency in science, rather than on a specified set of courses. However, certain course work requirements must be completed successfully:

1. the Ph.D. student must obtain a minimum of 60 graduate semester credits beyond the bachelor's degree. A dissertation committee may require more, depending on the student's background for the proposed Dissertation research program;
2. of the 60 semester credits, 20 may be thesis credits;
3. of the remaining 40 credits, at least 20 must be numbered > 500;
4. at least 30 semester graduate credits must be taken at UM;
5. up to 30 semester masters degree credits, 10 of which may be for thesis, research, or independent study courses, may be applied to the 60 credit requirement;

Required course work is geared toward preparing the student to develop sound scientific knowledge and to facilitate the incorporation of that knowledge into conservation practice. Hence, required course work may include aspects of theory, applications, biology and ecology, socio-political aspects of conservation, and statistical and other quantitative methods. The course work package is developed, in consultation with the Dissertation Committee, to assist the student in planning, conducting, and writing the dissertation.

A course work outline must be approved by the dissertation committee prior to the end of the first year in residence. A brief statement followed by the signatures of the committee members will serve as evidence of committee approval. The committee and student may make reasonable amendments to the course work outline if later evaluation shows that further course work is needed. Copies of the approved course work outline and approval are placed in the student's file in the WBIO office.

The WBIO Ph.D. Program has no foreign language requirement, but the Graduate Committee may require competence in a foreign language when appropriate for the student's area of research.

V. CONTINUOUS REGISTRATION, LEAVES OF ABSENCE AND TENURE

The Graduate School requires that graduate students register for credits every fall and spring semester. The number of credits should be that deemed commensurate with use of facilities and faculty time, but is at least 3 credits per semester (6 for students on Teaching or Research Assistantships). Students must apply for a leave-of-absence if they do not plan to be continuously registered. Students who do not register for at least 3 credits per semester for 2 or more semesters without such approval will be dropped from the program by the Graduate School. Re-admission is allowed through petition only.

Maximum time limits allowed for completion of degrees are set at 5 years for M.S. and 7 years for Ph.D. programs by the Graduate School and the Wildlife Biology Program. Students may petition, with support of their committee, for a *1-TIME*, 1-year extension, although granting of the petition is not guaranteed. A 6-month extension will be granted for petitions based on issues covered under the family

medical leave act. Petitions for extensions must provide careful justification for not finishing in the already-generous time limit and MUST provide a specific timeline of thesis/dissertation chapter completion dates in the extension period. These timelines must be met to continue in the program. Petitions for extensions must first be approved by the student's graduate committee and then will require a vote by the Wildlife Biology Program faculty who may not agree with the committee. No further extensions are allowed and if the student does not finish, they will be dropped from the program. Such students can re-apply to the Wildlife Biology Program through the Graduate School, but may be faced with new degree requirements. No student is eligible for further TA support, programmatic scholarships or awards after reaching maximum time limits.

VI. WILDLIFE BIOLOGY GRADUATE SEMINAR SERIES (WILD 594)

A. Purpose and Participation. The purpose of WILD 594 is to encourage the regular (weekly) exchange of scientific ideas among Wildlife Biology faculty and students and to promote improved communication skills. All graduate students must enroll for at least 2 semesters of WILD 594 and attend during every semester they are in residence. A few class meetings each year will focus specifically on improving the skills needed for presenting quality seminars, and students and faculty will present seminars during the remaining meetings. Seminar attendance is mandatory when enrolled.

B. Timing of Seminars. Both M.S. and Ph.D. students must present both a proposal seminar and a thesis or dissertation seminar. The maximum time allowed for each seminar is 40 minutes (enforced) to allow ample time for questions and discussion.

The proposal seminar should be presented early in the student's development of the thesis or dissertation topic (see XIII for details on timeline). Although it must be done absolutely no later than the time that the student's committee approves the proposal (i.e. proposal approval is contingent on a completed public proposal seminar), students are encouraged to present the proposal early enough to facilitate input to development of the proposal.

The proposal and thesis or dissertation defense seminars are usually presented on the same day as the student's defense with the committee, but may be presented up to 2 weeks prior to the defense.

For both seminars, students should note that prior planning is important. Scheduling seminars will prioritize thesis and dissertation defenses over other types; cancellations are strongly discouraged and must be approved by the student's committee. Ph.D. students are required to present a seminar once every 2 years during their residence.

VII. RESEARCH PLANNING AND PROPOSALS

A. Research Statement. As soon as possible after the graduate committee is formed, students must prepare a statement that generally describes their research projects and *preliminary* ideas and questions. The student must then arrange a formal committee meeting, no later than the end of the first semester in residence. At this meeting, committee members will evaluate the research statement and the proposed course work outline, provide feedback, and either approve them or recommend modifications.

B. Research Proposal. Each student is required to complete a formal research proposal that presents the conceptual and empirical framework within which the study will be conducted. The proposal should consist of a title, an introduction to the research problem, an explanation of how the problem

fits into a broader conceptual framework defined by existing literature, a justification of its importance, the specific objectives, methods (including details about design and proposed methods of analysis), a timetable, and a budget.

M.S. candidates must defend their thesis proposal in a committee meeting and receive committee approval of their proposal by the end of their second semester in residence and prior to collecting data for their thesis research. Students who will begin collecting data for their thesis research after 1 semester of enrollment must defend their thesis proposal in a committee meeting and receive committee approval of their proposal by the end of their first semester in residence and prior to collecting data for their thesis research.

Doctoral students must obtain committee approval of a preliminary research proposal. The preliminary proposal builds on the research statement, providing more detail on concepts, questions, study design, and data. Its purpose is to demonstrate progress toward a full Ph.D. proposal. Committee approval must be obtained no later than the end of their second semester in residence and prior to collecting data for their dissertation research. Students must defend their full proposal in a committee meeting by the end of their third semester in residence and receive final committee approval of the proposal no later than the end of their fourth semester. Students who will begin collecting data for their dissertation research after 1 semester of enrollment (e.g., students who begin in the spring semester and will conduct fieldwork the following summer) must get approval of the preliminary research proposal by the end of that semester, prior to collecting data. Such students must defend their dissertation proposal in a committee meeting by the end of their third semester and receive final committee approval of their proposal no later than the end their fourth semester. In the case of students that convert from a M.S. to Ph.D. program before completing the M.S., the dissertation proposal must be defended to the committee by the end of their fifth semester in residence and receive final committee approval no later than the end of their sixth semester. We suggest that Ph.D. proposals be structured in the format of an NSF Dissertation Improvement Grant.

Both M.S. and doctoral students must present a formal and detailed public presentation on their thesis or dissertation proposals. This presentation will be given during a regularly scheduled WBIO graduate seminar time slot (see VI-B). Following this presentation, students will meet with their committee for the oral defense of their proposal. After approval by the committee, a committee-signed copy of the proposal (including a statement that the proposal seminar was successfully completed) must be placed in the student's file in the WBIO office. Doctoral students must also submit an advisor-signed copy, timeline included, to the Dean of the Graduate School (see www.umt.edu/grad/).

In approving the proposal, the advisory committee agrees that successful completion of the proposed research will likely result in a satisfactory thesis or dissertation. Any substantive changes made after committee approval must be brought back to the committee for discussion, and documented as a revised and signed proposal in the student's WBIO file. All graduate students are encouraged to meet with all of their committee members at least annually to keep them informed of progress.

VIII. TEACHING REQUIREMENT AND TEACHING ASSISTANTSHIPS

All Ph.D. students, including those whose primary support is an RA, must engage in supervised teaching activities and must teach the equivalent of a regular TA assignment for at least 2 semesters. Non-UM teaching experience will be considered for substitution for the teaching requirement. Each semester that a student is a TA, they must ensure that the Professor for the course prepares a teaching evaluation (see under Annual Review of Student Progress below) and submits it to the Wildlife Biology office, with a

copy to the major professor (advisor).

Teaching assistantships are awarded annually on a competitive basis; students with a cumulative GPA ≤ 3.0 will receive lowest priority for teaching assistantships. Initial support is contingent upon the nature and quality of completed course work, GRE scores, letters of recommendation, and other evidence of scholarship filed with the student's application for admission. Renewed support is contingent upon satisfactory progress toward degree requirements and quality of teaching performance. An individual graduate student may not receive more than 4 semesters of support on a Teaching Assistantship.

IX. ANNUAL REVIEW OF STUDENT PROGRESS

Students are required to maintain a cumulative GPA ≥ 3.0 and to complete certain tasks by specified deadlines. The WBIO Student Evaluation Committee and the full faculty evaluate student GPA and progress every spring based on a form completed by the student and major professor by April 1 every year (see Appendix). Any deficiencies are identified and the student is placed on probation and given 1 semester to rectify these deficiencies. The Student Evaluation Committee will conduct a follow-up evaluation by 1 December to determine whether students have rectified deficiencies. Students on probation who do not fulfill requirements in the following semester will then become ineligible for TA or RA support in the next semester. A formal meeting of the student's committee will then be held to determine whether additional conditions need to be set (e.g., discontinuation of field work until deficiency is corrected). If deficiencies are still not rectified by the end of the second semester after being identified, the student will be dropped from the program.

Each semester the student is a TA, the student is responsible for having the professor in charge of the class submit to the WBIO office (with a copy to the major professor), a short evaluation that ranks the student from 1 (poor) to 5 (excellent), with any comments appended as desired on the following 6 criteria:

- 1) Preparedness/organized?
- 2) Positive interaction with students
- 3) Independent creativity in teaching
- 4) Enthusiasm
- 5) Student evaluations
- 6) Overall assessment

Note that the major professor must sign the form. If the student is on an RA, the professor in charge of the RA must attach a brief evaluation statement.

X. COMPREHENSIVE EXAMINATION GUIDELINES (Ph.D. Students Only)

The comprehensive exam will be completed by the end of the doctoral student's 4th semester. In the case of students that convert from a M.S. to Ph.D. program before completing the M.S., the comprehensive exam must be completed before the end of the sixth semester.

- 1) At least 1 month before the beginning of the exam, the student must:
 - a) provide a copy of these regulations to all examination committee members
 - b) convene a committee meeting at which an examination committee chair is selected and examination topics are discussed. The comprehensive examination committee chair is normally

a member of the Wildlife Biology faculty and the student's committee, but not the student's major professor.

- 2) At least 2 days before the beginning of the exam, the examination committee must meet to approve the examination. Given the diversity of faculty in the Wildlife Biology Program, a formal meeting is required to ensure consistency in application of the examination to different students. The student will be informed as to how the examination will be administered.
- 3) The written portion of the comprehensive examination will consist of up to 8 hours of open and/or closed book questions from each committee member, at the discretion of each committee member, typically answered by the student over 5 consecutive days. At least 1 committee member will ask biologically oriented questions and at least 1 committee member will ask policy- or management-oriented questions. Most wildlife conservation and management involves biology as well as social/political/legal/economic aspects; the intent here is to ensure that doctoral candidates have been exposed to and have knowledge in both.
- 4) At least 3 (and no more than 10) calendar days after completion of the written examination, faculty will communicate to the examination chair their evaluation of the student's answers. The rating will be 1 of the following:
 - a) Pass – Student progresses to the oral exam.
 - b) Marginal – The examination demonstrates weakness in 1 or more areas. The committee will meet to discuss the next step, but it may require some or all of the exam to be re-written and may postpone for a reasonable time the oral examination.
 - c) Fail – A complete fail of the written exam will require termination of the student's program.
- 5) The oral examination explores in depth the areas presented in the written questions, but is not restricted to those areas. The oral examination is restricted to 3 hours in length. The examination is open to all members of the faculty of The University of Montana, though all except committee members are excused before the vote.
- 6) Normally, the vote for admission to candidacy will occur at the end of the oral examination. Each examination committee member will rate the student's performance across both portions of the examination in 1 of 3 categories:
 - a) Pass – No further work is necessary. Student progresses to candidacy.
 - b) Conditional pass – The examination demonstrates weakness in 1 area. The student is required to make up for this deficiency before progressing to candidacy. At the examination, the comprehensive examination committee will specify the tasks required for the student to progress to candidacy, and the criteria for evaluating their completion. Typically, students in this category are required to take an additional course or complete additional written work.
 - c) Fail – The examination may be rescheduled if the student fails, but the Comprehensive Exam Committee retains the right to recommend termination of the student's program upon majority opinion at any time.

After each committee member states their opinion, the committee discusses the vote. At least 75% must vote in favor of a "Pass" or "Conditional pass" or the student has failed the exam.

XI. ADMISSION TO CANDIDACY

At least 6 months before the M.S. or Ph.D. degree is awarded, and after successful completion of the comprehensive exam (for Ph.D. students), the student must submit to the Graduate School 1 copy of the

Application for Graduation Form (available from <http://www.umt.edu/grad/> or the Wildlife Biology Office). One copy must also be submitted to the WBIO Office.

XII. COMPLETION AND DEFENSE OF M.S. THESIS OR Ph.D. DISSERTATION

- A. Content.** The thesis or dissertation must embody the results of independent research by the candidate. It must be an original contribution to knowledge, appropriate for publication in peer-reviewed journals. Many WBIO students write their thesis or dissertation as a series of papers, and some submit such papers to journals before graduating. A paper that is accepted by a journal does not, however, automatically constitute acceptance by the committee for the thesis/dissertation. We strongly encourage students to receive approval for manuscripts from their committees *prior* to submission to journals.
- B. Deadlines and approvals.** Copies of the dissertation or thesis draft (edited and approved by the advisor as being ready for defense) are provided to the rest of the committee, and a meeting for all committee members is scheduled for a vote on approval no less than 10 calendar days after the committee received the draft. These important steps cannot be circumvented by having the student visit faculty to collect signatures individually. After the committee unanimously approves the thesis for defense, or $\geq 75\%$ of the committee approves the dissertation for defense, the student submits it to the WBIO faculty for their review at least 10 calendar days prior to the defense date, (note: this means that students must provide copies of their dissertation or thesis to their committee at least 20 calendar days before their defense). The signatures of the committee members on the title page of the review copy of the thesis or dissertation indicate that at least 75% of the members of the committee have agreed that it is ready to defend. Students must also provide the Graduate School an electronic copy of the committee-approved defense draft of the dissertation or thesis prior to their defense date (see www.umt.edu/grad/); the Graduate School reviews this draft for formatting only. Public notice of the defense should be posted 7 calendar days prior to the defense date.
- C. Defense.** Masters and doctoral students are required to conduct a public 40-minute seminar presentation of the research findings to the advisory committee and any other interested persons followed by a 10-minute question and answer period (see VII-B). This should be done during the WBIO seminar series. The 1 (M.S.) or 2 (Ph.D.) hour defense, which normally occurs immediately following the seminar but may occur up to 2 weeks thereafter, is open to all faculty members of the University. The student is expected to answer questions specific to the research and those of a more general conceptual nature. Additionally, the student is required to “defend” the approach, methods, analysis, and conclusions of their research. Earlier draft thesis copies that were marked by committee members, as well as copies of the proposed final draft, must be brought to the defense for reference. The exam is passed with no committee votes to fail on the M.S. Defense and with no more than 1 committee vote to fail on the Ph.D. Defense. In the case of failure, 1 repeat defense examination is permitted, following a suitable interval as determined by the committee.

Students who are unable to finish during the academic year must return the following fall for the defense. No summer defenses are allowed because faculty usually have other summer commitments, and the campus community is generally not available for what is a public defense.

- D. Thesis and Dissertation Copies.** For guidance in preparing and submitting a thesis or dissertation, as well as deadlines, forms, and procedures required for graduation, students will need to consult the Graduate School website www.umt.edu/grad/. The major professor or the Wildlife Biology Office will submit the final copy of the thesis or dissertation to the Graduate School in an electronic format. The student submits her or his final to the Mansfield Library and must submit a paper copy to be

bound or a bound copy of their thesis or dissertation to the Wildlife Biology Office and is encouraged to have an additional copy of the thesis bound by a commercial binding service for the advisor.

XIII. Timeline

	M.S.	Ph.D.
Committee membership submitted to WBIO Office	By end of 1st semester	
Committee-approved coursework to WBIO	By end of 1st semester	
Committee-approved research statement	By end of 1st semester	
Committee-approved preliminary proposal	N/A	Prior to end of second semester, before collecting data for dissertation research (see VII-B); by end of 1 st semester when data collection begins after 1 semester of residence.
Research proposal presented orally and successfully defended	Prior to collecting data for thesis research, defended and committee approved by the end of 2 nd semester. Where data collection begins after 1 semester, defended and committee approved by the end of the 1 st semester.	Prior to collecting data for dissertation research, by end of 3 rd semester
Successful completion of comprehensive exam		4 th semester
Application for admission to candidacy	6 months before degree awarded	
Committee-approved dissertation proposal		By end of 4 th semester
Draft thesis or dissertation certified by committee as ready for defense	10 calendar days before defense	
Electronic copy of draft thesis to Graduate School	Typically ≥ 7 calendar days before defense (check www.umt.edu/grad)	
Successful defense	Within 5 academic years of start date	Within 7 academic years of start date
Submit final electronic copy of thesis or dissertation to Graduate School	Typically 4 weeks after the end of semester of successful defense (check www.umt.edu/grad)	
Submit final copy of thesis or dissertation electronically to Mansfield Library	Typically 4 weeks after the end of semester of successful defense (check www.umt.edu/grad)	

Annual Progress Form for Graduate Students in Wildlife Biology – Appendix

**[Must be turned in each year to Wildlife Biology Office by April 1]
(Attach full CV)**

NAME and EMAIL: _____ **M.S./Ph.D. (Circle one)** **DATE:** _____
CUM. GPA: _____ **DATE FIRST ENROLLED:** _____ **ADVISOR:** _____

I. State whether each of the following has been completed, and if so, the date completed, or the date you plan to complete each item (see regulations):

	<u>DATE PLANNED</u>	<u>DATE ACCOMPLISHED</u>
• Enrolled in WILD 594	_____	_____
• Committee submitted to WBIO office	_____	_____
• Committee approves course work	_____	_____
• Committee approves research plan	_____	_____
• Research proposal approved	_____	_____
• Committee reviews dissertation proposal (Ph.D. only)	_____	_____
• Complete comprehensive exam (Ph.D. only)	_____	_____
• Draft certified as ready for defense	_____	_____
• Defense	_____	_____

II. Attach a brief evaluation statement(s) from TA/RA professor(s).

Professor that you were a TA/RA (circle one) for last spring semester: _____
 Professor that you were a TA/RA (circle one) for last fall semester: _____

- Each semester the student is a TA, the professor in charge of the class needs to complete a short evaluation that ranks the student from 1 (poor) to 5 (excellent), with any comments appended as desired on the following 6 criteria. This must be submitted to the Wildlife Biology office, with a copy to the major professor.
 1) preparedness/organized?; 2) positive interaction with students; 3) independent creativity in teaching; 4) enthusiasm; 5) student evaluations; and 6) overall assessment
- Each semester the student is an RA, the student’s major professor needs to complete a short evaluation.

III. Record the following for work completed SINCE LAST APRIL 15

Publications In Press or published only (give full citation):
 Proposals Submitted (list all PI’s in order, amount, and granting organization). Say if funded or not:
 Presentations at Conferences or other professional outlets:
 Awards for Research Excellence (e.g., best paper, fellowships, etc):
 Management/Conservation Impacts of research:
 Other Professional Activities (including graduate student service):

IV. A brief statement by the major professor on progress:

SIGNATURE OF BOTH STUDENT AND MAJOR ADVISOR IS REQUIRED

 Student Signature

 Advisor Signature