

Wildlife Biology and Conservation - Master of Science

Current Compliance Year: 2023-2024

Mid-Cycle Review

Recent Recommendations

Feedback will include recommendations from the last Expedited Review or from your most recent review by your school or college. You may not see any feedback or recommendations until you have completed your first full or mid-cycle review.

Response to Previous Recommendations (if any):

NA

Student Learning Outcomes

The previous Student Learning Outcomes Assessment has been submitted as its own report. Going forward you will use the following prompts to discuss the success of your most recent SLOA plan and address your assessment activities since your last SLOA report (typically the past two years or since your last program review).

Learning outcomes feedback from last review:

Feedback will be provided once you have completed a full or mid-cycle review.

Discuss your SLOA findings, changes you are making and what you hope to see as a result:

All current core members of the Wildlife Program ([REDACTED]) and Program Chair ([REDACTED]) revisited our SLOA and agreed that assessment criteria could be more quantitative. In general, our wildlife faculty felt that our graduate program was functioning at very high level. Despite losing 50% of faculty since 2014, each of our faculty members is maintaining a lab with a relatively high volume of graduate students (approx. avg. of 5) and they are graduating in a reasonable amount of time (approx. avg. of 2.5 years) and approximately 75% are publishing at least one manuscript from their thesis research. Although the number of presentations given by students declined during the COVID years, the number quickly rebounded and roughly 50% of students are presenting their work outside of UAF venues. Please see our student data for the best estimates of our students' performance.
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Discuss the curricular changes made based on assessing your SLO. If you haven't made any curricular changes, please explain why not and address what you did notice in the review, including strengths of your curriculum through the assessment of your outcomes:

No curricular changes were necessary. We did modify our SLOA to be more in alignment with the MS in Biological Sciences (the other MS program in our department). The new SLOA is more objective. Most of the changes from the previous SLOA involve the inclusion of a quantitative benchmark. Completing the thesis and submitting chapters for peer-reviewed publication is a demonstration of a student's ability to design, conduct, and complete research that makes a novel contribution to knowledge within the wildlife field. Because publication may take an extended time and depends on journal scope and reviewer perspectives, we felt that half of students publishing is a reasonable standard of achievement. We also included agency technical reports because wildlife students often conduct applied research that directly informs the management decisions of agencies. Technical reports are reviewed prior to publication and may be more locally relevant.
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Communication is an invaluable skill in the wildlife field because of the direct engagement of the public with the animals we study. Oral communication skill is assessed during the thesis defense public presentation and through the ability of the student to orally defend their thesis to their committee during the closed-door component. Also, disseminating information beyond UAF is critically important, especially when much of the funding for the student's research is external. Therefore, we expect that at least 30% of students will present their work to outside professional and public audiences.

The ultimate goal of many of the students is to obtain full-time employment in a wildlife-related professional position. Therefore, tracking employment post graduation is an appropriate assessment metric.

Are communication outcomes embedded in the SLOA Plan?

As of 2017 all Baccalaureate programs were required to embed the communication outcomes within their SLOA Plans, this is optional for non-Baccalaureate programs.

Embedded

Student Success

To access the Student Success Dashboard please sign into a UA computer with VPN connection (if not on campus). You will need your UA credentials and it is best accessed with the most updated version of Chrome, Edge, Firefox or Safari browsers; Internet Explorer is not supported. You will need to filter the data to see your programs. If you need assistance in finding the data for your programs, please contact your data liaison or Julia Manfredini in the PAIR office.

Data Liaisons

Each school or college has a team of Data Liaisons to help you analyze the data provided in the portal and may be able to help you see your data in multiple contexts. You can find a list of data liaisons on the resources page for Program Review.

The college or school level committee will also have access to this data with the goal that by providing these visualizations data availability will be increased.

Data supplied within the dashboard linked below is intended for Academic Program Review and not for any other purpose.

Student Success Data Dashboard

Previous Feedback

Feedback will be provided once you have completed a full or mid-cycle review.

Student Success Data Trends: (please indicate the trends that apply to your program)

Increase in majors, No change in SCH, No change in degrees awarded, Increase in persistence, No change in pass rates, Equity gaps

If equity gaps were found in any of your disaggregated student success data, please explain how you plan to address those gaps. Please contact your data liaison or make an appointment with Julia Manfredini to learn more about analyzing your data.

██████████ are underrepresented in the program, representing about 5% of our graduates students in the program. This is a significant drop from percentage of ██████████ in the WLF undergraduate program (approx. 15%). Persistence by ██████████ has been relatively low. Two of our ██████████ students left the program early when offered full-time permanent employment by outside organizations.

representation has increased. representation has been absent. There is a slight majority of in the program.
We are revising our undergraduate WLF courses and programs to help with recruitment of students. We are also pursuing grant opportunities that increase funds available to support graduate students.

Optional Data Explanation

Feel free to share more of your thoughts on the data provided.

NA

High Impact Practices

According to the AAC&U, High-Impact Educational Practices "have been widely tested and have been shown to be beneficial to college students from many backgrounds." UAF is particularly interested in Undergraduate Research and/or Scholarly Activity because it is one of our mission fulfillment indicators, but all of these researched High-Impact Educational Practices should be reflected in your program's student learning outcomes and curriculum.

Previous Feedback

Feedback will be provided once you have completed a full or mid-cycle review.

High-Impact Practices Used in this Program

Please use the following fields to discuss how your program is using the high-impact practices, successes and known issues and solutions, or ways you are considering incorporating them in the future. If you are not using any of the high-impact practices listed, please use the "Other or None of These," field to share what your program is doing to help students be successful.

High Impact Practices that currently apply to your program:

Capstone Courses and Projects, Undergraduate Research, Writing-Intensive Courses, Collaborative Assignments and Projects, First-Year Seminars and Experiences, Diversity/Global Learning

Collaborative Assignments & Projects

Collaborative assignments, peer review, and course projects are used in WLF670 (Human Dimensions of Wildlife Management, WLF 602 (Research Design), and WLF604 Scientific Writing.

Undergraduate Research

The program is focused on graduate research. Many graduates supervise and mentor undergraduate technicians. It is also common for a component of a graduate research project to be used as an URSA or BLAST undergraduate research project.

Diversity/Global Learning

The need for an increase in diversity within the wildlife profession is emphasized in WLF670 Human Dimensions of Wildlife Management. Students review trends in demographics and participate in implicit bias testing.

ePortfolios

This is not emphasized within our program. However, students are encouraged to maintain an updated CV and post their academic products on faculty lab websites.

First-Year Seminars & Experiences

All incoming students receive an orientation and take WLF602 together. This helps to build cohorts and the feeling of a community. Also, most graduate students attend weekly life sciences seminars and are encouraged to have informal conversation afterward.

Writing-Intensive Courses

WLF604 Scientific Writing is a writing intensive course that helps students get a chapter of their MS thesis ready for submission. Also, WLF670 Human Dimensions of Wildlife Management emphasizes oral and video communication of their course project.

Service-Learning and/or Community-based Learning

Not an emphasis of the program. However, some students are engaged in community-based research and the co-production of knowledge with various interest groups (agencies, communities, NGOs).

Internships

Internships are only a component of our WLF undergraduate programs.

Capstone Courses & Projects

Production and defense of a research project (thesis) is required for completion of the degree. Capstone courses are only applied to the WLF undergraduate programs.

Other or None of these (explain)

NA

Submission**Submitter & Collaborator Names**

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College or School Review Committee

The college or school committees set the tone for helping each program feel seen during this process. We have provided you with strength-based feedback tags to attach to this program review. Please select as many as applicable.

Overall Recommendations

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Explanation of Recommendations

The review panel acknowledges the time and effort that went into submitting the mid-cycle program review for the Wildlife Biology and Conservation program. The review panel appreciates that the program provided a discussion on equity gaps (student success data) and narrative for the HIPs (high-impact practices).

Learning Outcomes Feedback

Requires Minor Revision

Student Learning Outcomes Assessment Feedback (tags)

Missing curricular connection,Missing a direct measure
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Student Learning Outcomes Assessment Feedback (narrative)

The program provided 4 SLOs for the Wildlife Biology & Conservation MS SLOA plan. The review panel offers the following recommendations to improve upon the program's SLOAs: - SLO #s 1-2 are appropriate as measures of student learning. - SLO # 3 is a program outcome and not tied to student learning. The program is encouraged to retain this measure of outcome assessment for their own internal tracking purposes (just not use it as part of program review). Post-graduation activities, such as graduate school/job placement and article publication, are not considered an assessment of student learning and are instead program outcomes. - Per guidance from the NWCCU for accreditation purposes, they recommend that degree programs have between 3-5 SLOs per program. Rather than describing what the students will achieve post-graduation, direct learning outcomes should describe what knowledge or abilities the student will gain as a result of being in the program, and how that will be measured. For example, for the oral and written communication skills SLO, consider developing an assessment that is not tied to near-end completion of the program. For the full program review, which will occur in two years, please upload assessment rubrics, artifacts, and student data (with student names redacted). The summary that was uploaded mentions a comprehensive exam; however, this was not mentioned in the SLOA. The program stated that curricular changes were not necessary. The review panel notes that this is possibly due to the program's assessment metrics. Following NWCCU guidance, SLOA plans must emphasize "closing the loop" and continuous improvement, ensuring each SLO within the plan is assessed individually to verify alignment with program objectives. If a SLO fails to produce the expected assessment outcome, adjustments to SLO language, substantial changes to the SLO, or revisions to data collection rubrics are necessary to ensure alignment and facilitate program improvement.
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Student Success & Equity Feedback

The program noted an increase in majors and persistence; no change in SCH, degrees awarded, and pass rates.

The review panel appreciated the discussion of equity gaps, as the program saw a slight increase in [REDACTED] enrollment, an increase in [REDACTED] students, and that [REDACTED] are underrepresented, as are [REDACTED] students.

For the full review cycle, the review panel is interested in hearing about the outcome of grant funding to support [REDACTED] graduate students.

High-Impact Practices Feedback

The program identified collaborative assignments/projects, writing-intensive courses, capstone courses/projects, first-year seminars/experiences, UG research (noted the focus on G research), and diversity/global learning as HIPs. A narrative was provided for each HIP, but it was not clear where these HIPs fit into the program or if all students are required to complete them to meet graduation requirements.

We would like to see a refined explanation for the Collaborative Assignments and Projects HIP and how it fosters graduate student engagement and success.

The review panel recommends including examples to demonstrate/highlight each HIP. For example, what are examples of capstone course projects?

What percentage of students participate in each HIP for those that are optional?

The review panel recognizes that the HIPs employed by the Wildlife Biology & Conservation program are all positive and meaningful in preparing students to enter the workforce.

UNIVERSITY OF ALASKA FAIRBANKS
Student Learning Outcomes Assessment Plan
Wildlife Biology and Conservation, MS
 College of Natural Science and Mathematics
 November 2023

Mission Statement: The Wildlife Biology and Conservation MS degree program provides training in advanced ecological concepts that are required to understand and apply the principles, methods, and tools of wildlife research, management, and conservation.

Goal Statement: The program will provide graduates with the qualifications necessary for positions in research and management as professional wildlife biologists. The curriculum also lays a solid foundation for advanced graduate study.

Intended Objectives/Outcomes	Assessment Criteria and Procedures	Implementation (what, when, who)
1. Graduates with M.S. in Wildlife Biology & Conservation will demonstrate the ability to apply advanced wildlife knowledge in subject areas related to their thesis research and make contributions to the field. 2. Graduates will have strong oral and written communication skills 3. Graduates will obtain employment broadly relevant to their field of study.	1. At least half will have their work published in a peer-reviewed journal or wildlife agency technical report within three years of graduating. 2. A. Students will present and defend their thesis effectively in a public setting B. At least 30% of students will present their work to non-UAF professional audiences. C. Graduate students will submit manuscripts for publication in a peer-reviewed journal. 3. At least 80% of MS graduates from the program will hold employment in a wildlife-related position within two years following graduation.	1. The Biology and Wildlife Department will monitor publications by former MS students using indexed journal databases to quantify the average frequency of publication of dissertation research in peer-reviewed journals. 2. A. Members of the student's graduate advisory committee will complete an evaluation of the quality of the student's communication in the public presentation portion of the thesis defense B. The Biology and Wildlife Department will track presentations by students in the program using an annual online self-reporting C. See 1. 3. The Biology and Wildlife Department will track the professional activities of students for at least four years post-graduation, in order to assess both initial and longer-term patterns of employment

