



Academic Program Review

Program Name: Wildlife Biology and Conservation - Master of Science

Academic Year 2025/2026

Recent Recommendations

Using your most recent review, please respond to all feedback and recommendations.

Response:

1. Mid-cycle feedback: SLOA missing a curricular connection. SLO # 3 "Graduates will obtain employment broadly relevant to their field of study" is a program outcome and not tied to student learning. 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 postgraduation, 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. The summary that was uploaded mentions a comprehensive exam; however, this was not mentioned in the SLOA. 1. Response: We overhauled our SLOs to address feedback. SLO #1 was revised to better indicate how the comprehensive exam (i.e., student's scientific project proposal) is integrated into the SLOA (Fig. 1, 2). We divided SLO #2 into two SLOs (one for written and oral communication) and created an assessment criterion for each. We replaced SLO#3 with a SLO dedicated to each student's contribution to knowledge based on what they learned in the program and through their research. We developed an assessment rubric (Fig. 3 in supplemental materials) that each student's committee completes at after thesis defense. All SLOs are now directly measurable.
2. Mid-cycle feedback: Student Success & Equity Feedback. For the full review cycle, the review panel is interested in hearing about the outcome of grant funding to support [REDACTED] graduate students. 2. Response: Since the mid-cycle review, our program faculty have submitted multiple grant proposals focused on collaborative research in [REDACTED] communities in Alaska. Each of those had funding for MS graduate students. Two of them were successfully awarded (1 NSF and 1 National Park Service). After intensive advertising with [REDACTED] academic, [REDACTED], and [REDACTED] networks, we did not get a single [REDACTED] student in our applicant pool (we received roughly 60 applications). Faculty in our program also guided an effort to create the Alaska Native Advisory Committee within UAF's Bonanza Creek LTER. The ANAC was provided funding through a LTER working group (social-ecological systems) to recruit a WLF graduate student to co-produce knowledge on a research priority related to environment change in [REDACTED]. The ANAC members ([REDACTED]) worked within their professional network and through faculty in UAF's College of Indigenous Studies and Tamamta Program to advertise the position. Once again, we did not receive a single [REDACTED] applicant. Therefore, our program has created funding opportunities to support [REDACTED] students, but we are not getting applicants. This suggests that we need to focus on recruitment. We have been modifying course content in the WLF undergraduate curriculum in an attempt to be more welcoming and appealing to underrepresented minorities, especially [REDACTED]. We have observed positive shifts in undergraduate numbers which we hope will serve as a pipeline to our WLF MS program. We continue to think critically about ways to improve.
3. Mid-cycle feedback: High-Impact Practices Feedback- 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? 3. Response: We refined Collaborative Assignments to indicate how it assists with student engagement. We provided examples of our HIPs (see that section), and provided a rough estimate of student participation.

Student Learning Outcomes

Describe the assessment of your student learning outcomes (SLOs). Discuss your findings, changes you are making, and what you hope to see as a result.

Response:

The SLOs (from the 2023 mid-cycle review) that applied during the period of this review focused on three outcomes: 1. ability to apply advanced wildlife knowledge in subject areas related to their thesis research and make contributions to the field., 2. oral and written communication skills, and 3. ability to obtain employment relevant to the student's field of study.

1. Demonstrate the ability to apply advanced wildlife knowledge in subject areas related to their thesis research and make contributions to the field.

Advanced wildlife knowledge is demonstrated by students' command of current principles, theories, and science gaps related to their research, and the application of modern and rigorous techniques and methods to address pressing research questions and needs within the wildlife field. The contribution is the creation of a thesis from which students submit either one or two chapters for publication in peer-review journal. Contributions also are evaluated by presentations of research to professional and public audiences.

Criterion 1. At least half will have their work published in a peer-reviewed journal or wildlife agency technical report within three years of graduating.

We selected the time frame of three-years post-graduation because thesis chapters are often submitted shortly after the student defends their thesis or graduates. Thesis chapters may take several years to get published because manuscripts often undergo multiple reviews and revisions before they are published. To assess publication rates, we surveyed all faculty advising students in the MS Wildlife Biology and Conservation program to estimate the average number of publications per student per year between 2021-2025. Because publication of articles during graduate school that are not thesis-related is important to professional development (e.g., learning to be a valued collaborator) and future employment success, we chose to also quantify non-thesis publications (i.e., publications that the student was not the lead author).

We conclude that the majority of graduates in the program are demonstrating mastery of the science related to their thesis - as evidenced by their ability to publish in peer-reviewed journals -and contributing original science to the larger scientific community through publication.

2. Strong oral and written communication skills

Three criteria were identified for assessing this SLO: 2a. Effective public presentation of the thesis during the defense; 2b. Frequency of presenting thesis findings to broad audiences: at least 30% of MS students per year; 2c. Publication of research in peer-reviewed journals.

Criterion 2a. M.S. students will present and defend their thesis effectively in a public setting" - We put this criterion in place during the mid-cycle review in 2023, and did not start accumulating reviews of thesis defense public communication quality until 2024. Following the public presentation of the student's thesis, graduate advisory committee members are asked to complete a quantitative assessment evaluating six aspects of their communication quality and provide qualitative written feedback. A copy of the rubric is provided here as a pdf (Fig. 1), although the actual assessment is distributed as a Google Form. MS students who graduated during FY25 and the beginning of FY26 were reviewed by members of the graduate committee across six criteria of communication quality. As a group, the MS students' scores were: "answers to questions from audience" (4.4); "context and background" (4.5) "graphics and other visual aids" (4.7), "goals and objectives" (4.5), and "delivery" (4.7); and "clarity and organization" (4.6). As more students undergo this review, the data will be helpful to faculty advisors and graduates alike. Based on current data, our students are meeting or exceeding expectations for public presentation of their research. With "answers to questions from the audience" scoring slightly lower, this is an area that we will devote attention to.

Criterion 2b. At least 30% of MS students will present their work to broad audiences outside committee meetings each year - To assess this criterion, we summed the number of presentations reported by faculty advising students in the program or self-reported by each student in the WLF MS program in Reports of Advisory Committee and annual departmental activity reports. Using these data, we found that on average across the four years of review, 60% of WLF MS students gave at least one presentation annually, an average of 0.86 presentations annually per student in the program. Presentations were at meetings and conferences, included both oral presentations and posters, and occurred at a range of local, regional, national, and international venues. This level of presentation exceeds our benchmark and indicates that MS students in the program are communicating their research broadly.

Criterion 2c. Publication of research in peer-reviewed journals - See assessment of SLO #1.

3. Criterion: Graduates will obtain employment broadly relevant to their field of study - To assess this criterion, we used the following means to survey student employment: direct email contact with student, inquiries to former advisors, and web searches including government lists of employees, NGO websites, Google, LinkedIn, and ResearchGate. Whenever possible, we attempted to verify web sources of employment through direct contact with the student or advisor. Since 2021, we have had 100% of the graduates from our program obtaining employment within their field of study, with the majority working for state wildlife agencies, followed federal wildlife agencies, NGOs, and private companies. We conclude that we are fully meeting program criteria.

Based on feedback during the mid-cycle review, we modified our SLOA and eliminated certain SLOs the review committee found less relevant to the intentions of the SLOA. We created new rubrics to guide this process (see below).

Did you make any curricular changes based on your most recent SLOA? If so, discuss what changes were made. If no changes were made, please discuss the strengths of your curriculum based on the assessment of your outcomes.

Response:

Yes, several changes were made to SLOA based on feedback. The major one was the creation of measurable rubrics to assess proposal and defense performance (Fig. 1, 2, 3, 4).

As of 2017, all Baccalaureate programs are required to embed communication outcomes within their SLOA Plans. This is optional for non-Baccalaureate programs. Communication outcomes in the SLOA plan are: **Embedded**

Check the checkbox to certify completion of the following tasks:

☒ Upload supporting documents to the Supporting Documents folder. This includes artifacts, rubrics, and other documents related to your SLOA.

☒ Upload your most recent SLOA to the Supporting Documents folder, even if no changes have been made since the last review.

Have changes been made to your SLOA document since your last review? **Yes**

If so, please summarize what changes were made.

Response:

The new 2025 SLOA is different from the 2023 SLOA in these ways:

We shifted the assessment of the student's command of scientific knowledge relevant to their subject area and of the scientific method to an assessment of the quality of the student's research proposal (already a requirement of the degree program), to be completed by the student's graduate advisory committee using a new rubric (Fig. 3). The rubric is quantitative with space for qualitative written feedback. This evaluation will occur at the end of the student's first year, while there is still time for improvement if needed. We also developed guidelines for an effective written proposal (Fig. 4), which will be available on our departmental website.

We separated the written and oral communication assessments, which were previously combined into the same SLO, at the suggestion of reviewers.

We added a SLO for effective written communication based on the required written research proposal. The proposal rubric (Fig. 1, 2) embeds a quantitative evaluation of writing quality, with space for qualitative feedback for written communication. This will be assessed at the end of the student's first year in the program, giving students time to improve their science writing skills if warranted.

We removed an assessment of post-graduate employment from the SLOA, as suggested by reviewers, but will continue to collect the data for internal departmental purposes.

We established a new SLO (#4) focused on the importance of communicating scientific findings to the broader scientific community. (This SLO was part of SLO #1 in the 2023 SLOA.)

Assessment criteria for the new SLO #4 include publication and oral communication (e.g. at meetings and conferences) of the thesis research findings.

High Impact Practices

Please indicate which high impact practices are currently being implemented in relation to the program's student learning outcomes.

- | | |
|--|---|
| ☐ Capstone Courses & Projects | ☒ Graduate Level Research |
| ☒ Collaborative Assignments & Projects | ☒ Writing-Intensive Courses |
| ☐ Diversity/Global Learning | ☒ Publications |
| ☒ ePortfolios | ☒ Communications |
| ☒ First-Year Seminars and Experiences | ☒ Scholarly Activities |
| ☐ Internships | ☐ Studios |
| ☒ Service or Community-Based Learning | ☐ Practicum |
| ☒ Undergraduate Research | ☐ Other |
| ☒ Labs | ☐ None of these |

Discuss how the HIPs in the program are reflected in the SLOA. If you have identified HIPs that are not included in the SLOA, please consider an update.

Response:

1. 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. This assists with student engagement by fostering a cohort experience and creating a sense of community. Example: WLF MS Students in WLF670 worked together to apply knowledge learned in class to prepare infographics relevant to their graduate research. We have approximately 100% by our WLF MS students in the courses that have collaborative assignments and projects.
2. ePortfolios: Students are provided an opportunity to get professional training on how to maintain an updated CV and webpage through meetings of the Student Chapter of The Wildlife Society and the Biology Graduate Student Association. Also, most faculty host graduate student products and bios on their website. Example: Each year the Student Chapter of The Wildlife Society invites a professional from Alaska Department of Fish & Game to facilitate a CV-building workshop. Roughly 30% of students participate in CV workshops and nearly all students, and descriptions of their research projects, are present on advisor or department websites.
3. First year seminars and 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. Example: All WLF MS students are asked to attend a weekly science seminar hosted by the Institute of Arctic Biology. A short social follows each seminar. All MS students have the opportunity to participate and nearly all do.
4. Service and community-based learning: This is not an emphasis of our program but some students are engaged in community-based research and the co-production of knowledge with various interest groups (agencies, communities, NGOs). Example: A WLF MS student (defended Fall 2025) worked closely with UAF's AOK (Alaska Arctic Observatory and Knowledge Hub) to co-produce knowledge on spotted seal haul out behavior near Utqiagvik. Residents of that community guided the research and their observations were integrated into products. In addition, separate products were created for the community to help them advocate for their own interests. Roughly 50% of our students engage with an external interest group or community during the graduate work.
5. Undergraduate Research: The program is focused on graduate research, however, 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. Example: A WLF MS student working on soundscape ecology on Alaska's Coastal Plain hired five undergraduates over the course of the project to assist with research. Two of the undergraduates created their own projects using the dataset that they helped to organize. The percentage of undergrads participating in our WLF MS research is unknown. This is a metric we will start to internally monitor and document.
6. Labs: Most of our graduate courses in the curriculum have labs to facilitate hands-on learning and provide the opportunity to apply principles and techniques. Nearly all students participate in courses with labs.
7. Graduate-level research: This is the focus on the program. We address pressing wildlife research needs and priorities in Alaska. Examples are not needed.
8. 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. All MS students participate in either WLF670 and/or WLF604.
9. Publications: Most our students generate at least 1 peer-reviewed publication from their thesis research within one year of receiving their MS degree. Based on our best available data, our MS WLF program is producing 0.5 publications per student per year.
10. Communication: Our students commonly interact with reporters to foster communication in the mass media. It is common for our students to have their research findings featured in local newspapers in Alaska and national magazines. Example: A WLF MS student contributed to a newspaper article (published in 2024) in the Juneau Empire on human-bear conflict in Juneau.
11. Scholarly activities: In addition to peer-reviewed publications, our students actively present their research at academic conferences and public venues. On average, our students provide 2.3 professional presentations. Approximately 85% of our WLF MS students participate in scholarly activities each year.

Student Success

Please reference the [Resources tab](#) for information on accessing the Student Success Data Dashboard and contacting your designated data liaisons.

Student Success Data Trends

Persistence: Increase

Pass Rates: Increase

Student Credit Hours: Decrease

Majors: Increase

Degrees Awarded: Increase

Other Trends (if applicable):

PAIR data summaries are included in supplemental materials (Fig. 5). The number of MS students per faculty member is not a metric that is tracked by PAIR. Nevertheless, it is worth noting that our faculty support and graduate an exceptionally high number MS students (Mean = 5 MS students per faculty member per year). However, this metric excludes wildlife faculty that joined our program since 2024 because they have not had sufficient time to recruit and mentor MS students to completion.

Achievement Disparities

Discuss any achievement disparities identified in your disaggregated student success data and explain how you plan to address them.

Response:

The majority of the students in our program are [REDACTED] (57%), [REDACTED] (90%), and [REDACTED] (73%). Data are insufficient to identify a meaningful disparity in student success based on gender, race, or age. Persistence has been high (100%) across genders, race, and age. Our faculty are aware of disproportionately low numbers of [REDACTED], [REDACTED] and [REDACTED] races. We are seeking ways to revise our undergraduate course material to appeal to different races and cultural perspectives. We are hoping that by drawing more minorities into our undergraduate programs, we can grow our pool of minority MS applicants. As noted in a section above, we have opportunities for more participation by underrepresented minorities. We need to focus more on recruitment to increase applications to available opportunities.

Closing the Loop

Please discuss how your student learning outcomes are reflected in high impact practices and student success data.

Response:

Our SLOs are focused on transitioning graduates from students to effective professional scientists and colleagues; someone who understands the current state and pressing needs within wildlife science, perform original research that can withstand critical review by expert peers, and communicate their findings to a broad community both inside and outside the university. Our high impact practices - including graduate level research, writing intensive experiences, publication, communications, and scholarly activities - are all geared toward assisting students to become more independent as practitioners and communicators of science. The employment and publication successes of our graduate students serve as evidence that we have been successful at meeting our goals. Our program is aligned with UAF's overall mission. In particular, our program is producing a skilled workforce that meets the needs of wildlife employers.

Academic Program Profile

The following questions help show how your program supports the university's mission, connects with other UA programs, engages with the community, contributes through service courses, and supports student success after graduation. Please use this section to highlight the value your program brings to students, the university, and beyond.

UAF's Mission:

The University of Alaska Fairbanks is a Land, Sea, and Space Grant university and an international center for research, education, and the arts, emphasizing the circumpolar North and its diverse peoples. UAF integrates teaching, research, and public service as it educates students for active citizenship and prepares them for lifelong learning and careers.

In what ways does your program advance UAF's mission?

Response:

Our program produces a skilled workforce to meet the demands of the state/federal wildlife agencies and NGOs (see "key community and external partners" below) in Alaska. Our program also is a leader in applied research in the far north on wildlife and the interactions among wildlife, diverse peoples, and a rapidly changing environment. Many of the students in our MS program stay on to pursue a PhD at UAF, contributing to our efforts to achieve R1.

How is your program related to others in the UA system?

Response:

Our program structure and function is similar to the MS in Biological Sciences. Our program also facilitates and is facilitated by IAB, BNZ CRK LTER, ACFWRU.

Who are your key community or external partners?

Response:

Healthy engagement and collaboration is a strength of our program. Our key partners are state (Alaska Department of Fish and Game) and federal (National Park Service, USGS, BLM, US Fish and Wildlife Service, and USDA Forest Service & NRCS) wildlife agencies. However, we regularly collaborate with NGOs (Wildlife Conservation Society, Wilderness Society, The Nature Conservancy, Wild Sheep Foundation), and Tribal organizations (Ahtna Inc., Tanana Chiefs Conference, Sealaska, numerous village tribal councils) all across the state.

What role do your services courses play, if any?

Response:

Service courses are not an emphasis within our program.

How do your graduates succeed after leaving the program?

Response:

According to a survey conducted by our home department in 2020, 96% of our MS graduates find employment in the field after completing their degree.

Submitter and Collaborator Names:

Todd Brinkman and Diane Wagner

Submitter Email:

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Committee Review

Program Name: Wildlife Biology and Conservation - Master of Science

Academic Year 2025/2026

Overall Recommendations

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

- | | |
|---|--|
| ☐ Insufficient Narratives | ☐ Report Incomplete |
| ☐ Address Achievement Gap | ☐ Consider Curricular Revisions |
| ☐ Develop Online Offerings/Options | ☐ Improve Time to Degree |
| ☐ Increase Enrollment | ☐ Increase Graduates |
| ☐ Increase Retention/Persistence | ☐ Strengthen Advising Practices |
| ☒ May be asked to share Effective Practices | ☐ Recommendation to University-Wide Committee |

Explanation of Overall Recommendations

Response:

Based on mid-cycle feedback, the program revised its SLOA, removed less relevant outcomes, and created new rubrics to strengthen and clarify assessment processes. Currently all goals are being exceeded. The committee commends the program for addressing the feedback provided during the mid cycle review. It is clear there were substantial updates made to the SLOs that provide a more effective framework for evaluating student success. The outcomes are clear, measurable, and align with program goals. Significant updates were made to reduce SLOs to focus them to four measurable student outcomes. These four SLOs effectively establish an evaluation map for student success in the program as well as the broader scientific community. The data is effectively set up to identify needs or shortcomings in the program. The well organized and linked SLOs are allowing for continued improvements based on student needs and through their enrollment increases are demonstrating the financial strength that is provided through the program. The continued growth and positive trajectory both in student enrollment numbers and revenue of the program has clearly been demonstrated.

The program has done exceptional at responding to data in enhancing their program and closing the loop. Employment outcomes are exceptionally strong, with 100% of graduates since 2021 obtaining jobs directly related to their field. The information provided shows that graduates are successfully contributing original scientific research to the wider professional community which is a stated goal of the program.

Student Learning Outcomes Feedback

- | | |
|--|--|
| ☒ Strong | ☐ Developing |
| ☐ Requires Minor Revision | ☐ Requires Major Revision |

Student Learning Outcomes Assessment Feedback

- | | |
|---|---|
| ☒ Strong Alignment with SLOA Plan | ☒ Clear, Concise Presentation of Findings |
| ☒ Compelling Learning Story | ☐ Missing a Direct Measure |
| ☐ Missing Active Verbs | ☐ Missing Curricular Connection |
| ☐ Missing Collaboration within Department | |

SLOA Feedback Narrative:

SLOAs were updated based on the 2023 mid-cycle review including restructuring the SLOs to be more specific to what the students would gain as a result of actively being in the program and what types of tools could be used for assessment. Improvements from the mid-cycle review include revising SLO #1 to be measurable, based on the student's research proposal as evaluated with a rubric by the graduate committee. SLO #2 was broken into two new SLOs including one focused on written communication and #3 on oral communications each having a measurable SLOA. For example, in regards to oral communications the benchmarks were exceeded with approximately 60% of students presenting their work annually across different venues. SLOAs are now stated clearly and effectively measure the outcomes of the stated SLOs. Updated rubrics have been added to evaluate students' oral and written proposals and theses. These rubrics have effectively created a quantitative way to evaluate oral and written communication. Benchmarks are also presented to evaluate all SLOs, stating that at least 50% of students will publish thesis research in a peer reviewed journal and 30% of students will present outside of their committee.

A change in assessment approach for the student's command of scientific knowledge includes an assessment of the quality of the student's research proposal using a new rubric that provides both quantitative and qualitative measurements. The separation of written and oral communication assessments made this more defined with each having a measurable component and rubric. One recommendation is that the publication of the SLOA criteria needs to be better linked to a learning outcomes evaluation and it largely occurs post-graduation

Student Success and Equity Feedback

Narrative:

The program has made great efforts to diversify their demographics but have ultimately limited the composition of their applicant pool (as is true for many colleges). Disparities in race presented in the report are more indicative of the field as a whole. There are no obvious gaps in performance across different groups, nor any retention concerns. Looking for new strategies to encourage underrepresented groups to apply and engage in the wildlife field will take work from the bottom up as well as at the professional organization level (The Wildlife Society). The committee commends the department on their extensive effort to recruit both graduate and undergraduate [REDACTED] students. Increasing [REDACTED] representation in this program is a unique challenge and opportunity. The report recognizes the lack of representation and also presents examples of students building relationships with [REDACTED] partners through research. For example, faculty applied for and were awarded multiple grants from federal agencies to build collaborations with CIS and other programs. This demonstrates a strong collaborative effort to increase enrollment of underrepresented groups, especially [REDACTED]. This effort is an achievement in itself and we recommend these efforts are continued with persistence.

This is a much bigger issue than just in the biology department and clearly requires a system wide approach and process for engaging with, mentoring, and supporting [REDACTED] in the academic programs. For example, look into the Geosciences NSF funded GeoForce program, which has led to an increased [REDACTED] enrollment in the Geoscience program.

We would recommend that the term "pipeline" is not used to refer to bringing [REDACTED] students to your program. They are not natural resources and given the lack of success in this area for many departments on campus this will be a more intentional support and mentorship process than the analogy of a "pipeline". An increase of 1-2 students per year should be seen as a success.

High Impact Practices Feedback

This section vigorously documents elements of their HIPS. The committee appreciates the additional details and examples provided for the HIPs. The Collaborative Assignments were updated to include a description of how it assists with student engagement. It is of note that this program lists several HIPs providing a description and detailed example for each. This is more than what most programs listed and demonstrates the breadth and broader impacts of this MS program.

The HIPs that have been identified and detailed go above and beyond the SLOs. They meet goals of building communication (both written and oral) skills for students in the program through coursework and program requirements. They also repeat the goal and success of 50% publication rate for masters students in the program. Outside explicit SLO related HIPs, it is clear that students are engaging in community (both in the program and outside) involvement, developing a collaborative cohort and working relationships in the field.

Profile Feedback

- | | |
|---|--|
| ☒ Mission-Centric to College and/or UAF | ☐ Unique within UA |
| ☒ Collaborative with other UA Programs | ☒ Provides Job Placement for Graduates |
| ☒ Strong Post-Grad Success for Students | ☐ Strong Service Teaching Component |
| ☒ Strong Ties to Community or Industry | |

Financial Feedback

- | | |
|--|---|
| ☒ High Tuition Revenues | ☒ High Grant Revenues |
| ☐ Operates at Low Cost | ☒ Productive Faculty |
| ☐ Opportunities to Increase Revenue | ☐ Low Enrollment |

Reviewer Names:

Chris Maio, Ellen Candler, Carrie Baker, Russ Hopcroft, and Mark Conde

Dean Review

Program Name: Wildlife Biology and Conservation - Master of Science

Academic Year 2025/2026

Dean Feedback

Overall feedback narrative:

The wildlife biology and conservation MS is a strong program that incorporates feedback from mid-cycle review to further improve student learning outcome assessment. Engaging [REDACTED] communities and students in this program that should be relevant to [REDACTED] communities is a challenge, but the program is actively reaching out to communities and prospective students from a range of backgrounds. This program is critical in our state and beyond to train wildlife professionals who manage our resources. The program is well developed and delivered.

Recommendation to University-Wide Committee **No**

Vice Provost Review

Program Name: Wildlife Biology and Conservation - Master of Science

Academic Year 2025/2026

Vice Provost Feedback

Overall feedback narrative:

The program followed the guidance from the 2023 mid-cycle review and revised the SLOA and SLOs, providing strong documentation of changes for the 2025 full-program review. Four SLOs were included, each with clear assessment procedures and implementation plans, including where in the curriculum assessments occur. Assessment criteria and procedures are noted, and artifacts/rubrics were provided; however, the data used to assess SLOs should also be included in future reviews. The narrative overview of SLO assessments was strong and should be commended. The program noted curricular changes but provided only a brief overview; future reviews should elaborate on these changes and their impact. For the 2027 mid-cycle review, include direct evidence (data) in the supplementary folder to show how assessment data informs decisions and whether additional curricular changes are needed. Closing the loop on assessment is essential for NWCCU expectations and should include evidence for each SLO to demonstrate meaningful, evidence-based improvements.

The program demonstrates improving student success outcomes across multiple indicators, including increased persistence, pass rates, majors, and degrees awarded. Persistence is reported at 100% across gender, race, and age during the review period, and 96–100% of graduates secure employment in their field or continue into PhD programs. Early assessment of research proposals and writing supports timely intervention, and high-impact practices such as graduate research, writing-intensive courses, publications, presentations, collaborative projects, labs, and community-based learning foster engagement and persistence. Robust faculty mentoring and advising capacity is evident, and partnerships with external organizations provide authentic learning experiences. However, a decrease in student credit hours despite increases in majors and degrees awarded suggests shifts in enrollment patterns that are not fully analyzed. Further engagement with disaggregated dashboard data and explicit goals for improving representation of underrepresented students would strengthen future reviews.

The HIP report and review sections were thorough and descriptive, with strong alignment to the SLOA and evidence of integration throughout the curriculum.



Department Profile and Financial Data

Department Name: **Biology and Wildlife**

Last updated: 2025/2026

Department Profile and Financial Data

This section aligns with Board of Regents Policy 10.06 and supports systemwide consistency in academic program review. Responses are maintained across review cycles and may not need to be updated annually. Please review your previous answers and update only if necessary.

When answering the following questions, refer exclusively to the standardized Financial Data Template provided by UAF. Work with your data liaison to interpret the template accurately. Do not include any additional or alternative data — consistency across programs is essential. To maintain integrity and standardization across all of UAF it is very important that you do not provide any additional or alternative data from this template.

Confirmation of Review

Have you reviewed the information in this section and made any necessary updates? **Yes**

Financial Data Spreadsheet

☒ I have reviewed the Financial Template for updates and accuracy.

Cost Effectiveness

Please describe strategies such as instructional efficiency, shared resources, cross-listed courses, or other ways your department uses resources thoughtfully.

Response:

The magnitude of Biology and Wildlife's SCH:FTE ratio (273-326) suggests that the department is extremely efficient. Annual revenues exceeded expenditures by ██████ in FY23 and ██████ in FY24 and FY25. The following practices contribute to the Biology and Wildlife Department's high efficiency.

First, we rarely hire adjuncts except for sabbatical or leave replacements. For the most part, the courses we need to support our programs and service teaching are on faculty workloads, including GER and foundational courses. Having regular faculty teach courses puts individuals with disciplinary expertise and a strong commitment to student and departmental success and professional advancement in charge of the instruction, which fosters continual course and program improvement. This, in turn, encourages student success and well being, which fosters enrollment.

Second, we teach stacked and cross-listed courses whenever it makes sense pedagogically. This can make the difference between a course that is chronically underenrolled and one that is not. Stacking is extra work for instructors but rewarding at many levels. As examples, we cross-list the large class BIOL/CHEM F360 Cell and Molecular Biology with Chemistry, and cross-list BIOL F377 Conservation Biology with both Wildlife and Natural Resources and Environment. Cross-listing promotes efficiency at the college level and helps to break down disciplinary and programmatic silos in the natural sciences.

Third, Biology and Wildlife's small but powerful departmental staff is conscientious about spending practices and record keeping. The staff keep our course fees up to date by comparing expenses with fees annually, and adjusting fees approximately every 3 years based on annual averages.

Fourth, the department is open to curricular redesign in order to meet academic, practical, and financial challenges. We revisit our curricula frequently and alter curricula when warranted. The department's willingness to take on difficult challenges was perhaps best illustrated by our creation of online, asynchronous B.A. and B.S Biological Sciences program options starting in 2020, and we created a BA in Wildlife Ecology and Society in 2024. This labor-intensive undertaking for faculty that continues into the present, but that has resulted in growing enrollments and strong benefits to our department and CNSM and UAF as a whole. A more recent example of efficiency through modification of the undergraduate curriculum is a current undertaking to create 1-credit add-on research capstone courses, which will run side by side with traditional 3-4 credit content-based courses. Separating the high-intensity research experience from the regular content-based course will permit larger enrollments in the content-based course than is feasible under our current model, in which the capstone project is a required part of the course for all students, whether they need the capstone for graduation or not.

Associated Programs

Program Name	Degree Type
Biological Sciences	MS
Biological Sciences	BS
Biological Sciences	BA
Biological Sciences	Minor
Wildlife Biology and Conservation	MS
Wildlife Biology and Conservation	BS
Wildlife Biology and Conservation	Minor
Wildlife Ecology and Society	BA
Earth Systems Science, Ecosystems Concentration	MS
Earth Systems Science, Ecosystems Concentration	PhD
Climate and Environmental Change	BS

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Financial Data

Department Name: **Biology and Wildlife**

Academic Year 2025/2026

	FY2023	FY2024	FY2025	For Data Entry Staff	For Programs and Review Committees
Total Student Credit Hours (SCH)	6450	8101	8687	Provided in SCH tab in the student success data provided by PAIR.	
Service SCH	2832	3646	3911	Sum rows labeled as "In unit, outside department, Service" and "Outside unit, Service" in the SCH tab of the data provided by PAIR.	
Department FTEs	23.63	24.84	31.55	FTE = Full-time equivalent employee. This field will auto-populate from the FTE Worksheet below.	
Total SCH per Department FTE	272.96	326.13	275.34		
Service SCH per Department FTE	119.85	146.78	123.96		

Majors in Programs	629	684	729	Sum for all programs from the Majors Total tab in the data provided by PAIR.	
Department FTE's	23.63	24.84	31.55	This field will auto-populate from the FTE Worksheet below.	
Majors per Department FTE	26.62	27.54	23.11		

Total Unrestricted Expenditures				Total Expenditures made from budgets with an F1 or F7 fund type designation, from provided cycle report data filtered by Data Liaison	
Total Restricted Expenditures				Total Expenditures made from budgets with revenue of the F2 or S2 fund type designation, from provided cycle report data filtered by Data Liaison	
Total Unit/Central Support Allocated to Program(s)				Expenses incurred for direct support of instruction within orgs identified as central or academic support, if applicable	
Total Expenditures					

Tuition Revenue				Receipts to college from tuition generated by the department/program (F1). NOTE: under the current 80/20 percent tuition distribution model generating units receive 80%. PLEASE USE PAIR REPORTED SCH.	Receipts to college from tuition generated by the department/program, based on the campus's active tuition distribution model, which determines how much the unit receives of their generated tuition, and how much the campus keeps (in addition to the out-of-state surcharges) to support central offices/functions. The current distribution model is 80/20, where the unit/college receives 80% of their generated in-state tuition.
State Appropriation Revenue				Appropriations for current funds operation of the university from the general fund of the State of Alaska through the annual budget cycle. This category also includes TVEP and State Mental Health Trust funds, if allocated to the department. (F1)	Appropriations for current funds operation of the university from the general fund of the State of Alaska through the annual budget cycle.
Restricted/Sponsored Project Revenue				Revenue from external sponsors; includes grants, contracts, sponsored projects & restricted (grant) accounts funded by UA Foundation funds (F2/S2)	Revenue from external sponsors; includes grants, contracts, sponsored projects & restricted (grant) accounts funded by UA Foundation funds
Fees				Course Fees (9159)	
Other UA Receipts/Revenue				e.g. Performance and Sales Receipts, Space Rental Revenue, Indirect Cost Recovery (F1/F7); NOTE: COURSE FEES (9159) REPORTED ABOVE	
Total Revenue					

Workload Allocation	FY2023	FY2024	FY2025	
Teaching Units	305.5	316.75	328	Department faculty's workload units assigned to teaching
Service Units	126	136.25	163	Department faculty's workload units assigned to service
Research Units	350.17	310.7	324	Department faculty's workload units assigned to research

Full-Time Equivalent Worksheet*	FY2023	FY2024	FY2025	
Faculty FTEs	10.99	11.07	12.7	Base assumption: 12-month full-time = 1.0 FTE. 9-month = 0.75 FTE. Split appointments are multiplied by the % of effort assigned to this department. Part-time are multiplied by the % of effort assigned. F9 faculty on sabbatical count as 67% of one 9-month 0.75 FTE (or 0.50 FTE).
Adjunct FTEs	1.2	1.15	0.84	Base assumption: 40 units/credits = 1.0 FTE. Total # of credits taught by adjuncts in a year divided by 40 = the FTE of adjuncts in that year.
Staff FTEs	3.15	3.98	5.31	Base assumption: 12-month full-time = 1.0 FTE. 9-month = 0.75 FTE. Split appointments are multiplied by the % of effort assigned to this department. Part-time are multiplied by the % of effort.
Graduate TA/RA FTEs	8.29	8.64	12.7	Base assumption: 40 hours/week for 12 months = 1.0 FTE. 9-month = 0.75 FTE.
Total Department FTEs	23.63	24.84	31.55	Sum of all employee FTEs

*Note: FTE definitions and calculations for the purpose of Academic Program Review are different than for other institutional reporting processes (e.g. OMB or IPEDS reporting)

Information last updated by: Laycie N. Schneckeburger

Date: 9/26/2025