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| <b>2021 Academic Program Assessment Report</b> | <b>Program current assessment plan here:</b> | <a href="https://www.csupueblo.edu/assessment-and-student-learning/_doc/2019/report/wildlife-natr-res-bs-assessment-plan-2019.pdf">https://www.csupueblo.edu/assessment-and-student-learning/_doc/2019/report/wildlife-natr-res-bs-assessment-plan-2019.pdf</a>               |
| <b>Wildlife and Natural Resources</b>          | <b>Program prior assessment report here:</b> | <a href="https://www.csupueblo.edu/assessment-and-student-learning/_doc/2020/report/wildlife-naturalresources-assessment-report-2020.pdf">https://www.csupueblo.edu/assessment-and-student-learning/_doc/2020/report/wildlife-naturalresources-assessment-report-2020.pdf</a> |

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| <b>Report Completed By:</b>                         | Nate Bickford |
| <b>Date Report Completed:</b>                       | May 19, 2021  |
| <b>Faculty members involved in this Assessment:</b> |               |

Please describe this year's assessment activities and follow-up for your program below. (Separate sheet for each undergraduate major, stand-alone minor, certificate, and graduate program in your department.) Please also submit any addenda such as rubrics which are not available in your assessment plan. The reports will be available to the Dean of your college/school and to the Executive Director for Assessment as well as faculty peer reviewers.

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| <b>Brief Statement of Program Mission and Goals:</b> | <p>The major of wildlife and natural resources leads to a Bachelor of Science (BS) Degree. In addition, supporting courses and general education courses in biology are available to meet a wide range of interests, backgrounds and needs. The Wildlife and Natural Resources Program emphasizes an understanding of fish and wildlife ecology and management with practical skills obtained during laboratory and field exercises. Graduates are prepared for positions with state and federal agencies, tribal departments, and conservation organizations or higher academic degrees. Carefully supervised career planning is provided to all students.</p> <p>Program Goals</p> <ul style="list-style-type: none"> <li>• To provide students with the necessary background to successfully pursue graduate study towards a professional career in wildlife and natural resources;</li> <li>• To prepare students upon graduation to enter field positions in government or private industry; and,</li> <li>• To supply students with the necessary coursework to obtain professional certification as associate fishery or wildlife biologists.</li> </ul> |
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**I. Assessment of Student Learning Outcomes (SLOs) in this cycle. Including processes, results, and recommendations for improved student learning. Use Column H to describe improvements planned for the year based on the assessment process.**

| A. Your program SLOs are pasted here verbatim from your assessment plan. Please enter info in columns B-H only for those assessed during this annual cycle.                            | B. When was this SLO last reported on prior to this cycle? (semester and year) | C. What method was used for assessing the SLO? Please include a copy of any rubrics used in the assessment process. | D. Who was assessed? Please fully describe the student group(s) and the number of students or artifacts involved (N).   | E. What is the expected proficiency level and how many or what proportion of students should be at that level?      | F. What were the results of the assessment? (Include the proportion of students meeting proficiency.)  | G. What were the department's conclusions about student performance?   | H. What changes/improvements to the program are planned based on this assessment?  |
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| Students will develop a broad-based knowledge of concepts and terminology in organismal, and ecological biology.   | 2020   | MFAT  | 7 WANR students enrolled in BIOL 493 in Fall 18 and Spring 19   | 75% of students at 50th percentile nationally in organismal biology and ecology                                     | 57% (4/7) of students were above the 50th percentile for organismal biology and 86% of students (6/7) were above the 50th percentile for Population Biology, Evolution and Ecology.                                    | Scores on the Population Biology, Evolution and Ecology portions of the MFAT were above our goal, however we were below our goal for organismal biology. Our samples very small and this may not represent a consistent pattern. | There are no plans to change the program at this point until we collect more data. |
| Students will know the taxonomy, ecology and natural history of flora and fauna in southern Colorado and the desert southwest.   | 2020   | Taxonomy exam   | In herpetology there was 30 WANR students<br>In ornithology there was 16 WANR students                                  | In herpetology 21 students need to score greater than 70%<br>Ornithology 12 students need to score greater than 70% | Herpetology 80% of the WANR students scored greater than 70%<br>Ornithology 44% of the WANR students scored greater than 70%.  | The student score well in herpetology but did not do as well in ornithology. There is not enough data to show patterns as of yet.  | There are no plans to change the program at this point until we collect more data. |
| Students will know the principles and concepts of fish and wildlife science and how they are combined with human dimensions to make informed decisions on difficult management issues. | 2020   | Final Project   | Enrolled students in Aquaculture<br>Enrolled students Wildlife Management   | 75% of students achieve an average score of 80%   | (3 of 4) 75% of the Aquaculture students scored greater than 80% (15 of 17) 88% of the Wildlife Management students scored greater than 80%  | This is above our stated goal.   | There are no plans to change the program at this point until we collect more data. |
| Students will develop skills in reading and interpreting the scientific literature and in presenting a synthesis of it accurately in oral and written form.                            | New  | Scientific literature project   | Enrolled in Zoology (BIOL 202) and again in Endangered Species (WANR 405) or Policy (405) and Senior Seminar (BIOL 493) | Our goal is to have at 75% of our senior students be at or higher than 80%  | Zoology (18 of 21) 80% of the zoology students scored greater than 75% Policy (21 of 23) 80% of policy students scored greater than 75% Senior seminar (5 of 7) 71% of Senior seminar students scored greater than 75% | Both zoology and policy students exceeded our goals. Our senior seminar students did not quite achieve the goal but was close. This is a small sample size.  | There are no plans to change the program at this point until we collect more data. |

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| Students will demonstrate critical thinking and problem solving skills using experimental design and the scientific process.   | Never  | Critical thinking scenario  | Enrolled in Wildlife Management (WANR 305) and in Senior Seminar (BIOL 493) | Our goal is to have 75% of our students in BIOL 493 receive an average score of proficient from the faculty                            | N/A | N/A | N/A |  |
| <b>Comments on part I:</b>   | This is our third year assessing this program and my second year at CSU Pueblo. Rubrics for SLO 5 are still in development and will be completed in the next year. We are however starting to see some patterns but with some small sample sizes it is difficult to make any changes. Looking at the outcomes of WANR SLO's I think we are doing well but will in the next two years make some curriculum plans based on the overall patterns. |   |   |  |     |     |     |  |
| <b>II. Closing the Loop. Describe at least one data-informed change to your curriculum during the year cycle. These are those that were based on, or implemented to address, the results of assessment from previous cycles.</b> |  |   |   |  |     |     |     |  |
| <b>A. What SLO(s) or other issues did you address in this cycle? Please include SLOs verbatim from the assessment plan, as above.</b>  | <b>B. When was this SLO last assessed to generate the data which informed the change? Please indicate the semester and year.</b>   | <b>C. What were the recommendations for change from the previous assessment column H and/or feedback?</b> | <b>D. How were the recommendations for change acted upon?</b>               | <b>E. What were the results of the changes? If the changes were not effective, what are the next steps or the new recommendations?</b> |     |     |     |  |
| We did not make any changes  | none   | none  | none  | none   |     |     |     |  |
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| <b>Comments on part II:</b>  | We added classes to the WANR degree and made a few changes that we feel will be positive for our SLO outcomes. Otherwise, there is not enough data to make new changes. I want three years of data to start looking at the need for changes.   |   |   |  |     |     |     |  |