WILD 291: Rewilding Animal Populations

Instructor
T.J. Clark

Course Overview
Human-induced global change is causing staggering losses in biodiversity, including defaunation, the extirpation of animal species from ecological communities. Loss of animal species can reduce the stability of nature, leading to negative cascading effects on other members of communities including mankind. Despite this continued loss, substantial progress is being made with efforts to improve the conservation status of threatened species and to restore ecosystem functions and processes facilitated by extinct species. The main goal of this course is to understand and critically dissect the efforts underway to rewild animal populations. We will tackle the ecological, biological, social, and ethical themes underpinning conservation actions like re-introduction, assisted colonization, ecological replacement, Pleistocene rewilding, and gene drives. We will also read and hear from conservation scientists and students carrying out these actions throughout North America and the world.

Recommended Texts

There are no textbooks for this class. Assigned readings will be provided for class sessions with discussions. However, here are some recommended texts to read during the semester or afterwards for more information.

- Rambunctious Garden, Emma Marris
- Feral: Rewilding the Land, Sea, and Human Life, George Monbiot
- Rewilding North America, David Foreman

Course Requirements

Each student is required to attend class, participate in discussion, and read materials before class. Students will be required to complete a report and present on a rewilding/conservation biology topic of their choosing. Students will also participate in class debates surrounding conservation actions.

- Class Debates, I and II = 15% each, 30% overall
- Final Project = 45%; 25% for the paper, 10% for the presentation, 10% for the outline
- Attendance/Class Participation/Quizzes = 25%
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<th>Day</th>
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<th>Readings/Tasks</th>
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<tr>
<td>Jan 13</td>
<td>Introduction &amp; Syllabus</td>
<td>Future of Conservation Quiz</td>
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<tr>
<td>Jan 15</td>
<td>a) The Anthropocene</td>
<td>Mann, 1491</td>
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<td></td>
<td>b) The Biodiversity Crisis</td>
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<td>Jan 20</td>
<td>No class – Martin Luther King Jr. Day</td>
<td>N/A</td>
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<td>Jan 22</td>
<td>a) The Science of Conservation</td>
<td>Soule &amp; Noss, Wild Earth</td>
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<td>b) Re-introduction &amp; Connectivity</td>
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<td>Jan 27</td>
<td>Brenna Cassidy Guest Lecture</td>
<td>Stolzenburg, Where the Wild Things Were</td>
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<td>Jan 29</td>
<td>Mark Hebblewhite Guest Lecture</td>
<td>N/A</td>
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<td>Feb 3</td>
<td>Rewilding, Science Communication, and “Fake News”</td>
<td>Marris, A Good Story</td>
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<td>Feb 5</td>
<td>Conservation Triage</td>
<td>Marris, Wolf Cull…</td>
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<td>Feb 10</td>
<td>Passive Rewilding &amp; Conflict Conservation</td>
<td>Deryabina et al., Long-term…</td>
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<td>Feb 12</td>
<td>Assisted Colonization</td>
<td>Marris, Rambunctious Garden</td>
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<td>Feb 17</td>
<td>No class – Presidents’ Day</td>
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<td>Feb 19</td>
<td>Ellen Pero Guest Lecture</td>
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<td>Feb 24</td>
<td>Invasive Species</td>
<td>Thompson, Where Do Camels Belong?</td>
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<td>Feb 26</td>
<td>Ecological Replacement</td>
<td><strong>Outline Due</strong></td>
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<td>Mar 2</td>
<td>Pleistocene Rewilding</td>
<td>Monbiot, Feral</td>
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<td>Mar 4</td>
<td>Pleistocene Rewilding</td>
<td>Monbiot, Feral</td>
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<td>Donlan et al., Pleistocene Rewilding</td>
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<td>Mar 9</td>
<td>Examples of Pleistocene Rewilding</td>
<td>Kolbert, Recall of the Wild</td>
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<td>Andersen, Pleistocene Park</td>
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<td>Mar 11</td>
<td><strong>Class Debate, Pt. I</strong></td>
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<td>Mar 16-18</td>
<td>No class – Spring Break!</td>
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<td>Mar 23</td>
<td>Genetic Rescue</td>
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<td>Mar 25</td>
<td>Donovan Bell Guest Lecture</td>
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<td>Mar 30</td>
<td>Gene Editing &amp; CRISPR</td>
<td>Webber et al., PNAS</td>
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<td>Apr 1</td>
<td>De-Extinction</td>
<td>Shapiro, How to Clone a Mammoth</td>
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<td>Apr 6</td>
<td><strong>Class Debate, Pt. II</strong></td>
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<td>Apr 8</td>
<td>Ethics of Rewilding</td>
<td>Leopold, Land Ethic</td>
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<td>Cronon, Trouble with Wilderness</td>
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<td>Apr 13</td>
<td>Ethics of Rewilding</td>
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<td>Apr 15</td>
<td>Politics of Rewilding</td>
<td>Blankenbuehler, Pupfish</td>
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<td>Mott &amp; Burnham, Grizzly Bear</td>
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<td>The Future!</td>
<td>Watson &amp; Watson, TREE</td>
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<td>Apr 27</td>
<td>Class Presentations, Group 1</td>
<td><strong>Projects Due</strong></td>
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<td>Apr 29</td>
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**Additional Information**

- The University of Montana assures equal access to instruction through collaboration between students with disabilities, instructors, and Disability Services for Students (DSS). If you think you may have a disability adversely affecting your academic performance, and you have not already registered with DSS, please contact DSS in Lommason 154 or 406.243.2243. I will work with you and DSS to provide an appropriate modification.
- All students must practice academic honesty. Academic misconduct is subject to an academic penalty by the course instructor and/or a disciplinary sanction by the University. All students need to be familiar with the Student Conduct Code.
- Please note, this class is offered for traditional letter grade only, it is not offered under the credit/no credit option.