



**Sub-Antarctic Biocultural Conservation Program**  
**University of North Texas, Universidad de Magallanes & Institute of Ecology and Biodiversity**  
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**INTRODUCTION TO SUB-ANTARCTIC BIOCULTURAL CONSERVATION**  
*Fall 2025*

**Core Professors:**

Dr. Ricardo Rozzi, *conservation biologist & philosopher*, UNT (Dept. Philosophy & Religion, Sub-Antarctic Biocultural Conservation Program) <http://philosophy.unt.edu/people/faculty/ricardo-rozzi>

Dr. Michael Thompson, *philosopher*, UNT (Dept. Philosophy & Religion, Sub-Antarctic Biocultural Conservation Program) <http://philosophy.unt.edu/people/faculty/michael-thompson>

**Collaborating & Invited Lecturers:**

Dr. Valeria Berros, *lawyer*, Facultad De Ciencias Jurídicas y Sociales, Universidad Nacional Del Litoral, Santa Fe, Argentina  
[https://www.conicet.gov.ar/new\\_scp/detalle.php?keywords=valeria%2Bberros&id=35328&datos\\_academicos=yes](https://www.conicet.gov.ar/new_scp/detalle.php?keywords=valeria%2Bberros&id=35328&datos_academicos=yes)

Dr. Bernard Goffinet, *bryologist*, University of Connecticut (Department of Ecology and Evolutionary Biology) <http://bryology.uconn.edu/bernard-goffinet/>

Dr. Andrew Gregory, *conservation biologist and landscape ecologist*, UNT (Dept. Biology, Sub-Antarctic Biocultural Conservation Program) <https://biology.unt.edu/people/andrew-gregory>

Dr. James H. Kennedy, *freshwater ecologist*, UNT (Dept. Biology, Sub-Antarctic Biocultural Conservation Program) <https://biology.unt.edu/people/james-kennedy>

Dr. Roy May, *environmental theologian*, Ecumenical Research Department, Costa Rica

Dr. Flavia Morello, *anthropologist / archaeologist*, professor and Director Instituto de la Patagonia University of Magallanes, Chile

**Course Catalogue Information:**

PHIL 4053, 6780; BIOL 4053, 5053

**Class Schedule:**

Fall semester; Thursdays, 6:00-8:50 pm (Central Daylight/Standard Time), online

**Office Hours:**

R. Rozzi: Video conference appointments by request to email: [rozzi@unt.edu](mailto:rozzi@unt.edu)

M. Thompson: Thursday 2:30 – 5:30 pm at EESAT 320E: [michael.thompson@unt.edu](mailto:michael.thompson@unt.edu)

**Academic Dishonesty Policy:**

Students are responsible for reading, understanding, and knowing UNT's Academic Dishonesty Policy, which can be found at: <http://facultysuccess.unt.edu/academic-integrity>. Academic dishonesty in this class is unacceptable and will not be tolerated in any form.

There are no approved uses of any AI, such as ChatGPT, or any other software or tool used to generate written content on your behalf or to check or revise content you have written.

**Any assignment completed with the help of AI will be treated as a case of plagiarism and be subject to the integrity policies above.**

**Disability Accommodation (ODA Statement):**

The University of North Texas makes reasonable academic accommodations for students with disabilities. Students seeking accommodation must first register with the Office of Disability Accommodation (ODA) to verify their eligibility. If a disability is verified, the ODA will provide you with an accommodation letter to be delivered to faculty to begin a private discussion regarding your specific needs in a course. You may request accommodation at any time; however, ODA notices of accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of accommodation for every semester and must meet with each faculty member before implementing it in each class. Students are strongly encouraged to deliver letters of accommodation by appointment. Faculty members have the authority to ask students to discuss such letters during their designated to protect the privacy of the student. For additional information, see the Office of Disability Accommodation website at <http://www.unt.edu/oda>. You may also contact them by phone at 940-565-4323.

**Drop/Withdrawal Information:**

The last day to drop without the professor's approval is found on the registrar's website. Other Drop/Withdrawal Information and other important Academic Dates can be found at <http://registrar.unt.edu/regISTRATION/fall-add-drop>. Before dropping the course, please come and discuss this with us.

## **INTRODUCTION TO SUB-ANTARCTIC BIOCULTURAL CONSERVATION**

**Course Description:**

The course will provide students with an introduction to sub-Antarctic biological and cultural diversity, as well as to the approach of the Sub-Antarctic Biocultural Conservation Program at UNT. First, students will gain an overview of the biophysical dimensions (flora, fauna, geography, and climate) and the cultural dimensions (ethnography, environmental values, worldviews, and conservation initiatives) of the unique sub-Antarctic ecoregion of southwestern South America. Second, this approach is not restricted to subpolar regions but has applications for other regions of the world. For this reason, we will also examine a novel conceptual framework to integrate environmental philosophy and ecological sciences, and their incorporation into practical and theoretical aspects of biocultural conservation, including education and ecotourism. This practical application will equip students with the necessary skills and knowledge to contribute to the field of biocultural conservation.

This course will not only introduce students to multiple approaches to biocultural conservation but also provide them with unique learning opportunities. It will invite students to address a particular challenge, which is to integrate ethics into biocultural conservation more systematically. To confront global environmental change, it is necessary, but not sufficient, to conduct long-term socio-ecological research. It is

also essential to act. Toward this goal, we will learn and practice the Field Environmental Philosophy methodological approach. This approach is being adopted by sites of the International Long-Term Ecological Research (ILTER) network and of the UNESCO network of biosphere reserves to integrate ecological sciences and environmental ethics into biocultural education and conservation practices, including ecotourism among them. Indeed, this course prepares students to be part of the broader ILTER network and offers them an opportunity to further this line of research through a study-abroad field course, entitled Tracing Darwin's Path (TDP), at the UNT Cape Horn Field Station in Chile. The Intro to Biocultural Conservation course is a highly recommended preparation for the TDP field course that takes place every winter break in Chile. However, the Intro to Biocultural Conservation course does not require participation in the TDP study abroad course, and vice versa.

We all bring different skills and mindsets to this course and will work as a group to broaden and integrate our approaches to biocultural conservation. To foster both individual and team study, an essential component of the course will include interdisciplinary integrations on biocultural ethics and Earth Stewardship, and on ethno-ornithology and ecotourism as a way to implement biocultural conservation. Biocultural conservation requires examining and imagining planetary scales that encompass a range of ecological worldviews, practices, and institutions. Today, inter-hemispheric, intercultural, and transdisciplinary collaborations for effective biocultural conservation are imperative. In particular, the biocultural ethic emphasizes that we are co-inhabitants in the natural world, no matter how complex our inventions may become. The course aims to help us consider what we could learn from one another and work collaboratively toward sustainability and biocultural conservation. This emphasis on collaboration will make students feel included and part of a team working towards a common goal.

**Course Goals:**

Through readings, films, and seminars, students will develop:

- Familiarity with both biological and cultural diversity.
- A basic understanding of the geography, history, culture, and ecology of the sub-Antarctic ecoregion of southern South America.
- An understanding of similarities and differences between Sub-Antarctic and Sub-Arctic ecosystems, and worldviews from indigenous people and members of other socio-cultural groups that inhabit these regions.
- A distinctive interdisciplinary approach to biocultural conservation that integrates environmental philosophy and ecological sciences.
- We will focus on environmental narratives, both historical and contemporary, from the northern and southern hemispheres.
- Comparative environmental philosophy, diversity of cultural worldviews, and imaginative syntheses about the knowledge and values embedded in them.
- Our course places a strong emphasis on under-appreciated biodiversity, such as bryophytes, lichens, and freshwater invertebrates, and traditional ecological knowledge. We are committed to exploring these less mainstream aspects of ecology and conservation.
- Our course is dedicated to the integration of sciences, humanities, and arts into biocultural education and conservation. This comprehensive approach is a hallmark of our program.

## Course Evaluation:

**1) Quizzes (35%).** At the beginning of each class, a short quiz will be taken regarding the material contained in the required readings (all students) and supplementary (only graduate) readings for that week.

**2) Tests (30%).** Two tests will be taken during the semester, worth 15% of the grade, the first and 15% the final. Graduate students will be given an additional question on each exam.

### **3) Group Presentations and Research Papers (35%)**

**25%** of the grades will be based on written papers, and **10%** on group presentation. in class presentations.

**Graduate students** should read the book *From Biocultural Homogenization to Biocultural Conservation* in detail. Parts I and II outline the problem, and Part III presents solutions with different conservation approaches. This book will serve as the basis for preparing the introduction and discussion of the general theme of the paper. Each student should also select a specific theme associated with the topics covered in one or more of the course sessions. A suggested list of supplementary articles and books will be provided for each of the research topics that students can select. The paper should be between 10 and 15 double-spaced pages long (Times New Roman 12), and it must include an introduction, where the objective (and/or question) of the essay is stated. The essays are individual. For the presentation, however, students should form groups of 2-3 members (groupings to be assigned by the instructor) and combine their complementary ideas into a single PowerPoint presentation of approximately 25 minutes in total.

**Undergraduate students** are the same as graduate students, but:

- (i) The requirement of the book reading of *From Biocultural Homogenization to Biocultural Conservation* is not mandatory, but recommended.
- (ii) A suggested list of supplementary articles and books will be provided for each of the research topics that students can select.
- (iii) Papers should be between 5 and 8 double-spaced pages long (Times New Roman 12).
- (iv) For the presentations, students should associate themselves in groups of 3-5 members (groupings to be assigned by the instructor) to combine their complementary ideas into a single PowerPoint presentation of 15 minutes in total.

**The final grade** earned will correspond to the following scores, weighted by each activity:

**A** = 90 – 100

**B** = 80 – 89

**C** = 70 – 79

**D** = 60 – 69

**F** = 0-59

## Tentative Schedule

Date	Topic	Readings / Assignments (available on Canvas)
<b>Session 1</b>  21 August	<b>Syllabus review</b>  <b>Introduction to the Bio-Cultural Conservation Course</b>  Guided readings of <i>biocultural</i> texts  <b>Lecturers:</b> Rozzi & Thompson	<ul style="list-style-type: none"> <li>• Omora, Yahgan story. Multi-Ethnic Bird Guide. Pp. 167-170.</li> <li>• Leopold, Aldo. 1949. <i>Thinking like a mountain</i>. In <i>A Sand County Almanac and Sketches Here and There</i>. Oxford University Press</li> <li>• Pascual; et al. 2023. Diverse values of nature for sustainability. <i>Nature</i> 620: 813-823</li> <li>• Film: <i>Homage to the Yahgans</i> by Anne Chapman</li> </ul> <p><b>Quiz 1: Take home 3Hs slides</b></p> <p>Rozzi, R., Arango, X., Massardo, F., Anderson, C., Heidinger, K. and Moses, K., 2008. Field environmental philosophy and biocultural conservation: the Omora Ethnobotanical Park educational program. <i>Environmental Ethics</i>, 30(3), pp.325-336. <a href="https://www.pdcnet.org/enviroethics/content/enviroethics_2008_0030_0003_0325_0336">https://www.pdcnet.org/enviroethics/content/enviroethics_2008_0030_0003_0325_0336</a></p>
<b>Session 2</b>  28 August	<b>Introductions of students through the 3Hs slides</b>  <i>Introduction to biocultural conservation and Indigenous worldviews of southern South America</i>  <b>Lecturers:</b> Rozzi & Thompson	<p><b>Quiz 2 based on:</b></p> <ul style="list-style-type: none"> <li>• Rozzi et al. 2010. <i>Multi-Ethnic Bird Guide of the Sub-Antarctic forests of South America</i>:             <ul style="list-style-type: none"> <li>○ (a) <b>pp. 9-11</b> (Foreword by Callicott),</li> <li>○ (b) <b>pp. 13-28</b> (subantarctic forests and methods);</li> <li>○ (c) <b>pp. 29-34</b> (Ethno-ornithology &amp; environmental ethics);</li> <li>○ (d) <b>pp. 36- 47</b> (ethnography)</li> <li>○ (e) <b>pp. 49-51</b> (Magellanic Woodpecker (Lana), Yahgan story).</li> </ul> </li> <li>• Rozzi, R. 2013. Biocultural Ethics: From Biocultural Homogenization toward Biocultural Conservation. Pp. 9-32, in Rozzi, R., S.T.A. Pickett, C. Palmer, J.J. Armesto &amp; J.B. Callicott (eds.), <i>Linking Ecology and Ethics for a Changing World: Values, Philosophy, and Action</i>. Ecology and Ethics Vol 1, Springer, Dordrecht.</li> </ul> <p><b>Completion of discussion about:</b></p> <p>Pascual; et al. 2023. Diverse values of nature for sustainability. <i>Nature</i> 620: 813-823</p> <p style="text-align: center;">*** Reading for Graduates ***</p> <ul style="list-style-type: none"> <li>• Rozzi, R. 2014. Ethical implications of Yahgan and Mapuche narratives about birds of the temperate forests of southern South America. Pp. 345-351, in Rozzi, R. &amp; J.E. Jiménez (eds.), <i>Magellanic Sub-Antarctic Ornithology: First Decade of Long-Term Bird Studies at the Omora Ethnobotanical Park, Cape Horn Biosphere Reserve</i>. University of North Texas Press, Denton, Texas, USA-Universidad de Magallanes, Punta Arenas, Chile.</li> <li>• <i>Short Film about the Magellanic Woodpecker in Life of Birds</i> by David Attenborough: <a href="https://youtu.be/MNmh5w6ci78?si=CJ450i5o2myb_PFU">https://youtu.be/MNmh5w6ci78?si=CJ450i5o2myb_PFU</a></li> <li>• <i>Short Film about the family life of the Magellanic Woodpecker in the Tiera del Fuego National Park</i> by Leandro Herrainz: <a href="https://youtu.be/RScrcElqMI8?si=s1lo9mNWVYyD-ECu">https://youtu.be/RScrcElqMI8?si=s1lo9mNWVYyD-ECu</a></li> <li>•</li> </ul>
<b>Session 3</b>  4 September	<b>Introduction to biocultural conservation and education</b>  Outdoor eco-hermeneutic practice  <i>Biocultural food exchange</i>  <b>Lecturers:</b> Rozzi & Thompson	<p><b>Quiz 3 based on:</b></p> <p>Franklin, J. F. (1993). Preserving biodiversity: species, ecosystems, or landscapes?. <i>Ecological applications</i>, 3(2), 202-205.</p> <p>Rozzi, R. &amp; A. Tauro. 2023. The multiple lenses of Ecotourism with a Hand-Lens: Fundamental Concepts and Practices. In: <i>Field Environmental Philosophy: Education for Biocultural Conservation</i>, R Rozzi, A Tauro, T Wright, N Avriel-Avni &amp; R.H. May Jr. (eds). Ecology and Ethics Series Vol 5. Springer: Dordrecht, The Netherlands, pp. 27-51. <a href="https://doi.org/10.1007/978-3-031-23368-5_3">https://doi.org/10.1007/978-3-031-23368-5_3</a></p> <p style="text-align: center;">*** Reading for Graduates ***</p> <p>Rozzi, R., C.B. Anderson, J.C. Pizarro, F. Massardo, ... &amp; M.T. Kalin. 2010b. Field environmental philosophy and biocultural conservation at the Omora Ethnobotanical Park: Methodological approaches to broaden the ways of integrating the social component ("S") in Long-Term Socio-Ecological Research (LTSER) sites. <i>Revista Chilena de Historia Natural</i> 83: 1-5, 25-27.</p>

<b>Session 4</b>  11 September	<b>Introductions to sub-Antarctic Magellanic ecoregion</b>  <b>Lecturers:</b> Rozzi & Thompson	<b>Quiz 4 based on:</b> <ul style="list-style-type: none"> <li>Rozzi, R., J. Armesto, J. Gutierrez, C. Anderson, F. Massardo, ... &amp; M. Arroyo. 2012. Integrating ecology and environmental ethics: Earth stewardship in the southern end of the Americas. <i>BioScience</i> 63: 226-236. <a href="https://academic.oup.com/bioscience/article/62/3/226/358404">https://academic.oup.com/bioscience/article/62/3/226/358404</a></li> </ul> <p style="text-align: center;">*** Reading for Graduates ***</p> <ul style="list-style-type: none"> <li>Rozzi, R. 2015a. Earth stewardship and biocultural ethics: Latin American perspectives. Pp. 87-112, in Rozzi, R., F.S. Chapin, J.B. Callicott, S.T.A. Pickett, M.E. Power, J.J. Armesto &amp; R.H. May, Jr. (eds.), <i>Earth Stewardship: Linking ecology and ethics in theory and practice</i>. Springer, Berlin.</li> </ul>
<b>Session 5</b>  18 September	<b>Introduction to biocultural homogenization &amp; differential responsibilities in the Anthropocene</b>  <b>Lecturers:</b> Rozzi & Thompson	<b>Quiz 5 based on:</b> <ul style="list-style-type: none"> <li>Krauss, M. (1992). The world's languages in crisis. <i>Language</i>, 68(1), 4-10.</li> <li>Rozzi, R. 2015b. Implications of the biocultural ethic. In Rozzi, R., F.S. Chapin, J.B. Callicott, S.T.A. Pickett, M.E. Power, J.J. Armesto &amp; R.H. May, Jr. (eds.), <i>Earth Stewardship: Linking ecology and ethics in theory and practice</i>. Springer. Pp. 113-136</li> </ul>
<b>Session 6</b>  25 September	<b>Little perceived organisms I:</b>  <b>Insect ecology, conservation, and education</b>  <b>Film:</b> <i>Convivencia</i> <b>Guest Lecturer:</b>  <b>Drs.</b> James Kennedy & Thompson	<b>Quiz 6 based on:</b> <p>Cardoso, P., Erwin, T.L., Borges, P.A. and New, T.R., 2011. The seven impediments in invertebrate conservation and how to overcome them. <i>Biological Conservation</i>, 144(11), pp.2647-2655. <a href="https://www.sciencedirect.com/science/article/pii/S0006320711002874">https://www.sciencedirect.com/science/article/pii/S0006320711002874</a></p> <p>Contador, T.A., J. Rendoll-Cárcamo, M. Gañan, J. Ojeda-Villarreal, J.H. Kennedy, P. Convey &amp; R. Rozzi. 2022. Underwater with a hand lens: ecological sciences and environmental ethics to value freshwater biodiversity. In: <i>Field Environmental Philosophy: Education for Biocultural Conservation</i>, R Rozzi A Tauro, T Wright, N Avriel-Avni &amp; R.H. May Jr. (eds). Dodrecht, Netherlands: Springer</p> <p style="text-align: center;">*** Reading for Graduates ***</p> <p>Contador, T.A., Kennedy, J.H. and Rozzi, R., 2012. The conservation status of southern South American aquatic insects in the literature. <i>Biodiversity and Conservation</i>, 21(8), pp.2095-2107. <a href="https://link.springer.com/article/10.1007/s10531-012-0299-x">https://link.springer.com/article/10.1007/s10531-012-0299-x</a></p> <p>Vannote, R.L., G.W. Minshall, K.W. Cummins, J.R. Sedell &amp; C.E. Cushing. 1980. The river continuum concept. <i>Canadian Journal Fisheries and Aquatic Sciences</i> 37: 130-137. <a href="https://pebbleprojecteis.com/">https://pebbleprojecteis.com/</a></p>
<b>Session 7</b>  2 October	<b>Little perceived organisms II:</b>  <b>Sub-Antarctic Bryology in "The Miniature Forests of Cape Horn"</b>  <b>Lecturer:</b> <b>Dr.</b> Bernard Goffinet	<b>Quiz 7 based on:</b> <p>Goffinet et al. 2012 Chapters 1 &amp; 2</p> <p>Rozzi, R., Armesto, J.J., Goffinet, B., Buck, W., Massardo, F., Silander, J., Arroyo, M.T., Russell, S., Anderson, C.B., Cavieres, L.A. and Callicott, J.B., 2008. Changing lenses to assess biodiversity: patterns of species richness in sub-Antarctic plants and implications for global conservation. <i>Frontiers in Ecology and the Environment</i>, 6(3), pp.131-137. <a href="https://esajournals.onlinelibrary.wiley.com/doi/abs/10.1890/070020">https://esajournals.onlinelibrary.wiley.com/doi/abs/10.1890/070020</a></p> <p style="text-align: center;">*** Reading for Graduates ***</p> <ul style="list-style-type: none"> <li>Goffinet et al. 2012 Chapters 3. <a href="https://libproxy.library.unt.edu:2160/lib/unt/reader.action?docID=1034650&amp;pgg=12">https://libproxy.library.unt.edu:2160/lib/unt/reader.action?docID=1034650&amp;pgg=12</a></li> <li>Lewis, L.R., Behling, E., Gousse, H., Qian, E., Elphick, C.S., Lamarre, J.F., Bêty, J., Liebezeit, J., Rozzi, R. and Goffinet, B., 2014. First evidence of bryophyte diaspores in the plumage of transequatorial migrant birds. <i>PeerJ</i>, 2, p.e424. <a href="https://peerj.com/articles/424/">https://peerj.com/articles/424/</a></li> </ul>

<b>Session 8</b> 9 October	<b>Midterm Exam open</b>  <b>Conservation approaches in North America by Aldo Leopold and in South America by Omora Park team</b>  <b>Lecturer:</b>  R. Rozzi & M. Thompson	<b>Quiz 8 based on:</b>  old, Carl. 2004. Living with the land ethic. <i>BioScience</i> , 54(2), pp.149-154. <a href="https://academic.oup.com/bioscience/article/54/2/149/255019">https://academic.oup.com/bioscience/article/54/2/149/255019</a>  *** Graduates Also Read *** Bridgewater, P. and Rotherham, I.D., 2019. A critical perspective on the concept of biocultural diversity and its emerging role in nature and heritage conservation. <i>People and Nature</i> , 1(3), pp.291-304. <a href="https://besjournals.onlinelibrary.wiley.com/doi/full/10.1002/pan3.10040">https://besjournals.onlinelibrary.wiley.com/doi/full/10.1002/pan3.10040</a> Gavin, M.C., McCarter, J., Mead, A., Berkes, F., Stepp, J.R., Peterson, D. and Tang, R., 2015. Defining biocultural approaches to conservation. <i>Trends in ecology &amp; evolution</i> , 30(3), pp.140-145. <a href="https://www.sciencedirect.com/science/article/pii/S0169534715000026">https://www.sciencedirect.com/science/article/pii/S0169534715000026</a> Janzen, D.H. 1988. Tropical ecological and biocultural restoration. <i>Science</i> 239: 243-244
<b>Session 9</b> 16 October	<b>Ecological Epidemiology</b>  <b>Guest Lecturer:</b> Drs. Andrew Gregory & Thompson	<b>Midterm uploads due</b>
<b>Session 10</b> 23 October	<b>Overcoming Taxonomic chauvinism</b>  <b>Lecturer:</b>  M. Thompson  <b>Film: My Octopus Teacher</b> by Pippa Ehrlich and James Reed. Netflix Productions: <a href="https://youtu.be/3s0LTDhge5A">https://youtu.be/3s0LTDhge5A</a>	<b>Quiz 9 based on:</b>  Bonnet, X., Shine, R. and Lourda, O., 2002. Taxonomic chauvinism. <i>Trends in Ecology &amp; Evolution</i> , 17(1), pp.1-3. Leather, S.R., 2009. Institutional vertebratism threatens UK food security. <i>Trends in ecology &amp; evolution</i> , 24(8), p.413-414 Moore, L.J. and Wilkie, R.M., 2019. Introduction to The Silent Majority: Invertebrates in Human-Animal Studies. <i>Society &amp; animals</i> , 27(7), pp.653-655. Rozzi, R., 2019. Taxonomic Chauvinism, No More!: Antidotes from Hume, Darwin, and Biocultural Ethics. <i>Environmental Ethics</i> , 41(3), pp.249-282. <a href="https://www.pdcnet.org/enviroethics/content/enviroethics_2019_0041_0003_0249_0282">https://www.pdcnet.org/enviroethics/content/enviroethics_2019_0041_0003_0249_0282</a>  *** Graduates Also Read *** Clark, J.A. and May, R.M., 2002. Taxonomic bias in conservation research. <i>Science</i> , 297(5579), pp.191-193. <a href="https://science.sciencemag.org/content/297/5579/191.2.full">https://science.sciencemag.org/content/297/5579/191.2.full</a> Donaldson, M.R., Burnett, N.J., Braun, D.C., Suski, C.D., Hinch, S.G., Cooke, S.J. and Kerr, J.T., 2016. Taxonomic bias and international biodiversity conservation research <i>Facets</i> 1: 105-113. <a href="https://www.facetsjournal.com/doi/full/10.1139/facets-2016-0011">https://www.facetsjournal.com/doi/full/10.1139/facets-2016-0011</a> Leather, S.R., 2009. Taxonomic chauvinism threatens the future of entomology. <i>Biologist</i> , 56(1), pp.10-13. <a href="http://cb.naturalsciences.be/ants/pdf_free/Biol_56_1_IMV.pdf">http://cb.naturalsciences.be/ants/pdf_free/Biol_56_1_IMV.pdf</a> Pawar, S., 2003. Taxonomic chauvinism and the methodologically challenged. <i>Bioscience</i> , 53(9), pp.861-864. <a href="https://academic.oup.com/bioscience/article/53/9/861/312018">https://academic.oup.com/bioscience/article/53/9/861/312018</a> Stein, B.A., Master, L.L. and Morse, L.E., 2002. Taxonomic bias and vulnerable species. <i>Science</i> , 297(5588), pp.1807-1808. <a href="https://science.sciencemag.org/content/sci/297/5588/1807.3.full.pdf">https://science.sciencemag.org/content/sci/297/5588/1807.3.full.pdf</a>
<b>Session 11</b> 30 October	<b>Overcoming Andro-, Anthro-, and Euro-centrism</b>  <i>Narratives linking ecological-evolutionary sciences and environmental ethics</i>  <b>Lecturer: M. Thompson</b>	<b>Quiz 10 based on:</b>  Plumwood, V., 1999. Paths beyond human-centeredness: Lessons from liberation struggles. In <i>An Invitation to Environmental Philosophy</i> , Anthony Weston (ed.), OUP. pp. 69--106 Rozzi, R. 1999. The reciprocal links between evolutionary-ecological sciences and environmental ethics. <i>BioScience</i> 49 (11): 911-921. <a href="https://academic.oup.com/bioscience/article/49/11/911/220150">https://academic.oup.com/bioscience/article/49/11/911/220150</a>  *** Graduates Also Read *** Gare, A.E., 1998. MacIntyre, narratives, and environmental ethics. <i>Environmental Ethics</i> , 20(1), pp.3-21. <a href="https://www.pdcnet.org/enviroethics/content/enviroethics_1998_0020_0001_0003_0021">https://www.pdcnet.org/enviroethics/content/enviroethics_1998_0020_0001_0003_0021</a> Mazzarello, P. 1999. A unifying concept: the history of cell theory. <i>Nature Cell Biology</i> 1: E13-E15. <a href="https://www.nature.com/articles/ncb0599_E13">https://www.nature.com/articles/ncb0599_E13</a>



		Rozzi, R. 2018. Darwin in Cape Horn: Implications for a Biocultural Ethics today. In <i>Darwin's Path in Cape Horn</i> (Rozzi, R., K. Heidinger & F. Massardo). University of North Texas Press, Denton, Texas - Ediciones Universidad de Magallanes, Punta Arenas, Chile (368 pp.)
<p style="text-align: center;"><b>Watch Film: <i>They killed Sister Dorothy</i></b>  Available online at the UNT media library: <a href="https://unt.kanopy.com/video/they-killed-sister-dorothy">https://unt.kanopy.com/video/they-killed-sister-dorothy</a></p>		
<b>Session 12</b> 6 November	<b>Liberation theology, environmental ethics, and biocultural conservation</b>  <b>Guest Lecturer:</b>  <b>Drs. Roy May &amp; Thompson</b>	<b>Quiz 11 based on:</b> <ul style="list-style-type: none"> <li>Film: They killed Sister Dorothy</li> <li>Palmer, C. 2013. Contested Frameworks in Environmental Ethics. Pp. 191-206, in Rozzi, R., S.T.A. Pickett, C. Palmer, J.J. Armesto &amp; J.B. Callicott (eds.), <i>Linking Ecology and Ethics for a Changing World: Values, Philosophy, and Action</i>. Springer Verlag, Dordrecht.</li> <li>May, R.H., Jr. 2015. Dorothy Stang: Monkeys Cry and the Poor Die, <i>Earth Stewardship as Liberation Ecology</i>. Pp. 407-418, in Rozzi, R., F.S. Chapin, J.B. Callicott, S.T.A. Pickett, M.E. Power, J.J. Armesto &amp; R.H. May Jr. (eds.), <i>Earth Stewardship: Linking ecology and ethics in theory and practice</i>. Springer, Berlin.</li> <li>May, R.H., Jr. 2018. Land grabbing and violence against environmentalists. In Rozzi, R., R. May, S.F. Chapin, F. Massardo, M. Gavin, I. Klaver, A. Pauchard, M.A. Núñez &amp; D. Simberloff (eds), <i>From Biocultural Homogenization to Biocultural Conservation</i>. Springer, Dordrecht: The Netherlands.  <a href="https://libproxy.library.unt.edu:2160/lib/unt/detail.action?docID=5716824">https://libproxy.library.unt.edu:2160/lib/unt/detail.action?docID=5716824</a> </li> </ul>
<b>Session 13</b> 13 November	<b>Biocultural Rights of Nature</b>  <b>Film: <i>The Rights of Nature: A Global Movement</i>.</b>  <b>Guest Lecturer:</b>  <b>Drs. Valeria Berros Thompson &amp; Rozzi</b>	<b>Quiz 12 based on</b>  Brara, R., & Berros, M. V. (2022). River Rights: Currents, Undercurrents and Planetary Vistas. <i>Global Environment</i> , 15(3), 490-519. Rozzi, R. (2022). An ethic of co-inhabitation for the biocultural conservation of rivers. <i>Naturaleza y Sociedad. Desafíos Medioambientales</i> , (3), 59-72.  *** Graduates Also Read ***  Chapin, F.S, S.T.A. Pickett, M.E. Power et al. 2011. Earth stewardship: a strategy for social-ecological transformation to reverse planetary degradation. <i>Journal of Environmental Studies and Sciences</i> 1: 44-53. <a href="https://link.springer.com/article/10.1007%2Fs13412-011-0010-7">https://link.springer.com/article/10.1007%2Fs13412-011-0010-7</a>
<b>Session 14</b> 20 November	Research presentations  <b>Lecturer:</b> R. Rozzi & M. Thompson	<b>Graduate Students group presentations (PPT due two days earlier. Tue Nov 18 )</b>
<b>No Session</b> 27 November		<b>Thanksgiving November 27</b>
<b>Session 15</b> 4 December	<b>Lecturer:</b> R. Rozzi & M. Thompson	<b>Undergraduate Students group presentations (ppt due two days earlier. Tue, Dec 3 ) &amp; individual papers due</b>
<b>Session 16</b> 11 December	<b>Final Exam</b>  <b>Lecturer:</b> R. Rozzi & M. Thompson	<b>Final Exam</b>



## FILMS REFERENCES

***My Octopus Teacher*** by Pippa Ehrlich and James Reed. Netflix Productions: <https://youtu.be/3s0LTDhqe5A>

***Homage to the Yahgans: the last Indians of Tierra del Fuego and Cape Horn*** by Anne Chapman and CNRS-Audiovisuel, Watertown, MA. <http://iii.library.unt.edu/record=b3925218~S6>

***Convivencia***. 2009. Directed by Fritz Dent. Sub-Antarctic Biocultural Conservation Program UNT & Universidad de Magallanes. <https://vimeo.com/110823507>

***Ecotourism with a hand lens "The Invisible Journey"*** 2012. Directed by Jaime Sepúlveda. Sub-Antarctic Biocultural Conservation Program UNT & Universidad de Magallanes. <https://www.youtube.com/watch?v=8OxIhp3A-1s>

***The Return to the Den (El Regreso a la Madriguera)***. 2011. Directed by Jaime Sepúlveda. Sub-Antarctic Biocultural Conservation Program UNT & Universidad de Magallanes. <http://vimeo.com/31905600>

***They killed Sister Dorothy***. 2009. Directed by Daniel Junge, produced by Henry Ansbacher and Nigel Nobel. Just Media production. Chilton Media Library DVD 11030. Also available online: <https://unt.kanopy.com/video/they-killed-sister-dorothy>

***The Rights of Nature: A Global Movement***. 2020. Produced by Issac Goeckeritz, Hal Crimmel, María Valeria Berros <https://www.youtube.com/watch?v=kuFNmH7IVTA>

***For the rights of all: ending Jim Crow in Alaska***. 2009. Produced by Jeffery Lloyd Silverman; directed by Jeffery Lloyd Silverman, Phil Lucas; written by Jeff Silverman, Diane E. Benson, Stevan M. Smith; a co-production of Native American Public Telecommunications, Inc., KAKM-TV Channel 7 Anchorage; a Blueberry Productions film: <https://video.alexanderstreet.com/watch/for-the-rights-of-all-ending-jim-crow-in-alaska>

***A Secret for Texas - Aquarena Springs***. 2010. A Short Documentary on Aquarena Springs in San Marcos, TX highlighting some of sights in the area and the connections to water. Produced by Randall Cook, Scuba Dude Productions <https://youtu.be/VFWLrvLTA7w>

### Optional:

*Walking in two worlds*: <https://video.alexanderstreet.com/watch/walking-in-two-worlds>

*Our fires still burn, the Native American experience*: <https://video.alexanderstreet.com/watch/our-fires-still-burn-the-native-american-experience>

*The Hadza: last of the first* by Bill Benenson; narrated by Alfre Woodard: <https://video.alexanderstreet.com/watch/the-hadza-last-of-the-first>

*Entangled Life, How Fungi Make Our Worlds, Change Our Minds and Shape Our Futures* with biologist and writer Merlin Sheldrake: <https://youtu.be/zaUvK9gbOeU>

## BOOKS

### Required books:

1. Rozzi, Ricardo. Multi-ethnic bird guide of the Sub-Antarctic forests of South America. University of North Texas Press, 2010.
2. Nelson, Richard K. Make prayers to the raven: A Koyukon view of the northern forest. University of Chicago Press, 2020.
3. Kohn, Eduardo. How forests think: Toward an anthropology beyond the human. Univ of California Press, 2013.
4. Rozzi, Ricardo, Roy H. May, F. Stuart Chapin, Francisca Massardo, Michael C. Gavin, Irene J. Klaver, Aníbal Pauchard, Martin A. Nuñez, and Daniel Simberloff. From biocultural homogenization to biocultural

conservation: A conceptual framework to reorient society toward sustainability of life. Springer International Publishing, 2018.

### Supplementary books:

- Maffi, L. (ed.) 2001. *On Biocultural Diversity: Linking Language, Knowledge, and the Environment*, Smithsonian Institution Press.
- Rozzi, R., A. Tauro, T. Wright, N. Avriel-Avni & R. May (eds). 2023. *Field Environmental Philosophy: Education for Biocultural Conservation*. Springer, Dordrecht: The Netherlands.
- Rozzi, R., F.S. Chapin, J.B. Callicott, S.T.A. Pickett, M.E. Power, J.J. Armesto & R.H May, Jr. (eds.). 2015. *Earth Stewardship: Linking ecology and ethics in theory and practice*. Springer, Dordrecht: The Netherlands. <https://libproxy.library.unt.edu:2160/lib/unt/detail.action?docID=5716824>

### Articles

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- Contador, T.A., J. Rendoll-Cárcamo, M. Gañan, J. Ojeda-Villarroel, J.H. Kennedy, P. Convey & R. Rozzi. 2022. Underwater with a hand lens: ecological sciences and environmental ethics to value freshwater biodiversity. In: *Field Environmental Philosophy: Education for Biocultural Conservation*, R Rozzi A Tauro, T Wright, N Avriel-Avni & R.H. May Jr. (eds). Dordrecht, Netherlands: Springer (in press)
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## Guidelines for Group Presentations

### Graduate students

First, each of the graduate students will present on the topics she/he has already working for the final paper, but integrating these topics into a single group ppt.

Second, the pre-final ppt presentation for the preceding Tuesday should be uploaded in the form of a single group ppt.

Third, each group ppt will include the contributions of three graduate students. I suggest that you "juxtapose" the presentations of the 3 grad students, and then add **1 slide at the beginning** of your group ppt that **introduces the overall theme**, and **1 slide at the end** of your group ppt that **presents the conclusions, and lessons learned** from the 3 individual-research projects.

Fourth, regarding the time each graduate group will have 1 hr. **Each individual student has 10** (maximum 13) **minutes to present**. The group has **5 minutes for the initial slide** and **5 minutes for the final slide**. Then, we will have **20 minutes for general discussion with the whole class**.

### Undergraduate students

Guidelines for your group ppt presentations, below there are 4 points (including timing, point 4!).

- First, **each of the undergraduate students** will present on the topics she/he has already working for the final paper, but integrating these topics into a single group ppt.
- Second, the **pre-final ppt presentation for the preceding Tuesday** should be uploaded on CANVAS in the form of a single group ppt.
- Third, each group ppt will include the contributions of four or five undergraduate students. I suggest that you "juxtapose" the presentations of the 4 or 5 grad students, and then add **1 slide at the beginning** of your group ppt that **introduces the overall theme**, and **1 slide at the end** of your group ppt that **presents the conclusions, and lessons learned** from the 4 or 5 individual-research projects.
- Fourth, regarding the time each undergraduate group will have 1/2 hr. The group has **2 minutes for the initial slide**. **Each individual student has 5 minutes to present**. Finally, the group has and **3 minutes for the final slide**. Then, we will have **10 to 15 minutes for general discussion** with the whole class.