

Sub-Antarctic Biocultural Conservation

Biocultural conservation emphasizes that the relationships humans have with the environment through their traditions and language is as important to an ecosystem as species and biological diversity. UNT is widely recognized for innovative environmental research and practice that integrates ecological sciences with philosophy and the arts in a context of collaborative research, international partnerships, transdisciplinary education, and policy. A strong suit within this orientation is the Sub-Antarctic Biocultural Conservation Program, which works to preserve the rich biological and cultural attributes of the Cape Horn Archipelago —one of the world's last remaining pristine wilderness areas, located at the southern tip of South America in the sub-Antarctic ecoregion. The newly constructed Cape Horn Field Station will help implement the Omora Ethnobotanical Park in Chile as a research hub and laboratory where UNT scholars collaborate with a network of participants, ranging from local communities to internationally renowned institutions, including UNESCO.

- Pioneers in the integration of environmental philosophy and ecological sciences for biocultural conservation and the establishment of field environmental philosophy methods that incorporate environmental ethics into ecotourism practices
- Leading experts on wildlife conservation and environmental studies in the sub-Antarctic region of Chile, with expertise in native and invasive exotic species, freshwater ecology and watershed conservation, environmental policy, ethno-ornithology, and ethno-ecology
- Creation of the Cape Horn Field Station as the world's first field research laboratory that combines environmental philosophy, science and policy
- Implementing novel ecotourism models to link research with policy and sustainable tourism, including Tourism with a Hand Lens and educational activities
- Preservation of indigenous ecological traditions, language and knowledge
- Collaborative research with an international coalition of renowned institutions; and bi-national program between UNT, the Universidad of Magallanes, and the Institute of Ecology and Biodiversity in Chile

Representative Faculty

Baird Callicott, Distinguished Research Professor of Philosophy and Religion Studies: theoretical environmental ethics; comparative environmental ethics and philosophy; the philosophy of ecology and conservation policy; and biocomplexity in the environment

Eugene Hargrove, Professor of Philosophy and Religion Studies; and Director of the Center for Environmental Philosophy: environmental ethics; Wittgenstein; and environmental policy

Jaime Jiménez, Professor of Biological Sciences at UNT; and Associate Researcher with the Chilean Institute of Ecology and Biodiversity: *sub-Antarctic ecosystem conservation; biodiversity models for modified agricultural areas; and ecotourism/educational outreach*

James H. Kennedy, Director of the UNT Elm Fork Education Center; Co-Director of the Sub-Antarctic Biocultural Conservation Program; and Regents Professor of Biological Sciences: stream ecology; aquatic insect biology; biodiversity studies; and ecological risk assessment

Ricardo Rozzi, Professor of Philosophy and Religion Studies at UNT and at the Universidad de Magallanes (Chile); Co-Director of the Sub-Antarctic Biocultural Conservation Program; and Co-Founder of the Omora Ethnobotanical Park and the Cape Horn Biosphere Reserve: *environmental ethics and the conservation of biocultural diversity in the Cape Horn region*

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Select Research Resources

CHBR: Cape Horn Biosphere Reserve

CHBR is the largest biosphere reserve in the Southern Cone — a pristine ecoregion with mountains, glaciers and forests that offers a rich environment for ecological research and conservation activities. A member of the UNESCO Ibero-MaB network since 2006, its researchers represent multi-faceted areas of biosphere reserve expertise and have aided the Chilean government in defining development zoning plans that benefit the community and conserve the archipelago's biocultural diversity.

Cape Horn Field Station

The station is the world's first environmental philosophy, science and policy facility. Located within the Cape Horn Biosphere Reserve, it is at the forefront of conservation and study in the Cape Horn archipelago. The two and a half story research hub facilitates international, interdisciplinary, environmental research opportunities for faculty, students and affiliated scholars and offers a library, laboratory and field equipment, lodging space, classrooms, computer workstations and kitchen.

Omora Ethnobotanical Park

www.omora.org

Located in the UNESCO Cape Horn Biosphere Reserve, Omora is an outdoor classroom for schools, universities and visitors, a public space, and a natural laboratory to study ecology. UNT works with a consortium of academic institutions to integrate ecological and social aspects of research, education and conservation with the aim to make the Park a formal, long-term ecological research site.

IEB: Institute of Ecology and Biodiversity, Chile

www.ieb-chile.cl

IEB is a center for excellence on ecological research in the South American temperate forests biome and adjacent regional ecosystems. Its mission is to conduct basic and applied research relevant to the environment, train graduate and postdoctoral researchers, and engage in outreach.

UMAG: University of Magallanes, Chile

www.umag.cl/en

UMAG, the southern-most university of this planet, aims to develop knowledge and human resources through teaching, research and extension activities. UMAG hosts the first accredited graduate program in sciences in Patagonia and works closely with UNT in developing a dual Master degree in sub-Antarctic, biocultural conservation.

CEP: Center for Environmental Philosophy

www.cep.unt.edu/centerfo.html

CEP promotes an understanding of environmental ethics by publishing journals and books, and advancing research through workshops, conferences, and education. CEP continues to publish the respected journal Environmental Ethics, the first journal of its kind in this nascent discipline. Dr. Eugene Hargrove, CEP president, authored the field's first textbook, *Foundations of Environmental Ethics*.

Sub-Antarctic Biocultural Conservation Program www.chile.unt.edu

Coordinated by UNT in the U.S. and UMAG and the IEB in Chile, the program and cluster work to integrate the ecological sciences and environmental ethics through research opportunities, interdisciplinary education and public outreach. Begun as a local effort at the Omora Ethnobotanical Park in 2000, the program today is an international and interdisciplinary venture.

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Contributing Research Cluster: subantarctic.unt.edu

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