POLITICAL ECOLOGY

ETHNOECOLOGY

ECOLOGICAL RESTORATION

ENVIRONMENTAL STUDIES 40TH ANNIVERSARY
Introduction

All flourishing human societies depend on the vitality of biophysical systems, and the fundamental challenge of our time is to transform our societies so that they recognize and respect this dependence. Such a transformation requires significant innovation in peoples’ social relations with the natural world. At the School of Environmental Studies (“the School”) at the University of Victoria, we have been, for forty years, at the forefront of knowledge development to support this kind of innovation in our institutions and societies.

Environmental Studies (ES) began in 1974 as a series of courses offered in different departments and coalesced into a formal program in 1979. Over its four-decade history, the School has proven its commitment to producing and sharing creative, action-oriented knowledge in pursuit of solutions to environmental challenges. We have adapted traditional methods as we produced rigorous, high-quality research that reflected the complexity of socio-ecological problems in order to inform solutions to them. Interdisciplinarity proved essential to our innovative work: our faculty members have come from a wide variety of backgrounds and collaborated with scholars in several disciplines and departments in UVic and beyond. Faculty have also engaged wide networks of social actors – including governments, First Nations, and environmental organizations – and formed lasting partnerships for research and learning. In teaching, too, the School has emphasized action; faculty have continuously pushed the boundaries of the classroom by focusing on problem solving, hands-on experience, and collaborative knowledge development.

In these ways, the School has sought to meet the knowledge demands of a fast-changing world with many complex social and ecological problems. In 2014, as we celebrate the fortieth anniversary of Environmental Studies at UVic, this booklet presents – in chronological order – forty stories that chart the development of ES as an official school and demonstrate the ongoing efforts of a growing and energetic group of people focused on transformative change.
First Regular Faculty

By 1989, Environmental Studies had become a program in the Faculty of Social Sciences, with tenured professors and a regular budget. Duncan Taylor, appointed in 1986, was the first regular faculty member. Duncan has since inspired hundreds of students and introduced a number of key courses, including Environmental Perspectives and Environmental Issues, Introduction to Natural and Social Systems, Advanced Systems Theory, and Discourses of Environmentalism. He published Ecoforestry: The Art and Science of Sustainable Forest Use (with Alan Drengson) and, most recently, the edited anthology Wild Foresting: Practicing Nature's Wisdom.
Starting Environmental Studies

In the early 1970s, Marc Bell, Derrick Sewell, and other UVic faculty members introduced proposals to address environmental issues on campus. In 1974, a university-wide experimental program in Environmental Studies began with almost no budget, drawing on personnel, space, resources, and courses from existing departments. By 1979, ES had become a regular interdisciplinary program with its own director and steering committee. Alan Drengson, the first ES director, shares his reflections on the early years of ES at: http://bit.ly/ESearlydays

Launching the Curriculum

The first Environmental Studies course, ES 300, was created in 1975 and taught by Marc Bell. This interdisciplinary course was designed to bring ES students and faculty together for discussions and shared environmental projects. It involved many memorable events, such as design-ins with Stan King and study weekends at Yellow Point Lodge near Ladysmith. As with so many ES courses, ES 300 was problem oriented, emphasized group process, and involved field components, experiential learning, and interdisciplinarity. Over time, new course themes were introduced, including environmental psychology by Robert Gibson, environmental economics by Leonard Ladidao, environmental philosophy by Alan Drengson, and natural resource studies by Bill Ross. The ES program also created its own ecology course.

Defying Convention

From the earliest days, members of the ES team, such as Paul West pictured here, were committed to addressing seemingly intractable problems. We collaborated across disciplines and asked questions at the interstices of conventional approaches. We also asked every undergraduate major in ES to complete a double major – to pursue one particular area in depth while gaining a breadth of knowledge and experience in ES as a whole – and ES currently remains the last program at UVic to retain this requirement. We defied convention in how and what we learned, and this tradition has stayed with us.
Creating a School

Under the leadership of Paul West, the longest-serving director (1987–2001), and the careful guidance of an advisory council (composed of experienced professionals from private, public, and nonprofit sectors), ES began to grow. In 1999, the program was renamed a “school,” in recognition of our thoroughly interdisciplinary approach; under this new designation, ES could accept graduate students, who would complete graduate degrees by special arrangement and with interdisciplinary committees.

Supporting Clayoquot Protest

In the 1990s, the environmental impact of logging practices in Clayoquot Sound became a high-profile issue through which to debate the global politics of land use. ES faculty Nancy Turner (member of the Clayoquot Sound Scientific Panel), Karena Shaw (co-director of the Clayoquot Project), Duncan Taylor, and Alan Drengson all made significant contributions to identifying solutions for the sustainable future of Clayoquot Sound.

Developing Core Courses

Environmental Studies is a broad field, attracting students from different academic backgrounds; in development of its core courses, ES faculty sought to balance flexibility and rigour and to engage students with diverse skills and interests. To this end, the School identified core courses in each of its three areas of specialization – Political Ecology, Ethnoecology, and Ecological Restoration – and developed a prerequisite course for all three: ES 200, Introduction to Environmental Studies. We initially hoped to attract 100 students to ES 200, but the course has become hugely popular, regularly attracting 250 students per term.
First Full Professor

Nancy Turner, who came to UVic in 1990, was the first tenured full professor in ES. She introduced courses in ethnoecology and ethnobotany. Nancy’s outstanding body of research (she has written or co-written over 20 books and 120 peer-reviewed papers) is testament to her collaboration with First Nations elders and cultural specialists in northwestern North America. For over forty years, she has helped to document, retain, and promote the traditional knowledge of plants and habitats, including Indigenous foods, materials and medicines, as well as language and vocabulary relating to plants and environments. Nancy and her many graduate students helped to firmly establish ethnoecology (including ethnobotany) as one of the three academic streams in the School.
Excellence in Teaching

While our faculty members have received many awards for outstanding research, we are equally recognized for our many achievements in teaching. We have continuously looked for unique, innovative ways to engage the problem solvers of tomorrow in the examination of environmental issues. From participatory pit cooks to community restoration projects to remote field schools, many of the common experiential learning practices now found throughout UVic coursework were first pioneered by ES faculty. One key to our innovativeness in teaching is our practice of drawing upon intellectual resources from outside the university by inviting environmental experts from the local community, non-profit sector, and government to teach as sessional instructors and serve as adjunct professors.
Developing the Political Ecology Stream

The early ES faculty realized that environmental problems would not be solved by natural science alone; a social scientific lens was needed for analysis of the social and political dynamics that profoundly affect ecologies. The Political Ecology stream of ES mobilizes this social scientific approach and delivers courses that are popular across the university community. Every ES Major and Minor student is required to take ES 301, and many students find it transformative, giving them the tools they need to understand how to actually engage in changing the social, economic and political systems that cause environmental problems.

**Michael M’Gonigle**

In 1995, the School established a joint chair of ES with the Faculty of Law, a position held by Michael M’Gonigle. A political economist and environmental lawyer, Michael has an extensive background in environmental activism, including as a co-founder of Greenpeace International, SmartGrowth BC, Forest Futures, the Sierra Legal Defense Fund, and the Dogwood Initiative. He has written widely on environmental issues, and is co-author of *Planet U: Sustaining the World, Reinventing the University*.

Creating a “Centre for Transdisciplinary Research”

The POLIS Project (est. 2000) is a Political Ecology offshoot of the School – a research centre that investigates and promotes ecological governance. POLIS seeks to cultivate ecological governance through innovative research, policy analysis and advocacy, law reform, education, and strategic community action. To foster healthy and sustainable communities, researchers at POLIS work with diverse groups of people from many sectors.
Promoting Sustainable Forestry

Wildwood Forest, located outside Ladysmith, Vancouver Island, was stewarded by Merv Wilkinson from 1938–2011, and is widely recognized as a valuable local example of sustainable forestry. Merv used Scandinavian forest management practices like single-tree selection and harvesting at a speed slower than the annual growth rate so that the stand volume is maintained over time. Wildwood forest has been a popular field trip site for ES classes since the 1990s, an important place at which students can study firsthand the impacts of seventy years of eco-forestry practices.

Brenda Beckwith

Brenda Beckwith has worn many hats for ES in the last seventeen years: PhD candidate, sessional instructor, senior lab instructor, undergrad advisor, and adjunct professor. An innovative and highly regarded teacher, Brenda’s strong passion for community–university engagement led to her receiving the 2011 Excellence in Outstanding Community Outreach Award from the Faculty of Social Sciences. Her many contributions – including being the University 102 instructor and co-founder of the Redfish School of Change – resulted in her recent selection by the UVic Alumni Association as one of fifty “Alumni Who Made a Difference.”

Wendy Wickwire

Sharing different Environmental Knowledge Systems has always been a priority of Wendy Wickwire who holds a cross appointment in the Department of History and ES. Over the past two decades, she has taught Ethnographic Methods in Environmental Research and Aboriginal Peoples and the Environmental History of BC. Her expertise in oral history, Aboriginal history, environmental history, BC ethnohistory, and early history of anthropology in northwest North America have contributed a key perspective in the research and teaching of the school.
Our Benefactors

The School has been blessed with the generous support of a variety of benefactors:

Ian McTaggart-Cowan was one of Canada’s foremost wildlife biologists and conservationists. Through his generous legacy, along with subsequent donations from the Habitat Conservation Trust, BC Hydro, and private donors, a $1 million professorship was established in 2005 in his honor (and awarded in 2009 to Dr. Brian Starzomski).

Lorene Kennedy was a modest, quiet person concerned about loss of habitat and ecological diversity. She championed a combined scientific understanding of biology and ecology with an awareness of conservation. Deeply inspired by the work of Nancy Turner, she bequeathed a $2.5 million gift to ES students in the form of bursaries.

Many individuals, including Vicky Husband, Bob Peart, and several others, have also donated funding for ES student bursaries.
Mountain Legacy Project

The Mountain Legacy Project is an interdisciplinary research team based in the Visualization Lab of Eric Higgs at the School. Originally established in 1998 and moved to UVic in 2006, the Mountain Legacy Project uses archival research, repeat photography, and scientific, historical, and cultural analyses of repeated historical survey photographs to assess landscape change in the Canadian Rocky Mountains over the last century. Currently the project is focusing on the secure storage, digital reproduction, and dissemination of archival photographs at Library and Archives Canada and UVic, and the re-photography of images from key areas including Kootenay National Park (1922/1923) and Crowsnest Pass (1913/14).
Eric Higgs

Eric Higgs has helped shape the evolution of the field of restoration ecology over the last three decades. He came to UVic in 2002. Along with his research, teaching, and past work as director of the School, he was chair of the Society for Ecological Restoration. His current research focus is on novel ecosystems in ecological restoration – an area that promises to be vital in the future. He continues to offer collaborative field-based learning opportunities in progressive small-scale restoration through the Galiano Island Restorative Learning Centre field courses and the Redfish School of Change.

Creating Campus Sustainability

In the late 1990s, two senior ES students envisioned a student-run environmental organization focusing on sustainability. Through their inspiring leadership, the UVic Sustainability Project (UVSP) was born and proceeded to conduct thirteen sustainability audits on campus in areas such as environmental health, energy, water, curriculum, recycling, and waste. Since that time, UVSP has hosted special events, worked on community mapping research projects and green city corridors, and participated in campus planning and management processes around sustainability, always with the active and tireless participation of ES students.

Karena Shaw

In 2003, Karena Shaw arrived from Keele University to join the ES faculty, just in time to help restructure the School’s undergraduate program. A political theorist, she is interested in how contemporary environmental challenges are reshaping political space and possibility. She has published in the areas of feminist theory, indigenous politics, and environmental and energy politics. She is an associate professor and the current director of the School, as well as a member of the Cultural, Social and Political Thought Graduate Program and the Institute for Integrated Energy Systems.
Collaborating with Communities

In the early 2000s, growing community interest in restoration of the Gorge waterway in Victoria created an excellent educational opportunity for an on-site restoration project. In partnership with the community, the private sector, government, and the university, students from the Restoration of Natural Systems program developed a plan to guide the restoration. The site remains a model for other properties along the Gorge Waterway and the community/university partnership has been repeated on restorations throughout the Capital region on public and private properties.

Enhancing Campus Ecosystems

In 2004, Don Eastman, faculty coordinator of the Restoration of Natural Systems program, completed a plan to restore a degraded field within an endangered Garry oak ecosystem on the UVic campus. Another community-university partnership, the project produced a model to examine the process and techniques for restoration of endangered Garry oak ecosystems. The School continues to work with university staff to enhance the educational, ecological, cultural, and social aspects of UVic’s distinctive and beautiful campus.

Val Schaefer

Val Schaefer is a biologist and ecologist with unique expertise in the emerging field of urban ecology. He joined ES in 2005 and is the academic administrator for the Restoration of Natural Systems program. Founder of the Institute of Urban Ecology at Douglas College, he is a leading proponent of urban ecology and urban biodiversity and has written many articles, chapters, and reports on these topics. Val is also an environmental educator who has conducted numerous community projects promoting nature in the city.
Restoration of Natural Systems Program

The School offers a number of programs on ecological restoration; both the undergraduate BA and BSc degree programs have a stream dedicated to Ecological Restoration, and we also offer an MA and MSc with this specialization. In addition to these degree programs, the School established a professional development Restoration of Natural Systems Diploma in 1996 in partnership with the Division of Continuing Studies. This twelve-course diploma allows professionals working in municipal planning, architecture, development, parks, and landscape management to return to UVic and learn about new developments and tools for sustainable restoration planning and long-term management. In 2009, a four-course Native Species and Natural Processes Certificate was developed with Continuing Studies to provide further options for advanced training in ecological restoration.
Creating Policy-Relevant Research on Marine Ecology

The Seafood Ecology Research Group (SERG) was created in 2005 to address the challenge of the marine environment’s limited capacity to produce and the seemingly insatiable human demand to consume. All SERG research initiatives begin from the perspective that ecological issues are the manifestation of underlying economic, social, and cultural forces; each initiative therefore seeks to incorporate and respond to economic, social, and cultural dynamics. Since the group’s inception, its research has been used to inform public policy on fish farming and marine ecology.
John Volpe joined the School in 2005. Bringing his expertise in population and molecular ecology, he (along with his students) uses data intensive approaches to undercover linkages between ecological and social sustainability in marine-based food production systems, particularly aquaculture. John heads the Seafood Ecology Research Group and also developed the Global Aquaculture Performance Index (GAPI) initiative. His current topics of interest and research include salmon, sablefish, and bivalve aquaculture; aquaculture-capture fisheries interactions; invasive species; and the application of complex systems theory to issues of sustainability.

Building Activism through Student Social Networks

The Environmental Studies Student Association (ESSA) is our undergraduate student club. The group focuses on linking environmental activism and social networking within the undergraduate community. ESSA organizes a wide variety of fundraisers, events, and activities throughout the year, and provides key volunteer and job opportunities to ES undergraduates. The Essence is ESSA’s flagship newsletter and was first published by ES students in 1974. This student-run newsletter, as a platform for students’ opinions and ideas on human-environment relations, has played a profound role in shaping and maintaining the School’s identity for the past forty years.

Moving to Green Infrastructure

In 2008, the School moved into the Social Sciences and Mathematics building – now known as the David Turpin Building (DTB). Built to LEED Gold standards, DTB features seven total “green roof” gardens and, in the courtyard, the Ian Ross Memorial Garden, designed to be representative of local ecosystems and with native plantings specific to our bioregion. These gardens attract birds, bees, and butterflies, and retain storm water run-off. Faculty and staff in ES designed and developed the species lists for the garden, which is now used as an open-air classroom for several ES courses.
**Brian Starzomski**

Brian Starzomski, the Ian McTaggert-Cowan Professor of Ecological Restoration and Biodiversity Preservation, joined the School in 2009. Brian trained as a community ecologist and conservation biologist; his research examines biodiversity structure and dynamics and seeks to link theory and empirical approaches. Much of his work has taken place at treeline and in the alpine zone beyond it, in Labrador, British Columbia, and the Yukon. Students in his research lab study alpine plant communities and bog ecosystems in BC.

**Honoring Knowledge Leaders**

The School has successfully nominated several exemplary individuals – leaders in the realm of environmental thought – to receive honorary doctoral degrees at UVic:

- Mary Thomas (Secwepemc)
- Daisy Sewid-Smith (Kwakwaka’wakw)
- Earl Claxton Sr. (WSÁNEC)
- Bill Turner (The Land Conservancy BC)
- Vicky Husband (Sierra Club of BC)
- Wade Davis (National Geographic)
- Vandana Shiva (Navdanya)
- Mervyn Wilkinson (Wildwood)

**Trevor Lantz**

Trevor Lantz, an alumnus who studied with Nancy Turner, joined the school as an assistant professor in July 2009. His work focuses on the impacts of global change on ecocultural landscapes in western North America. Trained as an ecologist and an ethnobiologist, Trevor employs local knowledge of ecosystems as well as observational and experimental approaches in his research. His current research projects with Gwich’in and Inuvialuit communities in the Western Arctic examine feedbacks between climate change, warming permafrost, disturbance, and vegetation change.
Creating Leaders of Social Change

The Redfish School of Change was established in 2009 to deliver a unique fusion of academic and experiential learning for students wanting to take action and create ecological sustainability and social equity in their communities. Students engage with social justice and environmental experts while living in community, developing their own “Community Action Projects” during the course of the unique field experience. Senior lab instructor and ES alumna Brenda Beckwith has inspired this program from its inception, and she is working closely with the current director, Ryan Hilperts, to relocate the Redfish field program to the Salish Sea area.
Studying Environmental Change in the Arctic

Building on his doctoral and post-doctoral research, Trevor Lantz established the Arctic Landscape Ecology Lab in ES in 2009. Research in this lab combines detailed field investigations of vegetation and microenvironment with broad-scale change detection and spatial pattern analysis. By combining field investigations and regional mapping, Trevor and his graduate students link knowledge of key ecosystem processes with data on landscape-level variation in critical drivers. Current research projects in the western Arctic focus on permafrost degradation, storm surges, vegetation change, catastrophic lake drainage, and anthropogenic disturbance.
James Rowe

James Rowe is trained as a political scientist. He joined ES in July 2011. His areas of research and teaching are political ecology, critical theory, social movement history, and political economy. James’s work is especially focused on the causes, effects, and redress of social and ecological injustice. His current research is on the emergence and effects of – and the rationale for – profit-driven economies. This research includes an exploration of alternative drivers for economic activity, such as the enhancement of social value.

Enterprising Students

It is difficult to summarize the story of the outstanding students who have graced the School with their questions, intelligence, dedication, passion, and commitment to solving the massive environmental issues facing humanity. Through ESSA and its graduate counterpart, Group ENVI, students have worked to link environmental activism to the university and the larger community. Our graduate students have a long tradition of bringing a high level of commitment to their research and trying out new approaches to the most tangled environmental problems of our times. Several ES students have gone on to make profound impacts in academic circles; others have applied their knowledge in non-profit organizations, governments at all levels, and private companies.

Jessica Dempsey

Alumna Jessica Dempsey joined the School in 2012 as an assistant professor. From working on ecological youth camps to establishing grassroots community policy for the provincial government to delivering presentations at the UN, Jessica brings a tremendous background in political ecology to the School. She aims to reveal ways in which environmental governance and ecological science are entangled with “the economic” and to examine the material and discursive geographies produced in the wake of market-oriented environmentalism.
Natalie Ban joined the School as an assistant professor in January 2013 from James Cook University in Australia. Trained in geography, resource management, and environmental studies, she draws upon both the natural and social sciences in her work. Her research interests span ethnoecology, conservation biology, marine spatial planning, conservation planning and implementation, and evaluation and mapping of cumulative impacts, primarily in marine and coastal systems. Natalie’s current research focuses on identifying options for management and conservation of biodiversity while respecting peoples’ needs and uses of resources.

Building a Team of Professionals

Over the decades, faculty and students have been fortunate to be supported by skilled staff members – such as Elaine Hopkins, Lori Erb and Alina Fisher – and by sessional instructors who graciously agree to return year after year to teach our courses. From managing complex field schools, to administrating multiple layers of research funding, to coordinating and processing graduate programs and scheduling courses each term, a core team of dedicated professionals has worked tirelessly to help realize the School’s goals.

Charting the Path Ahead

In 2003, the School developed a bold plan that allowed for a rapid and dramatic growth of the ES faculty and programs. Over the past two years, through several day-long faculty and staff retreats, we identified key goals that describe where we want to go and how we wish to get there. While our earlier plan allowed us to build up the School quickly with bold strokes, our current plan allows us to refine our goals and to hone the kind of research and teaching we provide in the School: interdisciplinary, intellectually demanding, community based, and collaborative. At the School, we also recognize the importance of British Columbia as a continental hotspot for biodiversity, climate change leadership, and an emerging energy-based economy, and we seek to ensure that our teaching and research delivers the innovation and leadership required to navigate the province’s complex future.
The Tula Foundation, whose mission is to understand the coastal ecology of a region on the Central Coast, graciously funds much of the current research of Nancy Turner, Brian Starzomski, Adjunct Professor Morgan Hocking, and many of their graduate students and post-doctoral fellows. Nancy is researching ethnoecological insights into change, resilience, and continuity on the BC coast, working with partners from the Heiltsuk and Kitasoo communities. Brian and his team are conducting experiments and observational studies to examine the blanket bog ecosystems of the Central Coast. These faculty also regularly help teach field courses at the Hakai Beach Institute in the beautiful natural environment of Calvert Island, part of the Hakai Lúxvbálís Conservancy, a place home to wolves, orcas, humpback whales, sea lions, mink, black-tailed deer, and more than seventy-five species of birds.