

MAPPING THE TERRAIN OF CONTEMPORARY ECOART PRACTICE AND COLLABORATION

ART in ECOLOGY – A THINK TANK ON ARTS AND SUSTAINABILITY

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This paper is a preliminary document to the Arts & Ecology think tank held in Vancouver in spring, 2006. It explores trends, issues and advances in EcoART collaborations among artists, environmental groups, communities and scientists. Beyond this, it considers suggestions for the future of such collaborations, including how this work might be better supported. In order to be locally-relevant to meeting participants, there is a particular focus on Canadian works and more specifically, on those from the Western part of the country. The intention of this report is to provide an overview of collaborative practice in arts and ecology, rather than projects, and so while specific projects and/or practitioners are brought forward as illustrative, this paper is not meant as a catalogue of practitioners or works.

As a part of the research process, the following questions were asked of collaborators in EcoART projects and organizations, the answers to which inform this document.

Questions Asked

- Who initiated the project (artist or environmental group)? Why?
- How long was (or is) the process from inception to completion?
- Was the work well-supported?
- Who funded it?
- Do you feel the project was a success? If yes, why? If no, why not?
- How were the terms of participation, evaluation arrived at?
- Were there questions/issues of ownership? How resolved?
- How was the work received?
- What worked well? What did not?
- What were the challenges?
- Would you work together, or in this way again?
- What additional support is/was required and how could the level of support be improved?

Related Terms & Definitions

- Bio-remedial – works which restore or recover lands, waters, naturally occurring systems and habitats.
- Community Based – works and projects in which community plays an integral role in the collaborative process and creation of work. Shared or community ownership of works often results from such collaborations.
- Conservationist/Preservationist – works which seek to preserve, or protect.
- Earthwork – a type of contemporary art begun in the 1960s and '70s, which uses the landscape, or environment, as its medium
- Ecology – both the totality of interconnected relations amongst organisms and the envionring world, and the science which studies this.
- EcoART – a broad field of interdisciplinary arts practice, distinguished from Land Art and Environmental Art by its specific focus on world sensitive ideologies and methodologies. EcoART practice seeks to Restore, Protect and Preserve the world for its own sake, and to mediate human/world relations to this end.
- EcoTECH – “earth-friendly” technologies; often utilized in or developed through EcoART practices.
- Environmental Art – a general term referring to art in and/or about the environment. Not necessarily world-sensitive or remedial practice.
- Instructive/Didactic – works which embody a message, or learning. This message may be any combination of cultural, political, ideological, scientific or pragmatic. An example of this would be transparency of process embodied in a bio-remedial work.
- Land Art – similar to Earthwork, an art category denoting works on, or utilizing, the land.
- Sci/Art – a name given to art/science collaborations. Such collaborations may be environmentally or ecologically focused, or not.
- Site-specific – also called Environmental Art, denotes work responsive to the terms defined by a particular location – a work designed for a particular site.
- Socially/Culturally remedial – works which seek to change, inform or mediate cultural/social ideologies and/or beliefs and behaviors.
- Sustainable – although now much used and widely applied, the term as it relates to environment is defined as meaning, to sustain an exploitation of natural resources without destroying the ecological balance of a region.
[source:Merriam Webster online]

- Sustainable development – According to *Our Common Future* (Brundtland Report, 1987), refers to “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”.
- Other (capitalized) – a term from cultural, critical and feminist theory denoting the objectified non-human status of beings within a dominant western, dualistic, and utilitarian culture.

Art, Ecology and the World

But what is Nature?

From the Latin *Natura*, it is my birth, my characteristics, my condition. It is my nativity, my astrology, my biology, my physiognomy, my geography, my cartography, my spirituality, my sexuality, my mentality, my corporeal, intellectual, emotional, imaginative self. And it is not just myself, every self and the Self of the world. There is no mirror I know that can show me all of these singularities, unless it is the strange, distorting looking glass of art, where I will not find my reflection nor my representation but a nearer proof than I prefer. *Natura* is the whole that I am. The multiple reality of my existence.

Jeanette Winterson, *Art Objects*

One of the reasons why we got The Arts for The Earth going was specifically to try and communicate not just the awful despair about collapsing ecosystems but also to remind people of the power of that joyful relationship which is such an important part... it isn't by forcing things onto people, it is by this lateral approach, very often evocative rather than didactic, that you can make such powerful messages available to people.

Jonathon Porritt, Founder & Director of *Forum for the Future* and Past Director, *Friends of the Earth*

It might seem at first blush that artists and scientists approach the world in very different ways. In popular culture, the former might be stereotyped as frivolous and disconnected from the “real world”, and the latter as unimaginative and concerned only with “hard facts”. Like most stereotypes, these are doomed to inaccuracy. In reality, the two have much in common, and where they do not, they can be most complimentary. Environmental philosopher Allen Carlson for instance, claims that one can have aesthetic appreciation of the enviroing world only through science, ie, through understanding how things work together beautifully in natural systems.

Artists and scientists alike begin their working projects and processes with a question – an enquiry. They are located within and asking questions of the same world. Processes and final manifestations of the work can differ greatly, yet goals may be parallel. Increasingly, when it comes to ecology and the environmental sciences many artists, scientists and environmental groups are asking similar questions and looking for solutions to the same, increasingly global, problems.

Similar questions about how we may improve human/world relations might involve finding and designing solutions to polluted waters, recovering and preserving habitats and species, educating people about the mystery of the other than human world and how everyday lifestyle choices impact this habitat we share.

Increasingly, the sciences and environmental groups are looking to the arts for partnership, collaboration and translation of vital information into forms that reach individuals, communities and organizations. The arts can facilitate a process of learning through the engaged senses, bypassing conditioned patterns of thinking and allowing other ways of knowing to come forward, at times subtly, at times overwhelmingly. Whether the work focuses on natural, cultural, or political aspects of their envioning world, artists have always been sensitive and responsive to the world. The role of artist as catalyst, critic, and educator is hardly a new development. Oftentimes the work has been urgent, prodded into becoming by the nature of a crisis, catastrophe or political repression.

Never, though, has the role of the arts been so urgent as it is in the face of what is now obvious to all as an immediate global crisis within our sustaining and envioning world. Because this crisis has been and continues to be nurtured and produced by past and current cultural practices and ideologies, artists, immersed in world and cultural practices, are ideally situated to locate and develop responses.

But if environmental groups and scientists increasingly look to artists for collaboration, many contemporary artists are just as frequently turning to scientists and ecologists for their detailed analysis of our interdependent world. As collaborators in artistic projects, ecologists and scientists provide in-depth research about, and a sophisticated understanding of, the interconnectedness of natural systems that can prove inspirational and efficacious in the design and implementation of EcoART works.

Artists working in the contested and critical zone of EcoART perceive scientists as natural collaborators. They value the structure and process of the sciences, and the wealth of expertise and knowledge that scientists bring. Artist Basia Irland, who works with international water issues, comments that her closest colleagues are now primarily scientists. [Source: private conversation].

The Topography of EcoART practice and collaboration

o Origins

If one tracks the arts and sciences trail through western cultural history, one observes the disciplinary boundaries between the arts and sciences alternately blur and harden. The notion of hard boundaries between these disciplines is not, contrary to the modern model, the only, or even the dominant story. One can, for instance, reference the 12th century renaissance in arts, science and philosophy at the School of Chartres and the later work of Leonardo DaVinci and Michelangelo as examples of an interconnected holistic vision of the arts and sciences. Perhaps now, in the 21st century, historical conditions necessitate another kind of renaissance – one which brings these two disciplines back together in new forms and configurations.

Certainly, art historical figures like Joseph Beuys, Mel Chin, Agnes Denes, Helen and Newton Harrison, Ocean Earth, Robert Smithson, Alan Sonfist and Mierle Laderman Ukeles are known and collected, yet too few in the art world realise the role ecoventions have played in convincing local city planners, landscape architects, civil engineers, and watershed managers to rethink their practices.

Ecovention – Current art to transform ecologies, Sue Spaid

The beginnings of contemporary EcoART practices can be traced back to the 1960s, a time when artists were looking to break free of the traditional white box of the gallery. Land Art, or Earthworks, emerged during this period and it is important to note that these works frequently objectified the land as a medium or as a site. Far from embodying sensitivity to, or awareness of, bioregional complexity, much Land Art of the 1960s and 70s involved what we now recognize as tremendous imposition on local eco-systems. Many giant earthworks exist as monuments to the artist, a practice which critic John Grande has referred to as egocentric, rather than eco-centric [Grande, 1994].

Rachel Carson's *Silent Spring* was published in 1962 and launched the environmental movement. And it is *Silent Spring* which artists Helen and Newton Harrison cite as the influence that launched a leading-edge practice which spans the distance from the 1960s to current EcoART interventions. Their projects are frequently international, always monumental and, given their scope and size, not always realized. Often called the "grandparents" of the genre, the Harrisons are two of a handful of artists (many cited in the above quotation) who initiated this way of working. Over decades, they have stayed the distance, and with profound focus and commitment to the wellbeing of the world, have set an international standard.

Art historian Arlene Raven says that the Harrisons “work from their aesthetics, from which originates the impulse to restore the relationship between the physical ground and the physical humans inhabiting that ground.” They “want to create actions that not only stand beside, but work to undo the domination and manipulation of nature in the service of man-made hierarchical systems” [Raven, p 69]. The Harrisons are known for comprehensive research related to their projects and for their collaborations with scientists and architects. Recent projects include *Peninsula Europe* and, with UK artist David Haley, the new, still evolving project, *Greenhouse Britain*.

Greenpeace, born in Vancouver of the same rush of environmental concern in the late 1960s and early 70s, pioneered the practice of performance in ecoactivist interventions. Bob Hunter, a founding member, was a journalist with a finely honed sense of the dramatic gesture. Influenced by the theories of Marshal MacLuhan as reconfigured by Hunter, Greenpeace developed a series of highly choreographed and dramatic interventions performed for the media, and hence, the world stage. This performing of intervention has remained a trademark of Greenpeace. Here is a recent example: Greenpeace activists, dramatically clad in white coveralls and wearing breathing masks, engage in a highly choreographed performance of scything GMO crops and stuffing them into “biohazard” bags.

In the late 1980s, Friends of the Earth was the first environmental organization to bring the arts as such directly into their work by creating The Arts for The Earth (TATE). The quotation from Jonathon Porritt at the beginning of this paper expresses the value of the arts for helping us remember that there is not only fear and sorrow and loss in a time of crisis – there is also a huge need for hope and beauty and celebration. We need to take heart in order to stay engaged – and TATE acknowledged that this heartfelt and willing engagement could best be achieved through the arts.

- **The Terrain of Recent & Current Practice**

...no one else creates the questions and invents the different perspectives that artists of all disciplines engage with in their practice. To ignore art and artists is to see, hear, and feel only part of the diverse richness of life and the issues we face. Our survival as a species is dependent on integrating art into the mix of science and technology, and at the same level.

David Haley, Artist and Academic, *Manchester University*

In our own work we have come to acknowledge the importance of a holistic perspective in enhancing urban wildlife habitat. It is not merely an exercise in applying principles of Biology and Engineering, but rather also requires that the community embrace nature through its values and activities. The beauty of the holistic approach to wildlife habitat, the combination of the arts and sciences, is that it makes the city more physically and emotionally healthy for people as well.

Dr. Valentin Schaefer, past Director, *Douglas College Institute of Urban Ecology*

Most EcoART collaborative projects, whether initiated by artists, environmental groups, local museums or communities, tend to be connected to a sense of place, and spring from local concerns with polluted waters, soil erosion, habitat loss, reclamation of post-industrial sites and the remnants of resource extraction. It is easily seen how these local concerns are universally linked, so that in fact these projects form a vast and interconnected web of intervention. There is no place in the world unaffected by corporate industrialization and the demands of predominantly Western, predominantly urban, cultural lifestyle choices.

EcoART collaborations frequently focus on engaging communities in not only awareness of problems (which are often all too evident), but on finding and implementing in solutions. These solutions might be bio-remedial, yet they may often be celebratory. Ritual and celebration are community building – they engage people with place and habitat. In the face of real challenges and losses, such as disappearing wild salmon, they can inform and assist communities in coping and staying solution focused.

EcoART collaborations also often focus on preservation, or conservation - particularly in Canada, where work is often inspired by a need to protect some of the last remnants of complex and still functioning natural systems, along with habitats and species. Such work ranges in form from education, to community building, to direct action and intervention.

In addition to these place and community specific projects and works, recently a few key collaborations are engaging global issues, such as climate change.

The approach of the millennium saw the advent of an increasing number of multidisciplinary international conferences focused on arts and ecology collaborations. These have been crucial in revealing the web of interrelated practices and projects and in building connections among practitioners who previously believed themselves working in isolation.

- **Projects**

This illustrative survey of projects begins with two that defy the categories below. The first of these is the DeLeon White Gallery and Stephen White's many satellite projects. The gallery has a specific focus on environmental or ecological works and alongside this, Stephen has created and set up a number of related initiatives dedicated to EcoART, EcoTECH and Green Design. These include Ecotecture, a non-profit society focusing on the relationship between art and nature, facilitating interdisciplinary collaborations and education, Public Nature, an arts consultancy firm "specializing in sustainability-related art works and projects by artists in all media", and Sustainabuild, a "green building" solutions company. www.eco-art.com

Stephen White is also collaborating with UK artist, writer, designer and 21st century renaissance man Oliver Lowenstein on getting a Canadian prototype of Lowenstein's Cycle Station project built in Toronto. The Cycle Station project envisages a network of Cycle Stations as overnight-stay rest and relaxation centers based around sustainable design, so people can cycle over a long distance staying in a chain of these, one by one. The project proposes a radical green and sustainable shift in commuting, travel and design. Oliver Lowenstein is the creator of Fourth Door Review and Fourth Door Research. www.fourthdoor.co.uk

The Emily Carr Institute of Art and Design, with the University of British Columbia, Simon Fraser University and the BC Institute of Technology, is involved in new sci/arts collaboration focused on sustainability. CIRS - the Centre for Interactive Research on Sustainability will focus on sustainable building technologies and urban development practices. They wish to address gaps between environmental concerns and actual behaviors in citizens, and between goals and outcomes in sustainable practices. CIRS also intends to work directly with citizens to engage with sustainable lifestyles. Methodologies include advanced imaging and immersive technologies. www.cirs.ubc.ca

Infrastructure & Community

Gameti Ko – The Land We Live on is Our Home

Artist/designer and professor Gavin Renwick, from the Visual Research Centre at Dundee, Scotland, has been asked by the Tlicho Dene in the Northwest Territories of Canada to work with them in an unusual and highly innovative collaboration - *Gameti Ko*.

We have been utilizing visual research and fine art practice-led methods to help evolve projects that promote cultural continuity, while linking traditional knowledge with generating appropriate sustainable development.

For me, in this work and in my other projects, this presents the potentiality

of the artist-researcher to be a catalyst for articulating a community vision, as well as a prompt for appropriate community development - i.e. art being a verb not a noun. It is also important to know that I am only there as long as they want me to be, it is on their terms.

Gavin Renwick

<http://www.vrc.dundee.ac.uk/Research/FineArt/GavinRenwick/activities.html>
<http://dsp-psd.pwgsc.gc.ca/Collection/NH18-22-105-106E.pdf>

Community

The bulk of EcoART collaborations continue to be small and local, and often involve artists living and working within their own communities. Such projects include community focused habitat preservation, bio-remedial and informative/pedagogic works. They range in form from community murals, mapping projects, events, stories and community theatre focused on local habitats, to the constructing and maintaining of local greenways and the care of local waterways.

✿ An example of such a project is a successful bio-remedial project initiated in a Vancouver neighborhood by artist Carmen Rosen and local community development Director, Paula Carr. The goal was to recover the habitat of one of the only remaining urban creek remnants above ground in the city – the Still Creek habitat in Renfrew Ravine. Studies were done on water quality, current species supported by the habitat in and around the creek, and the likelihood of increased species support. The project includes a number of artworks created for the site by local school children working with a local artist. The Evergreen Foundation was a collaborator on this project and Renfrew Ravine is now an official city Greenway. The Still Creek Reclamation is now a project undertaken by the City of Vancouver. Renfrew Ravine Sanctuary Park
<http://www.creativecommunities.ca/project/project.php?ProjectID=15>
www.evergreen.ca

✿ Much larger in scope than the above project, Islands in the Salish Sea was a community ecology mapping project, directly inspired by the work of Common Ground in the UK. Initiated by the Land Trust Alliance of BC and funded by national and international foundations, Islands in the Salish Sea involved artists on each of the Gulf Islands off the British Columbia coast working with their island community to produce the maps. Funded by a combination of 15 government agencies and environmental foundations, the Islands in the Salish Sea project was 5 years long, and is now documented in an award-winning a book of the same name. <http://www.landtrustalliance.bc.ca/salishsea.html>

✿ Splash and Ripple was a community performance work by Precipice Theatre, billed as the only environmental theatre company in Canada, in collaboration with the Living by Water project, an environmental education and

stewardship organization based in BC. Splash and Ripple was performed as a site-specific work at shorelines in communities throughout Alberta and BC. Precipice Theatre's community performance is focused on environmental awareness. www.today.net/precipice/past.htm www.livingbywater.ca

✿ In an unusual collaboration, from 1993-96 UK performance artist Hester Reeve, under the auspices of the NGO Green Circle in Eastern Europe, developed a 3-year case study and 'oral history' of an environmental-political dispute in North Bohemia, capturing the time of the post-1989 political transformation. The village of Libkovice, dependent on mining for survival, was, ironically, caught in a tug-of-war between government and environmental NGO. Everyone took part in this project to document its struggle for life. Libkovice: Zdaž Bùh is the name of the project and of the book which documents it (printed only in Czech). Zdaž Bùh means 'God willing...' and is the traditional greeting (i.e. 'Hi there') used by Bohemian miners working underground)...it refers to the ironic avoidance by the new Czech democratic government to do anything pro-active to save the entire village of Libkovice from being demolished, so the coal beneath could be accessed. Other than the book, there is no documentation of the project, or of the disappearance of the village. [Paraphrased from Hester Reeve's comments]

✿ YOU DON'T UNDERSTAND o SHARING IS THE LAW
o THE LAND OWNS ITSELF

[From a work by Sandra Semchuk & James Nicholas. Text, James Nicholas]
This subsection on community would be incomplete without the inclusion of the collaborative work of Sandra Semchuk and James Nicholas. Sandra, a Ukrainian Canadian, has throughout an extensive practice explored the meaning of collaboration, and engaged with questions about "Place", Land and Community in her visual work. Her collaborative work with her partner, James Nicholas, a Cree writer and actor, explores relationship with the land from the position of both indigenous Cree and Ukrainian settler culture. The symposium, Land, Relationship & Community, developed in conjunction with Sandra's exhibition, "How Far Back is Home", was held at Presentation House in Vancouver in 2001. The symposium proceedings were published as a small book of the same title. Sandra also collaborated with naturalist Charlie Russell in studying the relationship between grizzly and human cultures.

Celebration

Much has been said about celebration as a method of community building, engagement and healing. The next two projects represent arts/environmental science collaborations, which develop varied and innovative models of engaging communities in local issues with global resonance. These models are transferable to other communities, with minor adaptations.

⚙ Common Ground is an organization that for more than 20 years has focused on protecting local distinctiveness and therefore bioregion integrity. It is one of a number of long-lived and now well-supported organizations bringing together social and environmental justice. Common Ground does this through developing community-based initiatives that combine environmental science and the arts. One example of this is their Confluence project, which encouraged local communities to connect with and care for their part of the River Stour, through the creation of music for the river. Confluence also included performances of the compositions at communities along the watershed and a book of poems for the river. Their Parish Maps project has inspired community-mapping projects throughout the world.

A central and important feature of the work of Common Ground is their focus on the celebratory and on creating and reviving community rituals intimately connected to place and the other-than-human world. Common Ground also produces a number of publications. www.commonground.org.uk

⚙ Focused on creating celebratory works and events as methodologies of engagement with habitat and sustainability issues, Vancouver's SongBird project worked with the metaphor of songbirds, which are present in the stories of most cultures and are also indicator species for habitat stability. An ongoing collaboration among artists, the science-based Institute of Urban Ecology and other environmental and community organizations, SongBird focused attention on urban habitat and brought forward awareness of community as not only human, but as a relationship among many species and cultures dwelling together interdependently in a bioregion. SongBird included, among other events, the interdisciplinary Living City forums on habitat and sustainability, the annual Dawn Chorus celebration, and the SongBird Oratorio – a performance exploring interspecies communication. Urban based, and focused on urban communities as placing the largest demands on global systems, the aim was to ease into big issues in manageable and non-confrontational ways. Developed in 1997, and launched in 1998, SongBird ran programs and events until the autumn of 2002. www.songbirdproject.ca

Preservation

⚙ On the west coast of Canada, simply speaking the word “environmental” brings forward images of confrontation – the well known “war in the woods” being at the forefront of these. Uts'am/Witness is a 10-year collaboration among artists, ecologists, activists and the Squamish Nation intended to creatively deconstruct the conflict over a watershed located in traditional Squamish territory as it was being actively logged by a multinational corporation. The goal was no less than to bring all parties together through non-confrontational strategies, with the intention of preserving the watershed from the clear-cut logging. Every summer weekend for the past 10 years, a cavalcade of vehicles has driven up the logging road to

the heart of the watershed. The occupants come from the city to witness the land, the logging and to participate in ceremony, workshops and events. Successfully concluded with cessation of logging and the acknowledgement of Squamish title to the land, this summer will be the last for Uts'am/Witness. Uts'am/Witness was the first artist residency at the Roundhouse Arts and Community Centre in Vancouver and was funded primarily by the Squamish Nation. Work was undertaken largely on a volunteer basis, with artists and workshop leaders paid an honorarium. www.utsam-witness.ca

⚙ Now 18 years old, Boréal Art Nature, located on 100 acres of land in the boreal forest of Quebec, is the only Artist-Run Centre in Canada to focus explicitly on human/world relations through arts practices and residencies. In addition to its own 100 acres, Boréal has recently been granted a 20-year contract to manage and protect an additional 200 acre terrain adjoining their lands. They have been given this responsibility in the spirit of conservation and in light of the land being utilized for interdisciplinary art practices. To this end, Boréal will be collaborating with two forestry engineers, a biologist, an environmentalist and the local community.

Past projects include an invitational residency from the Hochuktlisat-h to work with their traditional and sacred land in British Columbia - the T'iitskin Pawaats, known as the Thunderbird's Nest. This ancient place was threatened by logging and has now been saved from destruction. Boréal Art Nature is primarily supported by the Conseil des arts et des lettres du Québec. www.artnature.org

⚙ Caribou Commons is a long-term collaboration among Northern artists, conservationists and the Gwich'in First Nation aiming to save the calving grounds of the Porcupine Caribou herd. The territory spans the political boundary of Canada and the US (Yukon/Alaska). Performance, film and music form part of the outreach and education aspects of the project, and Caribou Commons toured a multi-media performance in 1998. Recently, the U.S. government has announced its intention to develop oil deposits in the refuge which forms part of this sensitive region, so the work of Caribou Commons is far from over.

The project is funded primarily by national and international environmental foundations. www.cariboucommons.com

Bio-remedial

There are many sites devastated by natural resource exploitation. Habitat restoration of these regions falls to communities and local government, as industry has long since removed itself and its interests. There are a number of excellent EcoART collaborative bio-remedial projects in the U.S., two of which are Aviva Ramani's Ghost Nets and the Nine Mile Run project.

⚙ Aviva Rahmani initiated "Ghost Nets", a nine-year bio-remedial habitat restoration, by personally purchasing the town dump on Vinalhaven Island in 1990. In her own words, in 1994 she "hooked up with two scientists, bio-engineer/geologist Wendi Goldsmith, head of TBG, Salem MA and Dr Michele Dionne, biologist & head of research at Wells NERR, Wells ME, thru Annette Naegle, then at the Island Institute." She initially "wanted to quantify how much restored (salt marsh) wetland would produce how many fish, (in order) to convince the local fishermen of the value of restoring the site." At the end of the restoration, experimental data confirmed that "the restored marsh had all 18 indicator species." About the science collaboration: "I would work with them again in a blink and in fact, we tried several times to get funding for further projects but failed. The success, besides the beauty of the result, was that it was a model for several other projects I heard about." The Ghostnets website contains the whole story and more – it reflects Aviva's energy and passionate commitment to this work.

www.ghostnets.com

⚙ Nine Mile Run Greenway project is a long term and highly successful collaboration expressly designed to bring together the arts and sciences in post-industrial land reclamation – specifically, the Nine Mile Run watershed. Deeply committed to the belief that ecological concerns and the work of reclamation cannot be accomplished well by segregated and specialised disciplines, the creators of the project state their intention to "return to earlier methods of inquiry that flourished before the hardening of disciplinary boundaries." This and their other approaches to social and environmental concerns are thoroughly explored on their incredibly informative website.

"Reclamation projects involve inquiry and action that can occupy a roomful of disciplines. It is only through collective interdisciplinary inquiry and discourse that complex systems can be perceived. If we accept Joseph Kosuth's comments on quality; 'Quality is to be found in the artists thinking', then reclamation-art by its nature must free itself from the constraints of individualist practice. The 'art' becomes the work and process of the entire interdisciplinary team, the experience of the work is the experience of place." Studio for Creative Enquiry, the team working on Nine Mile Run

<http://slaggarden.cfa.cmu.edu>

Water

Water seems to be the focus of innumerable EcoART projects, organizations and interventions. This is no wonder, as water is so central to our communities and so necessary to our lives. Water – its quality and quantity, who has it and who does not, its commodification and its transport – is one of the biggest environmental and political issues of the 21st century. One project from Helix

Arts, *seen & unseen*, quotes an English proverb on its website: “we never know the worth of water, until the well is dry”. www.seen-unseen.com

✿ Keepers of the Waters is a non-profit organization founded by artist Betsy Damon in 1991 to address concerns over quality and availability. Keepers of the Waters develop and build collaborative water related model projects, including the massive Living Water Garden in Chengdu, China. “The 5.9-acre (2.4 ha) public park is located on the Fu and Nan rivers, an ancient river diversion system designed and constructed in 250 B.C. ... this international award winning park is a fully functioning water treatment plant, a giant sculpture in the shape of a fish (symbol of regeneration in Chinese culture), a living environmental education center, a refuge for wildlife and plants, and a wonderful place for people. Each day, 200 cubic meters of polluted river water move through the natural treatment system and emerge clean enough to drink.”

“Science is the base of information that people need to understand the issue; Art is the means of communication and inspiration; Community involvement brings in all those who wish to restore and preserve water quality. Blending these disciplines helps to make the natural process of water treatment both visible and integrated into daily life and culture.” [Source: Keepers of the Waters website]. www.keepersofthewaters.org

✿ Installed by the Don River in Toronto, Ontario, Noel Harding’s Elevated Wetlands are three large sculptural forms containing functional wetlands. Polluted river water is pumped by a solar powered pump to where it runs through the wetland, emerging clear on the other end. Several technologies were involved in this project including hydroponics, solar, plastics and more. The project embodies an instructive transparency of process. The EcoTECH hydroponics system was developed specifically for this work. The plastics industry expects that the project will fuel new EcoTechnologies for future industry use. The project/collaboration was funded by the plastics industry and a number of industrial sponsors. www.elevatedwetlands.com

Non-Human/Human Relations

✿ Canadian naturalist Charlie Russell and artist Maureen Enn’s collaboration with the grizzly of Kamchatka took place over 8 years. In 1997 Charlie and Maureen raised 3 orphaned grizzly cubs and reintroduced them to the wild. An intention was to study human/grizzly relations and Maureen Enns produced a related project on the grizzly’s sense of the aesthetic. The study ended tragically when on returning to Kamchatka after the winter for the 8th year, they discovered all the grizzly had been killed by hunters. The relationship between humans and other animals is a critical area of research and exploration. It has become clear through Charlie’s work that bear’s attitudes toward humans are shaped by our

attitudes toward them. Charlie Russell has lived and worked intimately with grizzly for more than 40 years. www.cloudline.org

✿ Brandon Ballengee's work – the Malformed Species project, Species Reclamation and more. Amphibians are disappearing at an alarming rate and many, while still around, are strangely mutated. Ballengee has a longheld fascination with marine biology and blends research with his practice as a visual artist. The work is eerie and documents what happens to rapidly adapting species when habitat shifts dramatically. Reptiles, like birds, are indicator species (canary in the coal mine) for habitat stability. Remember, we're animals too – we're all in this together. www.disk-o.com/malamp

✿ In March, 2006, a young researcher at MIT announced he had found a way to show what those who lived and worked with humpback whale had been saying for some time – that whalesong was structured communication, with complex syntax. This would be no surprise to Vancouver artist Lisa Walker, who for several years spent her summers on a boat up the northwest coast with a team researching the acoustic ecology of whales. A resulting project, Grooved Whale, a series of cross-species musical compositions, won a major award in 2002. www.groovedwhale.com

Acoustic Ecology

In the flurry of projects to reclaim land, waters and habitat, we often forget our auditory habitat. Vancouver based Hildegard Westerkamp is a pioneer in acoustic ecology. Through her work, she encourages us to do what we otherwise do not – listen, listen profoundly to the world. Andrea McCartney was transported by Westerkamp's *Cricket Voice*. The soundwalks that McCartney now produces create an audio presence of place. On her website, *Sounding Places with Hildegard Westerkamp*, McCartney includes a sound portrait of the area around Queen Elizabeth Park in Vancouver and more on the work of Westerkamp. www.emf.org/artists/mccartney00/index.html

“By focusing the ears' attention to details both familiar and foreign in the acoustic environment, Westerkamp draws attention to the inner, hidden spaces of the environment we inhabit.”

The Really Big issues

What the warming world needs now is art, sweet art... Where are the books? The poems? The plays? The goddamn operas?

Bill McKibbin, author of *The End of Nature*

Of all the concerns that might be addressed by arts and science, the biggest – almost incomprehensively big – is climate change. Its implications are vast and

global. How does one begin to tackle such an issue? At the root of global warming is, among other things, our insatiable thirst for oil...

⚙ London's Platform is high profile, overtly political and activist and takes on international issues. The organization bills itself as promoting social and ecological justice and as "...one of Europe's leading exponents of social practice art, combining the talents of artists, social scientists, activists and environmentalists to work across disciplines on issues of social and environmental justice" [Platform website] Highly visible and successful, Platform exemplifies interdisciplinary collaboration and embodies a research based informative practice which seeks to affect public awareness and government policy. A current project, 90% CRUDE, tracks the effects of the world's thirst for oil, its environmental and social impacts and the networks and practices of the corporations that control it. Platform is now, like Common Ground, more than 20 years old. www.platformlondon.org

⚙ Initiated by artist David Buckland, Cape Farewell is a high profile project bringing together artists and scientists on a journey to the arctic with the intention to spread awareness of climate change through education and the arts. Sailing through previously impassable channels, the Cape Farewell crew tracks the receding arctic ice in their passage. Such embodied experience makes sense of the science of climate change, bringing it into immediate and sharp focus. Cape Farewell is supported by a number of organizations, including the Arts Council of England, the British Council of Norway, Greenpeace and various foundations. The project is now 4 years old. www.capefarewell.com

⚙ Helix Arts in the UK has initiated a long-term EcoART project – *Climate Change Explorer*, set up as an interactive website where individuals can learn about and document climate change in their own community. www.helixarts.com
www.climatechangeexplorer.co.uk

Considering collaboration

The "art" becomes the work and process of the entire interdisciplinary team, the experience of the work is the experience of place.

Studio for Creative Enquiry

"Collaboration" means working together with one or more people to achieve something. The etymology of the word is "to labour together". When it comes to issues, concerns and problems as large and as complex as those taken on in EcoART practice, the only approach must be collaborative and interdisciplinary – indeed, most initiators of these works find themselves naturally in collaboration. Often, one of the best aspects of working together is the dawning awareness of the mutability and fuzziness of disciplinary boundaries.

In this diverse field of endeavour, connected by a love of our environing world and a passion for caring for it, collaboration can take many forms. At one end of an imaginary scale might be the boundary-dissolving approach taken in the Nine Mile Run project, while on the other end might be a museum commissioning an artist to develop a mural, or a photographer to document a habitat walk. When is and when is it not collaboration? Responses to this question as circulated by email varied a good deal. For most of the artists who responded, collaboration was open-ended, based on agreements among all parties and inherently involved an equal and respectful relationship, with clear and shared goals and intentions – a working side by side. This resonates fairly well with the etymology of the word.

Many environmental groups who responded were more prone to speak about collaboration in terms of, for example, having an artist in to do a website, a video, or a piece of theatre about the bog. This way of working, or approaching collaboration, more resembles a traditional commission to produce a specific product, rather than a situation where all stakes are equal and the process is one of examining a situation and together developing creative solutions. It was unclear whether the respondents were aware of the extent and variety of existent EcoART collaborative work.

Open discussion may be needed among disciplines about the nature of collaboration in this genre, what new configurations might be arrived at and how far traditional boundaries and limits might be stretched without great discomfort. The most important thing to remember in this context is that collaboration must not – and really cannot – be legislated any more than can cooperation. Terms of collaboration, or partnership, must remain mutable, fluid and to be defined anew each time, by each group. Most importantly, the terms of collaboration must not be dictated by funding bodies, but by the needs of the project and by consensus among those involved.

Funding and Collaboration

Because these projects are so long and complex, funding strategies must likewise be collaborative. Arts organizations in Canada, used to funding much shorter term projects, are not presently set-up to handle the needs of a major EcoART project or bio-remedial work. There is also the question, in both arts and environmental funding, of whether the form of the work is too marginal, or fringe, for the current system to support. No one funding organization can usually support or recognize the whole work within its guidelines, hence another reason for the diversity of funding sources for most EcoART projects.

The single most common issue voiced by artists and environmentalists alike was frustration and anxiety over funding. Often, crucial work is left incomplete, documentation is not done. Projects which are drastically underfunded will not be effective or model projects.

For many, funding arrives in bits here and there from widely diverse sources. Operating under these conditions requires a great investment of time and energy in multiple applications to multiple sources.

The diversity of funding model might work best when funders actively engage with one another and the subject project/organization in a collaborative process of their own designed to support the work, or project to a significant extent, if not, ideally, completely. This would remove some of the pressure on practitioners to engage in continual fundraising.

But all is not bleak in the world of funding, as there are signs of funding systems evolving to meet the needs of practitioners. Comprehensively funded projects and collaborations are in a position to accomplish a great deal. The RSA, in partnership with Arts Council England, has taken the visionary step of creating an Arts & Ecology program to support this crucial work and this program must stand as a model for those in other countries. As the largest consumers and polluters of the biosphere, it is fitting that countries in North America and the EU direct significant resources to creative and effective solutions. www.thersa.org/arts

In Conclusion

There is much concern among EcoART practitioners that in response to the world and critical concerns, "Art World Art" has become neutered and self-absorbed, fitting into the popular idea that art is a pastime possible only when our "real" needs are met – a commodity, an investment, tidily and comfortably existing for itself and to please audience and patrons. The lack of support from without the Art World for artists working in EcoART is largely due to the fact, as David Haley says, that "for the most part, art is not taken seriously - the Art World has much responsibility for this." This situation must be remedied, but it may be that the established and entrenched Art World must first step forward to re-enter and re-engage the world. That the work of EcoART practitioners is consistently marginalized, and primarily by the established, commodity driven, theory-bound Art World, indicates where the interests of that World lie. Many in the arts community perceive the established Art World as increasingly closed, turned in on itself and fiddling while the world burns.

The best work, it is said, always takes place at the margins, at the fringe. The current exhibition at Exit Art in New York, "The Drop" tackles global and local water issues. Exit Art believes this work to be of the greatest import and yet it is reported that the critics did not attend the opening.

It is difficult to express the importance of this work – it is comprehensive, its practitioners dedicated. It is often inspired. All of this is required at a time, as Suzi Gablik says, of global ecocrisis. Those who do this work arrive at it for different reasons, but primarily they do it out of love, passion and care for a world in crisis. We throw ourselves into saving the remaining non-human-world, as well as ourselves and the habitat we share. That so many dedicated, creative, curious and accomplished people should seek out one another to share their skills and the common ground of concern for an endangered world is both astonishing and humbling.

This work and those who do it ask us to think, to feel, and to begin the work of change both within ourselves and in our everyday acts in the world.

Celebration gives us hope and allows a way into frightening and confrontational issues. Knowing we can recover or protect one wetland, one creek, or one watershed gives us hope. Remembering our place within a world of others roots us.

If sustainability is to hold meaning, if it is to be more than the next popular term in a long list of ideas without action, then change – and change now – is exactly what is required. Artists, scientists, ecologists and activists, working together in a diversity of world engaged practices, just might manage that.

What is the language, the world, of stones? What is the language, the world, of birds? Of atoms? Of microbes? Of colours? Of air?

Jeanette Winterson, *Art Objects*

Consider again things that invoke feelings of beauty (music, poetry, painting, nature, mathematics, cosmology). They all have at least this in common: a structure (including texture and detail) that provokes and challenges specific parts of the mind: the parts that perceive and interpret, that make sense, that draw out meaning and pattern from initially random input, that creatively organize and make sense out of a chaotic universe. And this provocation occurs through an implied or explicit transformation, even if it is just a simple transformation of paint into an image, or a metaphor in a poem, or a melody from a sequence of sounds.

Daniel Conrad, *Aesthetics in Science and Art*

RECOMMENDED READING (also please see research bibliography)

- *Balance – Art and Nature*. Author John K. Grande
- *Ecovention: Current art to transform ecologies*. Co-published by: Contemporary Arts Centre, Cincinnati, ecoartspace and greenmuseum
Author/editor, Sue Spaid
- *Fragile Ecologies: Contemporary Artists' Interpretations and Solutions*.
Barbara Matilsky (currently out of print, but may be found used)
- *Islands in the Salish Sea: A community atlas*.
Sheila Harrington and Judi Stevenson, editors, The Land Trust Alliance of BC

ONLINE RESOURCES – please note that this list is not exhaustive.
A wealth of additional links are to be found on the websites of the online directories, networks and galleries listed below

Arts in Ecology Think-Tank Partners

- o Canada Council for the Arts www.canadacouncil.ca
- o RSA Arts & Ecology www.thersa.org/arts
- o Vancouver Foundation www.vancouverfoundation.bc.ca
- o Canadian Commission for UNESCO www.unesco.ca

Conferences, Galleries, Networks, Directories, Organizations, Publications

- o Art Culture Nature International <http://faculty.uwb.edu/kkochhar/ACN>
- o Arts & Healing Network www.artheals.org
- o Between Nature conference – ecology & performance
www.lancs.ac.uk/users/csec/betweennature
- o Community Arts Network – art & environment
<http://www.communityarts.net/archivefiles/environment/index.php>
- o Creative Communities, Vancouver www.creativecommunities.ca
- o DeLeon White Gallery <http://www.eco-art.com>
- o Desire Lines – Arts & Ecology at Dartington – a conference
<http://desirelines.org.uk>
- o EcoART Network www.ecoartnetwork.org
- o ECO-TECH InterChange (UK) think-tank on arts and ecotechnology
<http://www.futurephysical.org/pages/content/ecotechnology/nex.html>
- o The Ecologist magazine <http://www.theecologist.org/home.asp>
- o Environmental Art Net <http://www.environmentalart.net>
- o Fourth Door Research and Review <http://www.fourthdoor.co.uk>
- o Green Books (UK) www.greenbooks.co.uk
- o Green Museum <http://www.greenmuseum.org>
- o Green Pages <http://www.thegreenpages.ca>
- o Grist Magazine www.grist.org
- o Littoral (UK) <http://www.littoral.org.uk/HTML01>
- o New Society Publishers (BC) www.newsociety.com
- o ORION magazine – Culture & Nature www.oriononline.org

- Resurgence journal <http://www.resurgence.org>
- Roundhouse Community Arts & Recreation Centre, Vancouver www.roundhouse.ca

Environmental Organizations

- Arizona-Sonora Desert Museum & Art Institute www.desertmuseum.org/arts
- BC Environmental Fund www.efbc.ca
- BC Environmental Network www.ecobc.org
- B.E.S.T. www.best.bc.ca
- CIRS - Centre for Interactive Research on Sustainability (BC) <http://www.cirs.ubc.ca/index.php>
- Carbon Sense (UK) <http://www.carbonsense.org/premenu.htm>
- Clayoquot Biosphere Trust <http://www.clayoquotbiosphere.org>
- Council for Responsible Genetics (US) <http://www.gene-watch.org>
- Environment Canada – Greenlane www.ec.gc.ca
- Environmental Studies Assn of Canada www.thegreenpages.ca/esac/default.htm
- Eden Project (UK) <http://www.edenproject.com>
- Evergreen (Toronto/Vancouver) www.evergreen.ca
- Farm Folk City Folk (BC) www.ffcf.bc.ca
- Farmed and Dangerous www.farmedanddangerous.org
- Forum for the Future (UK) www.forumforthefuture.org.uk
- Greenpeace International <http://www.greenpeace.org/international>
- Institute of Urban Ecology (BC) www.douglas.bc.ca/community/urban-ecology
- Land Trust Alliance of BC www.landtrustalliance.bc.ca
- Living By Water (BC) <http://www.livingbywater.ca>
- Sierra Legal Defence Fund www.sierralegal.org
- Smart Growth BC www.smartgrowth.bc.ca
- Suzuki Foundation (BC) www.davidsuzuki.org
- Taiwanese Canadian Intercultural Green Club (BC) www.greenclub.bc.ca/default.htm
- Western Canada Wilderness Committee www.wildernesscommittee.org

Acoustic Ecology/Music/Audio

- Acoustic Ecology Institute <http://www.acousticecology.org/index.html>
- An Ear to the Earth, festival website: www.earthtotheearth.org
- EarthEar Environmental Sound Art www.earthhear.com
- Grooved Whale www.groovedwhale.com
- World Forum for Acoustic Ecology <http://interact.uoregon.edu/MediaLit/WFAE/home/index.html>

Theatre & Performance

- Ashden Directory (environmental theatre) www.ashdendirectory.org.uk

- Atlas Moves Watching – Shared Habitat (Toronto) <http://www.atlasmoveswatching.com/sharedhabitat02/index.html>
- Birdbrain Dance (US) www.birdbraindance.org
- Earth Matters on Stage <http://www.humboldt.edu/~emos>
- Enterchange: Performance and Nature (online gallery of Eco-Performance curated by Wallace Heim) <http://greenmuseum.org/c/enterchange>
- iLand – Interdisciplinary Laboratory for Art, Nature and Dance (US) www.ilandart.org
- Judith Marcuse – Earth www.worldurbanfestival.com/index.php
- Precipice Theatre (Alberta) www.today.net/precipice
- Welfare State International www.welfare-state.org

Projects/works/organizations

- artopie http://www.artopie.info/index.php?option=com_frontpage&Itemid=1
- Basia Irland <http://www.unm.edu/%7Ebasia/BIRLAND>
- Boréal Art Nature <http://www.artnature.org>
- Cape Farewell <http://www.capefarewell.com>
- Caribou Commons <http://cariboucommons.com>
- Climate Change Explorer <http://www.climatechangeexplorer.co.uk>
- Cloudberry Dreams international collaboration <http://www.hellefors.se/kommun/cloudberry/Index.htm>
- Common Ground <http://www.commonground.org.uk>
- D.I.R.T. studio <http://www.dirtstudio.com/dirtindex.htm>
- Earthfilms www.treesit.org
- Ecotecture <http://www.ecotecturecanada.org>
- EcoArtSpace www.ecoartspace.org
- Elevated Wetlands <http://www.elevatedwetlands.com>
- Ghostnets <http://www.ghostnets.com>
- Green Arts <http://www.greenarts.org>
- Heart of Reeds <http://www.heartofreeds.org.uk>
- Heartland All Species Project www.allspecies.org
- Helix Arts <http://www.helixarts.com>
- Islands in the Salish Sea <http://landtrustalliance.bc.ca/salishsea.html>
- Keepers of the Waters <http://www.keepersofthewaters.org>
- Lanternhouse International <http://lanternhouse.org>
- Living Prairie Museum www.livingprairie.ca
- Lynne Hull www.eco-art.org
- Nine Mile Run <http://slaggarden.cfa.cmu.edu>
- Planet In Focus – Toronto's International Environmental Film and Video Festival www.planetinfocus.org
- Platform <http://www.platformlondon.org>
- Projects in Holland – Landscape and Art - <http://www.jeroenvanwesten.nl/en>
- Public Dreams Society www.publicdreams.org
- site-sight <http://www.site-sight.demon.co.uk/main.html>

- Seen & Unseen <http://www.seen-unseen.com>
- SongBird www.songbirdproject.ca
- Studying Grizzly Bears in the Wild <http://www.cloudline.org>
- Travelling River
http://icm.landcareresearch.co.nz/science_themes/human-dimensions/arts_and_science_collaboration.htm
- Uts'am / Witness <http://www.utsam-witness.ca>

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