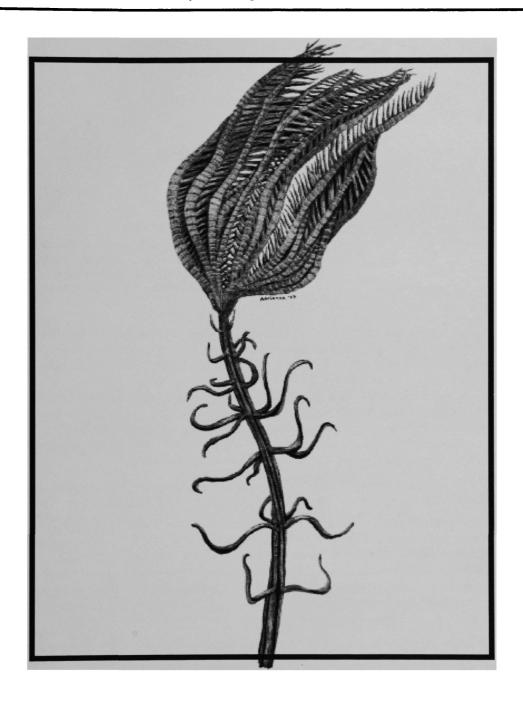
The Ecotone

Fall 2003 The University of Oregon Journal of Environmental Studies



They looked like plants but they were animals. And they lived on the bottom of the inland sea (that we could have been drowning in). Flower petal-like branches on stalks that were sometimes affixed to the sea bottom. Blowing in the windy current and bowing like trees. (From "Crinoids," inside cover)

Table of Contents	
OF FEATHERS AND FISH	
LEA GOODRICH	3
Environmental Studies Welcomes Two New Faculty	5
THE SPECIES PROBLEM AND INTERDEPENDENCE:	
COMPLEXLY TRYING TO SAY SOMETHING SIMPLE (OR VICE VERSA)	_
Adrianna Hirtler	6
Two Poems	
SEAN WILLAMS	10
CIDER	
Janet Fiskio	10
Poetry	
Lara Utman	11
Asphalt Healing	
Sarah Mazze	14
A Wandering Mind	
SEAN WILLIAMS	17
PATRICK HURLEY AWARDED UDALL FELLOWSHIP AND TONY Leiserowitz, PhD	19

cover illustration: ink on scratch board

Crinoids

By Adrianna Hirtler

EDITOR'S NOTE: In this issue of the Ecotone, we have brought together a compilation of creative and academic pieces that reflect the diversity and expansive scope of the Environmental Studies Program. We have also included short biographies of students in the graduate program along with a profile of our two newest faculty members. We hope you find inspiration, new knowledge, and an insight onto the current participants of the program.

The rippling smooth gorge rock bottom once teamed with life of another sort, but of course, this is just another romance. Walking there with bare feet, the rolling expanse of undulating stone the perfect complement to my arches and heels...another romance. Wet and yet again, like words whispering, then fading away, my footprints.

There where I walked, when I walked there, the fossils of crinoid stems were like drinking straw imprints in the rock. They were hardly like little eyeballs peering up out of the limestone at me. Yet now they look longingly from far away. I am looking too. Those gorges of the finger lakes in New York where my own toes have grasped like holdfasts, must be cast from those lake fingers like a spell by a sorceress. And within them, where the waterfalls lean away from glacially carved lakes, something looks out to me now in Oregon, on the other side of this body of land. Memories of times supposedly long past intertwined with memories of my own

brief and uprooted history? Layer upon layer I am sedimented in stories (and I sip some of the sludge as it settles).

I told other people about the crinoids. That they too once lived here. They looked like plants but they were animals. And they lived on the bottom of the inland sea (that we could have been drowning in). Flower petal-like branches on stalks that were sometimes affixed to the sea bottom. Blowing in the windy current and bowing like trees. Some of them sometimes moved very slowly and precariously to new places. But many of them stayed when the sediments settled. Layer after layer. Now their fossil footprints remain. Dead and long gone. Who else lived here who I will never meet? There, I mean...there's always a good deal of confusion when someone is looking back.

I thought that they were all gone, the crinoids. Extinct. Just romance. But then this summer I found one in a jar at the Oregon Institute of Marine Biology. The label didn't even say where it was from.

ECOTONE: A transition zone between two adjacent communities, such as a forest or grassland. It has some of the characteristics of each bordering community and often contains species not found in the overlapping communities. An ecotone may exist along a broad belt or in a small pocket, such as a forest clearing, where two local communities blend together. The influence of the two bordering communities is known as the edge effect. An ecotonal area often has a higher density of organisms and a greater number of species than are found in either flanking community.

The Ecotone

The Ecotone is published by the Environmental Studies Program at the University of Oregon. If you have questions or comments, or if you would like to placed on the mailing list, please contact us at:

The Ecotone

Environmental Studies Program 5223 University of Oregon Eugene, OR 97403

E-mail:

espress@oregon.uoregon.edu

Editors

Janet Fiskio
Adrianna Hirtler
Sarah Jaquette
Mary Larios
Sarah Mazze
Jo Rodgers
Mike Sims

Of Feathers and Fish

by Lea Goodrich

Lea Goodrich is an undergraduate student in Environmental Science at the University of Oregon. This essay was written for the class "Ecological Knowledges" taught by graduate students Janet Fiskio and Jo Rodgers.

It was hot, and in this way was an unusual day. The summer months in southeast Alaska are, overall, too wet and grey for my optimal state of mind. It must have been the second or third warm day in a row as the glacially fed, braided river above which we worked had been exploring alternate channels, broadening its horizons. Around noon, two hours or so before we would climb down from our trees and raft downriver toward town and home, I glanced down to the ground just below us - and I saw the fish.

What had been until recently a dry contour of silty glacial deposit had briefly filled with thick, cold water. Today the channel was rapidly drying again and had left a small pool, increasingly shallow and warm, isolated from the current. Within were two small salmon fry, possibly fingerling size. From my perch I watched them swim, apparently searching for the current by which I imagine they orient themselves, for cooler temperatures and more oxygen. Instinctually I thought of "rescuing" them, climbing down and picking them up, moving them to the flowing part of the river where they might survive. Since, however, climbing down from a tree-stand in brown bear country is no casual affair, and because I had responsibilities in fifteen minute intervals where I was, I had some time to assess my instinctual response.

Although I've been culturally immersed in the idea that the natural world is susceptible to human intervention, that we are "stewards" of the land, I've always been wary of the value judgments inherent in resource management. Who's to say that sheep are more important than wolves? That the life of one Himalayan Blackberry plant is expendable because the species originated elsewhere? That two small fish should live because I want them to? Because I relate to fish; that the importance and ubiquity of salmon to the northwest ecosystem really resonates with me, or even because I had gold-fish as pets as a child? Who's to say, essentially, that I know best, that because I am human I have the right to intervene in natural circumstances? Alright, so don't climb down and save the fish, Lea.

I don't believe I have the inherent right to intervene or exert my will in any particular circumstance because I am human, just as I don't believe what another of my employers that summer told me when we were talking about hiking alone in the presence of brown bears. "We're at the top of the food chain because we're smart, because we have guns. You know it, they know it, you just have to believe it." I don't though; I don't believe that intelligence out of context has much bearing on food chain placement – when it comes right down to it, I'm a slow, vulnerable, ill-adapted little creature for these parts,

and intellectual acuity or no you can't say the same thing for *Ursus horribilis*. But maybe I do have the *responsibility* to act. If I wouldn't watch a friend of mine drown below, how could I justify averting my eyes from the certain suffocation of these juvenile salmon *because* they are the 'other,' are part of this natural ecosystem more than I? Okay, so *do* climb down there Lea, and make it snappy!

In the end I realized, and accepted, the following. If I had not been in that particular tree at that particular time on that particular day, no one would have witnessed the plight of these two fish, save maybe the eagles I was there to observe, and they would have suffocated. Such is natural process; such is life and death and possibly the survival of the fittest. This scenario was not to be, however, because I was there, and I did see them. This being the case, I had already altered the reality of the moment, or rather, I was an integral part of the moment. Perhaps, for reasons undisclosed and undiscoverable to myself, by what I most comfortably call natural process, those fish wouldn't have found themselves in that predicament if I hadn't been there to see them. Just maybe. In this case it is my role, 'responsibility' in self-aware humanspeak, to intervene on their behalf. It would be in not doing so that I would deny my membership in the ecological community about which we have talked so extensively. I would thus relegate myself to the role of passive observer, rather than member, neighbor, rather than active participant.

That afternoon I struck a bargain with my conscience; the fish were still there and still trapped when I was done working, so I presented them with the opportunity to move to cooler, quicker water, which they took.

During the hours I spent sitting on that 4x6 platform the summer I was twenty-three, thinking about and eventually interacting with those two small fish was only one of many occasions on which I marveled at the complexity of the natural world. Sometimes I was so overwhelmed by sensory input that I was utterly unable to think of anything beyond what I was witnessing.

We routinely watched eagles fishing and fighting in and around the river below. I specifically remember watching a single adult consume more than half of a large salmon, mesmerized by the contrast; bright red fish upon dark and white feathers. When the bird momentarily interrupted its feast, that same mostly devoured salmon began flopping, maybe frantically and certainly fruitlessly beneath one incredibly strong yellow talon. Life and death; death for life, life from death. And sometimes I was struck by a single, subtle image, a catalyst for thought on the human tendency to, eventually, mimic the natural processes we are ultimately unable to outdo.

Sitting quietly one morning, a single small, downy feather floated down from the tree above and came to rest on

my leg. Looking at it closely, I was awed at the precision and perfection of the design. *Nothing* else could possibly keep this bird as warm or dry as this exact downy design. Or the lone, wiry wolf that materialized before our raft one day as we drifted slowly downstream, counting the eagles in the trees. One moment I was looking into the relative distance, the next this body appeared where I had seen only river cobble and brush. *Nothing* else could possibly camouflage this animal as well in this habitat as its exact coat. We can't hope to invent such designs, such colors, and we *shouldn't*, there is no need.

Many authors discuss the value of place-based knowing. Enrique Salmon describes the worldview of his native Raramuri people as one originating from their awareness of the natural processes which surround and sustain their culture. Wendell Berry argues in favor of contextual, specific knowledge of and about the place in and with which one lives, and cautions against the western push to universalize and displace our educations. Donna Haraway describes "situated knowledge" as a "faithful account" of the world, and speaks of the interaction between an observer and that which is observed, a blurring of the line between subject and object by which both employ agency, and as such are equals.

The experiences described above were, collectively, a crucial catalyst in my life, in that they reminded me that what is *real* is that which is *relevant*. They encouraged me, sometimes gently and sometimes with force, to rethink and reassess my place in the world, and the rights and responsibilities that I believe are inherent in awareness.

Knowledge out of context, as expressed by Berry, is knowledge that has lost its power. The same is true for people; without a sense of our physical homes, without a vivid awareness of the forces which nourish, sustain, and threaten us, we are not citizens but visitors. In this way, personally, I am working to validate my membership in the ecological community without which I would not, could not, exist. Perhaps through an internal partnership between the formal scientific education that I pursue through academia, and an ongoing pursuit of empirical knowledge based upon and originating in the place I love and in which I live, I can be what Mary O'Brien described to our seminar as a whole person. Only in this way can I foster a truly reciprocal relationship with this earth, this watershed, this immediate habitat: with my home.



ENVS Students Klamath Lake

Photo by Kate Fitzpatrick



Janet Fiskio First Year Doctoral Student in Environmental Science, Studies and Policy

I just recently moved upstairs to the phd office after completing an MA in ENVS here at UO. My focal department for my doctoral program is English, where I am completing the structured emphasis in literature

and the environment and participate in Mesa Verde, an interdisciplinary organization of graduate students and faculty dedicated to the study of literature, culture, and the environment. My focal areas in ENVS are philosophy and natural science. In addition to exploring literature and the environment in my studies, I spend time hiking throughout the Pacific Northwest and this summer encountered Orcas about 20 feet from my sea kayak in the Johnstone Strait off Vancouver Island.

Jo Rodgers, Master's Student Graduating in March (if all goes well)



One of the things that I most appreciate about the ENVS program is that it facilitates thinking and questioning in an interdisciplinary manner. This kind of integration and crossover is, in my opinion, a critical element to solving the complex environmental and social issues we face. For my master's project, I have been developing and

coordinating the efforts on campus to create a demonstration and research center at the UO called the Center for the Advancement of Sustainable Living (CASL). Its purpose is to encourage, inspire, and experiment with "sustainability" in our daily lives as well as to offer new opportunities for experiential learning, student leadership, and community partnerships. There has been a groundswell of support and interest both on and off campus (funding, however, is another matter) and the UO administration has committed a house for the project which we hope to have by spring. I have learned so much from this experience which I know I will draw from in my future work. The experience has also allowed me to balance the theories and concepts that I have learned in my coursework with this process of "ground-truthing" and action.

Environmental Studies Welcomes New Faculty "Completing the Set"

EDITOR'S NOTE: With the arrival of Ted Toadvine this Fall, the Environmental Studies Program now has a core faculty member in each of its three focal areas. Ted is our new Humanities professor, while Scott Bridgham, who joined us last Winter, is our new Natural Sciences Professor. They join Peter Walker, Social Sciences, who has been with us since 1998. We're all grateful they're here and look forward to increased interdisciplinary conversation within the Environmental Studies Program. Welcome, Ted and Scott!

Dr. Ted Toadvine

Dr. Scott Bridgham

As the new Environmental Humanities faculty member, Phi-Scott Bridgham joined the Environmental Studies program losophy professor Ted Toadvine rounds out the department's as the Natural Sciences faculty member in Winter 2003. He

interdisciplinary profile. Like Scott Bridgham, Ted was particularly drawn to the interdisciplinary nature of the department, and looks forward to further integrating humanities faculty and students with Environmental Studies. Ted co-edited a collection of essays entitled Eco-Phenomenology: Back to the Earth Itself with colleague Charles Brown, and taught environmental philosophy courses at Kalamazoo College and Emporia State University. Soon



also serves as an Asso-

ciate Professor for the Center for Ecology and Evolutionary Biology, where he works primarily with students in environmental ecology. After receiving his doctoral degree from the School of the Environment at Duke University, Scott was a biology professor at the University of Notre Dame. With an undergraduate degree in English and creative writing in addition to his biology background, Scott appreciates the links between fields emphasized

after earning his doctorate in philosophy from the University of Memphis, he realized that "the concept of nature was at the heart of the philosophical issues that had interested me to that point," including the nature of perception, knowledge of other people, and the foundations of scientific knowledge. Ted expects it to be both challenging and rewarding to continue illustrating the pertinence of philosophy to environmental inquiries to colleagues and students, and is excited about continuing to show that the field of philosophy is not as arcane as its reputation holds! This year Ted will be teaching Environmental Ethics and Eco-Phenomenology, and coteaching Introduction to Graduate Studies in Environmental Studies with Scott Bridgham. He is grateful to the students and colleagues in the program for making the transition to Eugene and the University so smooth, and says he "couldn't be happier" about joining the program.

by ENVS. Scott's research interests include wetland ecology and restoration, climate change, and plant community structure. In addition to these interests, Scott is committed to working directly with students both at the graduate and undergraduate levels. He looks forward to continuing to work closely with students on projects overlapping his research interests and to being involved in Environmental Studies program. He currently chairs the Environmental Studies Graduate Program Review Committee, which will be addressing issues such as how to accommodate students' academic and non-academic career goals, providing resource management skills as well as professional academic training, and implementing the department's vision of cross-campus cohesion and interdisciplinarity. Dr. Bridgham also enjoys writing and is an avid white-water kayaker. He is delighted to be living in Eugene in order to continue these pursuits.

The Species Problem and Interdependence: Complexly Trying to Say Something Simple (or Vice Versa)

Essay and Illustrations by Adrianna Hirtler

My species (comprised of over 6 billion constituents) is one of about 1.7 million "types" of organisms that have been named as species on earth to date (Expert Center for Taxonomic Identification (ETI) 2003). Scientists estimate that there are "really" anywhere between 5 million and 50 million species constituting the "biodiversity" of the earth (May 1988, cited in Van Dyke). It is so hard to know, not only logistically, having to communicate between the world's diversity of nations and languages (scant few of which even have words for 'biodiversity') or dealing with the difficulty of actually finding elusive species, but we don't even all agree upon what species are. Depending on what species concept you use, you may get wildly different estimates for world biodiversity...not to mention local biodiversity (down to the bacteria and viruses thriving in your body).

"Species" can be thought of as abstract entities or individual organisms...but they are more than that. Species concepts are human conceptions for naming something (as species) that we believe is really out there...life forms other than our own. Species concepts can be thought of as languages for expressing life as diversity and interdependence.

The "species problem" (the name given to a very interesting human puzzle that we have yet to solve) involves a debate over what species concept to use to name species. I am convinced that what we decide with respect to "species concepts" has implications for our ecological perspectives towards the world. While a unifying species concept is often sought, especially in the emerging field of conservation biology, ultimately such a concept might be more limiting than valuable to us if we are eventually to conceive of ecology as more than a sum of its biological parts. As an alternative to a universal perspective on species concepts, I will begin to explore a different "way of looking" hinted at by the eco-phenomenology of Maurice Merleau-Ponty and embodied in the philosophical concept of interdependence. I will also show why I think that this "way of looking" is very relevant to the interdisciplinary Environmental Studies Program from which I write.



The Species Problem

We think that we at least know for sure that a human being (*Homo sapien*) is not a common apple tree (*Malus pumila*). It seems that we *must* recognize this difference on a most fundamental level if we are to find food to eat and perpetuate in



Sea Lion (forelimb)

the world. Biologists act, in part at least, as an extension for my direct observations of this sort; venturing out to investigate the various dark corners and niches of the world (and ways to be in the world) that I do not come into direct contact with everyday since as a particular *Homo sapien* I am complexly involved with venturing out to and investigating my own niches (while I am eating and perpetuating in the world). It seems that a biological taxonomist,² in particular, acts as a specialist in our intuitive human/apple tree sort of naming to report back (to those of us doing a diversity of other things) about the diversity of life on earth. There's a point when it gets messy, though.

Since the 18th century, Western taxonomists have used the classification system of Carolus Linnaeus, where all living organisms are given binomial Latin names which ascribe them to "natural" categories of genera (e.g. *Homo*) and species (*sapien*). Linnaeus himself seems to have held that species and genera were "products of *nature*" while higher orders of classification (i.e. classes, orders and kingdoms) were products of human *art* and nature and lower orders of classification (i.e. varieties) were products of human *culture* (Stamos, 63-64). That is, Linnaeus recognized a nominalism of classes, orders, kingdoms and varieties while holding that there is something in the world that really independently exists to be found in genera and species.³

It is easy and convenient to agree intuitively with Linnaeus when we are dealing with humans and common apple trees, but gets quite a bit more complex when we are trying to name a symbiotic organism such as a lichen (species of which are made up of co-dependent species of algae and fungi living together) or are addressing the concept of serial endosymbiosis in which the very cells of our own bodies (particularly the mitochondria) are the modern descendants of once free-living bacteria. Species are often delineated in terms of potential for interbreeding among member organisms...how then should one classify asexual organisms?

Or what is one to do about the red wolf (Canis

rufus) which used to be prevalent in the American southeast, but by the late 1970's was almost extinct? Under the Endangered Species Act of 1973, millions of dollars are spent annually to maintain captive breeding populations and to attempt to re-introduce them into the wild (with little suitable habitat remaining) but under currently prevailing species concepts, some opponents point out that they don't even seem to constitute a "real" species (Stamos 309-311). According to the currently widely accepted biological species concept, "a biological species is the largest unit of a population in which genetic exchange is possible and that is genetically isolated from other such populations" (Campbell et al., 446). Red wolves, gray wolves, and domesticated dogs for that matter are known to interbreed (and sometimes share habitats). The bold and distinct lines that we would like to draw between species, in order to most accurately reflect the "reality" of the natural world, must often be blurred, dotted or overlap one another...which leads us to another dilemma. If we rigidly conceive of organisms only as life forms defined as species, how should we conceive of the Gaia hypothesis, put forward by James Lovelock and Lynn Margulis in the early 1970's, where the earth itself is conceived of as a single integrated self-regulating organism?

In light of Darwin's theory of evolution and the later Modern Synthesis (which reflect some new observations that we have made of the world since Linnaeus' time), such essentialist species concepts as we have mainly been using in the biological sciences leave little room for the process of evolution in which species change over time and in different environments through influences on and of populations of individual organisms. New species (with or without new species names) emerge and current species interbreed until the distinctive lines we draw between them evaporate like an ocean's horizon on a hot hazy day.

In reality, biologists often pick and choose amongst species concepts depending on what organisms they are considering and why they are considering them. A University of Oregon biologist told me that he would laugh if someone told him that all biologists were suddenly required to defer to a universal species concept. A meaningful discussion about implementing a universal species concept could end here...if it weren't for what seems to be a human-caused mass extinction that is underway. Not only does it indeed seem contextually important to name species (so that we can save them from ourselves4), but it seems that considering our global ecological situation, we seem to need some way to talk unify-ingly about the diversity of life on earth. "More and more it is being appreciated that the estimation of earth's biodiversity and the allocation of conservation resources rest largely on the [particular] concept of species that is used" (Stamos, 2).

David Stamos writes that the species problem is a huge, genuinely interdisciplinary and contentious problem that cannot hope to be solved unless biology and philosophy are taken equally seriously (Stamos, 6). Since species names are critical to speaking about ecological interaction, I would say that the problem of "species," furthermore, has eminent significance to our understanding of our *ecological* situation and that philosophy must be considered equally with *ecology* as well as with biology. What *could* be particularly philosophically insightful to ecology and the species problem as we face it right now is the concept of "interdependence."

The Concept of Interdependence

In both early Eastern and early Western traditions of philosophical speculation, a similar "essentialism" (to that which I am addressing in the species problem) held sway. Out of these arose the traditions of Mâdhyamika (the Middle Way) in Buddhism and more recently the negative dialectics of the Continental tradition in the West (Stamos, 1, Liberman 1991, 273). In each of these traditions, respectively, similar ideas of "interdependence" arose coming from the works of Nagarjuna and Hegel.⁶ According to the concept of interdependence, "entities are produced in dependence upon causes and conditions." More subtly, entities arise through reliance on their parts (does this sound similar to the concept of endosymbiosis or the Gaia hypothesis?). And most subtly, entities "arise only in, and as, the ensemble of the internal relations of their conceptualization" (Liberman 1996, 188). Can this concept be useful to the species problem and ecological thinking? I think that it can.

"More than just empirical or conceptual [...] the species problem is a hybrid of both" (Stamos, 6). David Stamos writes that the modern species problem maps onto the traditional metaphysical problem of universals and we have already seen glimpses of how the "essential" characterization of species through naming can be both problematic and stifling to critical ecological thinking. The concept of interdependence is much more "ecological" in the sense that metaphysically it represents something more like what ecology is supposed to physically be about.

In his discussion of the species problem, David Stamos likens species concept diversity to species diversity and hints at how both might be important (Stamos, 353-355). But then he shies away from this idea saying essentially that it is not fair to make this analogy because it is contradictory that "cherishing species diversity presupposes species realism while cherishing species concept diversity presupposes species nominalism" (Stamos, 355).

The concept of interdependence and its correspond-

ing philosophical traditions can be of value to the species problem by providing a philosophical infrastructure to our logic that could permit that contradiction. Through the very nature of *interdependence*, species are both metaphysical constructs and *simultaneously* real physical entities. In his discussion of how to solve the species problem, Stamos reaffirms a dualism between nominalism and realism (mind and matter; subject and object) that might not be unrelated to why we currently find ourselves in the ecological and philosophical predicament that we are in, in the first place.

Interdependence is a concept through which such hindering dualisms can begin to be re-imagined. Tsong Khapa writes of *interdependence* that "the recognition of functional efficacy and the realization of emptiness" must be "cognized simultaneously" (Tsong Khapa).

Oren Lyons of the Ho-de-no-sau-ne (Iroquois) people writes of the mandate to relate to the welfare and well-being of the seventh generation in any decisions made by the Ho-de-no-sau-ne council of elders (Lyons, 173). This might be an example of something similar to the concept of interdependence functioning in a culture less familiar to most of us; recognizing the "functional efficacy" of what we do (the decisions that we have the power to make right here and now) and simultaneously the "emptiness" of our own "independent" existence (our true existence includes how our own ancestors partially determined who we are today as well as how we will determine many things for those who will come in seven generations). Different species too are interdependent with one another and also interdependent through time (it is through time that species themselves evidently diverge and converge).

Some Examples of *Interdependence* and the Inadequacy of a Universal Species Concept

1. Ecological interaction does not respect borders. This is coming to be recognized more and more (on a certain scale, at least) through such developments as watershed councils in the Pacific Northwest⁸ and international co-operations to address global warming.⁹ It is only the human species that seems to (for the most part) respect political borders but even in this realm, walls have been coming down and it is usually at least recognized that the world might be a more harmonious place (ecologically and socially) if there were more open dialectic between different cultures.¹⁰ But should the world become one big melting pot? Could we ever have a harmonic (rather than hegemonic) dialectic between cultures? Probably not if we maintain ways of thinking that support dualisms that force us to choose between harmony and hegemony.

On a certain scale we are coming to recognize a

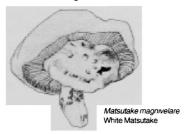
necessity for intercultural dialogue, but yet we are still colonizing, and being colonized by dominant paradigms...a dialogue where one side doesn't listen...Darwin's survival of the fittest? But nature doesn't really work that way. If as human beings we prove ourselves to be "fittest" (as we seem to be trying to do) and we out-compete all other species, we are coming to recognize that we will then have out-competed ourselves as well. Our "essence" as a species is interdependent. A universal species concept, likewise, seems to be unable to avoid similar "essentialist" and squelching implications.

David Stamos cites Mishler and Donoghue as saying that "it seems clear that the group of organisms on which one specializes [referring to biologists] strongly influences the view of 'species' that one develops (Mishler and Donoghue 1982, as cited in Stamos, 353). It seems that diversity of species concepts is indeed linked to diversity of species. If we have to choose just one species concept to apply everywhere, in addition to the many (squelching) implications that such a realization implies, how do we address the fact that as human beings we are but one species among many? Being curious about ourselves (as we should be) do we favor a species concept such that through it we might best be able to consider human beings, but not necessarily slime molds? Or do we leave ourselves out of the picture all together and assume that ecologically what we need to understand is "out there" in "nature" and apart from us...and still never get away from the fact that whatever species concept we choose will favor certain organisms and ecological relationships over others? If species concepts provide the languages of biology and ecology, do we really want to promote one universal language (don't different languages allow for a diversity of valuable ways of thinking about the world)?

2. Ecological interrogation should not respect borders. Speaking from within an Environmental Studies graduate program that is truly interdisciplinary,11 I find it extremely valuable to have the opportunity to explore ways in which there can be dialectic between various disciplines and ecological inquiry. For example, the ways in which biology and ecology have already been discussed to be critically interdependent with philosophy. Not to mention geography, anthropology, political science, literature, psychology, public planning and policy, etc. Yet the Environmental Studies program is not taken as seriously as the "real" departments at this university are (and I imagine that the case is similar elsewhere in truly interdisciplinary programs). Certainly we would get more funding if we were more clearly "disciplined" and defined. We could also probably get more funding if we were recognized for having a more strictly "hard"

science approach to ecological inquiry as seems to be the current dominant (squelching?) paradigm. Maybe we could even move out of the basement where our offices are to our own building where we could sequester ourselves like a true "discipline" should, and "really" focus on ecological issues.

My environmental studies program example is meant to demonstrate a way in which rigid "speciation" (disciplination) from the outside can limit ecological interrogation, but is the case so dissimilar from the inside? Species concepts structure the languages of biology and ecology. In The Visible and the Invisible, Merleau-Ponty writes that language "cuts the continuous tissue that joins us vitally to the things [such as the other than human world] and to the past and is installed between ourselves and that tissue like a screen" (Merleau-Ponty 1968). By the very act of naming species, are we inhibiting ourselves from ever truly understanding species and especially their ecological nature? What Merleau-Ponty seems to hint at, however, is not that we should attempt to avoid language all together. Since language is indeed our Homo sapien medium for inquiry, identity, and perhaps awareness itself, what maybe we need is to conceive of language as itself being a life! In light of this, a universal species concept doesn't seem like it would quite suffice (could life on earth continue to exist pared down to just one species, even a "superior" one?). Interdependence is more than an interaction of parts.



What Would a Consciousness of *Interdependence* Look Like?

If we talk about species concepts as providing languages for biology and ecology, we must not forget that they will likely continue to emerge as *scientific* languages. Do we (could we ever) have any other languages to express biodiversity on a global scale (is it really necessary to express biodiversity on a global scale)? Theoretically (and ideally), scientists go out (or *in*), observe, and report back to humanity on "everything" in nature that through present language and technology they are able to humanly perceive and express...details of a *life-world* that we cannot be personally/individually aware of all at once. Then interpreters of all sorts use this to make stories that all of us incorporate into our lives (at least this is one way to look at it). Additionally, we use these observations (and the stories!) as made through time, to come to better understand life/nature as

valuable in and for itself. Science helps us to recognize value in nature by extending our experience (albeit in a very particular way¹²). Science can extend our experience in its particular way, but it also should not be forgotten that many other endeavors can extend our experience in different ways than science can...to discover things that science *cannot*.

While science in its most noble forms is a valuable constituent of humanity, it must be kept in perspective and not be allowed to run away with itself (lest in presupposing that things are the way we name them, we lose sight of what they dynamically truly "are" in their *interdependence* and strip ourselves of all agency within that *interdependence*). (Perhaps we also need to question the species categories of "scientists," "philosophers," "artists," ... etc.) It seems that scientists really need a *diversity* of languages (rather than an over-arching universal one) as well as gobs of creativity if they are ever going to be able to conceive of the world as dynamic (and *interdependent*) as it truly exists.

Here's a great niche for an eco-phenomenology¹⁴ such as hinted at by Maurice Merleau-Ponty — eco-phenomenology as a philosophical endoskeleton for conscious interdependent existence in the world. An eco-phenomenology can offer to ecological inquiry a way to think beyond dualisms (e.g. nominalism vs. realism) that have led to dead ends in our thinking (as demonstrated in the species problem). Another serious hindrance to ecological inquiry has been the current dominant basis of Western thinking in "essentialist" philosophy. Phenomenology, on the other hand, is not about finding an origin in God, humans, or nature; attempts at which converge in a myth of total explication of the world (and this myth no longer sustains fruitful research in our time) (Merleau-Ponty, 274). Such a myth does not take into consideration our insertion into being. Merleau-Ponty's concept of the flesh of the world¹⁵ is a way to think about interdependence out in the "real world;" a world that we experience directly in our individual (and social) lives (and where we make decisions that affect other species and the earth)...as well as through science, art,...etc. Perhaps this can translate into a more ecological ecology.

So how would this *look* in the "real world?" Yrjö Haila and Peter Taylor speak of the work of Richard Levins¹⁶ as suggesting some possibilities (96-100). They propose the idea of a "postclassical ecology"¹⁷ as an alternative to a "classical" view of ecology where "[e]cology is interactions that make wonderful nature films, but which can ultimately be understood on other grounds" (96).¹⁸ Two key themes within Haila and Taylor's postclassical ecology seem to be

1. a recognition that the "ecological theatre" is "a complex of partially interacting dynamic processes" and that "the

Continued on page 12

Two poems

by Sean Williams

1.

woke up Big Smoke Valley
smell of sage, Toiyabe Range
Big granite, like Sierra – snow on top
November cold – frost on bottom.
Steam from springs on valley floor
(normal fault – magma deep – coming up! heats the water)
a little green in the sage
from the first winter rain
yellow dead grass
Alpenglow
Toiyabe Range
blue sky

2.

Driving south – fast! global warming coming.
Goin' climbin' – J Tree! down from wet rain dark Eugene through basins and ranges
No watersheds here! funny little valleys stuck in hydrologic limbo they don't belong to any river, won't come home to any ocean, left all alone out here,
Where Turtle Island's pulling apart.
Even at 80 mph the desert speaks,
Great Basin sliding by.



Henry Mountains, Utah

10

Photo by Mike Sims

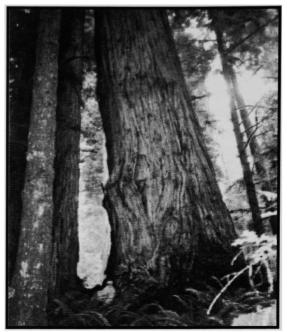


Photo by Jo Rodgers

Cider by Janet Fiskio

In this orchard, this October, all the blossoms have become apples.

Once my Arabian horse escaped and spent all day sampling the windfalls turning to cider under the trees.

He came back at twilight, dapple grey and glimmering, the barn smelled of the last hay cutting, he swayed down the aisle drunk and blissful.

I reach for an apple, dig my feet into the green nitrogen of the year's rain and sun. The pippin snaps in my mouth, and I run my tongue along the edge. And now

I feel the same sharp delight, selecting the words for this poem, this moment when the solid stuff of my life becomes thought, reflects light.

Two poems

by Lara Utman

Poem #1

Dustbones

Are you olden than time itself?
The cells in your body
The electricity in your brain.
Walking in your bones on the dust,
Your bones made of the dust you walk upon.
When you think inside yourself
Of that still place you go to,
The one that made you wide and whole,
Do you remember that the stillness
Exists now, created before time?
When you forget time, you remember
That time is your youngest cousin,
That your bodycells electricbrain dustbones
Stillnessyou is older than time itself.

Poem #2

Leaving your world for mine, travelling,
I found my heart deep within the loss of time;
Far from my thoughts I found my mind;
Holding your flesh in my hands I began
To understand EarthMother's roots, dirt, dust, soil,
I buried you with my bare feet out of my boots, in the ground.

Roots pulled, left wondering, we lay apart.
Our navels pressed against the evening dirt.
Rolling onto our backs and over one another,
We left soft tracks of human love in the dust.
When stars approached our eyes from the midnight sky,
We slept on each other's bare bones in the warm soil.

When desert sun blossomed over the mountain's convex shoulder,

Our distance to the edge of it had shrunk; likewise, Our space away from alone had lessened quietly. Met connected by dusk, stars, rising sun, We leaving left no impact on our EarthMother, And a shared world became our being mind.



Photo by Mike Sims

Lara Utman, graduating Master's student (took two years and a fall term)



As I finish up my work in the Environmental Studies
Program, I remember how much I've expected to come away with, and how much I have been able to learn and grow as a participant. My work has remained within the realm of cross-disciplinary dialogue, and I've focused that on Biology/ Ecology, Social/Political Ecology of sorts, and Philosophy. For my thesis I

developed the concept of how participation links individuals to their communities, weaving a web within the whole of more-than-human life. This participation happens in our bodies, leading me towards what you could name an "embodied ecosophy."

The work focused on its own use of language for each section, and brought in concepts from system theory in order to show how living systems organize and participate on their own. I wanted readers to participate in the reading with the thesis, creating their own living system and coming away from the piece subtly altered, with pinwheels in their eyes, saying, "Participating, embodied, I webbing..." Yes, laugh, and then have a look!

I wouldn't say that the Environmental Studies Program *did* a whole bunch to get me to this place, but without it I wouldn't have had any coursework, no funding, and no time or academic engagement by which to synthesize my observations. So the program invited me into a web in which I could participate instead of fitting into another box that turns out degree holders. Now that the academic work is over, the real fun begins: seeing it being the world!

...Continued from page 9

question, what is unified with what, does not have any simple answer any more"

2. the ecologist is part of the environment he/she tries to understand" (97).

Both of these themes reek strongly of the concept of *inter*dependence. Richard Levins seems to have pursued problems that fit into this notion of postclassical ecology in his intellectual work. Not only did he play a role in developing seminal ideas on ecological complexity beginning in the late 1960's, but as Haila and Taylor point out, "an integral element in the Levinsian view of ecological complexity is not to accept any distinction between ecological and social factors" (98).

Arthur McEvoy, in his consideration of ecology and law in the decline of California fisheries between 1850 and 1980, also takes a sort of eco-social approach to his particular sort of historical ecological inquiry. Through his concept of "collective ecological identity," it became possible for him to integrate a consideration of social factors surrounding law and ethnic identity into his consideration of an ecological system that essentially collapsed. He writes that "Anglo-Saxon fishers ... had a collective ecological identity no less than the salmon did" (73).

A final example that I will give of what a more "ecological ecology" might look like is the movement/philosophy of deep ecology as initiated by Arne Naess.

Deep ecology is an attempt to "deeply" reconsider human existence in the world as more eco-centric. In other words, to redefine humanity as interdependent with the diversity of other life forms and the unity of life itself and to subsequently make all practical decisions accordingly.

Against a Declaration of Interdependence

There are some serious complications that arise in going from where we are now to a consciousness of interdependence. An interstate highway cannot be built to take us where we are going. That is, we must feel our ways through the landscape to get there...because we are already here, on "earth," right where we need to be (in order to "be"). Likewise, while a consciousness of interdependence is crucial, it also is not the essence of being. As soon as we label it as such, it ceases to be dynamic and alive as a concept that a consideration of can help us to more dynamically and vivaciously approach our dynamic and vivacious ecological situation. Through phenomenological consideration, it becomes very clear that a "Universal Law of Interdependence" would not be a step in the right direction.

Of all the perceived problems that we face in our collective lives, I think that the species problem is an important one to consider (though not the only one) because how we address it (or don't address it) determines, in part, how we interact with the life-world. "Species" (prescribed by a diversity of species concepts) are the vocabularies of our languages (some of our languages) for expressing life other than our own (which our own lives are utterly intertwined with). The "physical" (such as addressed by "ecology") and the "metaphysical" (such as addressed by "philosophy") realities of the world have been treated as separate species for too long when they are utterly and wholly dependent upon



one another. For the most part, in trying to deal with global ecological issues, we are still hoping/striving for a unifying species concept (so that we can finally more easily address pressing environmental concerns) while maybe it would be worthwhile to begin to take steps towards truly recognizing the interdependent nature of things; a truer ecology. If we could just open our eyes wider (in wonder?), maybe we would have an easier time seeing beyond our concepts of Homo sapiens and Malus pumilas, and begin to recognize better just where in the *life-world* we are.

- 1 This idea is discussed further by Yrjö Haila and Peter Taylor.
- ² Taxonomists are also called "systemetists" and are "the ones" who name and classify species
- 'Though Stamos indicates that Linnaeus may have come to change his ideas to a certain degree over time (particularly about what level of category he considered "natural"), he always seems to have ascribed to a species essentialism in some form.
- See, for example, Kevin McCann's 'The Diversity-Stability Debate' for a discussion of the importance of biodiversity for ecological systems.
- I will use the term "interdependence" here for what has also been referred to by many other names including "interconnectedly dependent being," "mutual dependence," and "reciprocal dependence."
- As in Nagarjuna's pratity as a mutpâda, and Hegel's "reciprocal determination" (or contradiction)
- Liberman discusses this in greater detail (1996).
- Carolyn Merchant, for example, writes that "the subject-object and attendant dualities of mainstream Western thought entail a philosophy of domination. Because an active controlling subject is separate from and dominant over a passive controlled object, the scientific rationale of objectivity can legitimate control over whatever has been assigned by culture to a lower place in the "natural" order of things. It thus maintains a hierarchical domination of subject over object, male over female, and culture over nature (p. 61). See also Martin Heidegger, 'The Question Concerning Technology.'

 * Particularly to address the effects of instream, riparian and upland human activities on anadromous
- salmon species in the wake of the Endangered Species Act.
- Such as the Kyoto Protocol of 1992.
- The idea of different cultures and different races can be argued to be nominal as well, yet there still exists (simultaneously) in the world, differences between people, places and ideas that lead to wars (as well as to creative synthesis of ideas and friendship).
- 11 We have only three core faculty members who focus on the natural sciences, social sciences and humanities, but are also shared with the Biology, Geography and Philosophy departments respectively. In addition to taking classes that are officially offered by the department, graduate students take classes in any and all departments which offer classes that might give insight to their particular interrogations...and they are generally very well received by faculty who are sometimes equally interested in bringing more of an ecological perspective into their own disciplines.
- See, for example, Heiddeger, 'The Question Concerning Technology'
 See, for example, Heiddeger, 'The Age of the World Picture.'
- Interested in learning more about eco-phenomenology? Ted Toadvine, our new ENVS Humanities professor and the very philosopher who coined this term, will be offering a seminar course on ecophenomenology this Winter.
- See Merleau-Ponty's discussion of flesh.
- 16 Like species, Levins is also not easily categorized. In his faculty profile as John Rock Professor of Population Sciences in the Department of Population and International Health at Harvard, Levins is

described as "an ex-tropical farmer turned ecologist, biomathematician and philosopher of science whose central intellectual concern has been the understanding and influencing of processes in complex system both abstractly and as applied to evolutionary ecology, economic development, agriculture and health," Levins.

As developing on the idea of the "postclassical" theory of Herrnstein Smith and Plotnitsky (1995) who they cite in their article.

A great example of "classical" ecology can be found to be presented in many introductory ecology texts such as Smith and Smith's *Elements of Ecology* in which the first three sections of chapter one are entitled respectively. "Ecology is a *science*," "The major *unit* of ecology is the ecosystem," and "Ecosystem components form a *hierarchy*." p. 3, emphasis added.

References

Campbell, N., Reece, J., & Mitchell, L.: 1999, Biology - Fifth Edition, Benjamin/Cummings, an imprint of Addison Wesley Longman, Inc., Menlo Park, CA, pp. 446-450.

Expert Center for Taxonomic Identification (ETI): 2003. World Biodiversity Database (WBD), http:// www.ct.uv.a.ni/Database/WBD.html. accessed June 2, 2003.
Haila, Y. & Taylor, P.: 2001. 'The Philosophical Dullness of Classical Ecology, and a Levinsian

Alternative, in Biology and Philosophy 16: 93-102.

Heidegger, M.: 1977, 'The Question Concerning Technology,' & 'The Age of the World Picture,' in The Question Concerning Technology and Other Essays, transl. by William Lovitt, Harper Colonhon Books, New York

Husserl, E.: 1970, 'Clarification of the Origin of...Physicalist Objectivism,' from Section 10 of Crisis of the European Sciences and Transcendental Phenomenology, Northwestern University Press, Evanston, pp. 21-53.

Husserl, E.: 1973, 'Exact Knowledge and the Recovery of the Life-world,' from Section 10 of Experience and Judgment, Northwestern University Press, Evanston, pp. 41-46

Kohák, E.: 1997, 'Varieties of Ecological Experience,' in Environmental Ethics 19: 153-171

Levins, R.: 2003, Faculty profile at http://www.hsph.harvard.edu/facres/lvns.html, accessed June 1, 2003. Liberman, K., 1996, 'Negative Dialectics in Mâdhyamika and the Continental Tradition,' in Ninian Smart and B. Srinivasa Murthy, East-West Encounters in Philosophy and Religion, Long Beach Publications, Long Beach, pp. 185-202

Liberman, K.: 1991, 'Racism and Essentialism: Some Buddhist Reasoning Regarding Racial Prejudice,' in New Ouest 89: 273-276.

Lyons, O.: 1980, 'An Iroquois Perspective,' in American Indian Environments, Syracuse University Press, Syracuse. New York, 171-174.

McCann, K.: 2000, 'The Diversity-Stability Debate,' in Nature 405: 228-233.

McEvoy, A.: 1986, The Fisherman's Problem Ecology and Law in the California Fisheries, 1850-1980. Cambridge University Press, Cambridge

Merchant, C.: 1996, Earthcare, Routledge, New York.

Merleau-Ponty, M.: 1968, The Visible and the Invisible, Northwestern University Press, Evanston, Illinois. Naess. A.: 1989. Ecology. Community and Lifestyle. Cambridge University Press. Cambridge, UK

Rojas, M.: 1991, 'The Species Problem and Conservation: What are We Protecting?,' in Readings from 'Conservation Biology': To Preserve Biodiversity - An Overview,' Ed. by D. Ehrenfeld, 1995. Blackwell Science. Inc. and The Society for Conservation Biology. Hanover, Pennsylvania.

Smith, R.L. & Smith, T.M.: 1988. Elements of Ecology, Addison Wesley Longman, Inc., Menlo Park. California.

Stamos, D.: 2003, The Species Problem: Biological Species, Ontology, and the Metaphysics of Biology, Lexington Books, Lanham, Maryland.

Tsong Khapa: 14th Century, 'Three Principal Aspects of the Path,' Lam gyi gtso bo mam gsum gyi rtsa ba, transl. by K. Liberman, four stanzas lent by K. Liberman

Van Dyke, F.: 2003, Conservation Biology: Foundations, Concepts, Applications, McGraw Hill, New York.



Adrianna Hirtler, Second Year Master's student

I started this program with a strong but vague interest in how the stories we tell (through media, history, literature...etc.) influence our perceptions of nature and thereby ourenvironmental ethics. I was also really interested in the subject of place. Currently I am working on a thesis about perceptions of place-based "nature" on Mount Hood National Forest. I did a number of interviews with National Forest employees on Mount Hood this summer and plan to also do interviews with visitors to the forest and local residents. My hope is to reveal some of the richness and

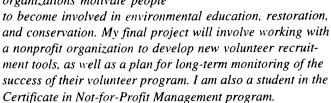
diversity of experience in a particular place and to suggest through some more theoretical discussion (with place-based examples) why such place-based and experiential considerations are important to public land management. I'd also like to explore ways in which such considerations can effectively be made as well as how they might be integrated into manage-



Mary Larios, **Second Year** Master's Student

I'm a second-vear master's student interested in issues of community conservation. Specifically, I want to explore how nonprofit

organizations motivate people



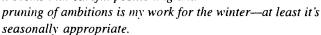


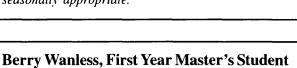
Krzysztof Sakrejda, First Year Master's Student

I was born and reared amongst physicists, and I continued to learn as a natural scientist throughout my undergraduate education—it's a wonderful tradition. However the language I find there for dealing with the roots of environmental issues is

weak and conflicted. In the last few years I've looked for this language and I've found many gems in unlikely places: works by David Harvey, Marx, W.E.B. DuBois, Said's 'Orientalism', Sandra Harding, and many others. They are fantastic authors with lives filled with a form of honesty that warms my heart. If I could tell every story

these authors touch on I would but it seems that careful positioning and





My interest lies primarily in stream restoration, with emphases

on fish habitat restoration and stream ecology dynamics. I

would like to explore the value of stream restoration as well as the successes and failures in the field. I plan to use this summer to get an internship involved with stream restoration and conduct research for my thesis.



Asphalt Healing

by Sarah Mazze

I jog towards a fork in the path. The air burns my lungs as I suck in mouthful after greedy mouthful. I pound the pavement that unwinds its unforgiving spool through grassy hills studded with California oaks, crowned with a radiotelescope dish the size of a house.

Clouds gather in the distance, but the sideways morning light warms my bare arms and legs. With guilt, I allow the sunshine to heal me. I've rushed south from the winter rains of Oregon to say goodbye. I should not enjoy any of it.

Before me, a narrow road scars the foothills Bay Area residents know as The Dish. The area makes up one fragment of the remaining five percent of California's original grasslands. To my right, a sign warns me to stay on the paved road rather than trample the green stubble of native grasses masking a familiar path. The trail winds down a gully to a frayed rope swing hanging from the limb of a gnarled oak. If I were to swing out over the hill, my stomach would sink with vertigo, the hillside falling as I rose. Clearing the trees below, the entire Bay Area would open in shades of green, gray, and brown, trees scattered with houses that give way to houses scattered with trees. On clear summer days, tawny foothills across the valley allude to the mountains beyond.

I resent the restriction the sign imposes. I cannot grasp what destruction I've wreaked over the years by wandering into spring's tall grasses sprayed with white, pink, and yellow wildflowers. My only crime consists of lying on my back tracing patterns in the clouds or watching particles of dust crashing through our atmosphere as they ignite into flames.

It's not easy to release what we love.



Barely a month before, at thanksgiving, my grandfather stuns me with his frailness and his strength. His chest heaving with the exertion of mere breath, he places a skeletal hand on my arm, all the softness of his body eaten by two years of cancer. I warm my back by the fire as he murmurs to me, "I'm so tired of this, Sarah. All I can do is sleep. I don't have the energy to live anymore." He keeps his voice low so the rest of the family can ignore this truth for tonight.

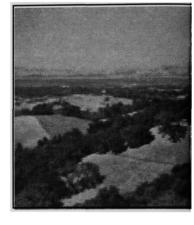
At all of our urgings and by sheer will, he has surpassed a three month death sentence to hold on for one more birthday, anniversary, visit from family, whatever else we ask for. We ask him to suffer to preclude our suffering.

At the table, my grandfather nods for me to pass out a prayer he typed on his computer and copied for us all. I read the words that he could muster the strength to compose, but not to read. We give for our time together and for his survival; and for all the victims and families of the recent 9-11 tragedy, we must lend our thoughts to peace.

I follow the pavement, breathing in my solitude, exhaling

my sorrow. Running above the city, I am out of reach.

To enter the Dish just after dawn, I cross through a new gate that separates urban from wild. A police officer greets me. "You're the first one here." Years before the chain-link fence, I sneaked out on solitary walks to explore the paths that once spread their dusty fingers over the creases and curves of this sanctuary. Now, a ribbon of asphalt extends from the road up



into the folds of the earth in an attempt to erase those untidy lines.

As I run, I long to disappear into the less exposed area to the south. Tucked beyond the drainage hides a tree house in miniature and the oak I fell from heeding advice to "let gravity be your friend." I laughed, scraped and safely on the ground, free from the tree I did not have the skill to climb down from.

The explanations of restoration deter me from seeking seclusion. With my high school class, I planted seedlings wrapped in lacy pink plastic. Deer, a creature I rarely saw in the hills, had eaten too many other young oaks to leave nature alone to heal itself. At that time, meditation on the wound evaded me.

I never thought to fear the bobcats rumored to live next door, barely believing in their existence. I never grasped that my presence amongst the unseen thousands of visitors drove those predators away from this sanctuary that they needed more than I ever have.

Barely an hour later, I sit alone by my grandfather's side. The hospice calls minutes after I return to my parent's house, warning us that he doesn't have much time. My father and I speed to the hospital, where he leaves me for "just a minute" to distribute holiday gifts to friends working in the building. My grandfather's daughters and wife have not yet arrived.

I glance away from the unresponsive body before me. My grandfather has not been present for at least two days now. Morphine takes away his pain and his ability to accept our love and sorrow. Behind me, a window the width of the room lets in what little light a rare storm allows through the clouds.

The rain begins as my grandfather's breath becomes more labored. I stroke the smooth skin of his hand. Tears run silently down my cheeks. I wish that my father would return.

The breathing stops. A dagger of lightening shatters the sky.

Maurice opens his eyes, restored to their original blue sharpness, his entire face his own again. He rises from his pillow to look straight through me. He shines with a vision of all the beauty and hardship of his life and an energy no longer his. Then he sees me, and I am his wife, fulfilling her prom-



Sarah Mazze, early years ise to be by his side at this moment of release. We have lost our age and enjoy the prime of our happiness together.

Each time I go home, I return to the Dish. I follow the asphalt path. It's not that I've lost the desire to wander into these open hills, alone with the sky, but I sacrifice for their rejuvenation.

Two years later, my grandparents visit my dreams together, younger than I've ever known them. "Sorry for the unfortunate circumstances," my grandfather apologizes, always the gentleman. My grandmother looks away, distracted or uncomfortable. She doesn't belong in the world of dreams, but I know she longs to join him there.

When she is ready to leave us, I will only hold her gently.



Sarah Mazze, First Year Master's Student

Already, in my first term of school, I have been forced to re-evaluate what exactly I mean by "environmental education" and where exactly my interest within that subject lies. I have discovered that one aspect of environmental education

that intrigues me may include a stretching of the term to include environmental reporting and writing. Concurrently, and because it is a field that does much strong work that I believe in, I am working on my certificate in Not-For-Profit Management. Things seem to change by the minute.



Kate Darby, First Year Master's Student

I began this program with a strong technical background and an equally strong desire to develop my interests and skills in

social science-focused environmental studies issues. After living in an urban area for a couple of years, I began realizing the potential for sustainability within an urban context. The experience also opened my eyes to urban social inequities, which invariably lead to environmental inequities and ecological degradation. While at UO, I would like to merge these interests by examining ways to create sustainable urban development, engage previously "untapped" social and ethnic groups, and simultaneously build social and environmental capacity.

Mark Neff, First Year Master's Student

I am planning to study biogeography, ecosystem ecology, fire policy, and the link between science and policy. I am thinking of using the 1988 Yellowstone fire as a case study because of the intense scientific and public interest in that fire. Most of my work will be with the biology, geography, and PPPM departments.



Sol Hart, First Year Master's Student



Born and raised in Eugene, I am returning to the great northwest from a 5 year stint in California to further my studies on how motivation, persuasion theory, and risk perception can be applied to the environmental movement. I am currently working with Paul Slovic of Decision Research to undertake a local pilot study investigating how the public perceives the risk of lead poisoning.

Beyond the halls of academia, I can be found trekking through wilderness, performing in local dance clubs as a member of the Salseros salsa performance dance group and pursuing my ventures in landscape photography. In addition, I am also an avid recreational cyclist and get out whenever I can.

Chris Jones, First Year Master's Student

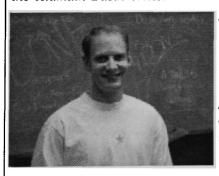
I have been working in computing support for eight years, and while I enjoy it, I have a feeling I am

going to be ready for a career change in a few years. I started the Master's program this fall and plan to take one or two classes at a time while continuing to work full-time. My primary environmental studies interest is in river restoration, specifically in reconnecting rivers to their historic floodplains.



Daniel Hurley, Second year Master's student

I entered the program with a background in Environmental Engineering which focused mainly on fixing environmental problems after they happen. This seemed like a very backwards way of approaching environmental problems, so I sought knowledge to help me understand why environmental problems arise and what might be done to preempt them. Unlike the Bush strategy of preemption, my strategy attempts to be interdisciplinary, prudently planned, and factually grounded. I took a handful of environmental sociology/philosophy classes to gain insight on the influences behind environmental behaviors, I took a handful of planning classes to see how proper planning might alleviate environmental pressures, and I took several water science classes to further my understanding of the role of science in water conflict issues. As for my thesis, I've decided to tackle the grand-daddy of water conflict issues here in Oregon: the Klamath Basin crisis. I'm still working on the



precise angle to take on this, but right now I am planning to explore the relationship between political ecology and changes in hydrology.



Sarah Jaquette, First Year Doctoral Student (Focal Department, English)

Kathryn Moore, Joint Master's/Law Student in Second Year

I am in the second year of a four-year MS/JD program. This year I am digging in to my first-year law studies. My life is full of legal theories and principles—very different from my previous coursework in environmental studies! Last year my studies focused on forest policy and collaborative natural resource management. After I make it through this year I hope to continue studying land use law and environmental conflict resolution.

Kate Fitzpatrick, Third Year Master's Student

I am currently finishing up a thesis on community-based ecosystem management in national forest planning in two case studies here in Oregon. In general I find myself drawn to the intersection of social and environmental issues. I also find myself drawn to large forests.



Kimberly Muxlow, Joint Master's/Law Student in Final Year

My interests lie in the study of law and in land conservation for wildlife habitat. I had the amazing opportunity to coteach a 411 course with Patrick Hurley last Spring term entitled "Private Land Conservation." And, I spent last summer working diligently on and interviewing for my thesis. My thesis investigates the use of conservation easements by land trusts in Oregon for protection of wildlife habitat. Specifically, I am looking at whether (and how) easements are used to fulfill strategic conservation planning goals.

I plan to graduate from the Master's program in Winter and from law school in May. In addition, my husband and I are looking forward to having a child in May.

A Wandering Mind

by Sean Williams

On a morning walk today, under a cloudless blue sky with frost on the ground and cold in the air, I saw a pine tree. A pine tree usually calls for a double take, because you don't see them that often around here. It seems that the southern Willamette Valley is just barely dry enough for them, so that they're usually crowded out by Douglas-firs and Western hemlocks. A little farther north, they disappear entirely, except for the shore lodgepoles along the coast. So the occasional glimpse of those long hedgehog needles usually calls up, for me, thoughts of ecotones and the situated peculiarity of our place here, between the rainforest coast and sunny California.

But this particular ponderosa elicited more than a double take. I had been walking attentively, watching the early morning light play on the tops of the trees while shadow remained below, letting the cold air and the dawn light and the birdsong wash over me and nudge my thoughts where they would. So perhaps my stream of thought (as William James would put it – if you don't like this little essay, blame it on Mark Johnson for making me read too much of James) anticipated a sudden cascade of memory and visceral, bodily, carnal emotion.

This pine tree. Then suddenly, and all at once,

Camp in the forests of the Sierra eastside after several days climbing higher in the alpine. Hikes on Mt. Baldy northeast of L.A. The volcano-forest-desert country north of Mt. Shasta, around Lava Beds and Medicine Mountain. The granite and glaciers of the Palisades seen through pine needles, the weight of a pack and an aborted Sierra ice route.

Not just these images, but the entire bodily *feeling* of that place and that time, the smell, cold, tiredness, love, bright rockiness of the Sierra, the weight of my own future and past balanced around each of those moments, the vast surge of my anticipation and openness and the confusing heaviness of disappointment. All at the same time, not one after another but all heaped on top of each other, thick and tangible and wildly open in each direction. All connected and *real*, today in Eugene, Oregon, through *me and that pine tree*.

It must have been as much the crisp, sub-freezing air, the frost under a cloudless blue sky, and the magical morning light as the pine tree itself. All of these were bodily, sensory reminders of my carnal memories from two, three, four years ago. For it was a feeling of my whole body, the whole synaesthetic moment of my body and that place.

And again, a few steps later, from cold air – blue sky – early morning – pine tree and from the strong smell of someone's wood stove,

Rough stone buildings and a roaring river. Machapuchare and the Annapurna Himal high above, in the way that a thing is HIGH in a world more vertical than horizontal. Steaming chiyaa (sweet milk tea), dalbhaat (rice and lentils) eaten with fingers. The goodwill and halting Nepali of American friends, and the brown, sun-baked beautiful Hindu/Tibetan faces, and equally bad Nepali, of the Gurung people who live around there.

All at once, and calling up the whole wash and flow of five mind-bending months in Nepal. That moment and Machapuchare, and then the whole time, all sensual. All this from a pine tree, a wood stove, and a cold morning on Spring Boulevard.

These are (perhaps unfairly) unusual and intense examples of the wandering of my mind. It moves out there in the world, and back into myself, called in different directions by a pine tree, the lines of a text, or the sub-conscious enormity of my own past. Wandering, by foot or by mind or both, the stream of thought goes where it will, turned and formed by my sensory encounters and my prior thoughts. Reading a book I follow the author's thoughts with only an occasional nudge from my conscious will. Writing, I wait, aware and reflective, until the word or sentence jumps from *somewhere* to my hand almost without the intervention of consciousness. Only occasionally do I remind myself to stay on task or decide what "I" will do next.

And so, I wonder, who exactly is in control here? Just who is this *I* or *me* whose welfare and course of life I'm supposed to be so worried about? If no one is making the decisions and my thoughts wander on their own, with nothing more than the occasional nudge from any rule-making executive body, then why do I feel like I'm so important to myself? What's all this hullaballoo that I keep reading about the dichotomy between Self and Other, the problem of individualism in our society, or the definition, location, and description of the Self? Who the hell is this *I* anyway, and what useful work does he do?

It seems that the rational, responsible, decision-making Self, phenomenologically at least, makes only an occasional appearance. The rest of the time, the stream of thought is flowing along quite peacefully with no one at the tiller, pulled

along by the sensual world, pushed by the sub-conscious, borne up by the body. It seems that I owe as much to the Sierra, the Himalaya, and that pine tree and frost here in Eugene for these musings as I do to my own intelligence or creative thinking. Indeed this very tangible product, this essay itself, comes as much from them as from me.

And, if my stream of thought or the stuff of my experience meanders after the callings of the world and my own past, and only forms itself up into the monolith of Self for occasional practical convenience, then where is the boundary between me and that world? *Is* there a meaningful boundary, or only an occasional and fuzzy line of theoretical convenience and cultural habit?

Chaone Mallory, Ph.D. Candidate (focal department: Philosophy)



As I enter my fifth year at the University of Oregon, I realize how wonderful the ESSP (Environmental Science, Studies, and Policy) program is for folks like myself who want to combine

their interests in a variety of fields and areas, develop these interests in a way that's useful and applicable to environmental thought and activism, and of course, earn a degree! I am in the process of writing a dissertation called "Subject to the Laws of Nature: Ecofeminism, Representation, and the Politics of Subjectivity" which brings together the disciplines of philosophy, feminism, environmental studies, and law. Through focusing on questions of political representation, political subjectivity, and political inclusion for women, communities of color, and the natural world, I am exploring ways in which ecofeminist theory can contribute to transforming legal practices that marginalize the interests of socially subordinated groups. A strong interest for me involves analyzing and constructing connections between academic theory and activist practice. I recently traveled to Belarus, which was formerly part of the Soviet Union, to participate in an international environmental conference where I got to relay for an international audience how it is that forest activists in the Pacific Northwest are addressing problems of sexism, racism, and homophobia, within their communities and the larger society while concomitantly working to defend native old-growth forests.

Mike Sims, Third Year Master's Student

I grew up rambling (as they say in Texas) the Piney Woods and bayous of East Texas and Western Louisiana. After graduating from Texas A&M University with a degree in business and outdoor leadership, I spent about two years living out of my truck climbing and



working for wilderness and outdoor programs in Utah, Montana, and Texas. I finally found a home in Red Lodge, Montana and for eight years taught wilderness skills and expeditionary dynamics for Outward Bound in the Greater Yellowstone Ecosystem. Before coming to UO I completed post-baccalaureate studies in English composition and teaching from the University of Montana in Missoula. Currently, I'm working on my thesis titled Self-Reliance as Activism, a collection of essays that explores self-reliance as learned from genuine experience in realms of our lives that are often overlooked, such as work and the domestic arts. Self-reliant individuals can be change agents that influence and complement human and natural communities in ways that promote compassion, humility, patience, light-living, and decrease the need for a lifestyle that is inherently destructive to the communities we call home. I am getting married in the summer to Heather and plan to live in Eugene with our basset hound, Suzie, and our two cats, Sasquatch and McKenzie.

Ian Moise, 3rd year Master's student

I started the program with interests in cross-cultural issues, consumption, natural resources, and sustainable development. I am finishing this quarter, having completed my thesis titled: "Sustainable Development and Economic Cultures: Does Individualism Undermine Ecology and Society?" I used surveys to look at social and ecological sustainability as a function of resource

allocation patterns in Zambia and the US. I found that both types of sustainability are improved by increasing social capital, i.e. investing resources communally rather than individualistically. To this point, sustainable development has focused mostly on increased material well being. With this project, I hoped to outline some ways that social and ecological well being could be operationalized.



PATRICK AWARDED UDALL FELLOWSHIP

Patrick Hurley (MS 2001), Doctoral Student (focal department Geography), was awarded a Fellowship from the Morris K. Udall Excellence in National Environmental Policy Foundation for the final year of his dissertation work. The Foundation awards these prestigious fellowships to promising scholars in the areas of environmental public policy and environmental conflict resolution whose work has significance for national environmental public policy. The Foundation specifically seeks out scholars whose research and experience are interdisciplinary.

Patrick's work examines land-use policy-making and decision making processes in Nevada County, California, a rural community that is being impacted by "exurbanization" or what is often referred to as "rural sprawl." Looking into the changing social context of this exurban area, typical of many across the country, he questions the influence of these changes on county government and the efforts toward formulating policies aimed at ecological management. Thus, Patrick's work focuses on the politics of land use and the concrete application of land use policy to ecological and social problems. His work weaves together issues of ecological science, planning processes, and stakeholders' interpretations of the landscape, offering insights into the success and failure of environmental policy initiatives, and information on the social dynamics that impact environmental planning.

Patrick's dissertation research grows out of his masters thesis, which also examined environmental problems and planning solutions in a rural area of Oregon. Although that work examined practical solutions to growth in Wasco County, it raised important questions in his mind about the politics of pursuing such efforts. This questioning led him to choose Peter Walker, with whom his dissertation interests overlap. Peter's current research examines the changing social and political landscape of Nevada County through a First World Political Ecology framework. While Peter's work focuses on landowner's perceptions of nature, how they use their land, and general attitudes about government control, Patrick's work complements this theoretical investigation by focusing on how land use planning and particular policies intersects with the politics that Peter's research illuminates.

Patrick writes:

This summer I called up an informant for a follow-up interview. Before he said yes, he asked me whether I had my swim trunks with me and proceeded to tell me that he would only agree to give me an interview on the way to the Yuba River and back. "If I wanted to understand why some people care so much about the place, then I needed to experience the South Yuba on its terms..." Three hours later, I was swimming in one of the most beautiful rivers I have ever seen—among huge boulders and watching dragonflies skim the top of a pool just above a small waterfall.... So much for the humdrum of field work. Whenever I'm transcribing and it gets a bit tedious, I think back to that day (and others) and it keeps me going."

OUR VERY FIRST ENVS PhD

Congratulations, Tony!!!



Tony and Toby

Tony Leiserowitz, PhD successfully defended his dissertation this November, entitled "Global warming in the American mind: The roles of affect, imagery and worldviews in risk perception, policy preferences and behavior."

Natural scientists warn that global climate change is a risk with devastating consequences for human societies and natural ecosystems around the world. Meeting this challenge will require a concerted national and international effort to dramatically reduce anthropogenic greenhouse gas emissions. It will also, however, require public support for leaders and government mitigation policies, as well as committed action by individual citizens and consumers.

Tony's dissertation examined whether the American public perceives global warming as a real threat, supports public mitigation policies, and/or has initiated individual actions to mitigate climate change. It found that measures of affect, imagery and cultural worldviews predict perceived risk, policy preferences, and individual behaviors. Finally, it used affective image analysis to identify several distinct "interpretive communities" within the American public.

The data comes from three surveys: a national public survey completed in February, 2003 (n=673); a statewide public survey (Oregon) completed in February, 2001 (n=900); and a survey of student activists at the 2000 World Climate Conference (COP6) in The Hague, Netherlands (n=112).

Tony's research results describe an American public with broad concern about global warming, strong bipartisan support for international treaties and mitigation policies, and strong opposition to higher energy or gasoline prices to reduce greenhouse gas emissions. Relatively few Americans have undertaken individual mitigation behaviors. While global warming does have negative connotations for most Americans, the thoughts and images evoked by this term primarily reflect impacts temporally and spatially distant from most people's lives. Critically, this research also finds that Americans do not currently associate global warming with any impacts on human health. Overall, these results suggest that American public opinion about global warming is at a critical turning point. Americans are aware and concerned about global climate change and predisposed to support political leaders and mitigation policies across party lines. Global warming is not a national priority, however, and Americans have yet to confront the tradeoffs that will ultimately be required.

Future plans:

Tony has accepted a position as a research scientist at Decision Research, a non-profit research institute located here in Eugene. He will maintain his ties with the U of O and the Environmental Studies Program as an Adjunct Professor, teaching occasional courses and working with students interested in environmental risk perception.



UNIVERSITY OF OREGON

Environmental Studies Program

5223 University of Oregon, Eugene OR 97403-5223

Nonprofit
Organization
U.S. Postage
PAID
Eugene OR
Permit No. 63