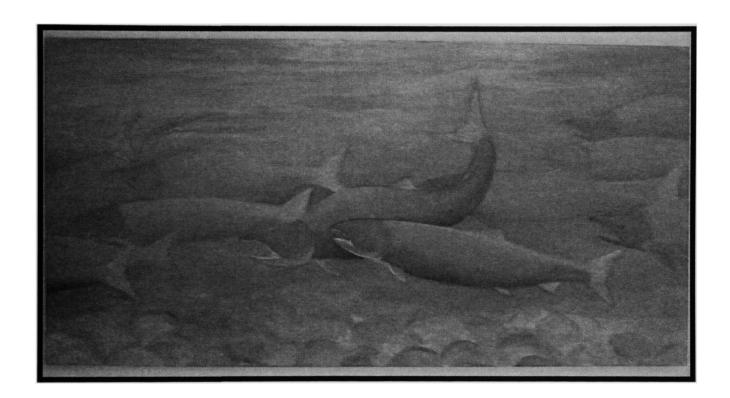
# THE ECOTONE

Winter 2002, Journal of Environmental Studies, University of Oregon



MIGRATION

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ECOTONE: A transition zone between two adjacent ecological communities, such as forest and 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 on each other 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.

### **EDITORS' NOTE**

This issue's theme of "migration" reflects students' journeys through ecotones, bioregions and human communities. These migrations lead them back to study and reflect transformed by their experiences. Pieces in this issue also reveal the ways our program and its alumni are moving out into the world, offering service and visions of environmental sustainability to our local and global communities.

### COVER IMAGE CREDIT

Sockeye Run (oil on canvas) by Dan Hurley

"I developed this painting as an expression of my yearning to return back to Oregon in the way an adult salmon yearns to return to its native stream."

### THE ECOTONE

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

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#### **EDITORS**

Kerry Case Janet Fiskio Mike Sims



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# Moonrise Over Mindo: Ecuador, Summer 2002 by Lara Utman

Moonrise, Mindo Biology Station

Ecuadorian fireflies, lightning bugs, bits of magic on wings, Unnumbered cicadas, crickets, whirring in the thick jungle evening, Smoothly the full moon glows itself into being, quite grand, Showing off the clouds, buff white against the night sky.

In the old stone fireplace the mama bird sits,

Warming her young, then flies to feed, Then sits again.

At the station the species human feeds, and Talking, knits its social web whole, Then sleeps in rough wooden bunks.

Under the moonrise, we dream of the morning, When we all hope to name a new thing.

082602 – Mindo Biology Station, 6000 feet Western Andes cloud forest, Ecuador

Monday, early sunshine, RAIN all afternoon. This morning I woke up at 4:30 am to hike by moonlight for an hour to observe the Cock of the Rock lek. A lek is an area that birds use for their mating display, where males compete for a single female, in the case of the Cock of the Rock. Males arrived in the trees above our heads, starting about 5:45 am. We lay nearly vertically on a steep hillside, with our feet wedged against trees to keep us from slowly sliding down the slope we had just clawed ourselves up in the black of the jungle. We could hear the birds calling through the pre-dawn from a long way off, and they flew into the lek from all around the valley. They settled at all levels in the branches, and continued calling to each other. As the sun rose behind

PHOTOGRAPHS BY RUDY DIETZ



our heads I found myself literally surrounded by nearly fifty males, sitting in pairs and small groups, moving to music I couldn't hear, dancing a dance I'd never learned. The male birds are a deep crimson orange with a puff head that looks like the crown on a rooster, and striking black tracings around their eyes and on their wings. Their eyes are round and surprised looking, and as they do their dance they wait for a single female to choose one of the dominant males for her day of mating. Tomorrow another female will come and choose, and afterwards lay her eggs, hatch them, and raise the young without the males. The performance is incredible, one of the most amazing things I've even seen in my life. As the light grows strong and the female makes her selection, all of us lay quietly waiting in shock for the males to disperse. Hiking back home for breakfast I think about how many ways exist for living, and how little we ever see.

### Tiputini River

Ahora nueve de la noche:
Juvenile tapirs in the Rio Tiputini
Owls like tree stumps on the ends of branches
Two foot caiman, grinning stilly at the boat's edge
Boat-billed heron, night-eyes shining, white-grey feathers
The stars, all blues and whites and oranges.
And the Milky Way unimpeded by the lights of Los Angeles.
Bats in bunches decide to join us for the ride back home
Tossing their small furry bodies over the river for dinner insects.

083102 – Tiputini Biology Station, sea level and lower, Eastern Ecuador Amazon basin

It's very wet here, but not too hot if you're sitting quite still. Morning walk beautiful. Saw so many cosas, all alive and different. Not so many bugs here as in Mindo. Long day traveling to arrive here – bus, plane, boat, ranchero, canoe. Brought in most of our food and all of our stuff; I am suddenly in the middle of a new sort of nomadic adventure. Now I am sitting on the long porch or our dormitorio, listening to the jungle afternoon thunder far away and the insects all around invisible in the dense trees.

### 090202

Tonight I helped Jill set up the bat nets for her evening's work in the jungles by the bend in the river. It's Sunday, I think, and I'm sitting on the banks of the Tiputini (tributary of the Amazon). watching its mud-brown water stream and swirl by me. The sunset arrives from up the river, orange and pink and rococo clouds thick, one on another above me. I'm on the deck, hoping to stay dry and without ants/bugs bites or stings. I can hear the jungle (la selva) world all around me and I'm attempting to digest the fact that I am IN South America, IN the depths of so much life, six hours from contact with anyone not in the jungle.

On our walk this morning the rain came on heavily, twice. Our teacher, Mirar, cut us bifurcated palm leaves to use for umbrellas. This worked well for keeping my core merely damp, and now my extremities are drying slowly in the humid afternoon heat. I wonder if it might rain again, for the



wind is up a bit and I see clouds dark to the southeast. Today someone mentioned a Redwood tree and I began to cry in the jungle. luckily it was pouring at the time and my caiman tears fit right in with my surroundings.

#### 090802

This is our final full day at TBS. It's been sunny and beautiful and HOT of course, and I've been out swimming in the river before the afternoon rains. I keep my feet off of the bottom and don't stay still for long, because the sting rays, caiman, piranha, and electric eels scare me, even though they don't typically go for humans. After the swim I went to check on my communal spider experiment before dinner, one last round of observations on the group of red-orange arachnids that I have come to enjoy observing. When it pours they huddle together under the leaves they build their tent-like webs around. The smallest spiders in the middle with

the medium workers and large warriors clumped where they fit, so that they don't get pelted with the hard jungle rains. I get pelted today, as I squelch back to the dining platform in my rubber boots in time for a last meal of fried plantains, yupi (aka: kool-aid, they love it over there!), and their specialty of rice and barbecued protein – believe it or not, the vegetarians get fried gluten steaks out here! I go to sleep with the jungle noise loud around me and the coming sound of a final shower before I am dreaming of missing the canoe out of here at 4:30 am.

111102 – University of Oregon, 500 feet, Willamette Valley, Eugene, Oregon

I have been back in the United States for seven weeks since my trip to Ecuador. I dream of the jungle several times a week – the deep and diverse greens, the

in front of the entire mixed Ecuadorian assembly. They spoke of being embarrassed that people from our country want to hurt ecosystems, cultures and peoples alike in our hunger for more oil.

I wonder, like many of us wonder, why our policies continue to reflect our actions, why our actions haven't changed more drastically to support strong communities and healthier ecosystems. In the jungle I felt as though I was "right-sized" in my relationship with other living organisms. I am small, and just one person, but in this country I reflect the lives of many worldwide, as all of us do. In the mornings I ride my bike through the streets of our city, poised at the 44<sup>th</sup> latitude, and look southwest at the dark clouds gathering there. I think of both the comfort and the fear I felt looking southeast on the equator seeing the dark afternoon clouds gathering on the horizon, knowing the hard rains were approaching. Like the



hundreds of plants and insects I never learned the names of, the sounds and varieties of humidity, the animals and of hiking and hiking through the trails of mud and more green. Recently I heard from a classmate here that in Quito a protest occurred concerning the oil pipeline they continue to plow through the jungle. Several U.S. citizens stood up against a fellow citizen and also against the pipeline,

hard afternoon rains of the jungle, our choices fall hard on the earth of the Americas, but unlike the rains, we have choices about how hard and where we will fall.

LARA UTMAN IS A MASTERS STUDENT IN ENVIRONMENTAL STUDIES AT THE UNIVERSITY OF OREGON.

SHE TRAVELED TO ECUADOR WITH THE NEOTROPICAL ECOLOGY SEMINAR OFFERED BY THE DEPARTMENT OF BIOLOGY AND THE CENTER FOR ECOLOGY AND EVOLUTIONARY BIOLOGY.

# REFLECTIONS ON ECOTONES, OR, AM I AN ECOTONE? BY SEAN WILLIAMS

"Ecotone" is a wonderful word. It rolls off the tongue and into the mind in a way that makes one's eco-intellectual sensibilities just quiver with delight. It's an ambiguous word; one knows it carries a rigid scientific definition, but "-tone" gives it flexibility, shiftiness, a tenuousness of the moment, a way of dancing just outside of our reach. A tone should be part of a harmony, but it's a harmony one can never quite grasp.

I've been thinking a bit about ecotones lately,

partly because I've moved across and between them quite a lot this past summer. Of course one moves across ecotones all the time - I'm sure I pass a few going from my house to school. But they're hard to notice in town, with pavement and houses and planted trees and grass to confuse me. Perhaps I'm

NEAR FROZE-TO-DEATH PLATEAU, MONTANA

just not perceptive enough. Of course you might call these spatial shifts of land use and class and attitude people-tones, or urban-tones, which I suppose are their own very specialized kind of ecotones.

In other places, as I move about by foot, bike, or car, ecotones are easier to notice. I passed most of the summer and early fall in the North Cascades of Washington, watching the land change (among other activities) as I moved across ecotones large and small. Walking up the trail above Stetattle Creek, contouring around a shaded drainage of sword fern and cedar and deep, soaking duff. Suddenly rounding the corner where water and snow and gravity haven't conspired to cut a shaded gully. Finding young Doug fir and younger hemlock and a bone-dry salal ground cover,

born from a fire not long ago. There was an ecotone.

Or driving up the North Cascades Highway, from the flat Skagit delta near Puget Sound where it's overcast, through the narrow upper Skagit Valley where it's raining, Kulshan and Shuksan hidden somewhere off north in the clouds. Half an hour later, up Granite Creek to Rainy Pass where it's *not* raining. The giant sword fern and moss-covered bigleaf maple are gone from under the conifers, replaced by blueberries, and the conifers themselves are different: Pacific

silver fir and mountain hemlock, rather than Douglas fir and Western hemlock and cedar. I pass through ecotones in two dimensions, horizontally and vertically. Then over Washington Pass and down to the Methow, ponderosa pine and grasses, and the desert. Such a flurry of ecotones can make your head spin and

leave you thoroughly unsettled, if you try to pay too close attention. Perhaps our minds' awareness of a changing landscape wasn't meant to follow along at sixty miles per hour.

There are more subtle ecotones, even at free-way speed. Driving home, the rain stops at Olympia and the clouds break up at Salem. Over Eugene, there are clear skies. Fewer droopy hemlock tops and more straight-limbed doug fir race along the side of the freeway. An ecotone or two has passed by; this place is different. But according to my *Plants of the Pacific Northwest Coast*, the plant association along the coast from here to Prince William Sound in Alaska is basically the same. Walking up Fall Creek, I pass through a rainforest where mist-filtered sunbeams

shine through 300 foot conifers, moss-covered maples and alders die red and yellow for the winter, and sword ferns the size of bathtubs grope at my legs – just as in the North Cascades.

South of the Siuslaw and McKenzie Rivers. according to my field guide, things are quite different, and the book is no help. What changes down there, I wonder? How are things so different in the Siskiyous and Klamaths, where I've hardly ever been? What lies between wet here and dry California, which I also know well? I can read about it in a book, but what's it like? Am I at the edge of a very big ecotone, between the Northwest coastal rainforest and something mysterious (but drier) to the south? Is Eugene where it all changes, where the big ecotone shift goes down? This is one question I ponder when I take a break from reading and writing to watch the clouds forming out the back door. You can find ecotones of every size and shape, the smaller ones part of and related to the big ones.

Ecotones are good food for thought, a whole food of the mind, brown rice for your brain. But maybe there's more to this analogy. Are ecotones, to me, just a neat trick of natural history that happens outside, that I can watch like the TV?

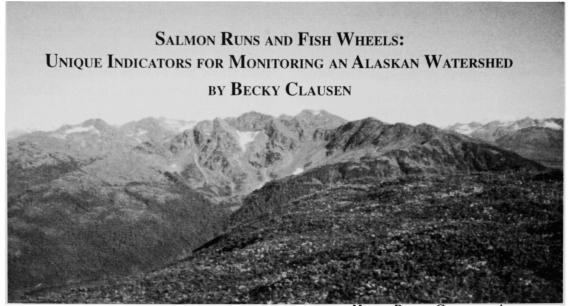
Lately, in the past three or four years, I've been reflecting on how I see things like ecotones, or clouds out the back door, or anything else for that matter. How they go from themselves, the myriad and unknowable participations of the Northwest coast rainforest, to my eyes and brain, and what the whole process does to my mind. Is there some medium through which they pass, that I share? If this place, that sword fern or that river or this rush of ecotones that I attend to so carefully, somehow gets in my head and affects who I am, which I am sure they do, then where is the boundary? Where is the ecotone between Me and Them? Are we, like Fall Creek and the North Cascades, really the same? Or are we like the Northwest rainforest and the Siskiyous, apparently quite distinct? There is a difference, but many species are the same; weather systems and migrating birds and humans pass through both. The ecosystems are in union through, and across, their ecotone, yet still separated by it.

Perhaps perception too is an ecotone, between the beings of the world and my own consciousness of them. Between the ecosystem of my mind and the bigger one here on the wet western edge of North America. Somehow one becomes the other. It goes both ways, just as I can travel in or out of a drainage, or up from the rainforest to the alpine and back. Just like an ecotone, perception is a subtle and fluid, yet existent, transformation, an uncertain and never complete division *and union* between my Self and the myriad beings of the world.

SEAN WILLIAMS IS A MASTERS STUDENT IN ENVIRONMENTAL STUDIES AT THE UNIVERSITY OF OREGON

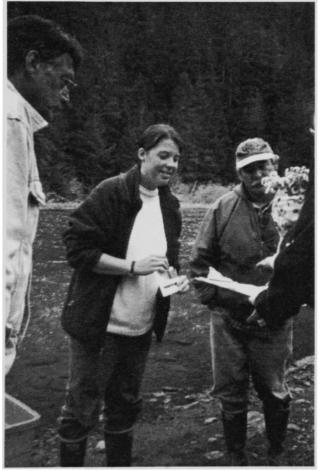


PROXY FALLS, OREGON
PHOTOGRAPHS BY MIKE SIMS



HENEY RIDGE, CORDOVA, ALASKA

In the summer of 2001, I waved farewell to my UO classmates and embarked on a three month internship in Cordova, Alaska to begin my thesis research. A *year* and three months later I have returned, armed with fish habitat data, community organizing skills and a plea to my patient colleagues – "I can explain!"



BECKY TRAINING VOLUNTEERS ON EYAK RIVER, CORDOVA

During my extended northern adventure, I was employed by the Copper River Watershed Project to design and implement a volunteer-based fish habitat monitoring project for the Copper River region. I was based in the small fishing town of Cordova, where the 287-mile Copper River drains into the Gulf of Alaska. The Copper River supports healthy runs of the five species of Pacific salmon and is world renowned for the quality and endurance of the king and sockeye salmon that return to its waters. The Copper River watershed is home to approximately 5,000 residents, a third of whom are Native Alaskan, and over half the population is employed in the vibrant fishing industry. Salmon are the life blood of this region, both in terms of maintaining the integrity of a unique ecosystem and providing means for a subsistence lifestyle to over 80% of the residents. Surprisingly, little is known about the habitat that supports these healthy salmon populations. There is a lack of data for water quality indicators and levels of human use on popular tributaries. The main goal of my thesis work was addressing these data gaps in the "FishWatch" project.

I quickly learned that my task had several challenges. First, there was an enormous area to be monitored. At 26,500 square miles, the Copper River watershed is the third largest drainage in Alaska and encompasses an area the size of West Virginia. Second, there were the logistical issues stemming from the fact that there are only three major roads in the region. Cordova, like other communities in the watershed, is isolated from the road system. This meant that for every FishWatch planning team meeting I attended, I had two options:

1) reserve space on the ferry for me and my truck to travel through the Prince William Sound, or 2) catch a ride on a bush plane. Third, myriad ownership patterns fragment the watershed, including BLM, Forest Service, Department of Natural Resources,

Alaska Department of Fish and Game, Native Corporations, University of Alaska, and a lease agreement for one-fifth of the Trans-Alaska Pipeline to travel through the drainage. I realized interagency and intersovereignty coordination would be crucial for the success of FishWatch. Finally, the sparsely populated region made me auestion whether we could successfully recruit volunteers who were interested in and capable of monitoring the selected water bodies throughout the summer.



AOUATIC INSECT COLLECTION ON EYAK RIVER



AOUATIC INSECT IDENTIFICATION ON EYAK RIVER

Through confronting each of these challenges, I gained valuable insights into both the rigors of establishing a viable study design and the flexibility needed to work with remote, rural communities. Using salmon habitat conditions as one indicator of watershed health required specific attention to the sampling times chosen for each site. In addition, working with a low

population base in a large area encouraged creative methods for monitoring human use. For example, the FishWatch project recruited Native Village of Eyak members who were maintaining fish wheels on the Copper River to count the number of boats that passed

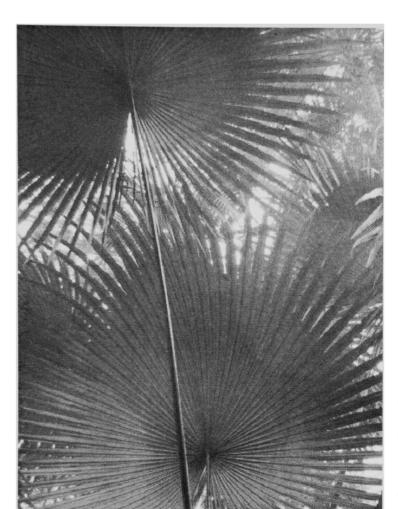
by each week. (Fish wheels are traditional fishing equipment of Pacific Northwest native people).

By the end of summer 2002, the FishWatch project had successfully recruited and trained 20 volunteers. including high school students, families, Native Alaskans. commercial fishermen, and fishing guides to monitor fish habitat on sixteen streams and lakes within the Copper River watershed. Data was collected and recorded for water quality (pH, water temperature, dissolved oxygen, nitrates, turbidity), biological indicators (benthic macroinvertebrate sampling, riparian habitat descriptions), and human use levels (number of fishers. number of boaters). I

am looking forward to serving as the 2003 FishWatch Coordinator for the Copper River Watershed Project, and encourage all ENVS students to visit Cordova and explore Alaska anytime!

BECKY CLAUSEN IS A MASTERS STUDENT IN ENVIRONMENTAL STUDIES AT THE UNIVERSITY OF OREGON

Photographs courtesy of the Copper River Watershed Project



Underside of Palm, Atlanta Botanical Museum

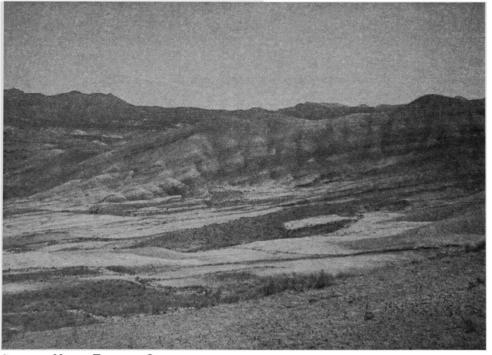
# 9,000 MILES FROM HOME

# TEXT AND PHOTOGRAPHS BY DAN HURLEY

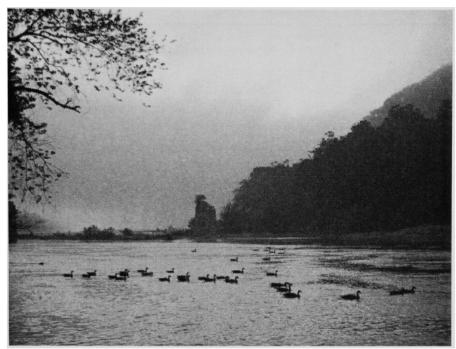
"Free at last, free at last.... I'm not sure what I'll do with this new-found freedom, but the release from expectations is exhilarating.... I drove all day to get to the border of Louisiana. Just had to get out of Texas and everything it represented to me.

Free at last!"

These are a few of the black & whites I took on my roadtrip across America this past summer. I left the Army in late Spring from Fort Hood, Texas and drove east to the coast of Georgia, then north up the coast to Maine, and finally west across the northern part of the country back to Oregon. I called this 9,000-mile journey my "Freedom Trip" because it was my first real taste of freedom since entering military service nine years earlier. Each place I visited along the way made a different impression on me, but my overriding thoughts were of gratefulness for the richly diverse lands we live in and the freedom every citizen has to explore them.



Painted Hills, Eastern Oregon



CANADIAN GEESE, HARPER'S FERRY, WEST VIRGINIA

### **Travel Journal**

"The moss hanging from the 'live oaks' was beautiful. It swayed in the breeze and really made them look alive."

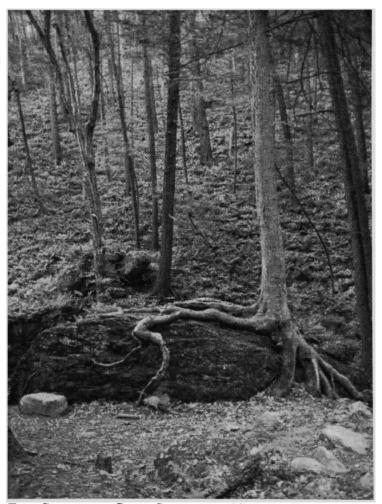
"Arrived too late to tour the San Francisco Plantation. Didn't look all that interesting anyway. The beauty of the area has been eclipsed by numerous chemical factories."

"I took the bus down to the park and walked to the Botanical Gardens. The evergreen garden and rainforest sections were very nice, but I was enthralled by the new Fuqua Orchid Center...in one section they actually thin the air to replicate conditions in high elevations."

"Today I took the ferry out to North Carolina's Outer Banks...it was definitely the longest stretch of pristine beach I'd ever seen."

"I made the mistake of ordering soft-shelled crabs. They batter and fry the *whole* crab – shell and all."

Dan Hurley is a Masters student in Environmental Studies at the University of Oregon



Tree Clutching a Rock, Shenandoah National Park

# MEDITATIONS ON FRESH WATER, ETHICS, & BULL TROUT BY CHAD OKRUSCH

Bull trout haiku: fresh water, bull trout cold, clear, complex, connected both precious and rare

When Ed Abbey said we needed more predators, he wasn't talking about bull trout. He was talking about charismatic mega-fauna—grizzlies, wolves, cougars, and such. But I like to think that if Abbey had ever watched a 30-inch bull trout devour a wounded spring run Chinook salmon, or a runt-gosling, he'd have included this voracious predator on his list of species we need more of.

In 1999, bull trout made a different list. We, the citizens of the US of A, added them to our list of threatened and endangered species. Today, perhaps 250 adults swim and hunt and spawn in all the waters of Oregon. Between 50 and 100 struggle to survive in the murky, drawn-down Army Corps reservoir behind the Cougar Dam. Throughout their entire native range—roughly, the ecoregion we call the Pacific Northwest and parts of Western Canada—bull trout are on the brink.

We simply do not value them as we do other species.

In terms of aesthetics, many fish are more beautiful than the big-headed bull trout. They were not blessed with visual flair like the rainbow or Yellowstone cutthroat.

Bull trout are of no use to us in terms of economics. They mature slowly, live long, maintain small predator-sized populations, and require complex habitat. In short, humans have little regard for bull trout because they can't be mass produced in the machinery of industrial hatcheries.

Many anglers trained in utility still consider bull trout a trash fish because they are piscavores—they eat other, valuable fish—like exotic summer runs of salmon. Once upon a time, fishing guides on the McKenzie River caught and killed bull trout—for the good of the river. They hung them from bridges and barbed wire fences—like coyotes—and encouraged others to do the same.

But bull trout have value beyond human notions of aesthetics, economics, or utility. They have what Aldo Leopold called integrity—value in-and-of-themselves. They have value just because they are.

Ecology has provided us yet another way to value bull trout—as an indicator of a healthy system. Bull trout require a pristine environment—and I don't use that word lightly. Those who know refer to the bull trouts' habitat needs as the 4Cs: cold, clear, complex, and connected.

They are thermally sensitive and live in streams that run clear and cold. Bull trout require complex habitat—lots of cover, large woody debris, boulders, undercut banks, and gravel spawning beds. They need riffles, runs, and pools. And, in order to continue existing, bull trout populations must be connected. Sadly, most are not.

One ten-thousandth of all water on earth moves over land as rivers. Of all the river systems in the world, few are cold, clear, complex, and connected enough to support populations of wild bull trout. Fewer still exist in the bull trout's native range. We ought to value these places and these fish for no other reason than they continue to exist—in spite of us.

\*\*\*\*

In the 5th century, before the common era, Lao-tzu (the old sage) mounted a water buffalo and started to ride out of town. He had had enough of damned civilization. A border guard convinced him to write down his thoughts before he retreated into the mountains to start his life as a hermit. On matters of virtue and ethics, he wrote the following: "The highest good is like water; it nourishes everything and seeks no praise."

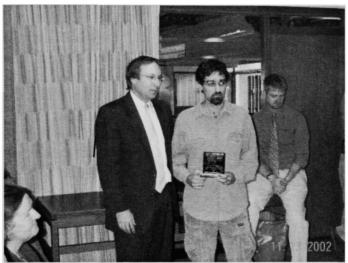
Rivers sustain us—humans and bull trout—regardless of the how beautiful we are or how much we contribute to the economy or how useful we may be. In the grand scheme of things, our value is derived not from these things, but from our very existence and from the sacred roles we play in natural systems.

Chad Okrusch is a PhD. Student in Journalism at the University of Oregon

### Doing More for Community:

# An interview with the Service Learning Program's Founder and Coordinator, Steve Mital

Steve Mital is the founder and current coordinator of the Environmental Studies Service Learning Program at the University of Oregon. The program is in its second year, and Ecotone co-editor Mike Sims sat down to talk to Steve about the beginnings of the Program, its first two years, and future directions for the Program.



Steve recieves a Lane County Trash Busters Award

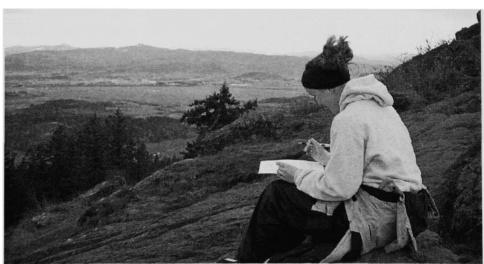
MS: Steve, can you describe the beginnings of the Service Learning Program? How did you conceive it? How did you put the idea in motion?

SM: I came to the University of Oregon with a background in experiential learning, both in my undergraduate education at Prescott College and my career as an Outward Bound instructor. I began my graduate studies here in the Community and Regional Planning Program. They have a great series of courses that require students to work in teams with some organization or agency to addresses a community need.

I also noticed that undergraduates in the Environmental Studies Program are inundated with the world's environmental problems such as overconsumption, pollution, and population pressures. I feel like they at times tend to over study and theorize it, and don't really learn how to get involved, make a personal difference, and discuss what practical tools one needs to be effective. I figured that learning these skills would be very valuable to Environmental Studies undergraduates

MS: And the Service Learning Program also seems to educate students that there is a lot to be done locally, that "Think Globally, Act Locally" is more than a slogan. It's a way of guiding your work in the world.

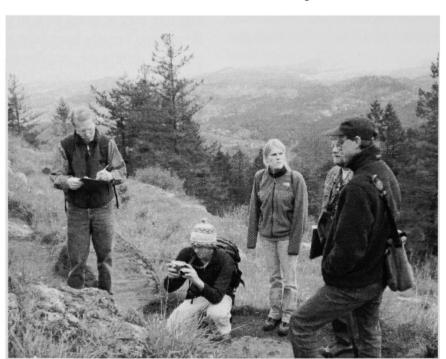
SM: Exactly. I think that students should spend some time studying global environmental problems and discussing possible solutions but I also think that they should spend time learning skills that will help them improve environmental conditions. Environmental Studies students come in to the Program with a lot of practical idealism, and they really do want to get involved in some way to address larger problems. I looked around Eugene and realized that this is a wonderful laboratory to learn how to develop some of



SLP STUDENT RECORDS SURVEY DATA AT SPENSER BUTTE

the skills necessary to get involved and really make a difference. There are so many small organizations and agencies that are working to making Eugene and Lane County a better place. These organizations could really use some help. Everything is here: the community need, interest from the student body, and organizations that could use some help.

MS: This program also seems to be a good fit for the Graduate Program as well. This year you have your first full-time GTF working with the program and managing a team. It's valuable experience for graduate students in that it gives them experience managing and facilitating a project team. Was that in the design of the program?



SLP STUDENTS CONSULT WITH LOCAL EXPERTS AT SPENCER BUTTE

SM: For a lot of students their Master's degree is a terminal degree for them; they don't want a PhD. When they graduate, they'll go into the work world and many head off into the direction of working for agencies or non-profit organizations and managing community and environmental projects. It seemed to me that working with the Service Learning Program as a project manager would be good experience. Basically, the GTF is given a problem, a few initial resources and contacts, a team of students and is asked to guide the team through discovering options, creating a research agenda, designing a study to address the problem, and publicizing their findings. This is a great way for graduate students to gain practical experience and can give them an advantage when looking for professional employment. Graduate students come to the University seeking research and analysis skills. I think graduate students also want to apply these skills in the world where it can make a

tangible difference. That's what a GTF in the Service Learning Program gets to do.

MS: What were your first projects?

SM: We had three projects in fall 2001. One was with Bring Recycling to investigate the TV recycling market to figure out where old TVs were sent and

what the problems are with disposal. That led to Lane County's first TV recycling drive. We collected old TVs and computer monitors and educated Lane County's residents how to properly dispose of them. The second was with Food for Lane County and the Department of Environmental Quality. They wanted to do a food flow study for Eugene and

figure out where food is wasted and how it can be recovered before going to the dump. The third project was with the City of Eugene Parks and Open Space. They wanted us to study the recreational impacts at Spencer Butte. Native plant communities are being impacted by the heavy use the park receives and the focus of the study was how we can provide for the needs of both plants and people.

MS: That seems like a very diverse first year.

SM: Yes. We've defined the program more since then. We now have focus areas in public interest research and education, resource and energy conservation, and ecological restoration.

MS: How would rate or evaluate that first year?

SM: Oh, I think it was wildly successful! We had 12 students, three projects, and we carried them out to the

satisfaction of our clients. We were able to raise money from the outside; that is, we were paid by the partner organization for some of the work we did. One of our student teams was hired as a private contractor by the City to continue the research into the summer. Another team's report resulted in a grant application by Food For Lane County seeking funds to implement a food recovery plan. The TV and computer recycling program colleted over 1600 TVs and monitors and diverted almost 19 tons of TVs and monitors from the dump. In fact we just received a Lane County Trash Busters Award from the County Commissioners. All of these things point to successes that were beyond our expectations in that first year.

MS: What about this year? What projects are you working on and how are they going?

SM: This year we have three projects. One is on campus with the EMU Food Services to help them identify how they can reduce the amount of food and food-related waste they generate. We've decided to commit to at least one campus improvement project a year. The second project is with the Mohawk Valley Watershed Council. They have a long-term watershed education and restoration project that we are assisting with. The third is with the City of Eugene Parks. We are helping them with an invasive species project at Hendricks Park where we set up and monitor test plots to determine what species control methods work the best.

We also have a new office, meeting space, and computer lab. And this year, as you mentioned, we have our first full-time GTF who is managing one of our projects. We decided not to expand to four projects so I could focus on program development and find secure funding.

MS: Speaking of the future, what is your vision for the Service Learning Program for the next few years?

SM: Right now, we are only doing three projects a year, and I'd like to eventually increase that to 8 to 10 projects a year. Obviously, I can't manage that many projects by myself, so I'd like to see a team of graduate students manage the projects, and I could



Invasive Plant identification at Hendricks Park serve a supervisory and development role as well as run a couple projects. That would enable us serve about 40 undergraduates.

Funding is also a huge issue. We are funded basically on a grant-by-grant basis. If the grants dry up, the program could disappear. We have to bring in funded projects. We would also love to find alumni or foundation support so we can increase the number of projects we offer to the community.

Overall, I think are where we want to be and we're moving by leaps and bounds. I feel confident in our future, but I also keep my fingers crossed that we can find the resources to do more for the city, county, and university communities.



SLP FIELD TRIP TO SHORT MOUNTAIN LANDFILL

Mike Sims is a Masters student in Environmental Studies at the University of Oregon

# A New Community Resource? By Jo Rodgers

#### Overview

Environmental concerns as well as economic hardships are making people keenly aware of the need to develop new ways to live in a more resource and energy efficient manner. Several universities and colleges have recognized the inherent role they play in the innovation of sustainable solutions to these societal concerns. A few examples of 'sustainability demonstration' projects already exist such as the Campus Center for Appropriate Technology (CCAT) at Humboldt State University, the "Outhouse" at Whitman College, an eco-village residential facility at Berea College, an eco-design classroom building at Oberlin College, a 16-acre 'green' residential village at Cal-Poly University, and a 83-acre demonstration site with retrofitted farmhouse at Slippery Rock University. On the University of Oregon campus, a group of students, faculty, and community members are formulating a proposal to create a new campus facility that would be dedicated to researching and promoting sustainable living practices on a residential scale.

### Vision

We envision taking an existing house on or near the UO campus and transforming it into a combined classroom space, living quarters, resource center, and research facility. This new campus resource would incorporate principles of environmental sustainability, economic feasibility, and applied research and teaching. This project would benefit numerous departments by creating additional classroom space, an interactive studio, dynamic research possibilities, and a place to foster interdepartmental collaboration. There would be resident hosts at the house who would facilitate public relations and maintain the resource center and some of the on-site projects. In the future, this house could serve as a gateway to a high-density, 'green' residential area developed in the surrounding area.

### **Goals**

The primary goals of this new facility would be to:

- \* Demonstrate low-impact life style choices and home design features to the local community, students, and visitors (e.g., renewable energy production, sustainable methods of waste handling, water and energy conservation, food production, and urban land stewardship in a residential context).
- \* Offer experiential learning experiences through regular classes, studios, workshops, and tours held in the facility.
- \* Function as a multi-faceted research facility for university faculty/students (particularly for the Environmental Studies Program and the Departments of Architecture, Physics, Biology, and Landscape Architecture).
- \* Minimize non-renewable energy consumption to nearly zero.
- \* Maximize materials efficiency (e.g., using reclaimed, recyclable, and/or compostable construction materials, refurbishing building elements).
- \* Become water-self sufficient (i.e., via rainwater catchment, greywater recycling and high-water-efficiency systems).
- \* Demonstrate how low-environmental impact can intersect with aesthetically-pleasing design options and economic affordability.

#### Ties to Curriculum

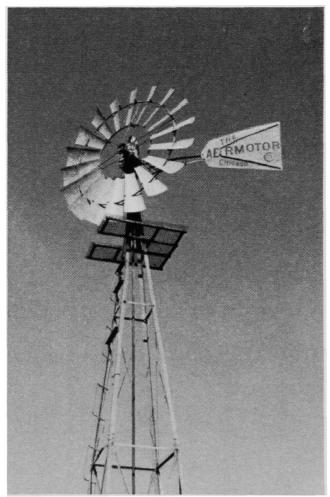
This demonstration house would offer on-going research and educational opportunities. For example, a hands-on studio for 'green design' architecture students could be held in the initial renovation and retrofitting of the house (this would combine well with the proposed 'green design' certificate). Other such classes could be held as more improvements are made; research could be conducted on the long-term effectiveness in energy and resource savings; and special workshops or design charettes could be held during the different phases of the facility's evolution. An Environmental Studies GTF could serve as a liaison and other students could serve as hosts and codirectors. A faculty advisor could have a part-time appointment to oversee the center and counsel the students working and living there. An Environmental Studies course (e.g., ENVS 411) could offer an on-site, firsthand learning opportunity to explore the meaning of 'sustainability.' Business students could oversee the budget and compare costs to conventional structures, communication students could facilitate public relations, and the Urban Farm could have a satellite garden/landscaping location. Clearly, there are more possibilities than can be listed.

### Current status of this project

As word gets out about this proposal, people are stepping forward to help make this idea a reality. The Ecological Design Center has formally endorsed the project and the Environmental Issues Committee (comprised of staff, faculty, and students who meet monthly and report to Vice President Dan Williams) has made this an official subcommittee. A house has not yet been secured but it is hoped that this may be resolved in an up-coming meeting. If it is, then the next steps can be taken to gather more support and commitment from the UO and larger community. If it's not, then new avenues for obtaining this crucial piece will need to be explored. It is clear that when a site is obtained, there will be tremendous support and involvement from the community on and off campus.

### What's next

Besides a house and funding (i.e., for start-up costs such as renovations, solar panels, and other equipment as well as recurring costs of GTF/faculty support and maintenance), there is a growing need for volunteer support. As things progress, there will be tasks to do such as creating a detailed short and long term plan, contacting more faculty about potential classes and workshops that can be held in the house, researching appropriate technologies, and making partnerships in the community. The group hopes to establish a regular meeting time and get more people involved. If interested or if you have questions, please contact Jo Rodgers at irodger1@darkwing.uoregon.edu.



PHOTOGRAPH BY JO RODGERS

JO RODGERS IS A MASTERS STUDENT IN ENVIRONMENTAL STUDIES AT THE UNIVERSITY OF OREGON

# THE ENVIRONMENTAL STUDIES PROGRAM

### WOULD LIKE TO WELCOME ...

### **New Graduate Students:**

Jason Carriere Adrianna Hirtler Daniel Hurley **Mary Larios** Kathryn Moore Astrid Rafoth



ASPEN GROVE, ABSAROKA-BEARTOOTH WILDERNESS, MT PHOTOGRAPH BY MIKE SIMS

### **New Core Faculty:**

Trudy Cameron, Raymond F. Mikesell Professor of Environmental and Resource Economics Scott Bridgham, Associate Professor of Environmental Studies and Biology

### **New Participating Faculty**

Karl Appuhn, History

Dennis Galvan, International Studies & Political Science

Doug Kennett, Anthrophology

Andrew Marcus, Geography

Rich Margerum, Planning, Public Policy & Management

Marc Schlossberg, Planning, Public Policy & Management

Joe Thornton, Biology

Richard York, Sociology

### **New Office Staff:**

If you have been in 10 Pacific lately, you have probably noticed some new faces.



GAYLA WARDWELL & ALISSA MANSKE

Alissa Manske is our new Undergraduate Secretary. Originally from Norfolk, Nebraska, Alissa did her undergraduate work in Environmental Studies and Political Science at Gustavus Adolphus in St. Peter, Minnesota. She has been working at the U of O for the past two years in Media Services.

Gayla WardWell is our new Graduate Secretary. A Vermont native, Gayla came to Oregon via Hawaii. She has a B.A. in Humanities from Johnson State College in Vermont and a M.A. in Humanities from Cal State. For the past four years, she has been working as the Reference Letter Specialist at the U of O Career Center.

Terri Williams is working as an Accounting Assistant/Travel Specialist for the newly formed Center for Ecology & Evolutionary Biology. Terri, an Oregon native from Elkton, came to us last spring to help with the transition of office staff. She recently retired from the College of Education Dean's office, where she had worked since 1976.

# ALUMNI UPDATE

### FROM GALEN MARTIN

**Jessica Schultz** is at Cornell University in Ithaca, NY in a dual program in Landscape Architecture and City and Regional Planning.

**Megan Stein** is the Recycling Coordinator for the Newberg Garbage and Recycling Service, in her hometown of Newberg, OR.

**Matt Rutman** is returning to Eugene to pursue a teaching degree form Pacific University. He spent the last two years doing service in rural Guatemala. He organized a donation project that filled two shipping containers with books, computers, school supplies and medical supplies and then coordinated distribution. Matt is hoping to replicate the project again, sending more material next spring.

**Emily Dietzman** launched the School Garden Project in Eugene, a program that brings gardening into school curricula. She was recently featured in *The Eugene Weekly's* "Happening People" column.



DANA'S FISHING HOLE (OIL ON CANVAS) BY DAN HURLEY



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