Masthead Logo

Western Washington University
Western CEDAR

The Planet

Western Student Publications

Spring 2005

The Planet, 2005, Spring

Lucas Henning
Western Washington University

Huxley College of the Environment, Western Washington University

Follow this and additional works at: https://cedar.wwu.edu/planet

Part of the Environmental Sciences Commons, Higher Education Commons, and the Journalism Studies Commons

Recommended Citation

Henning, Lucas and Huxley College of the Environment, Western Washington University, "The Planet, 2005, Spring" (2005). *The Planet*. 43.
https://cedar.wwu.edu/planet/43

This Issue is brought to you for free and open access by the Western Student Publications at Western CEDAR. It has been accepted for inclusion in The Planet by an authorized administrator of Western CEDAR. For more information, please contact westerncedar@wwu.edu.

GREEN *living*

THE PLANET | *spring 2005*

Dear reader,

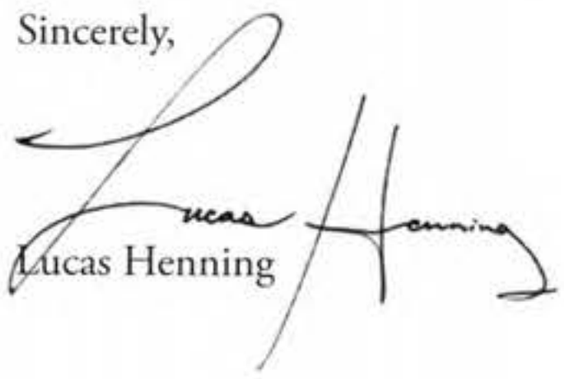
Single-handedly saving the world is impossible. I aspired to save it after graduating high school, but the multitude of problems convinced me to surrender. Feeling discouraged, I chose the more specific task of saving the environment. I rode my bike to school and work, recycled, used less and cleaned up other people's trash, too. But nothing changed. The state of the environment continued to worsen.

Although nobody possesses a remedy for all the world's environmental problems, one person can make a difference. The difference comes from questioning your actions and making informed decisions in your everyday life, such as considering where your food comes from and how choosing one food or another benefits the environment. Thoughtful consideration of human impact on the Earth is a key concept in green living. And that's what this issue of The Planet is about — people making a difference in their community by finding ways to tread more lightly on the environment, advocate for change and inspire future generations to care for and appreciate the natural world. In this issue you will read stories about people who use solar energy to escape the grid and concerned citizens who organize initiatives to change government policy. This issue also features how-to stories about greening offices, cars, dinners and parties. Anyone can find a way to make a difference in this world. All they need is inspiration.

In May, I met a mountaineer named Jim Whittaker who shared advice on how to inspire people: "I've always said that if you can get people out into nature, if you can get them on the water, and so forth, they'll learn to love it because it's so beautiful. And if they learn to love it they'll take care of it. That's the important thing; they'll take care of it and they'll pass it on."

Next time you're outside, take a walk away from civilization. Find a place in nature and examine the detail that surrounds you. Take note of the beautiful veins of every leaf on every branch of every tree. The oxygen in the blood running through your veins once ran through the veins of those leaves. We are all connected to nature and it nourishes our lives. Let's remember this and do all that we can together to preserve the natural world that we can't live without.

Sincerely,



Lucas Henning

Thanks to: Bellingham Public Works Department, Sarah Wallace, Mary Ellen Carter and Spinnaker Photo Imaging Center. Laurie Rossman, Dave Ellison and the rest of the publishing staff. And all those in the community who answered our questions and told their stories.

EDITOR IN CHIEF:
Lucas Henning

MANAGING EDITOR:
Laurie Ballew

ASSOCIATE EDITORS:
Katie Scaief
Mugs Scherer

ASSISTANT EDITORS:
John C. Davies
Sarah Kuck

DESIGNERS:
Nausheen Mohamedali
Kassandra O'Bryant

PHOTO EDITOR:
Jamie Clark

PHOTOGRAPHERS:
J.R. Barker
Dylan Hart
Zecca Lehn
Nicole Ryan
Derick Smith
Khale Wallitner

REPORTERS:
Brandi Bratrude
Seamus Burke
Neil Diemer
Natalie Emery
Christy Greenwald
Krista Grunhurd
Matthew Hoar
Jessica Knox
Kailyn McGrath
Evan McLean
Chris Neumann
Nick Orlando
Meadow Pederson
Sam Phillips
Holly Regan
Elise Roberts
Melanie Valm

ONLINE EDITOR:
Landon Fisher

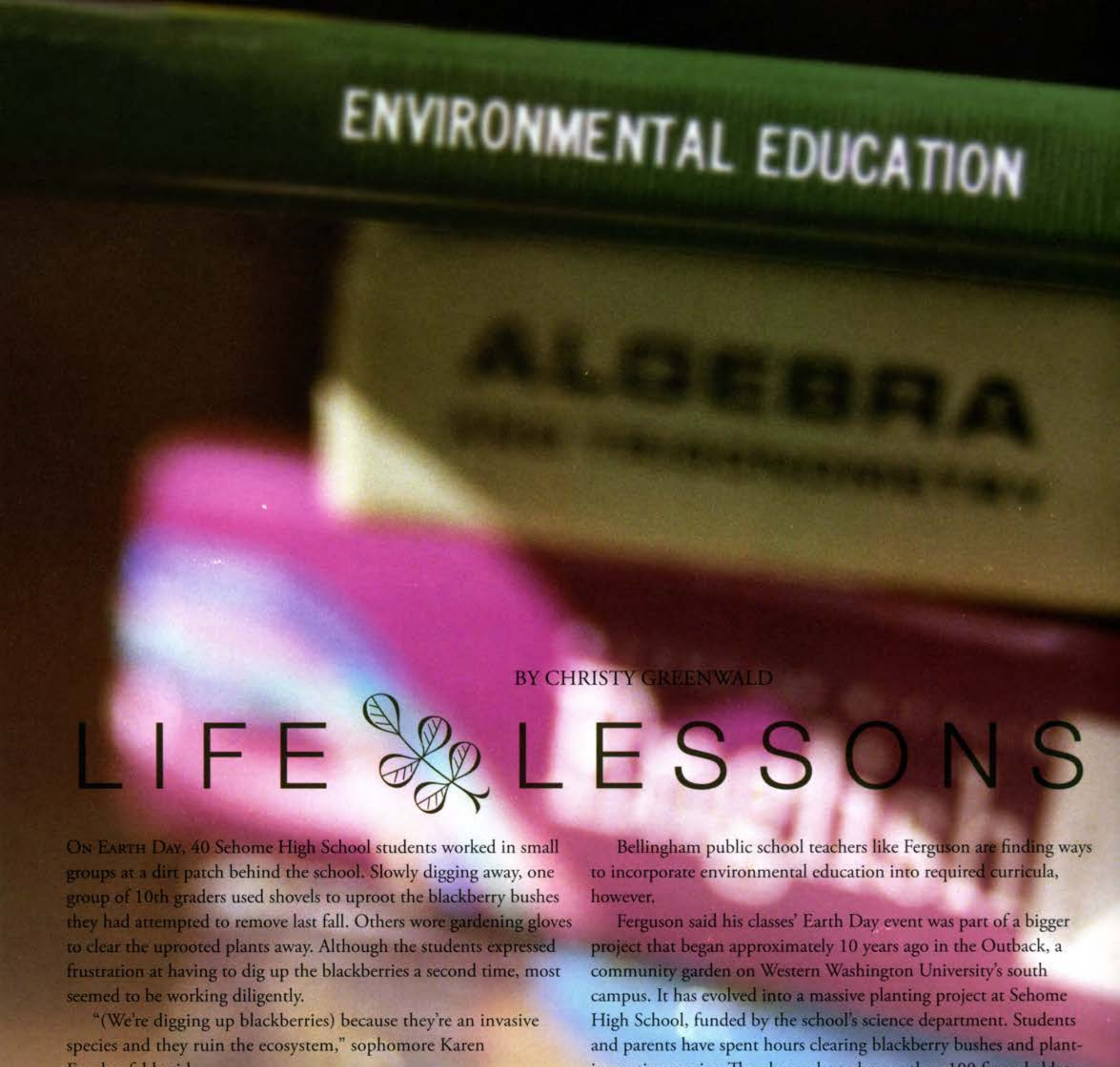
ADVISER:
Tim Schultz

THE PLANET
Western Washington University
516 High Street, CF 220
Bellingham, WA 98225
360.650.3543
http://planet.wwu.edu

Cover photo by Khale Wallitner
Unedited photo shot on location at Whatcom Falls Park.

This issue of The Planet is printed on Living Tree Paper's Déjà vu Matte. The paper is 50 percent post-consumer waste and 10 percent hemp/flax.

The Planet magazine is published three times yearly and is dedicated to environmental advocacy and awareness through responsible journalism. The magazine is written, designed and edited by students through Huxley College of the Environment.



BY CHRISTY GREENWALD

LIFE LESSONS

On Earth Day, 40 Sehome High School students worked in small groups at a dirt patch behind the school. Slowly digging away, one group of 10th graders used shovels to uproot the blackberry bushes they had attempted to remove last fall. Others wore gardening gloves to clear the uprooted plants away. Although the students expressed frustration at having to dig up the blackberries a second time, most seemed to be working diligently.

"(We're digging up blackberries) because they're an invasive species and they ruin the ecosystem," sophomore Karen Frankenfeld said.

Ninety-five percent of Americans think environmental education should be in public schools, according to the Environmental Protection Agency. School teachers, city employees, nonprofit organizations and parents are working together to integrate environmental education into Bellingham schools, despite the lack of funding and flexibility to incorporate subjects that state testing does not cover.

Environmental education is not at its optimal level, said Craig Ferguson, a 10th-grade biology teacher at Sehome High School. Teachers lack the time to teach environmental issues, partly because of the preparation required to ready students for the Washington Assessment of Student Learning.

"Three-fourths of sophomore year is spent preparing for the WASL," Ferguson said.

Bellingham public school teachers like Ferguson are finding ways to incorporate environmental education into required curricula, however.

Ferguson said his classes' Earth Day event was part of a bigger project that began approximately 10 years ago in the Outback, a community garden on Western Washington University's south campus. It has evolved into a massive planting project at Sehome High School, funded by the school's science department. Students and parents have spent hours clearing blackberry bushes and planting native species. They have planted more than 100 fir and alder trees on the site.

The city of Bellingham also is working to expose students to environmental education. For almost three years Kym Fedale, an environmental educator for the city, has led a fifth-grade program called Sharing Our Watersheds. Approximately 38 of the district's fifth-grade classes participate in the program each year. Each class that participates in Sharing Our Watersheds receives a pre-trip talk, a field trip to the water-treatment plant and a visit to the wastewater-treatment plant. At the plants, students learn the components of watersheds, where the city's water comes from and where it goes after use.

The city pays for transportation, a workbook for each student, a teacher's manual and pre-trip videos. Each student aquires 10 hours

LEFT: Sehome High School students dig up blackberry bush roots behind the school in an effort to clear invasive species and make room for native vegetation. *Photo by Khale Wallitner.*

BELOW: Milton Jimenez-Facundo, a third-grader in Jackie Brown's class at Alderwood Elementary School, dissects lima beans in order to understand their reproductive processes. *Photo by J.R. Barker.*

of environmental education per year without cost to the school district. The city contributes $3,500 each year for transportation costs. A main goal of the watershed program is to incorporate WASL test questions into the district's curriculum. The student workbook about the water cycle uses terms such as "evaporation," "condensation" and "precipitation," which are WASL components.

Traditional curricula don't consider environmental education to be a fundamental subject, so schools with little state funding have to rely on teachers who have the drive to incorporate it, Fedale said. With the removal of funding issues and the addition of environmental expertise, schools can increase the presence of environmental education, Fedale said.

Jill Bailey, a second-grade teacher at Edison Elementary School in Burlington, said she would like to see more environmental education in schools. She said especially important topics are the impact humans have on the environment, toxins, population growth, the history and the future of the environment and the capability to resolve current problems.

"If we don't teach the kids about what happened in the past and what could happen in the future … the future of our world will be negatively impacted," Bailey said.

Bailey's son, Tommy Bailey-Chisholm, is a sophomore at Sehome High School. He recently finished a six-month project in Ferguson's biology class. He and two classmates, Daniel Broker and Satchel Steele, created a nature sanctuary near his house.

Bailey-Chisholm said the most difficult part was clearing the blackberries. For Broker, using the rototiller was hardest because it was a muddy day, he said.

They used the foundation from a neighbor's torn-down barn as the perimeter of the sanctuary. The pictures of the sanctuary site before their project show a complete covering of blackberry bushes. The three teenage boys worked for 25 hours to reveal a clean patch of land. After clearing the bushes, the boys planted native plants such as Oregon ash, ferns and red alder.

"Environmental education is on the upswing," Ferguson said.

Environmental education in schools is important because it gives students knowledge about what's going on in the world and helps prepare them for the future, Bailey-Chisholm said.

If we don't teach the kids about what happened in the past and what could happen in the future … the future of our world will be negatively impacted.

Jill Bailey
Edison Elementary School second-grade teacher

We need to ask ourselves what we are educating for. We're handing our children a planet in devastation. It is our responsibility to educate our children about the problems they will be facing.

Jackie Brown
Alderwood Elementary School third-grade teacher

Sehome High School sophomores Satchel Steele, Tommy Bailey-Chisholm and Daniel Broker (left to right) stand at their homemade nature sanctuary behind Bailey-Chisholm's house. With a rototiller, weed whacker, loppers, a machete and a rake, the students cleared blackberry bushes away from the foundation of an old barn and primed the soil to grow native plants. *Photo by Khale Wallitner.*

"Environmental education is important for the next generations," Bailey-Chisholm's classmate Erik Holgate said.

While Ferguson's students study the environment, many teachers say Bellingham public schools lack environmental education.

"There is very little environmental education in (Bellingham's public) schools," said Jackie Brown, a third-grade teacher at Alderwood Elementary.

The public-school administration pressures teachers to teach with the goal of high achievement on state standardized testing, in concurrence with the No Child Left Behind Act, Brown said.

From the school grounds to Padilla Bay, Brown's third-grade students experience education outdoors. Representatives from RE Sources make paper with the class and teach students about recycling. Students raise salmon, working closely with members of the Nooksack Indian Reservation. The students also are working on an in-depth rocky-shore experiment. They compare high and low tides and explore how tides and oil spills affect the animals that live on the shore.

Though the class participates in a variety of projects, difficulties in teaching students about the environmental persist.

"Something challenging about environmental education is that (environmental problems are) very depressing," Brown said. "When we studied oil spills, this is when the students found themselves getting depressed, for we saw that there is no way to truly clean up an oil spill completely."

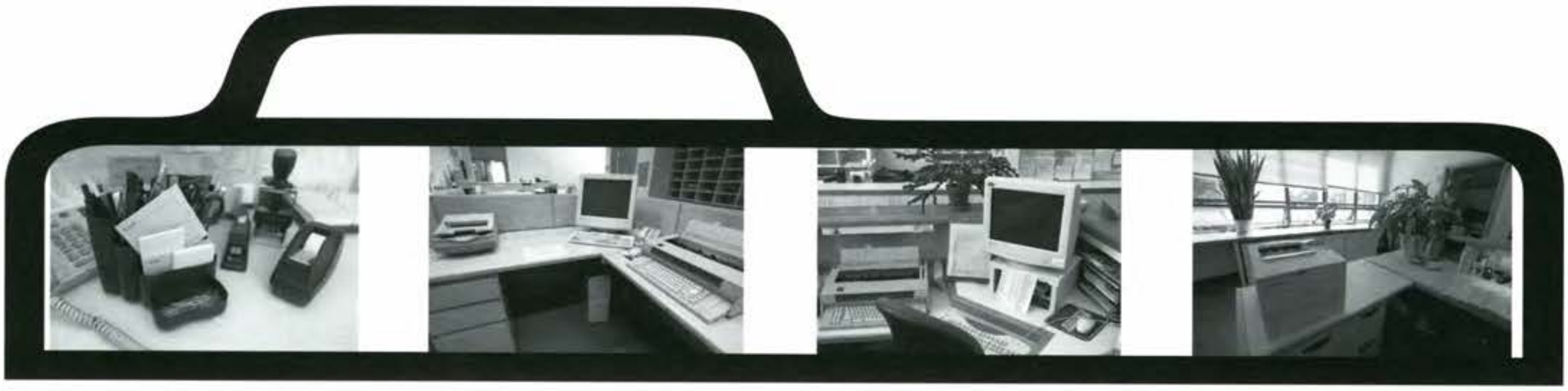
To overcome that obstacle, Brown focuses on remaining positive. She asks herself, "What do we want the future to look like?"

Brown's advice to environmental educators is to focus on solutions. She also stresses that people don't have to be teachers to make a positive impact on the environment. They should consider environmental issues no matter what their field of work is, she said.

Teachers like Ferguson and Brown and city employees like Fedale set examples of how to integrate environmental education into public-school curricula, creating a generation more conscious of its impact on the planet.

"We need to ask ourselves what we are educating for," Brown said. "We're handing our children a planet in devastation. It is our responsibility to educate our children about the problems they will be facing."

Senior Christy Greenwald studies environmental education. This is her first published piece.



OFFICE IMPACT

COMPILED BY MEADOW PEDERSON
PHOTOS BY KHALE WALLITNER. PHOTO ILLUSTRATION BY ZECCA LEHN

TIPS

SIX PATHS BUSINESSES CAN FOLLOW TO A GREEN ROUTINE

Use it again

- Ask suppliers to take unwanted packaging back for reuse.
- Reuse envelopes and parcel packaging.
- Reuse paper scraps for notes.

Use less

- Use PowerPoint presentations, summary pages and online documentation to avoid making multiple copies.
- Use the phone or e-mail to communicate instead of memos or faxes.
- Print on both sides or print multiple pages per sheet.
- Print company cards rather than individual business cards.
- Encourage staff members to share and circulate copies of memos and reports.
- Share office supplies.

Conserve energy

- Turn off all computers and office equipment when not in use and turn off lights when natural light is sufficient.
- Use energy-efficient light bulbs where possible.
- Make sure to enable energy-saving features on computers, printers and photocopiers.
- Use blinds to reduce solar gain in summer and save on air-conditioning costs.

Complete the cycle

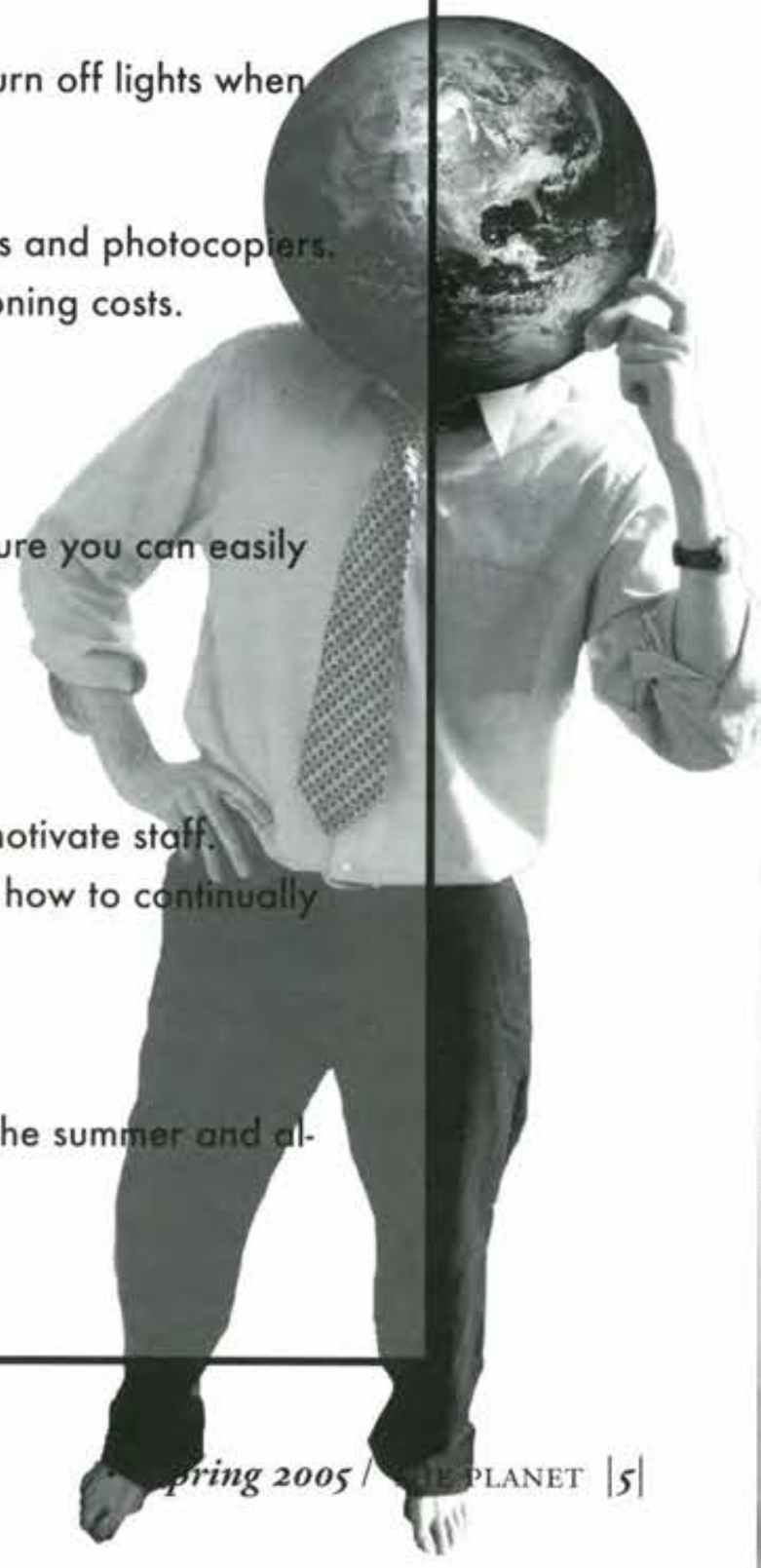
- Buy recycled products.
- Purchase recycled paper products.
- Technology is always improving. When buying computers, make sure you can easily upgrade your system.
- Buy Energy Star-certified appliances.

Reminders, measurement and ideas

- Post reminders to turn off the lights and print double-sided.
- Keep track of the resources and money saved to encourage and motivate staff.
- Make time during staff meetings to come up with new ideas about how to continually lower impact.

Greening your day

- Put plants in your office to increase indoor air quality.
- Plant deciduous trees outside office windows to increase shade in the summer and allow light in the winter.



Natural NURTURE

BY NATALIE EMERY

PHOTOS BY ZECCA LEHN

TIPS

TOP FIVE WAYS TO RAISE 'GREEN' CHILDREN

1. Buy and feed your children local and organic foods.
2. Shop for secondhand clothing and toys.
3. Buy toys made without harmful chemicals.
4. Choose cloth or disposable diapers based on energy use and local landfill situation.
5. Send your children to a daycare that serves organic foods.

ABOVE: Shelby Sneva (center) teaches finger painting to Annie O. Wilsong (left) and Hazel Smith-Carlson at A Little Darling School in Bellingham, which makes the environment a priority.

OPPOSITE TOP: A typical snack at A Little Darling School consists of organically grown vegetables.

OPPOSITE BOTTOM: Aundrea McBride holds a baby chicken out for her son, Aiden, to play with. McBride tries to live sustainably and has raised Aiden to live an eco-friendly lifestyle.

OUTSIDE A HOME ON THE south side of Bellingham, a hybrid car sits parked near a small tree as a natural wood gate sways open to a set of stairs that lead to a warmly lit porch. Inside, the distinct sound of a toddler running the length of the living room resonates off the walls, his voice bouncing with his steps.

Aundrea McBride's 2-year-old son, Aiden, a curly-haired blond, picks up a plastic drill and starts slamming it onto his toy worktable. A guy on the go, Aiden runs everywhere, seeming to love the sound of his bouncy voice.

As the human population approaches 6.5 billion, the way people live — and the way they raise their children — has significant implications for the environment. Some parents use unconventional parenting techniques to alleviate human impact on the Earth. They buy secondhand clothing, avoid plastic toys, use cloth or chlorine-free diapers and feed their children local organic foods.

McBride said this philosophy is aimed at keeping things simple and lightening the load on the environment.

'Loved-in' clothes

"Consignment stores rock," McBride said. "And sharing stuff around to different families is pretty normal with our group of friends."

McBride said she shops at consignment stores instead of buying new items because the reused clothes are still in good condition. Also, reusing materials is a way to use fewer resources and lessen the demand for new products.

Courtney Laws, the wellness director at the organic-food store Terra Organica, also shops at consignment stores to find clothes and toys for her 7-year-old daughter, Sophia.

"We try to stay away from clothing for children made by children," Laws said. "We try to recycle as much as possible."

At Wee Ones Reruns, a children's consignment store, clothing fills every room. The store also sells toys, cribs, sunglasses and many other possessions a child might need.

"Children change sizes every six months when they get older, and babies change every three months," owner Kathy McCrady said. "So they outgrow their clothes so fast that it makes sense to buy (used)."

McCrady said the store receives approximately 500 items daily, creating a wide variety of choices.

"In terms of the entire nature of recycling, we do that all day long, so that (the clothes and toys) won't end up in a landfill," McCrady said. "I know people who will just toss a shirt because they don't know how to sew on a button."

Wee Ones Reruns accepts items from local families, which McCrady said is the ultimate example of buying local. Parents can bring in old gear and when it sells, receive cash or credit they can use for their child's next size, McCrady said.

Entertaining change

When it comes to toys, McCrady said the demand for wooden and non-electronic ones is on the rise.

"A lot of people want classic toys that are old-fashioned," McCrady said. "People want quality items to give to their children."

McBride said it is difficult to find toys with minimal plastic that won't fall apart with repeated use.

"Some toys just can't take the banging he puts them through," McBride said with a chuckle. "Wooden toys tend to be more durable."

Many soft plastic toys contain phthalates — also known as plasticizers — to provide flexibility. According to the Environmental Protection Agency's National Center For Environmental Research, these volatile molecules can escape from plastics and pose a health risk. The European Union banned the use of six common phthalates in toys intended for children under the age of three.

At A Little Darling School in Bellingham, the staff uses as many wooden toys as possible. Netta Darling, the co-owner and manager, said she and her staff try to purchase toys that have been played with before, yet she sees plastic as an inevitable material at her school.

"A major part of plastic is that when they play with a toy that's plastic, I can wash it in the dishwasher …" Darling said. "Otherwise I'd be Murphy Soap-ing every wooden toy."

Laws said purchasing toys made with natural materials was an important decision she made for Sophia.

"Because of the way we raised her … we try to give her toys that use natural materials," Laws said. "It's easier on the Earth and holds a certain artistically aesthetic quality. I mean, she has teddy bears and such things, but we're not dogmatic about it."

Clash of the diapers

In a quiet Bellingham neighborhood near Broadway Park on a muggy and overcast day, Sophia sits on her mother's lap. The two almost match, Sophia points out, with the same corduroy pants in slightly different hues of pink. Her long brown hair waves in tendrils.

Courtney Laws said she used disposable diapers on Sophia approximately half of the time.

"We were always on the go, so the convenience factor was there, and (Sophia) was born in Boulder, Colorado, and there was access to a diaper service," Laws said.

Parents must decide whether to use cloth or disposable diapers. According to the book "50 Simple Things You Can Do to Save the Earth," in the 1980s disposable diapers consumed 1,265,000 metric tons of wood pulp and 75,000 metric tons of plastic each year. Americans also threw away 18 billion disposable diapers a year during that time frame. In the authors' independent study, these figures gave rise to an increase in the use of cloth diapers.

According to the Union of Concerned Scientists, however, cloth and disposable diapers are equally detrimental to the environment because of the energy necessary to wash cloth diapers. The union recommended choosing whichever type of diaper makes the most sense to parents in terms of convenience, cost and child comfort.

McBride said she chose cloth diapers because she wants to control what types of chemicals Aiden comes in contact with and because they are reusable. At night, though, he wears non-chlorinated disposable diapers.

"He's been wearing (disposables) overnight since he was 18 months old because he pees at so much volume that it's hard to keep him in cloth diapers," McBride said.

FACTS

Cloth or disposable?

Environmentally concerned parents debating the pluses and minuses of disposable diapers have made a lot of fuss through the years.

Convenience notwithstanding, disposable diapers have a reputation for using less energy, and therefore resources, than cloth diapers.

A 1992 study by Franklin Associates is the basis of much of the debate. The study concluded that laundering cloth diapers at home was more energy-intensive than using disposable diapers, but that disposables created more solid waste.

Using cloth diapers is still energy intensive, but environmentally conscious parents can weigh the costs of disposable diapers, which are manufactured using paper products and end up in landfills, against using hydroelectric power to clean and dry cloth diapers.

For the ultimate in efficiency, commercial laundry services use less water and energy per diaper than home machines.

We go to the farmers market, and she knows all the farmers there, and we know that they raise their crops responsibly without harmful chemicals.

Courtney Laws
Terra Organica's wellness director

McBride said that after her $400 investment in cloth diapers, she washed them at home with petroleum-free detergent. They have circulated to friends to the extent that they are on their fourth child.

In comparison, according to estimates by Ohio State University Extension, disposable diapers cost approximately $50 each month. If used for two years, disposable diapers could cost $1,200 for each child.

Organic snacks

Laws and McBride said the biggest environmental factor in their children's lives is what they eat.

Laws packs a lunch each morning for Sophia. Although she can't always watch what her child eats, she said Sophia eats only organic food at home.

"We go to the farmers market, and she knows all the farmers there, and we know that they raise their crops responsibly without harmful chemicals to the environment," Laws said. "We eat organic as much as possible because on one hand, we don't want to expose her to toxic chemicals through non-organic foods, and on the other, we'd like to tread a little more lightly on the Earth."

As a child brought up eating mostly organic foods, Sophia said she can taste the difference between organic and non-organic.

"I eat food that doesn't have chemicals because it makes you healthy and tastes better," Sophia said.

Organic modeling

Darling said she has felt strongly about serving organic food to her students ever since opening her school.

"We try to keep things on a simple level, and caring for our bodies and making sure you're focusing on nutritional modeling is important," Darling said. "Children follow the example that's been set before them."

As raising children has been a part of Darling's life for 10 years, she said that being responsible to the body is being responsible to the Earth.

"We like to think that we have a whole-system design, which is not just thinking about organic foods," Darling said. "It's one, everything comes local. Two is buying organic foods. Three, that the food is made by all of us. Four, we eat all together, and five, that we believe that we are planting the seeds of responsibility and that we're all growing together."

Senior Natalie Emery studies English. She has been published in The Western Front and Klipsun.

green PARTYING

Photos by Khale Wallitner

Buy kegs to reduce waste. One keg of beer = 15.5 gallons = 1,984 fluid ounces = approximately 165 12-ounce bottles of beer = roughly 27 six packs, pictured above.

Everyone parties, even animals. Wolves get together to howl at the moon. Cats sniff catnip and run around attacking anything mouse-like, and emperor penguins wear classy tuxedos while waiting to bobsled into frigid waters. Humans party, too. Their parties, however, tend to have a greater impact on the environment. Here are some tips on how to party like an animal — and waste less.

TIPS

TIPS FOR GREENING YOUR PARTY

- *Expecting a big crowd?* Fill a keg and tell your guests to bring their favorite beer steins. This will reduce waste from bottles, cans and plastic cups. You can make your money back by stamping guests' hands to keep track of who contributed to the beer fund.
- *Make it a slurry.* Rather than using only ice cubes to chill your cooler, make a slurry by adding water. Your beverages will cool faster. Plus, pouring a cooler full of icy water onto a friend is hilarious.
- *Buy local.* Supporting local breweries reduces the fuel consumption associated with transporting beer.
- *Go organic.* Feeding your guests organic food supports sustainable agriculture, which is free from pesticides.
- *Bulk up.* Whether it's beverages or food, buying in bulk reduces packaging and is more economical.
- *Transportation.* Carpool with a designated driver, see how many of your friends you can legally fit into a taxi or, better yet, just walk.

Compiled by Nick Orlando

RESOURCES

WHATCOM COUNTY BREWERIES

1. Boundary Bay Brewery & Bistro, Bellingham
2. Frank N Stein, Ferndale
3. The North Fork, Deming

ENVIRONMENTAL *Harmony*

BY MELANIE VALM

The funky sounds of Spearhead radiated from the stage, washing over a few hundred fans who jumped up and down to the beat during the Telus Ski and Snowboard Festival in Whistler, B.C. Michael Franti hopped around the stage barefoot, with dreaded hair flying every which way.

"In school they tried to tell me that a tree it couldn't feel. But I have felt a tree, and it was bleeding for real," Franti sang.

Franti's songs bring a message of environmental advocacy to his audience. Environmental organizations are recognizing the power of music and are working with bands to use this medium to spread awareness and inspire action.

Marc Ross started Rock the Earth in 2001 to work with musicians to promote environmental causes. The organization has begun to reach artists and audiences nationwide. Last year, it worked with bands such as The String Cheese Incident, Dave Matthews Band, Barenaked Ladies and Alanis Morissette.

The organization asks band members what causes they are concerned about and if they would like to help publicize the causes.

"Everyone has some kind of local issue they are concerned about," Ross said. "It may be factory farms, paper mills in the neighborhood they grew up in or endangered tortoises."

Rock the Earth recently began working with Derek Trucks of the Allman Brothers Band to review development and diversion projects slated for the Saint Johns River in northern Florida, where Trucks is from.

Rock the Earth works in different ways to publicize and resolve the specific issue with which each band identifies. Its staff writes letters to government agencies, works to educate the public through monthly newsletters to 2,000 subscribers and sets up information tables at concerts.

In addition to using a team of volunteers, the organization employs a geologist, a hydrogeologist, an aquatic biologist, engineers and environmental attorneys. This team works to develop solutions to environmental problems.

Music is becoming a popular way to spread awareness of environmental causes because of the variety of people it can reach, Ross said. Rock the Earth's efforts to expand beyond dedicated environmentalists allows the organization to reach more people than would otherwise notice an environmental issue, Ross said.

"We have found that a lot of people tune out to environmental issues," Ross said. "But a lot of people tune in to music."

The Northwest Ecosystem Alliance is a Bellingham-based environmental-advocacy group that works to protect Northwest lands and wildlife. The alliance works to conserve forestlands, save old-growth forests and protect Northwest wildlife with the help of the Endangered Species Act. It also works with musicians who display a passion for the environment.

The annual Jammin' for Salmon event takes place in Bellingham on the Friday closest to Earth Day. This year, it featured a variety of local artists. The event is tailored to educate visitors and offer a chance to donate money or time to the alliance.

Rose Oliver, the event coordinator for Jammin' for Salmon, said the variety of music attracts a diverse group of people, spreading the alliance's message to more of the community.

"Sometimes it happens that people come just to see the band and don't care so much about the issue," Oliver said. "But it's not that big of a deal. The $13 they paid to get in the door still goes to a good cause."

Attendees can visit stations set up around the event displaying information about current issues such as the Lake Whatcom

Micheal Franti, a solo artist and the frontman for the band Spearhead, writes about environmental issues in his music. *Photo by Melanie Valm.*

Sometimes we feel alone in what we do. When we hear music that honors the things we believe in, it helps us to keep going in that way.

Michael Franti
Solo artist and frontman for the band Spearhead

watershed development or management of state trust lands. Last year's event, the sixth annual and most-attended, raised $8,000 for Northwest wildlife and land.

"Hopefully people will come to see music and have their eyes opened a little," Oliver said. "Maybe they don't take action, but they leave thinking about it."

Joel Ricci, a member of the Bellingham-based band La Push, has performed at Jammin' for Salmon the past two years. He said playing at benefits for causes he believes in is an important part of his life as a musician.

"When a lot of people come out for a band like La Push, it's a situation where a lot of money can be raised," Ricci said. "I don't see a problem with using the name and popularity to benefit as many people as possible."

Ricci said that while musicians could just donate money to a cause, spreading awareness at a benefit is important and more valuable.

Even though environmental groups invite musicians who promote environmental causes to play at benefits, owners of general venues may be reluctant to ask advocacy musicians to play at their establishments.

John Goodman, the owner and manager of Bellingham's Wild Buffalo House of Music, said a band aligned with a specific topic might not be his first choice for his venue.

"If I get a reputation as being aligned with one cause, then it is possible that I could lose a good share of business," Goodman said.

Although Goodman said he considers himself an environmentalist, he also said the Wild Buffalo's purpose is to feature music, not promote controversial issues. Showcasing too many advocacy bands might turn away more moderate listeners or those on the other side of an issue. If that happens, the business loses money, Goodman said. While the Wild Buffalo has done environmental benefits in the past, including one three years ago for the Clean Water Alliance, Goodman said that lately he has shied away from polarized topics.

"I like to be neutral turf for the most part," Goodman said. "I want all people to feel comfortable coming here."

Matthew Feigenbaum, the owner of The Nightlight lounge, which opened in 2004, said he does not consider supporting advocacy bands a problem.

"People I worry about being angry at me for supporting good causes are the people I don't worry about," Feigenbaum said.

The Nightlight has done a benefit show about once a month since opening, Feigenbaum said. None of them have been environmental benefits yet, but he said he is completely open to the idea and is waiting for one to be presented.

Music is a powerful tool to raise money, Feigenbaum said. If bands are willing to play for a cause, just having them there will raise more money because people are paying to see them play.

"They can raise more money in 20 minutes of their time than we could running this place for six months," Feigenbaum said.

Along with playing to support environmental causes, many musicians incorporate eco-friendly living into their tours. Willie Nelson formed his own biodiesel company, BioWillie. Other artists, such as Jack Johnson, use only biodiesel in their tour buses.

Franti, a solo artist and the front man for the band Spearhead, said he requires vendors at his shows to use biodegradable materials in all their packaging. He also uses hemp paper in his CD inserts and non-bleach materials for tour clothing.

Franti, who sings largely about political issues and some environmental matters, said music inspires people to act.

While Franti continues to motivate those who attend his shows, Ross is working to expand Rock the Earth to attract even more people to the environmental movement. The list of this summer's artists involved with Rock the Earth includes Ani DiFranco, Ozomatli, Jack Johnson and Brian Wilson.

"Sometimes we feel alone in what we do," Franti said. "When we hear music that honors the things we believe in, it helps us to keep going in that way."

"The glory of the light it brings evaporation / Morning's fresh oxygen cleanest / I take a deep hit help my mind stay the greenest"
-Spearhead, "Hole in the Bucket"

Senior Melanie Valm studies environmental journalism. She has been published in The Western Front.

VS.

CONVENTIONAL COTTON VS. ORGANIC COTTON

SEED PREPARATION

CONVENTIONAL COTTON

Typically treats seeds with FUNGICIDES or INSECTICIDES

Uses GENETICALLY MODIFIED seeds for approximately 70 percent of U.S.-grown cotton

ORGANIC COTTON

Uses UNTREATED seeds

NEVER USES GMO seeds

SOIL AND WATER

CONVENTIONAL COTTON

Applies SYNTHETIC fertilizers

Causes soil loss due to predominantly MONO-CROP culture

Requires INTENSE IRRIGATION

ORGANIC COTTON

Builds strong soil through CROP ROTATION

Retains water more efficiently due to increased ORGANIC MATTER in the soil

WEED CONTROL

CONVENTIONAL COTTON

Applies HERBICIDES to soil to inhibit weed germination

ORGANIC COTTON

Uses HAND HOEING instead of chemicals to remove weeds

PEST CONTROL

CONVENTIONAL COTTON

Uses INSECTICIDES, accounting for 22.5 percent of world consumption

Uses toxic PESTICIDES

Frequently uses AERIAL SPRAYING, which can drift onto farm workers, wildlife and neighboring communities

ORGANIC COTTON

Maintains a BALANCE between pests and their natural predators through healthy soil

Uses BENEFICIAL INSECTS, biological and cultural practices to control pests

May use TRAP CROPPING to lure insects away from the cotton

HARVEST

CONVENTIONAL COTTON

Defoliates plants with toxic CHEMICALS

ORGANIC COTTON

Relies mostly on seasonal FREEZE for defoliation; may stimulate defoliation through WATER management

For more information, go to www.aboutorganiccotton.org

Hemp STATEMENTS

BY KAILYN McGRATH

At age 12, Teresa Remple sold her first piece of clothing after receiving a sewing machine for her birthday. What was once a childhood hobby has turned into a career of making clothes with eco-friendly fabrics. Remple, now an outgoing 32-year-old, moved from Vancouver, B.C., to Bellingham to set up her clothing company, Texture Clothing Inc.

According to the Organic Trade Association, conventionally grown cotton is the most chemically intensive crop on the planet. Growing cotton requires approximately 22.5 percent of all agricultural insecticides, herbicides and fungicides. As a reaction to these practices, businesses and citizen-activist groups are bringing environmentally friendly clothing into the mainstream.

Remple makes her clothes from a blend of hemp, 100 percent organic cotton and Lycra. Remple distinguishes her clothing from the conventionally grown cotton clothing that dominates many fashion lines by using hemp, an alternative natural fiber. Remple said she has always loved working with hemp because it is an environmentally friendly alternative.

"I make clothes with not only an environmental conscience but also with a comfortable and fitting one," Remple said. "I believe a person should wear clothes that they love everything about — what it is made of and how it fits."

Remple combines hemp with 100 percent organic cotton, both produced without synthetic chemicals or pesticides. The inclusion of organic cotton gives Remple's clothes a soft, flexible feel, contrary to a common stereotype of hemp clothing being rough.

Ruth Harper-Arabie, an environmental toxicology assistant professor at Huxley College of the Environment, said the chemicals

Patagonia Inc., an environmentally aware retail store based in Ventura, Calif., converted its sportswear line to 100 percent organic cotton in 1996. *Photo by Nicole Ryan.*

in pesticides can enter the environment in many ways, depending on the properties of a specific chemical. Pesticides can evaporate, dissolve into water or attach to sediment. Eventually, organisms can take these chemicals into their systems. The degree of harm a pesticide has on the environment depends on its mechanism of transport.

According to the Organic Trade Association, the environmental effects of pesticide use in cotton production is the primary reason environmentally conscious farmers, manufacturers and consumers are searching for alternative fiber sources.

One place for consumers to look is in Bellingham's Happy Valley neighborhood where Remple's bright, open studio is filled floor to ceiling with an array of colors and styles of fabric. This summer will be Remple's third in Bellingham. She sells her clothes at the Bellingham and Ballard farmers markets.

"I moved here because I was sick of the city," Remple said. "This community is so supportive; I really don't think I could have done it in any other community."

Like Texture, businesses on local, national and international levels are entering the organic-cotton and alternative-fiber markets. In 2003, according to the Organic Trade Association, sales of organic fiber products increased 22 percent in the United States and Canada.

In 1996, Patagonia Inc., based in Ventura, Calif., switched to 100 percent organic cotton in all its clothing.

"In the early '90s, as part of our long ongoing environmental assessment at Patagonia, we learned that the most damaging fiber we were using in our line was conventionally grown cotton," said Coley Malloy, a public relations representative for Patagonia. "Who would have thought that a natural fiber was causing more harm than polyester or nylon, which are both made from a nonrenewable source?"

Malloy said this was a risky move for Patagonia. Once it learned how damaging the pesticides used in conventionally grown cotton really were, the decision to switch was clear. After launching an extensive education program to communicate the importance of organic cotton to the entire staff, Patagonia made the switch.

"Yvon Chouinard, our founder, was willing to put the fate of the company on the line, in order to do the right thing for the environment," Malloy said.

According to the Organic Trade Association, many businesses do not choose to use organic fibers because of possible economic loss.

"Many companies are afraid that customers will not respond," Malloy said. "We have proven that they do."

Although sales are on the rise, organic fiber represents only one in every 2,500 articles of clothing in the U.S. clothing market, according to the Organic Trade Association.

The Sustainable Cotton Project, based in California's Central Valley, is one organization that has been working to develop the organic-cotton market. The project connects farmers, manufacturers and consumers in creating markets for organically grown cotton.

Teresa Remple (left), the owner and designer of Texture Clothing Inc., chats with customers Jesi Holmes and BJ Banleewen at the Bellingham Farmers Market. *Photo by Nicole Ryan.*

We are devoting our energy to making organic cotton a viable agricultural and economic alternative.

Lynda Grose
Sustainable Cotton Project's marketing consultant

TOP: Remple's fabric consists of organic cotton and hemp that do not involve the use of pesticides or other harmful chemicals. *Photo by Khale Wallitner.*

INSET: Patagonia clothing consists of 100 percent organic cotton, 100 percent organic hemp and PCR (post-consumer recycled) polyester. *Photo by Nicole Ryan.*

"We are devoting our energy to making organic cotton a viable agricultural and economic alternative," said Lynda Grose, the project's marketing consultant.

Grose said she recognizes that in order to popularize organic cotton, knowledge and education must reach farmers, manufacturers and consumers.

The project has organized three main campaigns. One campaign, Biological Agriculture Systems In Cotton, works directly with conventional cotton farm issues and educates farmers on the advantages of organic practices. Another, the Cleaner Cotton campaign, educates manufacturers about proven business models and strategies to incorporate organic-cotton fibers into existing products. Care What You Wear is an initiative that educates consumers about the issues of conventional cotton production and the environmental importance of purchasing organic cotton.

"We are consciously commited to socially and environmentally conscious clothing," Grose said. "With consumer, farmer and manufacturer participation, we hope to achieve the critical mass necessary to redirect the future of the world's favorite natural fiber."

It's hard to miss Remple's sign that stretches across her two booths at the Bellingham Farmers Market and reads, "Texture: Clothing with conscience." Her sign epitomizes what the green clothing market is about: making clothing with the environment as the top priority. Remple said she hopes consumers on a local and international level will become aware of the rising wave of environmentally friendly clothing options.

"Even if it's buying one organic cotton shirt this year, it is a huge step," Grose said. "Any step of participation by the consumer is a step in the right direction and a statement of environmental care."

Senior Kailyn McGrath studies environmental education. This is her first published piece.

thoughtful FOUNDATIONS

BY BRANDI BRATRUDE

PETER NILES DID WHAT MANY do when shopping for a house; he bought a fixer-upper. He said he planned to renovate rather than build because he wanted to avoid the resource expenditure of building a house.

"Building a house is one of the biggest consumptive activities people can do," said Niles, a designer for Adaptations, the design division of A-1 Builders Inc., a company that focuses on environmentally friendly construction practices.

Most of the materials in Niles' fixer-upper were rotten, beyond restoration or not up to safety standards. Because renovation would have required a greater amount of resources and would yield a less energy-efficient house, Niles decided to demolish the neglected house and start over, using the opportunity to build a low-impact home.

The Environmental Protection Agency reported in 1998 that the United States produced 136 million tons of construction and demolition waste, which is approximately 2.8 pounds of waste per person per day.

Green building employs design and construction techniques that minimize the energy consumption and environmental impact of a building.

"I had six weeks to plan a house, which is not anywhere close to enough time," Niles said.

Despite the lack of time for sufficient planning, Niles said he managed to build a home that has less impact on the environment than the remodeled house would have.

Niles' house stands behind a wall of bushes with windows covering the east-facing wall. Inside, daylight brightens the house from the west, with windows framing Fairhaven and Bellingham Bay.

"It's not built out of car tires; it looks like a normal house," Niles said.

Niles said he tried to reduce how much his home contributed to his ecological footprint through decisions about construction materials, energy efficiency, size and location. An ecological footprint refers to the amount of space or environment necessary to produce the goods and services a person's lifestyle requires.

"Look at every part of the design critically," he said. "Every single component is up for grabs to see if there's a way to make a smaller impact."

Materials

Niles used bamboo to floor his house's main level and stairs. The process of harvesting bamboo consists of cutting the stalks but leaving the rhizome — the part of the plant from which new shoots grow.

"It's a grass and it's got an eight- to 10-year renewable cycle," Niles said. "Bamboo is no more expensive than other hardwood flooring."

Cindi Landreth, the president of Cindi Landreth Home Design, used an alternative style of framing for her house. Instead of wood, she used Rastra block.

"The Rastra block is made of 85 percent post-consumer waste products," Landreth said.

Rastra block walls are hollow forms of expanded polystyrene filled with concrete. The forms stay in place as a permanent part of the wall. They provide a continuous insulation and sound barrier as well as backing for drywall on the inside and stucco, lap siding or brick on the outside, according to the California Energy Commission.

"There is such a broad palette of materials to pick from that are environmentally friendly," said Cheryl Lovato Niles, Peter Niles' wife.

The Nileses used natural linoleum flooring in the kitchen and bathrooms.

"It is made of rubbers and gums and resins — all natural products and all sustainable," Lovato Niles said.

Niles bought recycled slate blackboard from the RE Store and used it to fashion the kitchen counters himself, he said.

During construction of the house, he had to remove a 60-foot cedar tree.

"I cut the tree down, brought in a portable mill and milled it all up," he said. "The wood is going to be used for cabinetry, a desk, bookcases and a window seat."

Energy efficiency

A 2001 review by the United States Department of Energy found that residential and commercial buildings accounted for 65.2 percent of total U.S. electricity consumption.

"Finally the market is recognizing the environmental cost — the real cost — of energy, and prices are going up, never to go down again," said Alistair Jackson, an environmental consultant and project associate for O'Brien & Co. "Free energy — wind, solar — are more viable, more realistic."

Niles designed open floor plans, which make use of natural light to increase energy efficiency.

ABOVE: Cindi Landreth, the president of Cindi Landreth Home Design, framed her house with Rastra block instead of wood. *Photo by Jamie Clark.*

TOP: Landreth and her husband, Rick Dubrow, the president of A-1 Builders Inc., were careful to make the most of small spaces in the home they built in Bellingham. *Photo by Jamie Clark.*

OPPOSITE: Peter Niles built his house on an urban infill lot near Fairhaven, allowing him to bike and take public transportation to work. He constructed the house to be energy effecient as well, taking advantage of natural light.

"There are a lot of windows and a lot of daylight," he said. "During the summer, we will never have to turn on a light."

Taking the use of natural light to the next level, Jack Hardy, the president of Solar Design and Construction, designs and builds passive solar homes.

Passive solar energy uses the sun to meet a building's energy needs through architectural design and materials.

Windows cover the south-facing wall of a house Hardy, who teaches a class at Huxley College of the Environment, built in Blaine. From floor to ceiling, two horizontal rows of windows direct the sun's energy into the concrete wall across the living room and kitchen.

"Thermal mass — concrete — inside the house stores the heat," Hardy said. "The passive solar design reduces the heating bill by 70 percent. It is standard construction with a little more glass and a little more insulation."

Passive solar energy requires no extra equipment to use the sun's energy. Active solar, however, uses a circulation system to convert solar radiation into usable energy for space heating, water heating or electricity.

Every appliance in Niles' and Hardy's homes is Energy Star rated. Energy Star is the Environmental Protection Agency's rating system that labels appliances energy efficient.

For instance, washing machines that use 50 percent less energy than regular washers qualify for Energy Star.

According to Energy Star, the typical homeowner spends $1,400 a year on energy bills, but with Energy Star standards, savings can be up to 30 percent, approximately $420 per year.

"Energy efficiency — how much it's going to cost in the long run — is more of a strategy," Lovato Niles said.

One of the Energy Star rated appliances in the Nileses' house is the furnace.

"The furnace is 90 percent energy efficient," Niles said.

A 90 percent efficient furnace is approximately 15 percent more efficient than a standard furnace, according to Energy Star.

RESOURCES

BUILT GREEN RATING SYSTEM

Built Green is a nonprofit organization that promotes green building and education programs.
The organization's builders and associates provide sustainable housing in King and Snohomish counties. Its Web site provides consumers with a rating system that quantifies environmentally friendly building practices for remodeling and home construction, communities and multifamily development units.

To learn more about the rating system, go to www.builtgreen.net

TOP: A passive solar home built and designed by Jack Hardy, the president of Solar Design and Construction. *Photo by Zecca Lehn.*

Thermal mass – concrete – inside the house stores the heat. The passive solar design reduces the heating bill by 70 percent. It is standard construction with a little more glass and a little more insulation.

Jack Hardy
President of Solar Design and Construction

Size

Landreth's house is 970 square feet plus a 350-square-foot loft. She tries to use this space as efficiently as possible. Beneath one side of the staircase is a desk; the other side is coat storage. The laundry room doubles as a pantry.

"For spaces that aren't used, we're wasting so much energy heating them," Landreth said. "It's a fossil-fuel thing."

The Nileses' house is 1,600 square feet plus a 400-square-foot apartment. The apartment is built in such a way that the Nileses could convert it to extra space for the family if necessary, but for now a renter lives there, Niles said.

On a path to sustainable building, a 5,000-square-foot house is not the answer, Jackson said.

Location

Americans spend more than 100 hours each year commuting to work, and Seattle residents have the 10th longest commute time in the nation — 24.8 minutes one way, according to the 2005 American Community Survey data released by the U.S. Census Bureau.

"People need to really think about where they're building their house," Niles said. "You buy five acres 20 miles out of town and you have to drive 15 minutes to get a pound of butter."

Niles built his house on an urban infill lot near Fairhaven. An infill lot is an empty piece of land within an urban area. The alternative is building on undeveloped land outside the city.

Living in the city allows Niles to walk to the grocery store and other businesses and ride his bike or take the bus to work, he said.

"We have had one car between the two of us for 14 years," Cheryl Lovato Niles said. "Being in a location to walk, you don't have to bring 2 tons of steel with you to run an errand."

Landreth also said she chose the location of her new home carefully. She and her husband, Rick Dubrow, the president of A-1 Builders, picked an infill lot close to services and work.

"Look what (location) does to the environment," Landreth said. "Look what it does to your life."

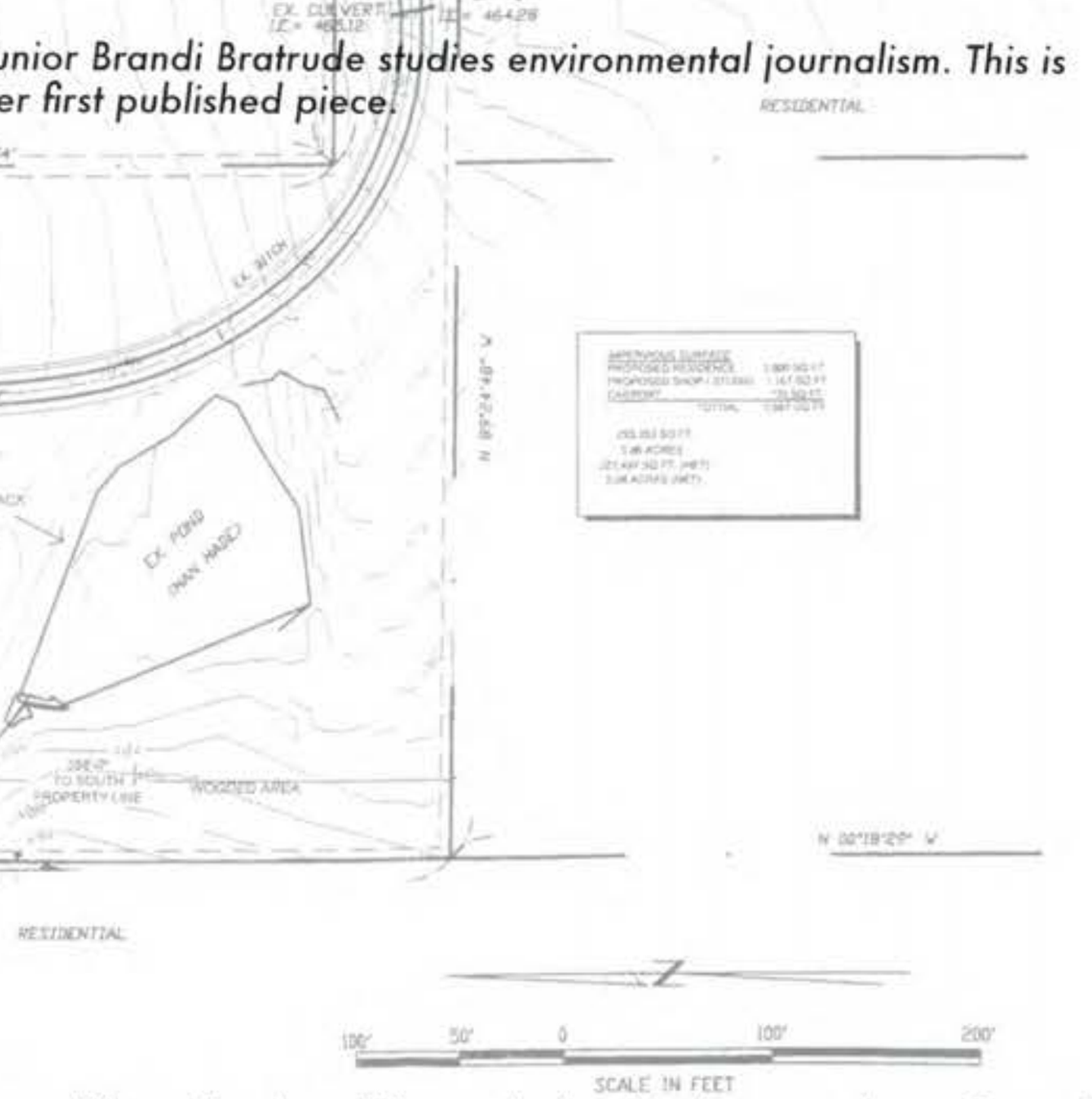
Niles said the amount of recent publicity environmentally friendly homebuilding has received is encouraging.

"Green building is growing — not just in my work, but in the popular press," Niles said. "From food to building, people are talking about environmental impacts."

Twenty years ago, people didn't think about building with the environment in mind, but now people are more conscious of it, Niles said.

"What green building is all about is being comprehensive — the process of building and maintaining it in the long term," Jackson said.

Junior Brandi Bratrude studies environmental journalism. This is her first published piece.



BELOW: **Niles used bamboo, which grows back quickly when cut, on the main floor and stairs in his house. He said bamboo is similar in price to hardwood flooring.**

H2ydratiOn CONSERVATION

BY EVAN McLEAN
PHOTOS BY DYLAN HART

AFTER A NIGHT'S RAIN, the morning sun warms the air in a landscaped yard in the Sunnyland neighborhood of Bellingham. Kurt Waldenberg said that with spring mornings like this, he almost forgets about an impending drought the state says will cause the driest conditions in 30 years.

The Washington State Department of Ecology declared a statewide drought emergency in March. Stream flows were at record lows following one of the state's driest winters. Bellingham has some water-conservation methods in place and has started to make a transition to water meters from the current flat rate.

Waldenberg responded last year to a program the city implemented to encourage the community to conserve water by using rain-catching barrels. He said he was one of the first people in Bellingham to install a rain barrel at his house.

"As soon as we got our barrel, people in the neighborhood began putting them in as well," said Waldenberg as he sheathed a pair of pruning shears. "We don't need it right now, but in the summer it helps out with the plants."

Tom Rosenberg, the assistant Bellingham Public Works director, said the program, which includes a $35 class that instructs people in how to make their own rain barrel, has been a success.

"We've fixed up the leaks in our (water) system, and now we're branching out these types of conservation tactics to the community," Rosenberg said.

Lake Whatcom, the city's water source, is at full capacity after this year's spring rains. Rosenberg said this doesn't mean the area is drought-free, however.

"Water conservation is especially important during the summer and early fall months in Bellingham when usage is high and there is very little opportunity to recharge the reservoir," Rosenberg said.

Richard Palmer, a water resource engineering professor at the University of Washington, said this year the state is at 5 percent of its average snowpack. Even average snowfall next year would not alleviate these dry conditions, he said.

Curt Hart, the drought spokesman for Ecology, said this trend is apparent throughout the state. Water levels and reservoirs are at or below 75 percent of average levels. He said it wasn't difficult for his department to declare a statewide emergency in March to start planning and reallocating early.

"This was one of the driest and warmest winters we've had," Hart said. "Precipitation coming down as rain instead of snow can have dire consequences on the east side, and this has become the trend over the last seven to eight years."

BACKGROUND: A dam at the upper part of Whatcom Creek controls the water level of Lake Whatcom by regulating the amount of water that empties into Whatcom Creek.

We haven't been able to rely on the snowpack lately, nor are we able to rely on heavy diversions from the Nooksack. We're using 4.2 billion gallons a year amid a booming population.

Tom Rosenberg
Bellingham Public Works assistant director

Hart said increasing temperatures are the most intimidating factor. Only small amounts of rain have been freezing, which could eventually wipe out the snowpack altogether, he said.

Palmer said he expects streams to be at less than 60 percent of their normal flow unless rain continues through the dry season. Many stream flows are protected under state and federal laws. Water managers inhibit initial spring flows to maintain constant rates throughout the dry season. Without monitoring, streams would surge in late spring and dry out by the end of summer, he said.

This year the city agreed to limit diverting water from the Nooksack River to ensure tribal water rights. The preserved flows of the river during the dry months will encourage a more productive fish ecosystem and help sustain plant life along the shoreline, Rosenberg said.

"We haven't been able to rely on the snowpack lately, nor are we able to rely on heavy diversions from the Nooksack," Rosenberg said. "We're using 4.2 billion gallons a year amid a booming population, which is why we've begun the transition into a metered water service."

Water meters

Rosenberg said meters haven't made sense in Bellingham until now, and this is why houses built before 2005 have flat water rates. The city has implemented a voluntary water-meter system to avoid being the last metered community in the state. Homeowners who choose to switch to a metered system must pay $150 for the setup.

The flat-rate system has started to change because of increasing populations and warming weather trends. Now, new or renovated buildings must have water meters installed, Rosenberg said.

"Water is going to become much more a precious commodity as time goes on," he said. "We need to start treating water more seriously, which is why the changeover cost is worth it."

Changing Bellingham to a completely metered system would cost about $5 million, Rosenberg said. The rate plan he outlined would actually benefit most single- or multifamily homes in the area. The city's Web site has a calculator that can estimate what a new monthly bill would be using a metered system.

Someone like Waldenberg would save approximately $5 a month using a metered system, paying for itself in two and a half years. Rosenberg said this is the case for most households. The city is willing to cut revenue it receives from monthly billing if it encourages conservation, he said. Rosenberg said he expects a citywide change to meters in the next five years. Waldenberg, like

ABOVE: Kurt Waldenberg said he uses about 1,000 gallons of water a year from his rain barrel.

RIGHT: Bellingham residents can voluntarily switch from a flat rate to a metered water system.

STEP-BY-STEP

MAKE YOUR OWN RAIN BARREL

COURTESY OF BELLINGHAM PUBLIC WORKS DEPARTMENT

✔ Materials:

Rain barrel (In Whatcom County, barrels can be purchased at Z Recyclers and Cenex)

3/4-inch ball valve spigot with pipe threads on inside

3/4-inch coupling or nipple, threaded on both sides

3/4-inch tank fitting

3/4-inch hose adapter

Two to four concrete blocks

Tube of silicone

4- or 5-inch diameter screen

4 feet to 5 feet of flexible hose

1 1/2-inch overflow valve

✔ Tools:

drill	wrench	hacksaw
3/4-inch hole saw	elbow gutter	jig saw

✔ Making your rain barrel:

1. Clean inside of the barrel and lid with dish soap and water.
2. Place the inlet screen on top of the barrel lid and trace in with a pen or marker. Use a drill to start a pilot hole on the marker line. Then use a jig saw or hand saw to cut out the hole for the screen.
3. Using a 3/4-inch hole saw, drill a hole just above the bottom of the barrel for the spigot assembly.
   - a. Wrap the end of the threaded nipple-and-hose adapter with Teflon tape, going around a few times. Screw each into one end of spigot.
   - b. Take the washer ring off the tank fitting. Apply a layer of silicone around the side that will be against the spigot hole on the inside of the barrel.
   - c. Place the spigot and nipple in the spigot hole, and screw the nipple into the tank fitting. Use a wrench to ensure fittings are screwed together tightly.
4. Drill a 1-1/2 inch hole about an inch or two below the top of the barrel for the overflow.
   - a. Spread silicone across the side of the overflow valve that will rest against the inside of the barrel, insert the valve into the hole, and screw the washer on tightly.
   - b. Attach the hose to the fitting, and direct its flow away from the house's foundation.
5. Determine which downspout you want to collect water from, and position the concrete blocks on level ground next to the house.
   - a. Place the rain barrel on the concrete blocks.
   - b. Using a hack saw, cut the downspout about a foot from the top of the barrel.

most, hadn't heard of the voluntary system. In fact, the city has only installed a handful of meters on houses built before 2005.

"The City Council is listening to what we have to say," Rosenberg said. "The state is going to come down on us eventually anyhow, which they have almost done in past drought years."

Palmer said that now is the time for water conservation in Washington, on both the east side of the Cascades and the west, and that it's time for Bellingham and Everett, the only two cities with flat-rate systems in the state, to become metered.

"Clearly any resource is more intelligently used when consumers are paying a reasonable price for what they consume. Flat rates do not discourage waste," Palmer said.

He compared Bellingham's flat rate for water with the competing forces for irrigation rights on the agriculture-dependent east side. Eastern Washington faces additional water demands for fighting forest fires, operating hydropower plants and maintaining fish-bearing streams, he said.

Palmer cited programs of agricultural conservation that feed water directly into these streams. Palmer also said urban conservation has a high mitigating effect and the Nooksack Basin's relationship to urban water use is an example of this.

"Water demands for the Seattle area are down to the 1974 levels although there has been a population growth of over 400,000 people," he said.

Public Works is trying to encourage a similar conservation change in Bellingham. Rosenberg said the city will be offering rebates to multifamily residences that replace 55-gallon washing machines with 15-gallon ones.

"Practicing water conservation is a cultural habit that we need to adopt as a way of life to ensure that there is adequate water supply for everyone's needs," Rosenberg said.

Public Works also has free conservation kits, which include a low-flow shower head, a toilet displacement bag and faucet aerators for anyone in the community. Residents have picked up more than 3,000 kits since 2001.

At a home with a garden as lush as Waldenberg's, drought doesn't seem threatening, but Waldenberg conserves anyway. The future status of water resources statewide is unknown, and responsible water use now will only benefit Bellingham residents later.

Senior Evan McLean studies environmental journalism. He has been published in The Western Front, The Planet and Klipsun.

A DRIVE TO CONSERVE

COMPILED BY MATTHEW HOAR
PHOTO BY DYLAN HART

Hybrid cars, such as the Toyota Prius pictured above, offer drivers a mode of transportation with better fuel economy and less impact on the environment.

IN 2002, AMERICAN VEHICLES TRAVELED more than 2.7 trillion miles, according to the Bureau of Transportation Statistics. This equates to more than 108 million trips around the equator.

Drivers can reduce the impact these miles have on the environment by taking simple steps to increase the efficiency of their vehicles. Properly inflating tires, getting regular tuneups, using the recommended motor oil and carpooling conserve fuel, lowering emissions.

EnviroStar is a certification program that recognizes companies for their efforts to reduce consumption and recycle materials. The five-star rating system provides consumers with a way to identify environmentally conscious businesses. Source: Whatcom County Web site.

RESOURCES

LOCAL ENVIROSTAR MECHANICS

Milne's Downtown Auto Repair ★★★★★
John Morgan's Unlimited Service ★★★★★
Humboldt Automotive Inc. ★★★★
John Kole Vehicle Repair ★★★★
Bellingham Automotive ★★★★
Evergreen Automotive Services ★★★
Angler Automotive Mobile Repair ★★
Prime Tune & Brakes ★★

TIPS

TIPS TO PROPERLY MAINTAIN A VEHICLE

1. Keep vehicles properly tuned. Replacing old spark plugs, ignition wires and the distributor cap can help an engine perform at its optimal level. Not tuning up a vehicle can result in a 10 percent to 20 percent increase in fuel consumption, according to the Federal Trade Commission.
2. Properly inflate tires. Incorrectly inflated tires reduce safety and increase the energy needed to move a car down the road. For every 2 pounds per square inch of underinflation, fuel consumption can increase by 1 percent, according to the Federal Trade Commission.
3. Use manufacturer-recommended oil. All engines are designed for specific fluids. Using the correct oil weight reduces friction in the crankcase and prevents energy loss.
4. Use commercial car washes. Commercial car washes are required to direct their wash water – which contains many pollutants such as oil, grease, suspended solids and heavy metals – into the municipal sewer system for treatment.

[enviro[rental]]

BY CHRIS NEUMANN
PHOTOS BY DERICK SMITH

AMANDA THIEL-SETTERBERG SITS CROSS-LEGGED on reused carpet in a cramped dorm room amid glass and plastic containers brimming with teas and herbal remedies. She and her roommate Cori Kruger could be called green dormers.

"Green living — I don't even know what that means; that's such a term," said Thiel-Setterberg, a Fairhaven College student living in the dorms.

Dorm life limits how much Thiel-Setterberg and Kruger can do to curb their effect on the environment. People who rent rather than own face obstacles when trying to reduce their impact because leases impose limits to changes they are allowed to make to their rental properties.

Renters might think reducing the environmental footprint of a rental property is impossible. Although tenants have no control over the design and structure of their homes, they can reduce their impact on the environment by making choices such as purchasing eco-friendly products for home care and maintenance, reducing energy and water use, turning waste into a resource and using small spaces to grow food.

"It's not that you have to devote your whole life to living sustainably; it's just those small choices that you can incorporate," Thiel-Setterberg said.

The green dormers use non-petroleum-based, biodegradable hand soap, dish soap and shampoo. They save plastic containers and try not to buy products with packaging. They also use compact fluorescent light bulbs.

"If you start by shutting off your lights when you're not using them or conserving water or composting your food scraps or something small like that, you start being aware of these little things," Kruger said. "Eventually, that starts spreading to being conscious of what kind of food you're buying at the grocery store and what kind of clothes you're buying."

The students are changing their lifestyles to live green. To save money and resources, the green dormers bike, walk or bus wherever they go. They buy used appliances from the RE Store, and wear secondhand and organic clothing. They

OPPOSITE PAGE LEFT: Green dormers Cori Kruger and Amanda Thiel-Setterberg manage to do what they can to reduce their impact on the environment, despite the limitations of dorm life.

OPPOSITE PAGE RIGHT: Adam Roberts, a volunteer coordinator for the Outback farm, enjoys a busy afternoon in the gardens on Earth Day.

LEFT: Nikkie Davis found a rental in Bellingham where she could garden, compost and use rainwater.

It's not that you have to devote your whole life to living sustainably; it's just those small choices that you can incorporate.

Amanda Thiel-Setterberg
Fairhaven College student

support local farmers at the Bellingham Farmers Market, buy organic food and grow food in the Outback, a community garden on Western Washington University's south campus.

Food production

Renters with little space can use small areas to grow food. Potatoes, zucchini and cucumber plants produce abundant crops and grow well in vertical wire meshes, balcony greenhouses or portable pots.

Eric Conn is one of six volunteer coordinators for the Outback, at which he teaches an independent study program called Sustainable Food Systems. The home he rents is south of the Fairhaven residence halls and the Outback, hidden among apartment buildings on a dead-end street, tucked away at the end of a wooded trail. The three-story turquoise duplex with purple trim has a big yellow, turquoise and purple bus planted in its front yard and a pond that ducks frequent. Letters above the front door read "Oasis."

Conn has been working with his landlord to create a garden that doesn't need tilling and uses limited fertilizer. The plants balance nutrients, such as nitrogen, to improve the quality of the soil.

"What we're trying to do here is to show that you really can grow a lot of your own food, even in the city, even on a normal-sized city lot," he said.

Starting with fast-growing annuals and some perennials, Conn and his landlord turned the garden into an elaborate ecosystem with fruit and nut trees, berry bushes, herbs, roots, vines and vegetables. This year they're in the process of densely infilling sections of their garden with more plants to use the maximum allotted space.

"Let's say you have a 20-by-20 patch of wheat," Conn said. "You might get 10 or 20 pounds of wheat from that spot. But if you have in that space an apple tree, and then underneath the apple tree you have some black-currant bushes and some raspberry bushes, and then underneath that you've got some mint running and some lemon balm and maybe some rhubarb along the edge, and then underneath that you've got some salad greens like chickweed and mache and lettuce and chard, and then down in the ground you've got roots like beets, turnips, daikon radishes, salsify, oca, things like that, and then you've got vines growing up through the whole thing, maybe hops or kiwis or grapes. In that same amount of space, you've got vegetables, you've got fruit, you've got roots, you've got herbs, you've got salad all in that space, and you might get a few hundred pounds of food."

Gardeners can produce their own food to save money on groceries while contributing to sustainability.

"It's a very ancient system. It's a very reliable and practical way of sustainable gardening that has been practiced for thousands and thousands of years by many cultures around the world," Conn said. "And it seems to be one of the best forms of sustainable food production."

For those with no space to grow food, Bellingham has community gardens that are open for anyone to grow or harvest food, Conn said. The Community Food Co-op Connections Building has a community garden downtown and Bellingham's Parks and Recreation Department provides three, which are located in Fairhaven, the Happy Valley neighborhood and on the corner of Lakeway Drive and Woburn Street.

"It's important to take advantage of resources as a group, like the Outback. Collectively, we can take our compost out there, and it's a great place for people to grow or harvest food, as a group or individually," Kruger said.

Adam Roberts, a Western sophomore and Outback volunteer coordinator, helps people obtain garden plots and teaches an independent-study program on gardening.

"This is a hub where students and community members can interact and meet each other," Roberts said. "Gardeners with knowledge can teach novices."

Although he lives off campus, Roberts harvests most of his produce from the Outback and totes his peels and food scraps in a plastic bag to one of its three compost bins.

"The most sustainable thing you can actually do is keep all your organic matter in the garden instead of shipping it off," he said.

Even though many people think compost piles stink, they don't if you do it right, Roberts said. A balanced compost pile has a carbon-to-nitrogen ratio of 30-to-1. Food scraps, which are moist and lower in carbon content, must be balanced with straw and higher carbon materials to prevent them from smelling bad.

Residents of the Oasis buy all their food in bulk to reduce unnecessary packaging.

Consumer choices

The main floor of Conn's house is shared community space. Shelves of books line the walls of a bedroom-turned-library. Drums, flutes and guitars litter the living room floor. A wooden archway leads into the kitchen, remodeled with two stoves, two sinks and a bigger pantry. The pantry, constructed from old lumber scraps and used buckets from the RE Store, is filled with basic food staples such as brown rice, beans and wheat grains.

"One thing I would actively promote for people renting a place together and doing something to be sustainable is eating organic whole foods bought in bulk," Conn said.

Not having the space or climate to grow grain, the household members buy whole grains and grind them into fresh flour with an exercise-bike-powered mill.

"When people become more intimately aware of their food — when they are more involved in bringing it from its original state into something they can eat — I think their general awareness of what they eat and how that affects them and what's around them becomes much more profound," Conn said.

Members of the house use 30-gallon barrels to catch rainwater. They use the rainwater on the garden during dry periods. They also run it through a filter rated for stagnant pond water. Conn said it tastes better than tap water.

"We go as close to the source as we can," he said.

Researching green

Four blocks away from the Oasis, Nikkie Davis conserves energy, recycles rainwater and gardens at the house she rents. Before moving to Bellingham the previous fall to attend Western, Davis researched Bellingham grocery stores online and found the Community Food Co-op. She saw a flier on the co-op's bulletin board advertising a home for rent that included compost piles for food and yard waste, and a garden in the backyard.

"Find the right place to live," Davis said. "If you're renting from somebody, I would just lay down with them solidly: What can I do, what don't you want me to do and what does it need to look like when I leave?"

The key to renting a space and remaining environmentally conscious is searching for a residence and lease that meet specific criteria. As more prospective renters base their criteria on double-paned windows, energy efficient appliances and compost piles in the back yard, more landlords will respond to the demands.

"You can live in the city and have all its benefits and still have a place to go get away from that and try and get in touch with the Earth," Roberts said.

TIPS

BE AN ENVIRO-RENTER

- Turn off and unplug lights, stereos, DVDs/ VCRs, etc. when not in use.
- Use a clothesline to dry laundry.
- Buy food in bulk.
- Compost food scraps.
- Recycle paper, newspaper, glass, plastic, aluminum, electronic equipment, etc.
- Use a cloth shopping bag for groceries.
- Reduce water flow in faucets and showerheads with aerators.
- Sanitary Service Company, Inc. customers can use their yardwaste toters to recycle all food scraps and food-soiled papers. SSC picks up every-other-week for $8.

Senior Chris Neumann studies journalism. He has been published in the Whatcom Independant and The Western Front.

beyond the GRID

BY JESSICA KNOX

Although Jim Malin's home is situated within a dense forest above south Lake Samish, it's difficult to miss. His property is an enthusiastic homage to renewable energy resources. Four solar panels, immediately visible to visitors, provide Malin with 450 watts per hour, enough to run his fluorescent lights and small appliances.

"In one to two years I expect to be living entirely off the grid," Malin said. Nodding his head and grinning, he added, "Man, it sure is gonna be a nice feeling to unplug Puget power forever."

Energy conservation is a topic close to the hearts and wallets of anyone who receives a monthly bill from an energy company. Individuals who want to conserve energy and money are opting for more environmentally friendly power sources such as solar or wind. According to the U.S. Department of Energy, 30,000 to 50,000 American homes use the sun as a power provider.

To power the rest of his house, Malin turns to other means. Behind his home, three radiating blades of a metal wind generator gleam in the sun, looming nearly 100 feet in the air. The wind generator provides his home with up to 1,000 watts of energy per hour, turning on when the wind reaches 12 mph, Malin said. During fall and winter, when his solar panels are functioning at roughly 20 percent capacity because of cloudy weather, the wind generator can provide Malin's home with 50 percent of its electrical needs.

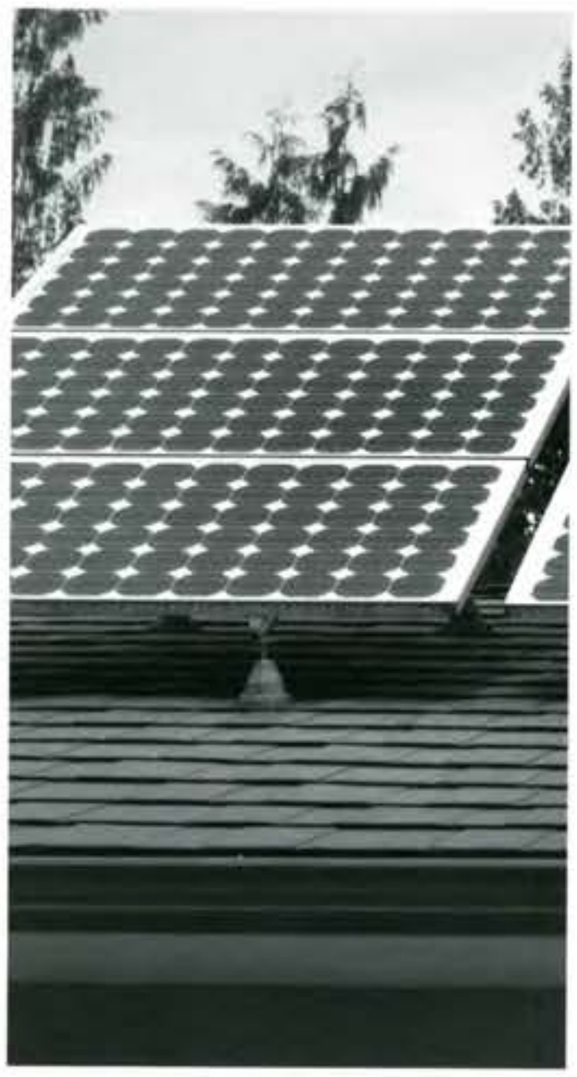
Malin is 95 percent free from the public power grid during the summer and 80 percent during the rest of the year. Before his system was installed, Malin was paying Puget Sound Energy $35 a month for electricity. After installation of his solar panels, Malin said he hasn't received a power bill exceeding $7 since winter, when it climbed to $12. Malin has remained connected to the utility grid to power his stove-top range, his electric hot-water heater in the winter and his deep-well pump.

Backwoods Solar Electric specializes in serving homes so remote that access to utility lines is not practical. Tracey Gentleman, Backwoods' data-entry, accounting and shipping

Man, it sure is gonna be a nice feeling to unplug Puget power forever.

Jim Malin
Homeowner

BACKGROUND: The solar panels on the roof of the Community Food Co-op collect energy for temporary backup use in case of power outages. *Photo by Dylan Hart.*



specialist, said it is not feasible to operate major heating appliances with solar energy because they require 20 to 100 times more energy than smaller appliances such as televisions. Homeowners can use other fuels to power large appliances at lower costs. For example, Malin uses wood to heat his home instead of an electric heater.

"It is not an economically feasible idea for a home to try to combat high energy bills by adding solar panels," Gentleman said. "More energy is not the answer. Conserve what you have first. This is especially important considering an efficient solar power system can cost, at a minimum, $6,000."

Because solar power is initially more expensive than energy from a power company and can replace only a limited amount of power in a home that is connected to the grid, Malin said conservation is as important as replacing fossil fuels with renewable energy sources.

"If someone is living in the city and looking for a cheaper utility bill, I recommend adding a couple of 50- to 200-watt solar panels and then consciously work to cut energy usage by one-third. Doing so will reduce the stress on an old and failing power-grid system," Malin said.

The Grid-Intertie System is another choice for homeowners in the city looking to put distance between their home and the utility power grid while not being wholly independent of it. This setup allows homeowners to switch back and forth between a photovoltaic system and the grid. Homeowners can use grid energy with a modest solar power system, effectively keeping the home powered on consecutive cloudy days.

Rick Todahl, an ironworker who lives near Alger, is in the process of upgrading his solar-energy system to include the Grid-Intertie System. His motivation is a $20,000, 12-panel photovoltaic system that generates 1,200 watts per hour — more energy than his 5,000-square-foot home actually uses. With the Grid-Intertie System, Todahl can buy the power he needs from the utility grid and sell back whatever excess electricity his system produces. PSE will buy only the equivalent of the electricity that his home uses throughout the year. This essentially cancels out the electricity he buys and zeros out his meter. Todahl projected that he will break even on his system in eight years with the Grid-Intertie, four years earlier than he would have without the upgrade.

Todahl, a man who seems most comfortable cruising around his property on his four-wheeler, lived in an off-the-grid cabin for six years before moving into his home near Cain Lake. During his first year in the cabin, he lived without electricity and water. Then he bought his first inverter and panels to run his lights and television. He continued to upgrade his modest system until moving to Cain Lake. Connecting his Cain Lake home to the power grid would have cost $45,000 because of its remote location, he said.

"After I got familiar with PSE, I quickly realized I wanted to distance myself from them," Todahl said.

Instead of paying to extend the power lines to his home, Todahl invested in a solar-energy system.

"I'm not a conservative energy user," Todahl said. "I don't own a single fluorescent light. … I've just gotten comfortable with having my own system and used to the independence I have from fluctuating power rates."

Though Todahl is enthusiastic about his alternative energy source, this setup is hardly common.

"Only 51 of 1 million PSE customers are using the Grid-Intertie System," PSE energy adviser Joel Smith said.

According to the PSE Web site, the energy company is offering a financial incentive to prospective solar-energy customers. In Whatcom County, PSE is offering a $575 rebate for each kilowatt of capacity installed in a system.

"More education is essential for the promotion of solar energy; that is what will breed wider acceptance," said Celt Schira, an electrical engineer and the owner of Schira Consulting.

Speaking rapidly and making emphatic gestures, Schira attempted to expel paragraphs of information in one breath while discussing solar energy.

"The technological engineering is entirely adequate. Now social engineering and change are necessary for advancement," Schira said.

OPPOSITE PAGE LEFT: The solar panels on Rick Todahl's 5,000-square-foot house generate more solar power than his house uses. He sells the surplus to PSE. *Photo by Nicole Ryan.*

OPPOSITE PAGE RIGHT: Solar panels produce electricity to power Jim Malin's hot tub. *Photo by Nicole Ryan.*

LEFT: Malin, an electrical contractor, leans over Todahl's battery bank, which stores energy for use when Todahl's solar panels don't produce enough. *Photo by Nicole Ryan.*

"Once renewable energy sources are demystified, they will be utilized far more often."

Three years ago, Schira Consulting installed two solar panels on the Community Food Co-op roof in Bellingham. The co-op's system can produce one to two hours of light should a power outage occur.

"Just enough time for orderly closing procedures," general manager Jim Ashby said. "We want to be a part of the larger environmental mission. We're here to set an example and make solar power more visible in the community."

The solar power inverter is located near the main entrance. The co-op has a larger display case planned for the inverter to call more attention to it, Ashby said.

Doug and Christine Park also use solar energy to power their home. This was not by choice, however, but out of necessity. The Parks live in an off-the-grid home off Chuckanut Drive. Their house is tucked deep in the woods, long after asphalt turns to gravel. When the Parks moved into their 1,800-square-foot home six years ago, they discovered it would cost $40,000 to $80,000 to extend the power lines out to their property, which was outside the public grid's coverage. Instead they opted for solar panels. Six panels on their roof produce 400 watts per hour to power their home. According to the World Resources Institute Web site, the average residential energy customer in 2001 used more than twice that amount.

Everything in their home is wireless. They use laptops instead of desktop computers, cell phones instead of a land line and have no desire to get cable television, they said. All their light bulbs are fluorescent, using only about 11 watts each, or one-fifth of the energy a traditional 60-watt incandescent bulb uses. Numerous large windows maximize the amount of light entering the home. Their refrigerator and clothes dryer run on propane, and they never use the heat drying cycle on their dishwasher, they said.

"There are times when you feel like a pioneer," Doug Park said. "You can't call the power company if a tree falls and disturbs your power flow. Instead, you get out there with a chainsaw."

They also have eliminated a large portion of phantom loads, which gobble up a considerable amount of energy, they said.

There are times when you feel like a pioneer. You can't call the power company if a tree falls and disturbs your power flow. Instead, you get out there with a chainsaw.

Doug Park
Homeowner

Digital clocks, answering machines, television sets, VCRs, stereos and any devices that have an instant-on capability have phantom loads because they sit in a home and continuously consume small amounts of electricity. To reduce phantom loads, people can plug the appliances into a power strip with an on/off switch, Shira said.

"We may be cutting-edge now," Doug Park said. "But I bet 20 years from now this will all be unremarkable."

Junior Jessica Knox studies creative writing. This is her first published piece.

green cuisine

BY KRISTA GRUNHURD

SITTING AT HER PICNIC TABLE in a compact backyard garden filled with herbs and plants, Mary Ellen Carter sips on a steaming cup of jasmine tea as she flips through her cookbook, "At Joe's Garden: Harvest Recipes from the Pacific Northwest."

"Food is more than just substance. It's a community event. It's a cultural event, and we need to start having more fun with it," Carter said. "We are losing our culture. We are losing our old recipes. We need to start being more aware by looking at our plates and asking, 'Where did this come from?' "

The recipes in Carter's cookbook call for seasonal ingredients from Whatcom County agriculture. Carter, a 30-year Bellingham resident, said it was important to write a cookbook that emphasized the environmental and social benefits of supporting sustainable agriculture.

Sustainable agriculture is a way of growing food that seeks to protect the environment, support local economies and encourage social and economic equity.

Carter said resources such as farmers markets, cooking classes and food education also contribute to community support for local farms.

"We have to have people like Joe's and the farmers market. If we don't start supporting them, all the local farmers will disappear," Carter said.

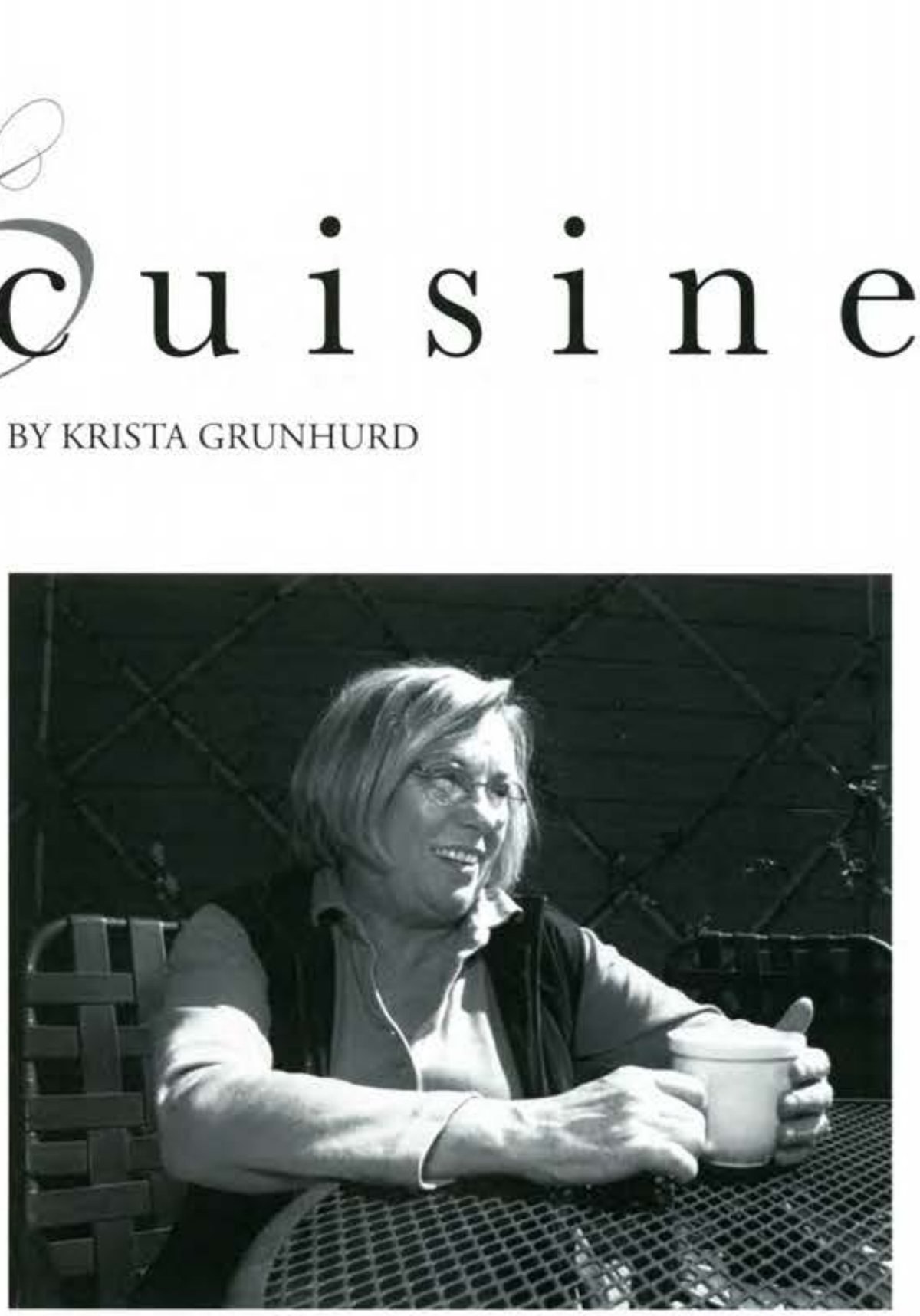
According to the Washington State Department of Agriculture, Whatcom County ranks sixth in the state for agricultural production and still has many small, family-owned farms. Although their numbers have decreased by 12 percent — to 1,485 farms — in the past five years, these farms still provide sustainable options for county residents.

Joe's Garden, the backdrop for Carter's cookbook, is a local grower of vegetables, flowers, herbs and other plants. Since opening in 1933, this Bellingham farm has provided produce while surviving increased competition from larger, industrial farms. Owner and manager Jason Weston said this was largely due to the role the garden plays and the staff's desire to keep it going.

"It's tough to make a living in this industry. We have made our niche by customer service and growing things better than the larger farms," Weston said. "We are big enough where we can make it but small enough where we don't have to compete."

Joe's Garden doesn't use pesticides on its soil or crops. Staff members pay close attention to the nutrient levels in the soil to have a successful harvest.

"We are a blend of scientific and traditional farming," Weston said. "By knowing exactly what your soil is doing, you can adjust where your plants go and have the healthiest plants possible, avoiding disease and insects."



Mary Ellen Carter wrote the cookbook "At Joe's Garden: Harvest Recipes from the Pacific Northwest" to encourage support for sustainable agriculture. *Photo by Zecca Lehn.*

While the staff at Joe's keeps a close eye on the soil and crops, larger-scale farmers with more acreage struggle with growing produce without pesticides.

"Industrial farming is not only ruining the environment, it's ruining our health, our children's health and our family culture," said Elizabeth Smith, a Bellingham Community Food Co-op member. "People really need to understand what food is. It's not the things that come out of a box. What most people put in their mouths is not food; it's crap. We need to get back to some of the basic premises of what food really is."

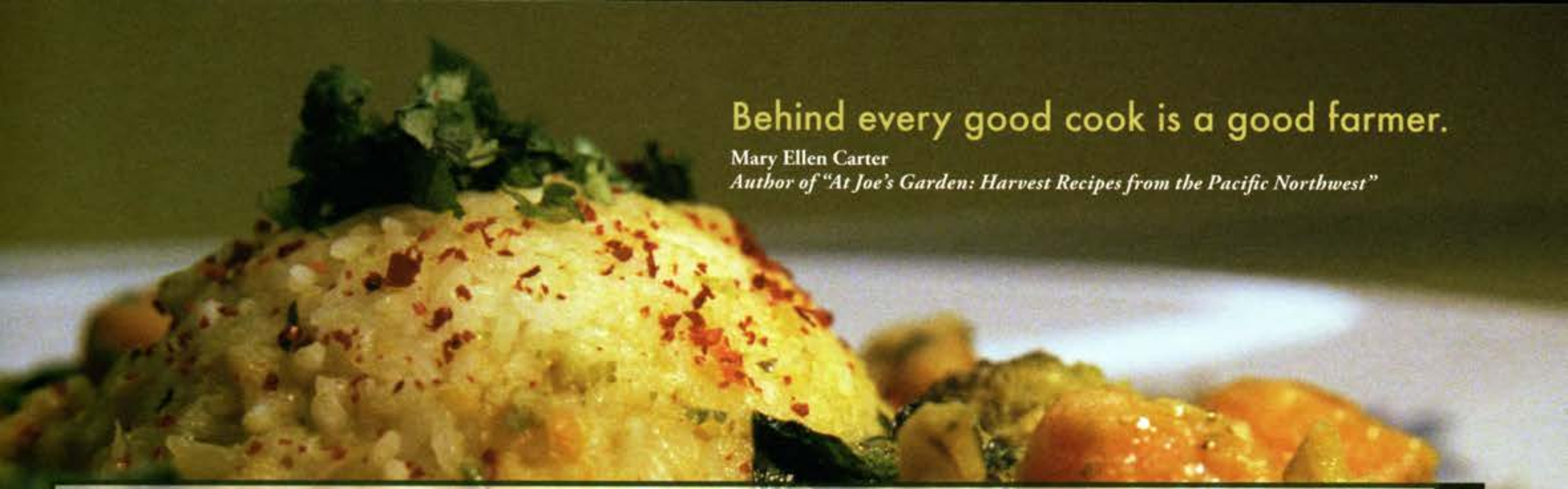
Mary Ellen Carter's cookbook does just that.

"It's about shopping for what's in season — using whatever veggies are happening at the time," Carter said. "When you get a good vegetable, it doesn't take long to make something easy and great."

Consistent with her passion for community food education and sustainable agriculture, Carter teaches monthly cooking classes for both Whatcom Community College and the co-op. She also writes a monthly food column for The Bellingham Herald and has written three cookbooks.

"Behind every good cook is a good farmer," she said.

Krista Grunhurd studies business administration. This is her first published piece.



Behind every good cook is a good farmer.

Mary Ellen Carter
Author of "At Joe's Garden: Harvest Recipes from the Pacific Northwest"

STEP-BY-STEP

CURRIED VEGETABLES IN COCONUT MILK (serves six)

3 tablespoons vegetable oil
1 onion, chopped
3 cloves garlic, minced
2 stalks broccoli, broken into florets
3 carrots, sliced into rounds
1 red pepper, sliced lengthwise
1 yam, peeled and cut into 1-inch cubes
1/2 head cauliflower
1 14-ounce can coconut milk
2 tablespoons yellow curry paste
1/3 cup of orange juice
1/2 pound of spinach, cleaned
1/2 cup cilantro, chopped

Photo by Lucas Henning.

Photo by Lucas Henning

1

Photo by Jamie Clark.

Heat the oil in a wok or large skillet. Add the onions and garlic and cook for two minutes.

2

Photo by Jamie Clark.

Add the cauliflower, broccoli, carrots, pepper and yam to the wok and cook for 10 minutes.

3

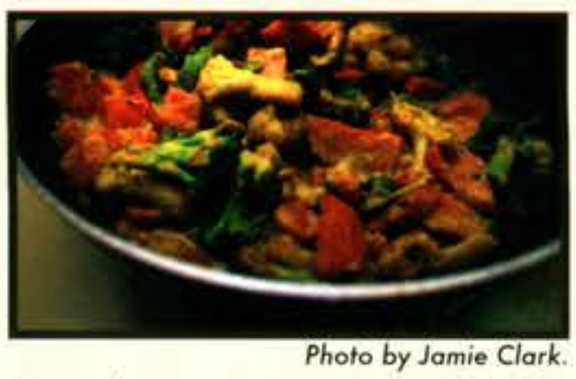


Photo by Jamie Clark.

Mix the curry paste with the coconut milk and add to the wok. Cover and simmer for 15 minutes.

4

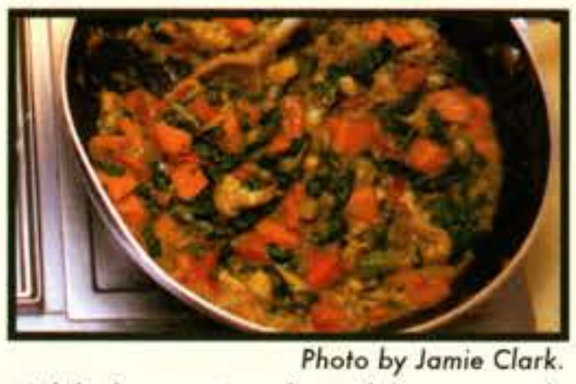


Photo by Jamie Clark.

Add the spinach, cilantro and orange juice and cook for five minutes.

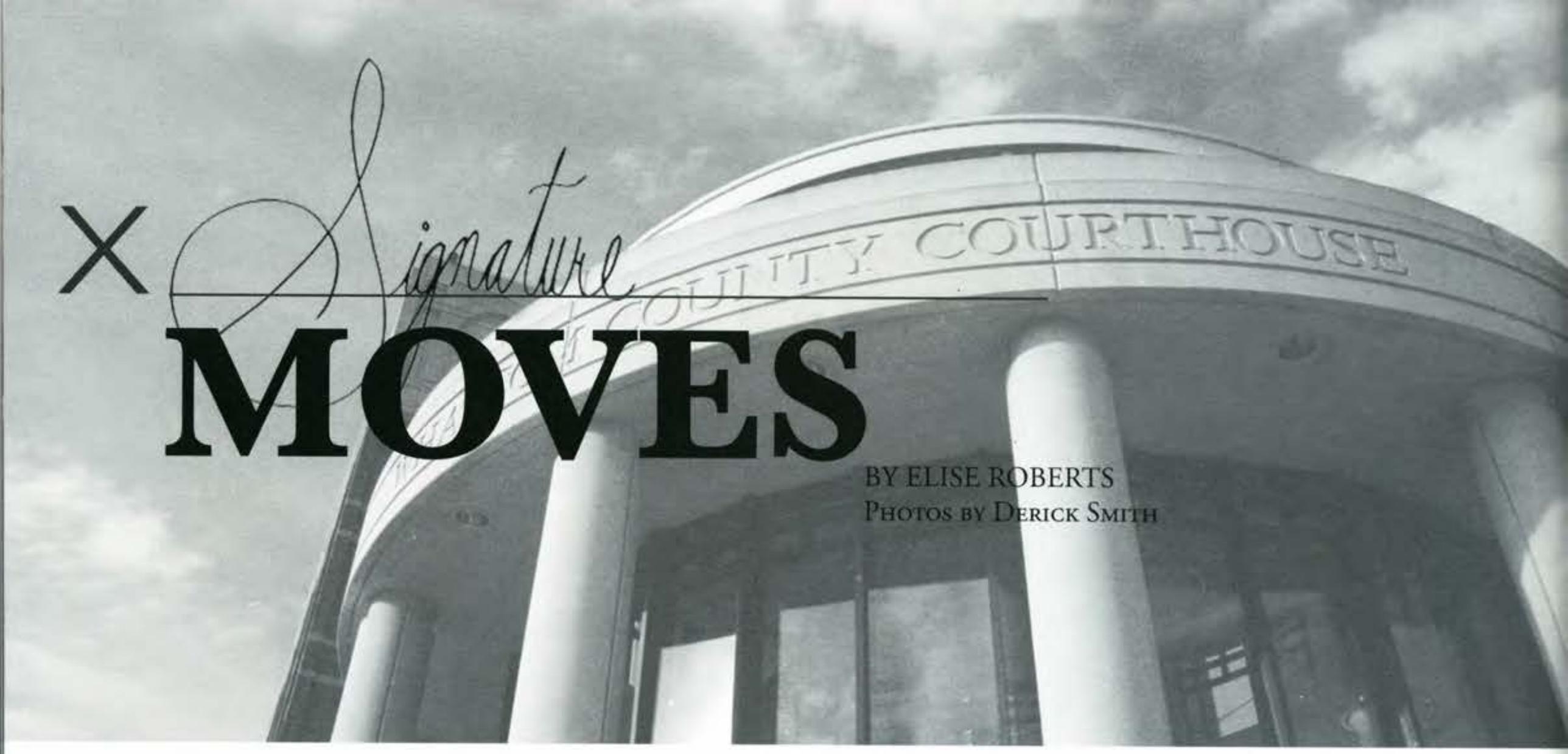
5

Photo by Lucas Henning.

Garnish with cilantro. Serve over jasmine rice.

Recipe courtesy of Mary Ellen Carter. The recipe is published in her cookbook, "At Joe's Garden: Harvest Recipes from the Pacific Northwest."

X Signature MOVES



BY ELISE ROBERTS
PHOTOS BY DERICK SMITH

MARIAN BEDDILL HAS DEVOTED MUCH of the latter part of her life to working for environmental and social change. She is retired yet rarely finds a free moment in her day. In 1999, Beddill and two other concerned citizens created the Drinking Water Initiative, which called for better water-quality protection in Lake Whatcom — the drinking-water source for more than 87,000 Whatcom County residents.

"When the legislature fails to act, the initiative process comes next," Beddill said.

The initiative mandated an increase of no more than $12 to monthly residential and commercial water bills to raise $4 million a year to buy land in the watershed.

The Drinking Water Initiative lost by 2 percent, but its efforts did not go unnoticed. Beddill attended nearly every Bellingham City Council meeting for nine months to prove her dedication to and concern for the issue. The council members took note. One year later they passed a similar version of the initiative into law.

Beddill said a quote by Margaret Mead inspires her to continue working for change: "Never doubt that a small group of thoughtful, committed citizens can change the world. Indeed, it's the only thing that ever has."

Citizen initiatives don't require great expertise. Dedication, community support and involvement stand out as the essential ingredients, Beddill said. Any legal voter in Whatcom County, either individually or on behalf of an organization, can propose an initiative to the county auditor.

"I think it's something that the proponent must feel very strongly about," Whatcom County Auditor Shirley Forslof said.

The Whatcom County Charter and County Code explain the process in detail. According to these documents, once someone proposes an initiative, the petitioner meets with the auditor to make any corrections to the format of the initiative. The initiative then receives an identification number and the prosecuting attorney meets with the petitioner to create a concise, unbiased title.

Writing the initiative is one of the most difficult steps, Beddill said.

"Writing the initiative requires careful legal review through preparation to maximize the validity of initiative language once it is passed into law," Beddill said.

If the wording is vague, a much greater chance exists that the council will reject or change it. Forslof said the initiatives that pass usually have relied on attorney assistance regarding specific structure and wording. The petitioner has 120 days to collect signatures from registered voters. The number of signatures must equal or exceed 15 percent of the total votes cast in the previous county election.

"The initiatives that get the most valid signatures are when the proponents go out and talk to the voters about the requirements ... not when they are just left on a counter," Forslof said. "What I would advise is to start early in the year. If you start early enough, you can have the full 120 days to get enough signatures."

If the initiative meets the deadline and has adequate signatures, the City Council validates it and places it on the next general-election ballot.

When the legislature fails to act, the initiative process comes next.

Marian Beddill
Co-creator of the Drinking Water Initiative

Tim Eyman has ample experience sponsoring citizen initiatives. Four of the 12 initiatives proposed to the Washington secretary of state so far this year carry his name. Unlike politicians, initiatives follow through on their campaign promises, uninfluenced by outside funding and re-election concerns, Eyman said.

"With initiatives, you get the chance to resolve the problem. You have months to debate it; newspapers can address it; legislatures can talk about it. ... If it was an easy problem for the legislature to solve, it would have been dealt with long ago," Eyman said.

Todd Donovan, a political science professor at Western

Washington University, said citizen initiatives aren't necessarily the makings of good policy, but they are indicative of the will of the people and can ultimately change government policy.

"Citizen initiatives are becoming a default option to a lot of groups whose issues are being ignored by the council," Donovan said.

Even if citizen initiatives fail, they usually increase public dialogue, Beddill said. This was the case for Boats Off!, a citizen initiative in 2004 that didn't make it onto the ballot.

Although the presidential race was the highlight of the 2004 elections, Boats Off! received a large amount of local attention — good and bad — in its effort to halt motorboats on the portion of Lake Whatcom within Bellingham city limits. Sharon Crozier, one of Bellingham's 2004 mayoral candidates, sponsored the initiative. Forslof certified the initiative in August 2004, making it ready to go on the November ballot. A judge removed it, however, when its process was challenged in court. Attorneys disputed the validity of the signatures, saying some were too old. Forslof said all the votes came from people registered in the county, which gave her reason to certify the initiative. After judges determined that initiative organizers had not collected all of the signatures within the allotted time period, Forslof subtracted the late ones, leaving the initiative invalid. Now the case is in the court, and proponents are hoping to place it on the next ballot.

Eyman said public policy is divisive by definition, and if it weren't, there would be no need for government.

"Why is it that we are smart enough to pick elected officials but we have a mental lobotomy when it comes to public policy?" Eyman said.

Beddill and Eyman show that through active participation, a place for "the voice of the people" exists within the government.

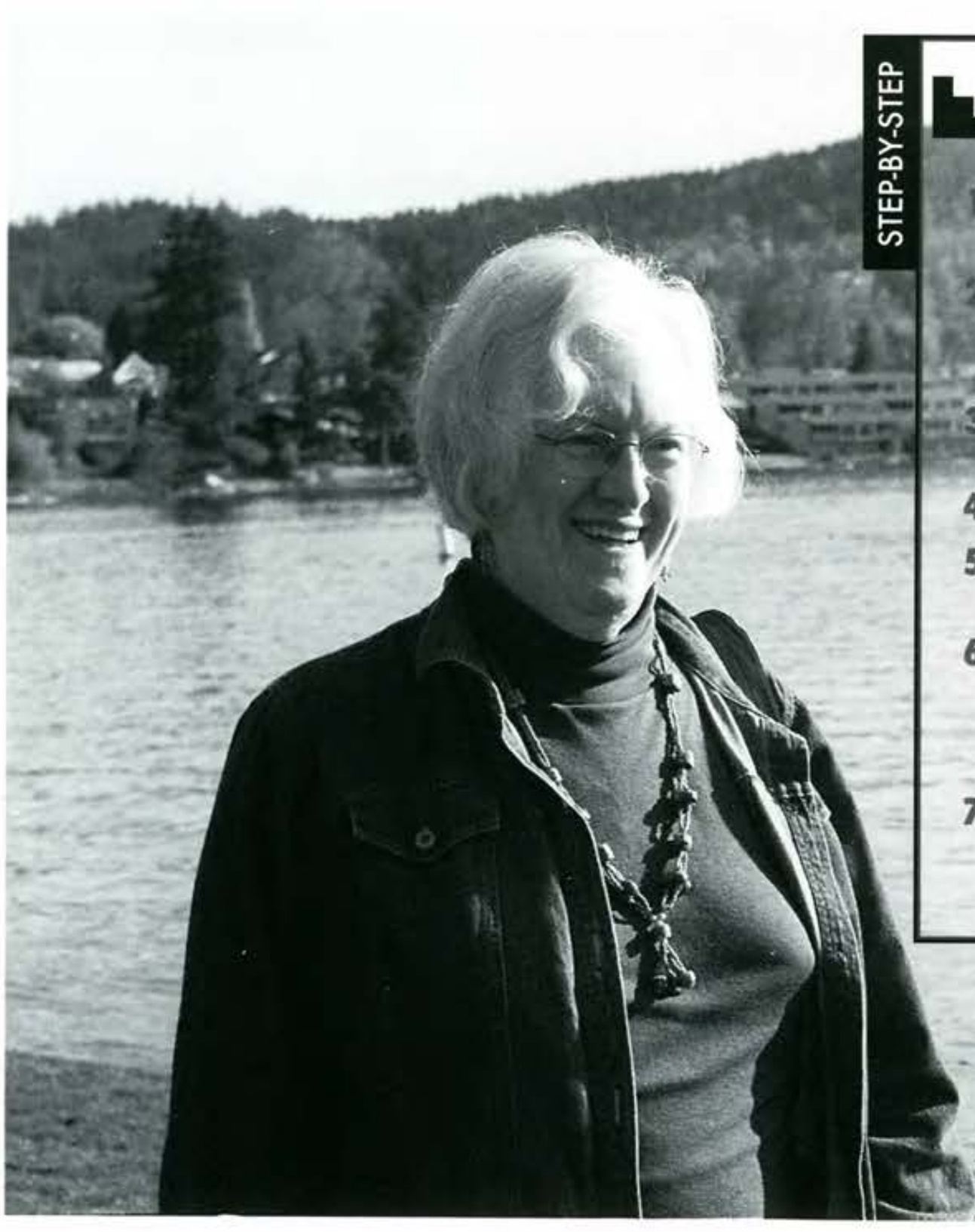
In Bellingham, initiatives that address environmental issues have garnered positive results for both the proponents and the environment. Thanks to citizen initiatives, Whatcom County is a nuclear-free zone and bans the burning of medical waste.

"Coming up with ideas that the voters will think is a good idea is simple," Eyman said. "The really difficult part is how to get your idea on the ballot."

While the process may not be easy, citizens have repeatedly proved it possible.

"Should students do this sort of thing? Hell yes," Beddill said.

Elise Roberts studies environmental education. This is her first published piece.



STEP-BY-STEP

SEVEN STEPS TO GETTING AN INITIATIVE ON THE BALLOT IN BELLINGHAM

1. Come up with an idea or issue that voters will support and the legislature isn't addressing.
2. Talk to people to formulate your ideas. Contact a nonprofit that is working in the field to get more input and like-minded people involved.
3. Talk to a lawyer to see if your idea is legal and constitutional.
4. Propose your idea to the auditor.
5. Meet with the prosecuting attorney to create a title.
6. Determine how many signatures you need and collect them. Go out in person, get help from community members and talk to people about your initiative.
7. Turn in the initiative to the auditor with the appropriate amount of valid signatures within 120 days.

Marian Beddill is an advocate for Lake Whatcom water quality. She and two other Whatcom County citizens created the Drinking Water Initiative in an effort to protect it.