Educating the Green Generation

By Jennifer McNulty

Undergraduates like Ryan Carle feel the burden of the global environmental crisis they are inheriting, and they are determined to build a brighter future.

“Our generation grew up seeing all these problems in the world,” said Carle, 21, an environmental studies major at UC Santa Cruz. “We’ve been hearing about them our whole lives, and they are feeling the burden—everybody else,” he said. “But I’m going to ask you to do it, because we can’t keep sweeping these problems under the rug.”

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Environmental studies majors (l–r) Jessica Beckham, Nicole Nakagawa, Joanna Bremser, and B. J. Dericco are classmates in the National Environmental Policy course.

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taught the course last fall. “Environmentalists get a lot of push-back. We know that, and our program prepares students to anticipate criticism.”

If the interdisciplinary approach demands more of students, it also asks more of professors, who have to go beyond the disciplinary silos that defined their own academic training.

“When I came to UCSC and started sitting on dissertation committees, it was a little like going to graduate school all over again to learn the literature and language of my social science colleagues,” said Gilbert, who left UC Berkeley to be part of a department where natural scientists and social scientists worked together to solve problems. “Like their students, Gilbert and his faculty colleagues share a vision of a better world, and they see interdisciplinary work as a necessity, not an option. A forest ecologist and passionate environmentalist, Gilbert learned the hard way that good science is not enough to protect the natural world. Gilbert works in central Panama, an area he calls “the best-studied tropical forest in the world,” because scientists have published more than 2,000 papers about the region’s ecology.

“But after 15 years of research there, I saw that the overriding forces in conservation were social,” said Gilbert. “Over and over, critical decisions about roads, dams, and parks were made by people who operated beyond the reach of scientists. “No matter how much we learn about the ecology, conservation depends on politics, economics, and social processes to work,” he said. Environmental studies students step up to the challenge of their major, which requires them to work outside their primary interests. Undergraduate Sarah Carvill is a writer inspired by the work of authors like Terry Tempest Williams and Rachel Carson, whose 1962 book Silent Spring helped launch the environmental movement. But professor Alan Richards, an international economist, commanded her attention in his Natural Resource Economics course.

“Economic considerations often seem antithetical to environmental advocates, but we have to learn how to use the language of economics to speak to people in that framework,” explained Carvill, who said she has known since third grade that she would work as an environmental advocate. “It’s a language you have to speak, because so many people speak the language of money.”

A senior, Carvill is pleased with the breadth of her education. Last fall, an internship with the City of Santa Cruz Water Department taught multiple skills as she supervised the restoration of a hillside where a landslide caused erosion that was polluting the city’s primary drinking-water supply. For her senior thesis, she is writing the untold story of the restoration of the North Basin of Mono Lake. Overlooked in the glare of publicity around the David-and-Goliath effort to save the lake itself, the neglected story of the hotly contested Mill Creek project nevertheless revolves around the essential elements of all western dramas: water and people. “It’s a microcosm of water policy in the West,” said one restoration advocate. “This department has given me the opportunity to do science and field-based science, to write political memos and critique policy, to write literary nonfiction and to try teaching,” said Carvill. “I wouldn’t major in anything else.”

Although each student’s path in environmental studies is different, each brings enthusiasm, passion, and a heartfelt desire for change to their studies. Professors routinely go beyond their jobs as educators to offer inspiration and encouragement, too.

“There are days when you’ll feel like you’re making a difference and other days when you’ll feel overwhelmed,” Holl told her students on the last day of class in early December. “But there are many ways to make a difference for the environment, so choose one that you will enjoy every day.”

And she reminded them that change sometimes happens incredibly quickly: In 1988, Holl spent her junior year of college in Berlin. “We traveled to East Germany, Hungary, Czechoslovakia, Yugoslavia, and the Soviet Union. We were told where we could and couldn’t go, we were forced to get our passports stamped to show where we spent every night, and we were regularly searched by military police when crossing borders,” she recalled. “We never considered that this might change in the near future.”

A year later, the Berlin Wall came down. “Although my peers and I didn’t know it at the time, people had been fighting for years to bring that wall down,” said Holl. “Likewise, we have to keep up the fight for things that are important to us.”

Bothered by such calls to action, Ryan Carle is spending this spring on Santa Cruz Island near Santa Barbara, studying the interaction of songbirds with native and nonnative plant species and evaluating different proposals to control invasive plants. And another piece of the global environmental picture will snap into focus.

“Everybody has a small part to play,” said Carle. “No one person can save the world. It’s more about finding your place.”

For more information about environmental studies at UCSC, visit envi.ucsc.edu. To inquire about ways to support the environmental studies program, contact John Lopold at jlopold@ucsc.edu.

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