

miracle on the mountain

SCOTT TIMM '99 LEADS A VERY SPECIAL SCHOOL IN COSTA RICA.

By Carol Brévar-Demm

Photographs by Ernst Demm and courtesy of the Centro de Educación Creativa



Visitors to Monteverde's Cloud Forest School, 4,600 feet above sea level in the Tilaran Mountains of Costa Rica, may well wonder whether they've stumbled into Brigadoon—that mythical community that, in order to preserve its peace and pristine beauty, appears out of the mist only every 100 years.

On a clear morning, the school connects to the outside world with a view across 70 miles of cloud-topped mountains that dip gently to the coastal town of Puntarenas, then over the brilliant sunlit band of the Gulf of Nicoya to Cabo Blanco and the open Pacific. On a typical September afternoon, in the middle of the rainy season, legions of thick, dark clouds advance over the mountaintops to envelop the campus.

The Cloud Forest School is an otherworldly place, yet it is far from disconnected with the world beyond its campus. In a bilingual environment, its international teachers and staff members represent a variety of cultures in a country that attracts tourists from around the globe. All embody the idealism inherent in the school's mission—to nurture a new generation of environmentally aware children. Their rewards are not financial—their hourly wage is about \$1.50. But when a little girl fearlessly picks up and relocates a baby tarantula to a new home in the greenhouse; when a young boy

shrieks with delight at the sight of an emerald toucanette; or when a group of muddy first-graders smile with pride after digging a new drainage trench, the riches of this school shine golden.

GETTING TO THE REMOTE MOUNTAIN HAMLET OF MONTEVERDE—founded by the Quakers in 1949 and home to a Friends school, a biological institute, and a cheese factory—isn't easy. Thirty miles of narrow, unpaved road wind steeply uphill to Monteverde, daunting the nervous traveler with a sensitive stomach. From the town, it's a 10-minute hike up a rutted, stony, painfully steep track to the school. Every now and then, school buses, motorcycles, and smelly ATVs roar by, defying potholes and boulders and skirting the deep, wide drainage trenches that must accommodate up to three meters of rainfall in one month. The roar of the vehicles competes with the songs of birds and the constant clicking, humming, and screeching of insects. Colorful butterflies dance from flower to flower. It's sunny but breezy and cool on the mountain—unlike the humid climate of the lowlands.

Our hike ends at a colorfully painted sign exclaiming, "Bienvenidos—CEC—Cloud Forest School" (CEC stands for *Centro de Educación Creativa*, the school's Spanish name, usually shortened to



**“You can’t learn
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La Creativa). Francisco, the gatekeeper, is waiting, his dark, smiling face reflecting the sign’s welcoming message. He immediately delivers an unexpected treat: “Look up there,” he says in Spanish, pointing into one of the high trees. “Two sloths.” Sure enough, two large grey furry balls rest motionless on a high tree branch. Francisco explains that the cecropia tree’s leaves are a sloth staple.

Beyond the gate, the campus unfolds across a series of grassy terraces where one-story wooden buildings with large windows are surrounded by lush gardens. Brightly painted murals depicting forest life adorn some of the exterior walls. On the lowest terrace is a children’s playground with climbing equipment. Bordering the path leading to the school office, banks of multicolored flowers and shrubs form a *Jardin de la Paz* (Peace Garden). Hummingbirds dart among blossoms, then hover, sparkling, blurry dots of metallic blue, green, and red. It’s early in the morning, and, except for the sounds of nature, the campus is quiet—all the children are in class.

In the office is the school’s director, Scott Timm ’99. A biology and education special major at Swarthmore, Timm taught for some years at The School in Rose Valley, Pa., then spent a year in Mexico with his wife, Emily, a ceramic artist. There, he started a small school for a group of children wishing to attend high school, while Emily completed a master’s in fine arts. One year later, the Timms gave birth to Grant, now 3½ and a CEC preschooler (1-year-old Corina was born in Costa Rica). When the family returned to Rose Valley,

Ninth-graders Viviana (*left*) and Winfredy (*right*) look at a flatworm as they learn about animal and plant cells.

Timm, although continuing to teach, also became involved in administration. But the couple missed the Latin American way of life.

“We’d both caught the Latin American bug,” Timm says. “We’d become really interested in bilingual education and in Spanish. I was looking at international schools for jobs, and the director’s position came up, so it felt like a really nice fit.”

In his third year at the school, Timm lives with his family and two dogs in a house they built in a mountain pasture 45 minutes from the school by four-wheel drive vehicle on unpaved roads (Timm drives it in 15 minutes on his ATV). They also have a horse.

Timm is proud of the Cloud Forest School, which was founded by a group of idealistic local parents who sought new educational options—including environmental awareness—for their children. He enjoys accompanying visitors on tours of the campus and hikes through the school’s 106 acres of forest. A stop at a fifth-grade language arts class, taught by energetic young Jesse Greist, reveals a light and airy room whose walls are enlivened with all kinds of art and lists of student responsibilities.

Greist has divided the class of about 15 students into three reading groups according to ability, two of which work outside on the building’s porches. He supervises the indoor group as they read the novel *The Indian in the Cupboard*. Then, trusting them to work quietly

on their own, he leaves to attend to the other groups. Later, they all come together to present essays and fictional stories written, in English, for “publication” and use in the class library. The school is consciously and completely bilingual. The children interact with Greist mostly in English but in Spanish with each other. They are a lively bunch, and, whenever the class threatens to become unruly, Greist holds up his fingers, forms an O-shape with thumb and forefinger, and says gently but firmly, “OK, zero noise.” They quiet quickly. After class, Greist, who has worked all over the world seeking a place to settle, says, “I have to confess, this place is starting to get inside me.”

In the ninth-grade science room, six students are studying the differences between plant and animal cells. They look at a flatworm under a donated microscope, guided by new science teacher Kirk Wahtera. The students examine further cells taken from their inner cheeks and from onions, observing the differences. Wahtera, fresh from a New Hampshire high school, where he was a special education teacher, is still becoming accustomed to the lack of supplies and equipment. He’d like to have a real chemistry lab table to replace the old wooden kitchen tables that currently hold equipment and bottles of chemicals that were purchased with a recent generous donation to the science department. “And we really need computers,” he says wistfully. “On the other hand,” he adds, more cheerfully, “there’s really no better place to study biology than here.” The students, used to making do with little, enjoy the class. “It’s interesting to learn about cells, and the teacher is fun,” says a boy named Wilfredy. His classmate Viviana concurs. “You can’t learn about the environment in the public schools the way you do here,” she says.

The lunchtime recess bell resounds, and the campus is suddenly filled with children wearing the school’s blue, green, and red T-shirt uniforms. They cluster on benches or low walls to eat and chat. Trees shake with climbing, writhing, wriggling, laughing small bodies, letting off steam after a morning of classroom work. Some shovel-wielding first- and second-graders are just completing repair work on a drainage ditch that needed to be re-excavated after the torrential rain of the previous night caused it to collapse.

Outside the office building, teachers, interns, and administrators sit at long tables to eat lunch and talk. The view to the gulf is stunning. Intern coordinator Andrea Paltzer, a young Swiss woman who grew up in England, joined the staff this summer and loves it. “It’s amazing to put a school like this into practice, building it and making it work,” she says. A proponent of the positive discipline methods employed by the school, she praises the school’s community activities program, where children from different grades get together to interact—singing, reading, or working—with older children guiding the younger ones. One teacher talks about a multigrade biodiesel project he has helped to develop—the idea for it came from the school’s students. The biodiesel club is currently helping to fuel the school’s buses.



Emily Timm believes that children should be nurtured to love and understand the importance of nature before they become too aware of threats to it.

At one of the tables, intern Avery Harris, a junior speech pathology major from the College of Worcester and daughter of Swarthmore reference librarian Pamela Harris, works with Pedro Luis, a special-needs student.

“I love working with the kids,” Harris says, “and I’m learning Spanish. The CEC is very important for a place like this, to pass on environmental consciousness to so many children. And that they all learn English—that gives them a real step up.”

THE SCHOOL’S VOLUNTEERS AND INTERNS, mostly from the United States, “really grease the wheels of the school,” Timm says. Volunteers range in age from middle school to college, working mainly in the gardens and forest, building or repairing trails, and constructing buildings or play areas. One group donated and erected the current kindergarten play apparatus.

Interns stay at least three months and assist in the classrooms with teachers as their mentors. In 2005, Professor of Education Lisa Smulyan ’76 initiated a Swarthmore program that enables students to earn a total of three credits as interns at the CEC. Five students have taken advantage of this opportunity, including two juniors currently interning at the school.

Beth Krone, an English major, education minor, and current third-grade classroom assistant says, “I was seeking a program where I could learn a language, be part of a community, and have a role in that community that would exclude my having to speak with American students. I wanted to learn Spanish. I plan math lessons, and the students are great. There’s so much freedom for everyone to use as they wish.”

Intern Lauren Yoshizawa, a political science and education special major, says she was initially surprised by the degree of liberty the students are allowed. “I’m housed with an amazing family that has three children in the school,” she says, “I’m not homesick at all, and I’m paired with a great teacher, Jesse Greist.”

Smulyan, who has visited the school herself, encourages interns from Swarthmore to bring classroom supplies with them, so

Yoshizawa and Krone both brought white-board markers. “They have no tape here!” Yoshizawa exclaims. Anna Baeth ’10, an intern last spring, had a shipment of used College field hockey sticks sent down so that she could start a team.

“Teachers fight over the Swarthmore interns,” Timm says. He is grateful to Smulyan, who has both brought and sent down in students’ duffle bags masses of educational materials. “The Swarthmore connections so far have been out of this world, and I’d like to strengthen them,” he says.

“I think our internship program is quite good,” Timm says. “It really shakes up teachers who come from the United States. Life down here is very different. It’s a different culture. Even though you can live here and speak English and feel fairly normal, it’s a very different environment. Spanish and English are floating around. It’s hard. I think teachers here learn to be adaptable. They learn to be resourceful, to work with what they have.”

After lunch, Timm explains that parents choose the CEC for their children not only because bilingual classes ensure that the children will graduate with fluency in English but also because of the environmental focus.

“We have all this amazing environmental science that actually

Each student has a “special place” in the forest for thinking, journaling, or relaxing (below). Scott Timm and Milton Brenes (inset, left to right) stand beneath trees less than 5 years old.

happens,” he says. “Being in an eco-tourism area, our families are going to be interested in their children obtaining that knowledge.” In fact, many of the parents work in the tourism industry as drivers and guides, so they understand the benefits of being both environmentally aware and being fluent in English.

Passing by organic vegetable gardens, flower gardens, a composting center, vermiculture house, and germination beds for the school’s reforestation projects, Timm explains that the children, under the guidance of environmental program director Milton Brenes, are largely responsible for the upkeep of the grounds, gardens, and tree plantings as well as for elaborate land stewardship projects. With the school located between the Monteverde and Santa Elena Cloud Forest reserves, he says that Brenes’s reforestation project aims to enlarge areas of the school’s forest that will attract animals, creating corridors for them to pass through. The school property is a so-called *servidumbre*, a legal term that ensures the right of safe passage to any insect, animal, or bird. “We can’t cut branches off trees; we don’t harm a single living thing,” Timm says. “We’ve planted 12 different kinds of native trees, most of which are excellent for attracting birds as well as monkeys and sloths.” He says that the school’s 202 children plant from three to five thousand trees every year. Traditionally, incoming preschoolers plant a seedling tree and are able to watch its growth along with their own. The climate and environment are perfect for both.

Brenes, at work in his *casa verde* (greenhouse), stresses that in



Students harvest ears of corn that they planted (above). The first- and second-grade classroom (right) is just one of the school’s bright, airy spaces.

the process of gardening, reforestation, and building, nothing is wasted—everything is recycled. New buildings are erected from the wood of old ones. Timm’s wife, Emily, who teaches art at the school, has a classroom constructed from the timber planks of a dilapidated hut. Coffee grounds and leftovers from students and teachers’ lunches are thrown into the vermiculture bins to be converted into compost. Coffee bean husks, supplied by small mountain coffee farms, mulch tree seedlings. Empty food containers are converted into plant pots. “We want to demonstrate to the community and our neighbors that what we perceive as trash, we can use—for example, as planters for orchids and bromeliads,” says Brenes in Spanish, with Timm translating. “And we plant them in natural soil from the forest.”

Brenes, a native Costa Rican, member of the Monteverde Conservation League, and owner of an organic farm, is the heart of the environmental studies program. He speaks softly, but his eyes are alight with passion for his work. In the greenhouse, he teaches the children how to raise seeds and propagate plants. He also shows them how to “rescue” plants and seeds from fallen, broken, or dead tree limbs and trunks. Carefully removing orchids, bromeliads, ferns, and other plants clinging for their lives to their damaged hosts, he helps the children bind the homeless plants to posts or other tree trunks, holding them in place with moss and string until they take root. The posts holding up the greenhouse roof are thick with plants saved in the forest.

“It looks like a tree trunk, but it’s not. The plants are sharing it,” he says. Others are placed into recycled containers. “Even the littlest children do these things. We have to teach our children to recycle while they’re still small.”

WALKING ALONG A TRAIL INTO THE WOODS, Brenes picks up a chunk of decaying wood and crumbles it. By using natural material like this, he shows the children the importance of microorganisms for breaking down matter. This decomposed wood is used as planting soil to reproduce orchids. “It’s *super-excellente*,” he says.

Brenes takes little credit for such successes, although Timm says
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The Cloud Forest School: 10 facts



1. A progressive, independent K–11th grade school, founded in 1991 by parents—some Quaker—from the local community. Funded by donations—of money, supplies, and time. The U.S.-based Cloud Forest School Foundation, initiated by CEC founders, drives fund-raising efforts. Tuition is \$100 to \$180 a month. Parents may pay off some tuition by working at the school. Sixty percent of students receive financial aid.

2. Located almost a mile high in the Tilarán Mountains of Costa Rica. Built on a 106-acre tract of pristine cloud forest, straddling the Continental Divide, above the town of Monteverde. The land purchase was financed by a loan from the Nature Conservancy. Later fund-raising enabled the school to pay back the loan and purchase the land outright.

3. Mission: To “nurture a new generation of ecologically aware, bilingual individuals by providing them with the skills and motivation to make environmentally and socially conscious decisions on a local, national, and global scale.”

4. Exchange programs with middle and high schools in the United States; collaboration with Canadian and U.S. universities. Successful volunteer and intern program: Up to 70 volunteers and interns each year provide essential man hours. Swarthmore College is nurturing a growing internship program for college credit. Five students have participated since the program started in 2005. For details, see www.swarthmore.edu/x9200.xml.

5. First private school in Costa Rica to receive not-for-profit status; recognized by the Costa Rican Ministry of Education as a fully accredited academic institution

6. During the past 16 years, the student population has increased from 30 to 208. This year, the school celebrated its fourth graduation.

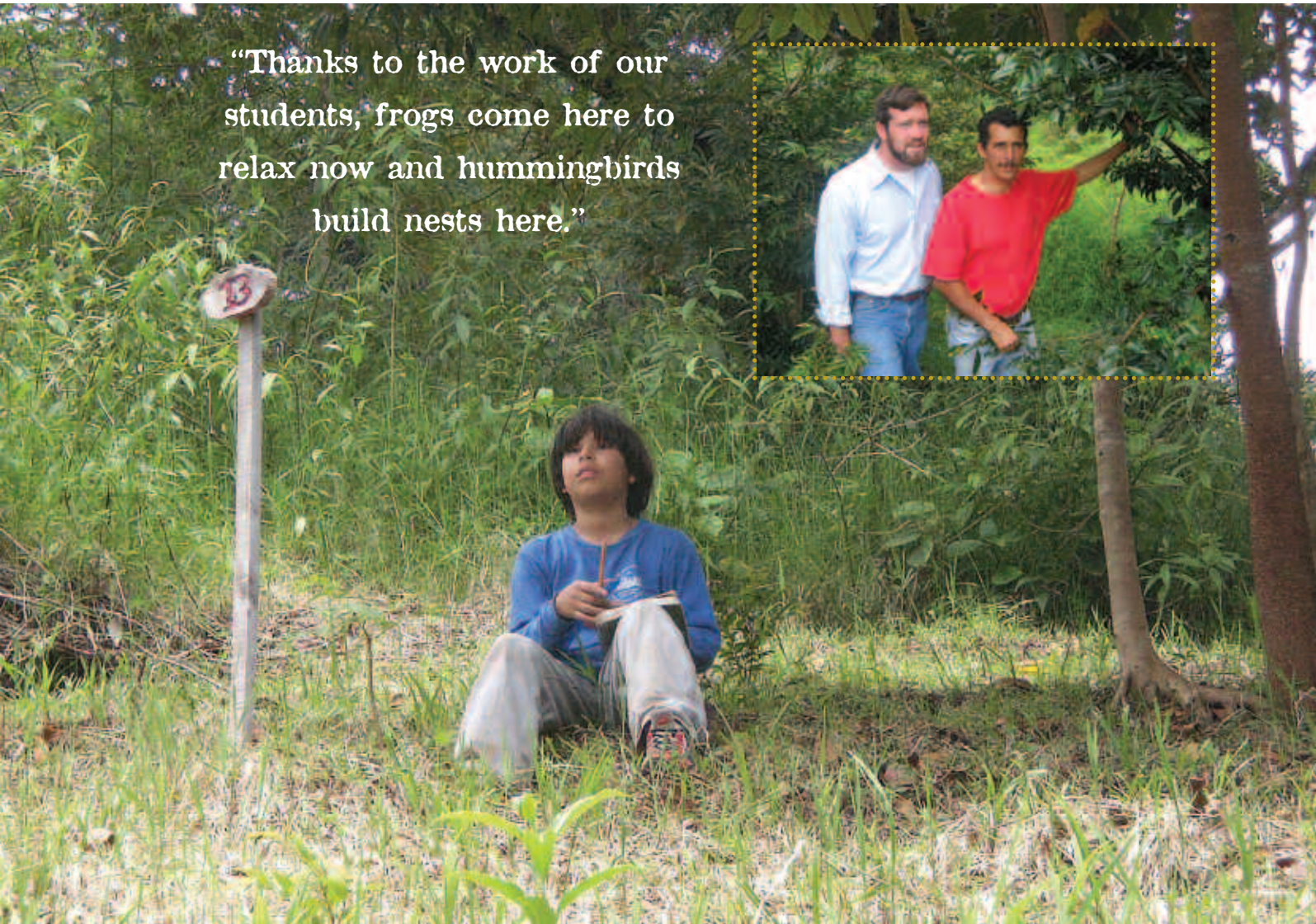
7. Standardized nationwide tests administered in ninth and 11th grades in math, science, social studies, civics, and English determine advancement to college or university. (Eleventh grade is highest in Costa Rica.)

8. International faculty from Costa Rica, United States, Latin America, Europe. Certification required.

9. Annual budget: \$450K, of which 50 percent supports a financial aid program. Starting teachers’ salary: \$480 a month (average monthly Costa Rican salary).

10. For more information, go to www.cloudforestschoo.org.

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miracle on the mountain

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At the Cloud Forest School, children are largely responsible for the upkeep of the grounds and gardens—and for tree planting and other forest stewardship projects



that his methods for raising and reproducing orchids and native plants are ground-breaking. Gazing around his plant nursery, Brenes says quietly, “Thanks to the work of our students, frogs come here to relax now and hummingbirds build nests here.”

Reaching the reforestation area—sunny pastureland that slopes down into a small valley and then rises through an area of secondary woodland to meet the virgin forest that stretches upward to the top end of the property—Brenes stops to describe the project. Five years ago, the area was just grass—leftover grazing land from former dairy farmers—but, in the meantime, volunteers have built a path through the stands of fast-growing trees. “Species of trees have been introduced to attract monkeys, toucans, and quetzals (the bright green and red long-tailed national bird),” he says. We have a lot of monkeys in the forest but not down here right now. We’ve planted a type of guyaba tree that monkeys like, and in two years they will be back. Five years ago, these trees were just saplings, and now they’re huge. I had a dream that I wanted to stand beneath a tree in the forest at this spot, and now I can,” he jokes, recalling the student who planted it.

The forest is a place of life, death, rebirth, and rejuvenation, Brenes says, and he tries to instill this in the children. Reaching a painted wooden archway at the entrance to the conservation area, he stops. High in a treetop, a large beautiful bird screeches a warning. “This bird warns against strangers,” Brenes says. “It always bugs me that they think I’m a stranger.” Serious, he goes on: “This is a special place. When you pass through this archway, you enter a place that is private and demands respect. Here, we learn about the systems that are most important for our own lives and for the natural life we have here.”

He stresses the need for all members of the school community to “bring their minds into the forest,” where they can cast off fatigue or frustration and reset. Each class spends time there at least once a week. In the more open spaces, 10-by-5-meter areas have been allotted to individual students as “quiet places” to think, write journals, do art, or talk quietly. Sometimes, the children give these places names, such as *El Palacio de los Monos* (the Palace of the Monkeys).

Moving deeper into the forest, the path becomes narrower, the air more moist, cooler. The forest canopy is more dense. Huge vines curl downward. Crossing streams fed by waterfalls, the path winds up to a huge strangler fig tree, providing a natural tubular climbing frame, its throttled victim long since decomposed. Timm climbs up inside the tree and peeks out like a forest spirit.

For himself, for the school’s board members, and for the original founders, Timm says, environmental education is key. “Having the students connected to the forest, knowing it and spending time in it, that’s what makes this place unique.”

And he believes the children feel the same as he does. “You can see it in all parts of the school, the way they love running through the woods and gardening, and so on. They’re very environmentally conscious. When the school collaborates with the community on projects, the children focus on those involving pollution of the area and work on how they can protect it.

“The local people have a nickname for us,” Timm adds. “They call us the Miracle on the Mountain.” ☘