Sometimes the most challenging part of a CALS graduate student’s work is just getting there.

After two days wending his way from Kathmandu to Khundi using spotty public transportation, natural resources graduate student Bob Beazley recently hiked 18,000 feet into the Himalayan mountains in his quest to document the shrinking of glaciers due to climate change.

“I had seen many very poor rural mountain communities and I became interested in how they were able to survive,” Beazley says.

Beazley spent seven weeks in Nepal and six weeks in China, trekking from village to village to conduct interviews for his master’s thesis. His research sites included the Everest Basecamp and Annapurna Basecamp in Nepal.

A girl in Nar-Nepal Annapurna, Himalayas
“From the trailhead, the whole hike is about 250 kilometers and can take 15 to 20 days if you walk every day,” he says. Eduardo Carrillo-Rubio was lucky if he could even find his sites. The master’s student in natural resources worked deep in the forests of the Tarahumara territory of Mexico, where residents and researchers have to balance competing interests in timber harvesting and ecosystem protection.

He often went days without seeing a soul, and got lost countless times while driving from one site to another. And even though Carrillo-Rubio is a Mexican native fluent in Spanish, he still experienced challenges communicating with the locals.

One memorable encounter came when Carrillo-Rubio asked an old man for directions and the response came in Raramuri, the language of the Tarahumara. “I have interacted before with people of different cultures and nationalities without having any language in common, but this was the first time all forms of communication failed me,” Carrillo-Rubio says. “After a few minutes we both smiled. He went back to tending his small flock of goats and I went back to my maps and vehicle.”

Their stories are just two examples of the intrepid nature of CALS graduate students who work abroad, traveling to far-off destinations and meeting people of diverse backgrounds. They are cultural and scientific ambassadors bringing innovative solutions to communities around the world. And with each new experience, the students realize how much more they have to learn.

**Restless animals**

When your driver is worried, you should probably be worried too—that’s what Lydiah Gatere, MPS ’05, a PhD student in crop and soil sciences, learned while studying conservation farming in Zambia.

She was returning from a study site in Mpika to her base at the Wildlife Conservation Society and Community Markets for Conservation cooperative in Lundazi when her truck’s four-wheel drive mechanism failed.

“We tried putting debris, tents, and ropes in front of the truck to create traction but that failed,” she recalls.

They had stalled in the sand alongside a river, and Gatere noticed her normally calm driver was becoming increasingly agitated. When she asked what was wrong, he replied: “The elephants will soon be coming for a drink.”

They appealed for help from a nearby tourist camp and managed to continue on their way, narrowly avoiding a potential elephantine crush.

A beast of a different variety caused her to adjust her plans during a visit to the game management area of South Luangwa National Park.

“It got late and we wanted to pitch a tent, only to be told that a couple had been mauled by lions several days ago. So we slept in the local (health) clinic,” she says.

As Gatere’s experiences illustrate, it’s impossible to predict what one may encounter in the field.

“It got late and we wanted to pitch a tent, only to be told that a couple had been mauled by lions several days ago. So we slept in the local health clinic.”

—LYDIAH GATERE
For Liz Hermsen, PhD ’05, a post-doctoral researcher with Maria Gandolfo in the Liberty Hyde Bailey Hortorium, sudden sandstorms left their mark on her memories—and her sunglasses.

While collecting and characterizing plant fossils from the Late Cretaceous (65.5 million years ago) and Eocene (51.9 million years ago) periods in Patagonia, she was sometimes pelted with wind and sand.

“In the Eocene era, the Laguna del Hunco flora was growing in a relatively moist and warm climate, but today that area looks like the dry areas of Nevada or Wyoming—widely spaced, scrubby vegetation, and amazing geology,” Hermsen says.

“One morning, we went to a site on a particularly treacherous slope. The wind was gusting and blowing sand everywhere. We finally gave up and went to a more sheltered site in the afternoon. Later I realized that my sunglasses were pitted from the sand.”

Local matters
Deferring to local wisdom is a valuable lesson many students learn early on in their adventures abroad.

Katie Ricketts, a master’s student in the Charles H. Dyson School of Applied Economics and Management, helps rural farmers get access to credit and links to local and international markets. She recently returned from a trip to Malawi, where she was helping small farmers conduct profitability analysis and planning with local extension agents.

“We spent a lot of time with the extension agents, and there were areas of disagreement and disconnect on how things should move forward,” she says. “But in reality, the local experts are often more equipped to offer interesting, relevant, and meaningful insight.”

Beazley echoed that sentiment. High in the Himalayas, he discovered how important local conditions are to the interaction between project design and implementation. Part of his work entailed analyzing the environmental, socio-economic, and cultural effects of road building.

“Roads make lives easier, giving farmers better access to markets and everyone else access to easier, more efficient travel. Roads open up access to health care, education, jobs, and social interaction,” he says. However, roads can also cause increased crime and air pollution, the commercialization of sacred sites, and decreased trekking revenue as hikers prefer trails, he learned.

“As with many things, there are two sides of the story, and with positive change there are often negative consequences as well,” Beazley says.

Challenge and reward
Many students report that one of the greatest challenges with international fieldwork is that no matter how earnest they are, or how much they believe their research will help, they are outsiders in the community and must be sensitive to local customs and conditions.

But despite frustrations, setbacks, and, in some cases, danger, they also speak fondly of life-changing experiences: trying new food, meeting new people, having their eyes opened to a new way of living in this world. Most wouldn’t change their research or work for something more comfortable back home.

Ricketts remembers the time when she was first struck by the idea that her work was indeed helping improve people’s living conditions in tangible ways.

“We were visiting a village savings and loan group in Northern Malawi when a woman stood up and proudly announced that she was able to buy chickens from the interest she earned on her investment,” says Ricketts. “This woman seemed to radiate a confidence about her. It was wonderful to see and hear.”

“I am always amazed at how friendly, generous, and hospitable rural Himalayan communities are,” Beazley adds. “Traveling and living in the mountains is very difficult, so when a stranger shows up, they extend their hospitality just like they would to a family member.”