



Lori Stiles

Marla Spivak

"There's been a trend away from natural history science in this country toward the more molecular stuff," Spivak says. "But it's important to remember that we need to have behavioral observations to know what kind of questions to ask in molecular research," she says. "I'm hoping that Juan will see something that interests him enough that he'll ask questions about this field."

Hoffman agreed that it was positive for Valesquez to participate in lesser-known research that will possibly have

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important real life implications for bee keepers.

"These kids who excel in high school and show an interest in science are often set on medical school or vet school," she says. "But it's great for them to see other research possibilities. It expands their options in science."

This exposure is precisely why different departments within the College of Agriculture need to get involved in the Young Scholars program.

"Often no one knows this research is even there," Kohn says. "Students just don't know the kind of applied science that is available for them to study." He hopes to get more departments within the college to take on a Young Scholars student next year.

"Young Scholars is going to go through some major changes this next year," Kohn says. "We need more of a marketing approach to attract and involve our faculty."

Cuneo is one faculty member who consistently volunteers to take on a Young Scholars student. He believes it's extremely worthwhile for anyone interested in working with animals to find out about options other than being a companion animal veterinarian. Youngsters need to see what working with livestock entails before making a career commitment.

"Giving a student this kind of exposure to the field just might spark some interest in studying an agricultural science," he said.

Contact Paul Kohn at the Instruction Office, 211 Forbes, Tucson, AZ 85721, or call (602) 621-3613. Contact Dr. Peder Cuneo at the Department of Animal Sciences, Campus Agricultural Center, 4101 N. Campbell, Tucson, AZ 85719, or call (602) 621-3454. Contact Dr. Marla Spivak at the Arizona Research Labs, Center for Insect Science, 404 Forbes Building, Tucson, AZ 85721, or call (602) 670-6380.

Horse Care... A Study in Caring

By Angela Woida

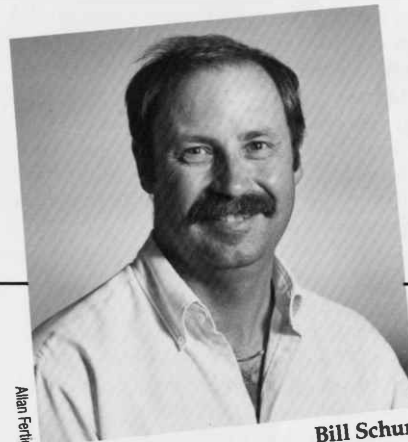
Veterinary and animal science students at the University of Arizona witness one of nature's greatest secrets by assisting in the birth of a foal. Bill Schurg coordinates the class.

The associate professor in the department of animal sciences wanted to create a horse program that lets undergraduate students learn as much as possible about the biological components of horses—and more.

"While they're learning specific biology, they're also learning to work with the animals," Schurg says. Although the UA horse project has a goal of raising athletically built foals with good conformation, Schurg's foremost concern is the students. They take part in the day-to-day management of a horse breeding program, applying classroom science to real situations. Most of the 25 to 30 students put in many more hours than what's required for a standard three-credit course.

"We try to convey our enthusiasm, and it tends to triple and quadruple," Schurg says. "Students come out here and help me paint, clean-up, do all sorts of different things. And it helps a lot."

Schurg—along with horse barn manager Bob Ritchie and students over the years—have built a sizable, successful horse program at the UA Campus Agricultural Center in



Alan Ferlinz

Bill Schurg

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Tucson. He started the program with one horse and gradually has increased the herd, mostly through donations, to 25 horses today.

"We've taken over this facility, a barn built in 1935, modernized it, upgraded it and made it look more like a horse facility," Schurg says. The herd size is ideal, he says, because it allows them to be more efficient and to upgrade the quality of horses, rather than concentrating on numbers.

Schurg and Ritchie are on call 24 hours a day, seven days a week, particularly during foaling season. Horses, like human babies, need someone tending to their every need, every day. Veterinary and animal science students take on

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some of that care when they're assigned a brood mare.

"They have to get to know that mare, understand her, and deal with her on a daily basis," Schurg says. "Their primary responsibility is assisting that mare during foaling. And sometimes they learn about foaling problems because some mares can have difficult births."

Waiting was the hard part for Cheryl Myers, a pre-veterinary student from Tucson. She was assigned to Precious Master, a thoroughbred mare in foal by Saratoga Legend, a UA-owned stallion. The 335th day after breeding, Cheryl's watch began in the UA horse barn. It was mid-March, she remembers, and the nights were still cool in Tucson.

"I had my little cot and my space heater and my dog," she says. Even so, the nights stretched out dark and long. She compares it to working a graveyard shift. Days stretched into weeks, and the initial excitement began to wear thin.

"She's not going to foal; she's not going to do anything," Myers remembers doubting. Although she had previously raised a foal, no one had ever explained the signs of labor in a mare, or why a mare reacts as she does. Bob Ritchie was on hand, along with another student, when she woke from a catnap to find birthing was underway.

Despite a minor dilemma or two—the mare lay down with her rump against a concrete wall—the foal's birth was normal. Myers appreciated both her classroom training and Ritchie's calm presence.

"You've gotta have a clear head on your shoulders," she says, nodding. Her excitement didn't wear off with the birth.

"The really neat part was watching him (the foal) stand. He has these long legs. When we put him near the mare, something told him he needed to be by his mother's legs. First he tried nursing under the front legs, and when that didn't work, he tried the back legs. Success!" Myers fondly remembers.

"Instinct is something I had read about as a powerful driver for animals—and humans, too—but I really didn't realize the extent," Myers says. "To be there and actually see the bonding that took place between a mare and her foal was very impressive."

After the foaling, students are involved with the youngster's care and general maintenance, Schurg says. They handle the foal during the rest of the semester, and they're involved with halter breaking and gentling the colts.

"It's hard to say which youngsters enjoy the playing more—the students or the colts," Schurg says, smiling.

But their work isn't over yet. This year's class is responsible for making sure their mares are re-bred so next year's class will have the same opportunity.

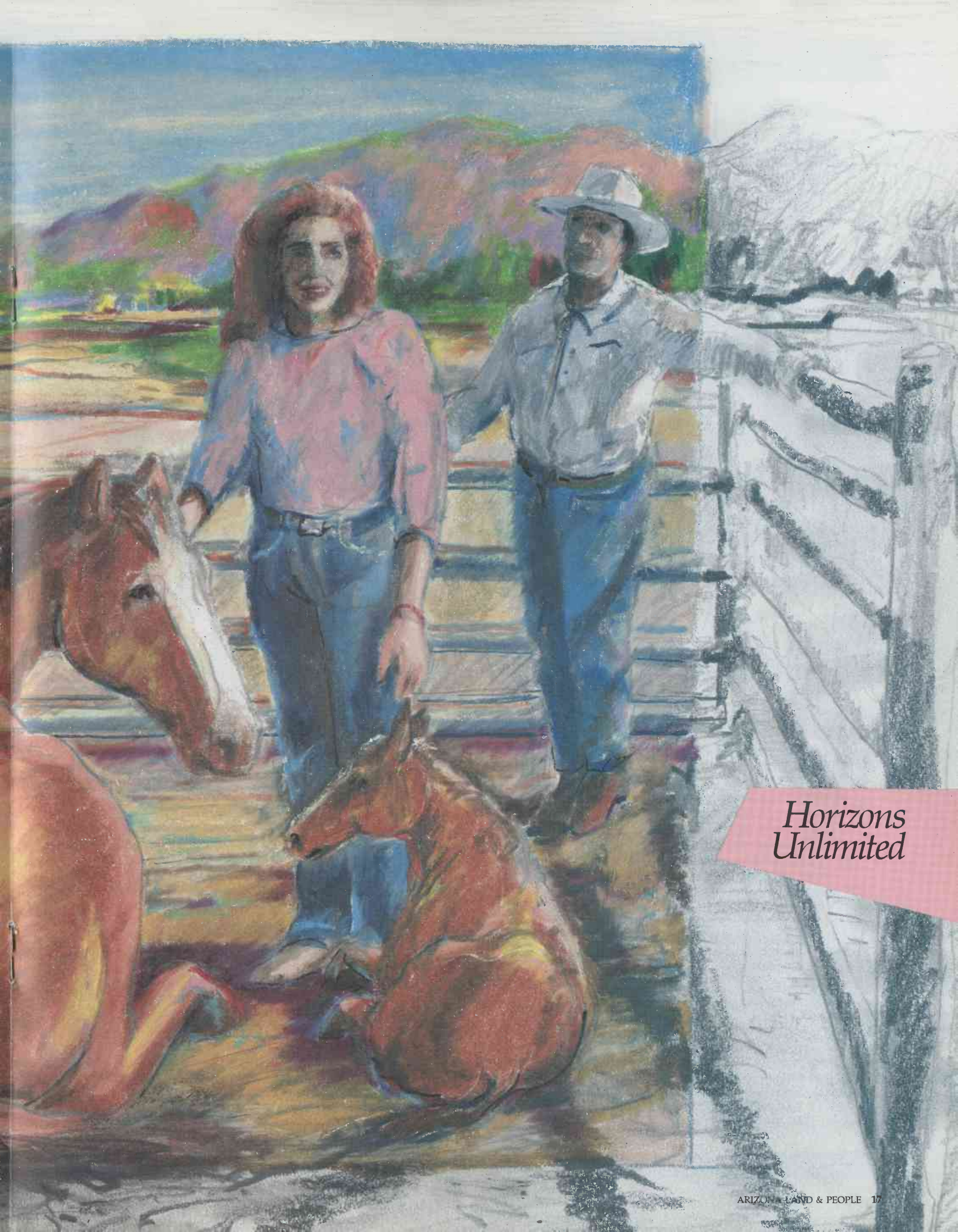
Schurg developed the breeding program to keep the UA horse project operational—and the foal watch developed from there. Initially, the UA didn't have the quality horses that would generate enough revenue through the sale of offspring to keep the project running. But, he notes, in the past several years, several top-quality, thoroughbred stallions have been donated.

"We're offering stallions for breeding to the public," Schurg says. "Those horses are now attracting mares from all over the Southwest."

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John Louder



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