## Global Veterinarian

Daniel K. Miller of Oberlin's Class of '68 favors us occasionally with his adventures in veterinary and agricultural work as he travels the world in his retirement. He writes from Santiago, Nuevo Leon, Mexico:

"After two years of Peace Corps (Brazil and Peru), I was a clinician in a dairy practice in north central Wisconsin for four years. Then I studied at Texas A&M for an MS and PhD while doing research in cattle diseases in Mali and teaching livestock health and management in Botswana. After that I taught at a veterinary school in Mexico and began doing short term volunteer projects overseas in a program called Farmers to Farmers. It's a great way to travel and expand your horizons. I recommend it for everyone."





In December of 2022 Dan described Nepal.

Howdy, y'all.

This is my fifth trip to Nepal, but my first trip to the eastern part where Mt. Everest is located.

We spent two weeks visiting dairy farms in the district of Dolakha, province of Bagmati, which includes river valley bottom land of under 1,500 feet above sea level on up to alpine pastures at above 12,000 feet where yaks graze. Temperatures varied with the altitude, as you can imagine, from afternoons around 80°F in the valleys to 30°F in the alpine pastures.



One thing about Nepal is that one of its two main sources of foreign exchange is tourism, so they are accustomed to foreigners and know how to accommodate them. Hotels are good and restaurants are cheap. The geography of the country means that the tourist areas are connected by winding mountain roads, but the roads connecting major cities are paved with two lanes.



They drive on the left and motorcycles are the main transportation for most people. The secondary roads leave something to be desired, and the ride can be a bit rough especially where they are repairing or building new roads. Some of them are paved with cobblestones and some are just bulldozed dirt roads.

Because of the Hindu influence, many of the important tourist attractions are the temples scattered all over. We visited one high in the mountains, Kalinchowk Bagawati Temple, accessible primarily by cable car if you didn't want to climb roughly a mile on a steep path at 15,000 feet above sea level. It was founded when a couple of herders tried to fry their bread on some stones that turned out to be one of the gods.



There is another temple we visited, Bhimsen Temple, that has a statue of a god that sweats when some disaster is about to strike like an earthquake, a disease pandemic or a violent revolution. On a previous trip I visited the birthplace of Buddha which is also a major tourist attraction. Other activities for tourists are river rafting, hang gliding, trekking, mountain climbing and similar activities.

Once you get where you're going, it is quite pleasant. The farms are scattered over the mountainsides with terraced fields going from the base of the mountain to the peak. In the terraces they have a crop rotation of rice during the monsoons, followed by potatoes, oats or vegetables, followed by corn. The oats are cut and fed to the cattle as forage and then replaced by corn before they get a chance to form seeds.

Around the farmhouses there are vegetable patches and fruit trees. More than half the farms have greenhouses. They grow tomatoes, various leafy vegetables collectively referred to as spinach, the biggest radishes you ever saw, cabbages, cauliflower, broccoli, a root that tastes like apple, kiwis, tangerines, cucumbers, squash, and others with local names. Usually the vegetables are for home consumption with any surplus being sold to friends and neighbors. The potential for being marketed to the urban areas is there. Only rice and potatoes are primarily for cash.

The biggest problem with livestock is nutrition. Being on a steep mountainside does not lend itself to cattle grazing comfortably, although the goats do fine in the forests that cover most of the mountains. The base of the cattle diet is rice straw which has the nutritive value of newspaper. Too often you see cows with huge rumens bulging out both sides because the cows filled up with straw in an attempt to eat enough calories. Pelleted feed costs about the same as

an equal quantity of milk and should produce approximately twice its weight in milk, so feeding more concentrate should be feasible. Farmers who were feeding concentrate and large quantities of green grass and tree leaves had cows in better physical condition.



Because the goats got to browse and were fed primarily on leaves cut from the trees, they usually were in better condition than cattle, but where they were kept penned, they often weren't given enough browse and were in poor condition. Goats, by the way, bring about \$3.00 to \$4.00 per pound from the butcher, so I would have thought people would be more conscientious about their care.

Now why do goats bring prices two to three times the price in the US? Nepal is basically a Hindu country, 70% Hindu, with most of the rest being Buddhist and a few Christians, Moslems, and other religions. That means that killing and eating cows is a distinct no-no, which further means that farmers have to keep their cows even when they aren't producing anything. Milking buffalo don't count as cows, so they can be sold for meat if they still aren't bred when their lactation ends. Goats don't count as cows, so they can be eaten anytime.

I worked with a cooperative that is trying to restore the yak herds and adapt them to tourism. Yaks are used as pack animals by the herders, so they can be part of some of the guided treks. As

far as temperament goes, yaks don't like strangers (notice the horns) although they let their herders milk them. One of their adaptations to the cold winters in the higher elevations is a thick undercoat of fine hair that is shed in the spring. In some countries this hair is used to make yarn for



knitting and could be used for tourist items like sweaters, caps, scarves, gloves and leggings; all of these possibilities are being looked at for the future. Yaks count as cows since they will interbreed with cows, but the males are sterile. The offspring of the cow/yak cross are called chauri.

Nepal is kind of unique in its development. Because of so many foreign tourists coming in and because so many men go outside to work in places like Qatar (remittances are the second-largest source of foreign exchange), most people know what life can be like. That leads to strange politics. A recent election resulted in a new government where two "communist" parties, formerly allied, were arguing over which would form the new government. One of them split and went to the opposition and got enough support to form a government. The new prime minister, who has served that role several times before and was a Maoist guerrilla early on, is regarded as the least-bad option by the people I talked with. There were warnings about political

violence on the internet, but the people I worked with were not at all interested or even aware of the situation. The only "violence" we experienced was some motorcyclist coming towards us who was busy looking at his feet and drove into the side of our car. He rode away afterwards, but our side mirror was destroyed.

In the rural areas I didn't see massive poverty as in some other countries, but once I was accosted by a beggar who was told to go away by the farmer I was visiting.

In the capital, Katmandu, we drove through a couple slums going from the airport to the hotel.

There seems to be a big problem of the young people migrating to the cities from the rural areas. A dozen years ago or more it was to escape being drafted into the terrorist groups; now it is to find better jobs.



The people I saw were all well fed and had a source of income although only a very few of them had what you would call a soft life. Women are regarded as equals, although only five of over 40 farmers we dealt with were women. There is a strong tradition that women do the housework, particularly cooking, but they shared more or less equally in livestock management. The women had no compunctions about expressing their views in the presence of their husbands.

There is a kind of caste system in existence, but nothing at all like in India. You find Brahmins in the educated work force more often than not, while other groups held more menial jobs. It's sort of like in the US where money and white privilege makes it easier for the already advantaged to give their kids a helping hand, what my sociology professor termed "the middle class help pattern." One place where old social traditions live on is in dowries that a woman brings into her marriage. There was an article in the paper about women being abused and killed by their inlaws for not having a big enough dowry.

For anyone who still wants to make their mark in the world, opportunities abound in Nepal. Educational opportunities in everything from doing business to food processing to teaching English to you-name-it are available. The government doesn't support schools, so the schools that exist are often hard-pressed to expand. Having a lifetime of experience in anything is the best way to be able to impart the knowledge and experience to other people.

Until the next time, Dan