In Arizona, the numbers are growing, but as elsewhere, getting an accurate count of goats is difficult. Most Arizona goats live in backyards or on small tracts of land that are not included in agricultural census surveys.

The number of dairy goats in the nation has been increasing steadily for at least two decades. Goats are also raised for wool or meat. Arizona's population of Angora goats, raised for mohair, is the second or third largest in the country and is on the upswing again after a period of decline. Most of them are on the Navajo Reservation.
It is the dairy goats in the state, though, that have the real growth story. They are found in virtually every population center in the state. The more people, the more dairy goats, so the largest concentration of the goats is in the Phoenix metropolitan area. The second largest goat population is around Tucson. The growing interest in backyard dairy goats has probably kept their populations climbing even faster than human populations in these areas. As a rough estimate, 10,000 now live in the state.

For suburban families, goats offer several attractions.

First, they can be an economical source of milk and animal protein for the family. The family milk cow of the past has been so improved by dairy herd improvement programs that one cow gives more milk than an average family can consume. A goat or two gives a more economical family-size supply.

Second, tending goats is a good project for youngsters in the family. Goats enjoy human attention. They are playful and friendly. Caring for them teaches young people responsibility because goats are creatures of habit that respond best to a controlled pattern of care. They should be milked and fed on schedule. They are not only for children, though. Often they become a focal point for the whole family’s sharing of work and play.

Third, goats are relatively inexpensive to keep. Their pen and small shelter need not require a large investment. A large bale of hay and a small sack of grain—enough to feed a producing goat for a month—easily fit into a station wagon or small pickup and cost roughly $14 or less.

However, goats do need some space. They should have a pen 40 by 20 feet or bigger. Most cities have lot-size or distance requirements for the keeping of goats. Phoenix, for example, restricts them to lots of at least 10,000 square feet. Tucson requires that at least 20 feet separate a livestock pen from any homes.
The same factors that are attracting Arizonans to dairy goats in increasing numbers are at work elsewhere in the country as well. However, goats are particularly well-suited to our region. Goats are found world-wide, but two-thirds of them live within 30 degrees of the equator, mostly in warm climates. Arizona reaches from 31 to 37 degrees north latitude. World goat numbers are concentrated in arid and semi-arid regions. They are relatively unaffected by high-temperature stress and can get by on less water than any other domestic livestock.

Goats’ geographical range has put them in a crucial relationship with many of the less-developed countries of the world. Their image as a poor man’s animal may be due more to that geographical link than to economics. As dairy animals, though, goats are more labor-intensive and less capital-intensive than cows. As population pressures grow in the future, that factor is apt to enhance even further goats’ importance as animal-protein sources in developing nations. Also, goats can eat a wide variety of scrub vegetation (but not really tin cans) not suitable for human use. They are good travelers, able to walk long distances.

In Arizona, dairy goats are almost all kept in pens and fed hay-and-grain rations, so those factors are not important here. Goats’ high-labor, low-capital requirements, though, will probably contribute to continued growth in popularity as family-scale milk producers.

Goats’ milk is similar to cows’ milk; fresh, it can be substituted for cows’ milk in recipes. It is richer than standardized whole milk, similar in creaminess to milk from Jersey cows. In numbers, that is about 4.5 to 6 percent butterfat compared to 3.5 percent in standardized whole milk. Goats’ milk makes excellent cheeses, yogurt, ice cream, cottage cheese and butter. Separating the cream requires a mechanical separator, though, because goats’ milk is naturally homogenized. Goats’ milk is recommended for some people who have allergic or digestive problems with cows’ milk.

A good dairy goat gives three to four quarts of milk a day for about 10 months of the year. If breeding is staggered, two does can supply a typical family’s dairy needs for the whole year. Some families with more goats end up with more milk than they can use. Some of the extra is given to friends, some sold legally and some bootlegged. Drinking of raw (unpasteurized) goats’ milk has not created a serious health problem because the two diseases transmitted through milk, brucellosis and tuberculosis, are all but unknown in dairy goats in this country.

Some goats’ milk is produced on commercial dairies. Last year, more than 12.5 million pounds of goats’ milk was sold commercially. About half of that was processed into evaporated or powdered form, mostly at two large plants including one at Turlock, California.

In size, commercial goat dairies range from one in Ripon, California that sells about 4,000 gallons of milk weekly to many that sell only about 50 gallons a week each. In Arizona, the number of commercial goat dairies changes from year to year. Some grow out of back-yard family projects; others have been commercial from the start.

Several factors have limited the number and size of commercial goat dairies. First is the goats’ high labor requirement. Second, goats produce less milk per pound of body weight than cows do. Dairy herd improvement programs for goats, like those that brought cows to their high-productivity levels, may improve goats’ milk production considerably within the next decade. Third, goat dairies have not had the re-
sources to advertise their product heavily. For these three reasons, goats’ milk is more expensive than cows’ milk. It currently runs more than a dollar per quart at most retail outlets. Also, the supply of milk is uneven from season to season: heavy in the summer and light in winter. This can be altered by management practices, but is the widespread situation for now.

Commercial goat dairies usually need to invest in their own processing and bottling equipment, even if they do not pasteurize the milk. The producer needs to be located within reach of a relatively large community, since he will probably sell no more than three quarts per week per 1,000 population.

Because of these limiting factors, most of the increase in dairy goat numbers in Arizona will probably continue to be non-commercial, just one or a few goats in the back yard to supply the owner’s family needs.

People considering getting goats should be aware first of some of the equipment, supplies and attention goats should have.

Some protection from the elements is needed, since even in southern Arizona winter nights get cold. A simple shed with 30 to 35 square feet is adequate for one or two goats, though more space would be even better. The opening should face south to let in winter sunshine.

Strong fencing is needed as much to protect the goats as to contain them. Wooden posts strung with woven wire are one option. Chain-link fencing is neater, but more expensive. Whatever the material, the fence around the perimeter of the goats’ area should be five or six feet high to keep coyotes and dogs from attacking the goats.

The enclosure should be 20 by 40 feet or larger so that the goats can get some exercise. Exercise objects such as large rocks, wire spools or blocks of wood give the goats a chance to hop up and jump down. A simple milking stand makes daily milkings much easier.

Goats have many breeds. Nubian, LaMancha, Alpine, Toggenburg and Sannen are among the good dairy breeds.

Goat kids are usually born in late winter or spring. Twins are most likely, but single and triplet births are common, too. Usually where does are kept for milk production, the kids are removed from the doe immediately or within two days. The new babies must get the first flow of milk from the doe because it gives them antibodies and nutrients necessary to cope with stress and disease. The young kids are fed only warmed goats’ milk for two or three weeks. Then some milk-replacer may be added to save goats’ milk. They begin eating a little alfalfa hay and grain at about three weeks. By three months, they can usually be put entirely on dry feed.

Dairy goats will produce milk even if they are not bred, but will give much more if allowed to carry kids. Adult goats can be fed just alfalfa hay, except that does should get grain, too, for a short time before being bred, for the last four to six weeks of pregnancy, and from a few days after giving birth for as long as they keep producing milk.

Keeping dairy goats does require a commitment of time to care for them. However, as mentioned earlier, that commitment can be an enjoyable lesson in responsibility for a youngster. The payoff comes both from the economical supply of milk and from the time spent with a responsive and playful animal. More and more Arizonans are finding that worth their while.