

Project Number: FW07-024

#### Title: Different Goat Breed Crosses to Find the Best Tasting Meat

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Lizzy with Newborn Kid



Luchachucai is the primary Boer breeding buck

### Situation:

In addition to pastured poultry and Navajo Churro sheep, Napier Family Farms raises goats for meat and mohair on 40 acres in southwest Colorado. The farm hopes to introduce goat meat to the area's mainstream consumers through grocery and health food stores.

Few people in southwestern Colorado have tasted goat meat. Four Corners area ranches that raise goats typically send live animals to large meat processors in Texas. Other ranches gather up as many goats as possible – of any age – and send them to the Texas slaughter houses, which then distribute the meat nationwide.

The goat meat Napier Family Farms sells at farmers markets is generally from a Nubian/Angora cross kid 8 to 10 months old. When cut to 90% lean, the meat is mild and delicious.

They want to assess whether taste differences between meat from Angora crossed goats and typical purebred larger meat breeds make the slower growth rate worthwhile and financially viable.

# **Different Goat Breed Crosses to Find the Best Tasting Neat**

## Holly Napier (Colorado: Farmer/Rancher Grant Program)



Napier daughters, from left, Madelyn, Lizzy and Melissa with Mabel, an Angora breeding doe.

#### **Objectives:**

1. Compare birth weights and growth rates for 40 does separated equally into four breed groups – Angora/Nubian cross, Angora/Boer cross, purebred Nubian and purebred Boer – against averages of each breed group.

2. Conduct taste tests among customers to assess mildness along a scale of 1 being a very mild goat flavor and 5 being very strong.

3. Share the results of the study with other producers in the Western region through presentations at conferences, market booths and on-farm visits.



Pretty Boy is the primary Angora breeding buck.



Belle is a Nubian breeding doe.

#### Actions:

During the summer of 2007, about half of the farm's breeding does were bred to kid in November 2007, with these breeds and breed crosses: Angora, Boer, Angora/Boer cross and Angora/Nubian cross. The rest of the does were bred to kid in March 2008.

The goats kidded in November 2007 will start to meet processing weight (approximately 100 pounds live weight) in August 2008, and the kids born in March will begin to meet processing weight in November 2008.



Napier Family Farms' diversity includes pastured broilers, eggs and mohair.



Navajo Churro sheep are raised for wool and lamb meat.

#### **Results:**

The November 2007 kidding season was successful, with minimal losses of kids at birth, in part because does get plenty of exercise on the 40-acre pasture until just two weeks before kidding.

Data gathered on birth weights and growth rates show little difference, although the Angora kids are slightly smaller and there is some variance in triple, twin and single births.

In assessing data to date in consultation with technical advisor Beth LaShell, it has been decided to take these additional measures:

- age of dam
- type of birth (single, twin or triplet)
- bottle or mother raised

During the summer of 2007, preliminary taste tests were conducted on the difference between Boer goat meat and meat from goats crossed with Angoras. The Boer goats met processing weight up to two months earlier (8 months) than the Angora crossed goats. While Angora crossed meat did taste milder, the Boer meat was also rated as delicious.

Customer taste tests conducted in summer of 2008 will use meat from goats of the same age, taking into consideration the month each breed and breed cross would be ready for processing.

### **Potential Benefits:**

Producing a milder tasting goat meat that fits into the consumer mainstream offers several benefits:

It can help expand the income stream for Napier Family Farms and other producers who engage information from this experiment. Customers at the Durango Farmers Market, for example, pay \$8-10 a pound for Napier goat meat.

- without chemicals for weed control or fertility.

The goats provide environmental benefits of improving grass production and soil conservation on the 40-acre pasture, at the same time fertilizing the pasture and controlling weeds like knapweed and thistle.

Napier Family Farms believes that while improving the taste of goat meat could be important to the farm's success, diversity is its key – raising different animals and food that can work in harmony to maintain a sustainable farm.

For example, as grain costs rise, the farm is directing more time and money to its grass-raised goats and lambs, and also to its laying hens, which eat half the grain meat chickens eat and still produce a daily harvest of eggs. And it's experimenting with growing greens in its hoophouse over winter to take advantage of Durango's year-round farmers market.

monthly weights of kids to track growth rates

Customers will know the source of the meat and that it was raised

Consumers will have a new choice of healthful protein.