



# December, 2012 Food For Thought

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## **Thank You**

The Silent Auction that was held in November was a great success. Over \$1700 was raised thanks to participating donors and bidders. These funds will help us reach more students and teachers with workshops, programs and resources and help them learn and teach

## Greetings,

Regardless of one's personal background or beliefs, I think it is fascinating to learn about cultural icons and rituals from other traditions, countries and regions. There are many different lenses through which we can view this current season of light and gift giving. Therefore, I'd like to share one that is both personal, and agriculturally related as a way to link the time of year with our farm focused mission.

My great-grandmother immigrated from Sweden in the late 1800's. As a result my family decorates our home

icons

at Christmas: the Christmas goat or *julbock* (Yule buk) and the gnome or *Tomte*. The importance of the goat is based on Norse mythology which states that Thor's chariot was drawn by two goats. Over the years this image shifted to a Christmas

goat that brings gifts.

with two traditional Swedish



As part of the celebration in some Swedish families an adult member dresses up like a goat. Other activities include making a straw goat to hide at a neighbors' house. When the goat is found, the neighbor hides it at another house and so the game continues. Another great Swedish Christmas tradition is to give the farm animals something extra to eat on December 26. At this time of year, a little extra fuel for the internal fire is not a bad idea.

The elements of gift giving and playfulness associated

about the importance of agriculture. We would like to thank the following major donors for their generosity: Dover Saddlery, Marshall's Florist, Moonlight Meadery, NH Beekeepers, Association, NH Motor Speedway. Carriage Barn Therapy Programs, Farm & Barns Real Estate, The Green Alpaca, LaBelle Winery and Windhaven Farm. Many other individuals and businesses contributed to the success of this event and we appreciate all their support and interest.

The Silent Auction is just one way that we raise much needed funds. Our annual appeal is another. If you would like to make a contribution to our program, click on the Donation button above or send a check made out to NHAITC to 295 Sheep Davis Road, Concord, NH 03301. The work we do is only possible because of support from individuals, businesses and foundations. Every piece of the puzzle is important and we hope you'll join the team in helping us put the pieces together. Thanks in advance.

with the Christmas goat seem appropriate given what goats are really like. They give us many products, including milk which can be made into cheese, soap, yogurt, other dairy products, yarn, fiber, leather and meat. Goats are also extremely smart and playful animals, which is why many people choose to raise them.

In this issue we'll share some interesting facts about goats and goat farming in NH, with insight from those who work with goats every day. Goat farming is not a major industry in our state, in fact according to UNH Cooperative Extension there are only seven licensed goat dairies in NH. Of course some farms are raising goats for other purposes, and not all farms are licensed. The industry in NH is primarily made up of part-time operators, backyard farmers and 4-H projects. Yet goat cheese, goat milk soap and meat for a growing ethnic market are in high demand. Goats and their farmers are working hard to meet that growing interest.

Have fun learning and teaching about goats and have a wonderful holiday season.

#### Ruth

Ruth Smith, Statewide Coordinator NH Agriculture in the Classroom

## **Goat Facts**

#### **Facts and Myths**

Goats do not eat cans and garbage. They are curious and will taste various things. Their preferred food is browse (woody stems). Therefore they are not good "lawn mowers" because woody plants are preferred over grasses. On farms they are fed a mixture of hay, forage and grains.

Goats do not have incisors (front teeth) on the top, only on the bottom of their jaws. This is also true of wild browsers like deer and moose.

Worldwide, people drink more milk from goats than from any other mammal. It is drunk on all continents.

## **Goat Vocabulary**

**Billy** - a colloquial name used for male goats Buck - a male goat used for breeding **Chevre** - the French word for goat, used to refer to goat cheese in U.S. **Doe** - a female goat Horns - appendages on the head, usually occurring naturally on both male and female. Horn buds may be removed when goats are very young for safety reasons.

**Kid** - a baby goat **Wether** - a castrated male goat

### **Goat Biology**

Have students compare these numbers to their own or typical human figures.

Life expectancy average 8-12 years
(depending on breed)
Pulse rate - avg. 83
beats per minute (50-115)
Respiration - avg. 29
breaths per minute (15-50)

**Body temperature** - 103.6 degrees F (102.5-104)

Gestation - 150 days

#### **Goat Resources**

If properly handled, goat milk does not taste different from cow milk.

A full sized doe can produce 6-8 pounds (3-4 quarts) of milk per day. They are milked twice a day like cows.

Goat milk has a pH close to that of humans, it is rich in vitamins, minerals and protein and has smaller fat globules so it is more digestible than cow milk. Many people who are allergic to cow milk can drink goat milk without a problem.

Goat milk is naturally emulsified, cream does not rise to the top readily.

Butter and cheese made from goat milk are naturally white.

There are 6 breeds of dairy goats recognized by the American Dairy Goat Association:
Nubian, LaMancha,



Alpine, Toggenberg, Oberhasli, and Saanen.

Common meat breeds include Boer and Savanna. The commercial goat meat industry did not start in the US until the 1990's. Demand by immigrants and various ethnic groups created this new agricultural market.

Fiber goats include Angora which produce about 12 pounds of mohair each year and Cashmere which produce about 4 ounces of the fine, soft undercoat fiber each year. This explains why cashmere clothing is so expensive!

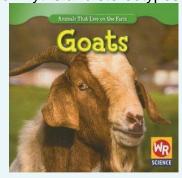
Goats do like to climb and often play "queen of the mountain", knocking each other off a high spot.

#### **Goat Farming in NH**

When asked "Why do you raise goats?" a common response from goat farmers in NH is "because they are such interesting animals, with great personalities". Valerie Drown who raises dairy goats

There are plenty of books on how to raise goats but educational books and story books about goats (other than the ones that perpetuate myths) are few and far between.

Here are a couple recommended by the American Farm Bureau Foundation for Agriculture. It might be interesting for older students to review books like Three Billy Goats Gruff or Gregory the Terrible Eater and pick out the myths and explore where they might come from. Learning the facts about animals is a fun way to explore the origins of myths and stereotypes.



Farm Animals: Goats by Emily Green
This is an early reader book which identifies goat parts and basic information. It contains a glossary and web sites for additional information. Ages 5-7 ISBN: 978-0-531-

in Webster said she inherited her love of goats from her grandfather. She's been around them since she was 13 and really enjoys how friendly they are. When Valerie talks to her goats, they talk back. Though they can be a challenge sometimes (she told quite a story about a couple of does who liked to jump out the window of her barn), but the rewards are worth it.

The folks at Hickory Nut Farm in Lee got hooked after "babysitting" some goats for a neighbor who was on vacation. They now have 71 goats of different ages and love their "kind eyes" and that they are "mostly quiet animals, except during feeding time, when everyone chews!"

Goat milk cheese can be firm or soft. The firm varieties must be aged under proper conditions of temperature and humidity. At Hickory Nut Farm, they built an underground cheese cave where the cheeses are aged for at least two months.

Interest in goat milk cheese, soap and other products varies depending on where you are in the state. However, according to the goat farmers I talked to, the demand for these items at some Farmers' Markets is extremely high.

To find a list of some of the goat farms in NH click here:

http://www.newenglandgrown.com/pages/goats.html

# **Lessons from the Classroom**

by Deb Robie

I have the pleasure of being in a typical first grade classroom this year as a one-on-one aide. This position has given me an in-depth look at how hard teachers work every day and then some.

The classroom teacher has allowed me to present an Ag in the Classroom topic every other week and read a story to the kids every Friday.

I would like to share just how easy it is to find ways to create a program for any grade much less very

#### 17552-1.

Goats on the Farm by Mari Schuh This is a basic book that explains information about how goats are cared for and raised, what they eat and how to milk them. It contains a glossary and web sites for additional information. Ages 4-7 ISBN: 978-0-7368-9380-0.

### **Contacts**

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Deb Robie, Grafton County Coordinator wehunt4@paigecos.com mobile first graders.

The first lesson we did was Sugar Detectives. This is a simple lesson but could be made more involved for older children. Take yeast, warm water and add sugary cereals vs. non sugary cereals and see which ones might be part of a healthier diet. Any time you can get a gaseous reaction it is fun to watch and the kids will remember.

We all know that October is pumpkin time but do you know how to get the kids to remember the life cycle of growing things. A simple lesson with cut out pictures of seeds, blossoms, different size pumpkins and paper plates will do the trick. Staple the plates together, string the cut outs on some yarn and put into the pumpkin so that the seed comes out first followed by the other parts and the kids will remember.

Pumpkin Pie in a Bag (no cooking required) is a real crowd pleaser because they begin to understand where food comes from because they just learned it in the previous lesson. The best part is that science, math, social studies, language arts and others subject areas begin to taste good and the kids will remember.

There are so many resources to use and your time is so limited wouldn't it be nice to teach something that the kids will remember long after they leave your classroom? I actually have kids in high school now that remember making pumpkin pie in a bag five years ago.

Check out these resources for some great ideas: <a href="www.myamericanfarm.com">www.myamericanfarm.com</a> www.agclassroom.org