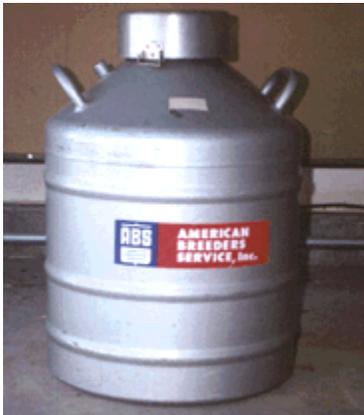


# Goat Breeding: Artificial Insemination VS. Natural Breeding



Two methods of breeding are commonly used in goats:

- Natural Breeding: In natural breeding, a doe (female goat) in heat is bred to a buck (a male goat).
- Artificial Insemination: In artificial insemination (AI), frozen semen from a buck is defrosted and inserted into the cervix of a doe in heat. Goats conceived by AI look and act just like other goats. Below, there's a picture of Minsky, an AI kid, that was born on May 6, 1995.



Each form of breeding has its own advantages and disadvantages.

**Advantages of Natural Breeding**

- **Simplicity:** Goats have been breeding naturally for centuries. As an owner of a doe, you must decide which buck to use, but the buck takes care of the rest.
- **Cost:** If you don't own a buck, many goat owners will allow you to bred your doe to their buck for a fee. In our area, this fee ranges from around \$35 to \$100 depending on the quality of the buck. Most also charge a fee of around \$2 a day to care for your doe if you must leave it to wait for it to come into heat. If you own a buck, your costs include the purchase price (from \$150 to \$800 in our area) and the cost of feeding and housing the buck. You can make some money breeding other's does if you do own a buck.
- **Timing:** A doe is in heat from 12 to 36 hours, and after breeding naturally semen can live for about 24 hours. It's not essential to bred at exactly the correct moment, and it's easy to repeat the breeding for a few days.

### **Disadvantages of Natural Breeding**

- **Difficulty in managing a buck:** Bucks require sturdier fences than does, and are usually housed away from does. During breeding seasons, bucks have some unusual behaviors such as urinating on their beards. This creates an offensive smell (12K) that attracts does but only does seem to appreciate it.
- **Variety:** If you own your own buck(s), you'll have only a few to choose from. If you use a buck that belongs to someone else, you'll still have a limited supply to choose from within driving distance. If you don't have a trailer or pickup truck, it can be inconvenient driving your doe to be bred.
- **Cost:** Bucks frequently cost more than does, and you'll probably have to own several because you usually won't want to breed the offspring of a buck to the buck. Bucks also eat more than does, and destroy their fences more frequently.

### **Advantages of Artificial Insemination**

- **Cost:** Once you have the necessary equipment, frozen semen is much less expensive than paying a breeding fee. Typical prices range from \$25 to \$100 per "straw" of semen. You can also avoid the costs of housing and feeding a buck.
- **Variety:** Straws are available from many high quality bucks, including National Champion bucks, and sires and siblings of National Champion does. It's possible to quickly improve the quality of your herd using such resources.

### **Disadvantages of Artificial Insemination.**

- **Timing is critical:** The best time to AI a doe is right at the end of the heat cycle. Defrosted semen remains viable at most a few hours and is usually immediately after defrosting. Therefore, it's important to know exactly when the doe went into heat and how long she remains in heat to be successful.
- **Cost:** The initial cost of the equipment can be high. The most expensive equipment is a tank to store liquid nitrogen (used \$100-300, new \$600-1000). It cost about \$35-50 dollars to fill the tank with liquid nitrogen, and this must be repeated every 2-4 months as the liquid nitrogen evaporates. A tank will usually hold 300-1000 straws so it's possible

to share among several goat owners. Some people rent space in a tank. The remaining equipment (lights, sheaths, etc.) totals less than \$100.

## **Artificial Insemination Equipment**

The necessary equipment includes a liquid nitrogen tank, "straws" of semen, tweezers (for removing straws from the tank), a straw cutter, (for cutting off the wax plug keeping the semen in the straw), an open ended glass speculum, a small light (to make the cervix visible), a thermos (for holding warm water to defrost the semen), a thermometer (for measuring the temperature of the water), an insemination gun (A thin metal tube with a plunger to push the semen out of the straw) and disposable plastic sheaths (to hold the straw while in the gun).

**Care must be taken in working near liquid nitrogen, since it is -361° F and can cause severe cryogenic burns.**

The sources below sell semen, equipment, instruction manuals and instruction video tapes. Most also provide training.

## **Sources of Goat Artificial Insemination Equipment and Semen**

Magnum Semen Works  
2200 Albert Rill Road  
Hampstead, MD 21074  
<http://magnumsemenworks.com>  
[vrhoten@ccpl.carr.lib.md.us](mailto:vrhoten@ccpl.carr.lib.md.us)  
(410) 374-2927

Buck Bank  
2344 Butte Falls Hwy  
Eagle Point, OR 97524  
(503) 826-2729

All American AI  
Andy & Ida Purcella  
Rt. 1 Box 605  
Coquille, OR 97423  
541-396-3448  
[aaai@harborside.com](mailto:aaai@harborside.com)

Frozen Assets  
Karen Lewis  
P.O. Box 493133  
Redding, CA 96049  
We've used and been very happy with Frozen Assets.

North East Caprine Semen Cooperative  
Monique Roeth, Sect/Treas  
2 County Route 2  
Berne, NY 12023-4211  
hroldlbt@ix.netcom.com

Soligenics  
Roger Ives  
584 Thompsonville Rd  
Suffield, CT 06078  
860-668-2602

Information source: <http://www.goats4h.com/AI.html>