

How to Plan Your Breedings to Target Specific Holidays

tatiana Stanton (June 2001)

Some facts to consider:

- The gestation period (time from mating to kidding) for US goats is about 150 days.
- Birth weights range from around 4 to 8 lbs for Spanish kids and 5 to 11 lbs for dairy and Boer kids. However, wide ranges can be experienced across the US population.
- Birth weights depend on the breed and genetic potential for size in the parents, age of the mother doe (yearling does and very old does tend to have smaller kids even though they often have singles), sex of the kid (male kids tend to be bigger than females), size of the litter (kids from multiple births generally average smaller birth weights than kids from single births in the same herd), and nutritional and health status of the doe during pregnancy (does that are severely overweight or underweight during pregnancy tend to have smaller kids).
- Daily growth rates for baby goats from kidding to weaning at about 3 months of age range from 1/3 and 1/2 lbs in most New York herds. However, herds with severe environmental restrictions (health problems, low feed inputs) or raising breeds with smaller mature weights may have growth rates as low as 1/4 lb per day. Some exceptional kids under optimal environmental management (but not necessarily optimal economic management) may grow 2/3 lbs per day. Single kids and male kids tend to grow faster than kids raised as multiples on a doe and female kids. Milking ability of the mother and general health and internal parasite condition of the breeding herd affect kid growth rate substantially. Sick and/or starved kids do not grow well. However, in most New York herds count on kids growing from 10 to 15 lbs per month for the first three months of age. Kids that are growing 1/2 lb daily at this age will generally grade **Selection 1** while kids growing 1/3 lb daily will generally grade lower.
- Goats are generally sold and shipped at least 7 to 10 days prior to the targeted holiday.

Calculations -

Let's say you want to market 30 to 40 lb kids at Easter in 2002. Western or Roman Easter will be early in 2002. It will be on March 31st. This means kids will probably be picked up about 10 days earlier or on March 21st. If your herd is well managed and you are working with Boer/dairy crosses, your twin kids from does that are 2 years of age or older will probably grow about 1/2 lb daily. Your singles from yearling does will also average about 1/2 lb daily. However, some of your triplets from older does and your twins from yearling does may grow only 1/3 lb daily. Let's assume your kids average about 7 lbs at birth. When should you breed your does to target the Easter market?

Growthy kids -

40 lb - 7 lb (birth weight) = 33 lb. At 1/2 lb of gain per day, you need about 66 days to get a 7 lb. baby kid to 40 lbs by March 21st. You have 21 days in March, 28 days in February, and still need 17 days in January --> So you want their dams kidding by January 14th, i.e., bred about August 14th.

Slower growing kids-

30 lb - 7 lb = 23 lb. At 1/3 lb of gain per day, you need 69 days to get a 7 lb. newborn kid to 30 lbs by April 21st --> So you want their dams kidding by January 11th, i.e., bred about August 11th.

This means you definitely want your bucks in the herd by August 1st. Most does are stimulated by the smell of a buck to come into heat within a week of a buck's sudden introduction into the herd. However, the heat cycle of a doe is 18 to 21 days so if you want to make sure all your does have a chance to be exposed before January 11th you need to have the buck in there by July 20th. Your leeway here depends on how many does you are challenging your bucks with, how young and inexperienced your bucks are and whether your buyer will actually accept larger kids or you also have a market for kids for Greek Easter which occurs about 5 weeks later on May 5th, 2002. If your buyer penalizes large kids, you will want to hold off putting the buck in until August 1st. If you have a good market for kids that are slightly over 40 lbs you'll want to play it safe and have the buck in by July 21st to make sure every doe has an excellent chance of producing an Easter kid.