

Horn or Poll

The offspring will inherit one gene from each parent, chosen randomly. If it carries either one or two poll genes, then the animal will be poll. If the parent is a Ph (Carrying a poll gene and a horn gene), it can pass on the poll gene or the horn gene.

(PP) = Homozygote Poll, (Ph) = Heterozygote Poll or (hh) = Horned are highlighted (In brackets)

| Sire | Dam | Offspring |
|-------------|-------------|-------------------------------------------------------------------------------------------|
| Horned (hh) | Horned (hh) | Horned (hh) <i>There is no poll gene in either parent</i> |
| Horned (hh) | Poll (Ph) | Horned (hh) or Poll (Ph) <i>Could pick up either gene from both parents</i> |
| Horned (hh) | Poll (PP) | Poll (Ph) <i>Must pick up gene from each parent</i> |
| Poll (Ph) | Poll (Ph) | Poll (Ph) or Poll (PP) or Horned (hh) <i>Can pick up either gene from both parents</i> |
| Poll (PP) | Poll (PP) | Poll (PP) <i>Can only pick up poll genes</i> |
| Horned (hh) | Horned (hh) | Horned (hh) <i>Can only pick up horn gene</i> |
| Poll (Ph) | Horned (hh) | Horned (hh) OR Poll (Ph) <i>Can pick up either gene from both parents</i> |
| Poll (PP) | Horned (hh) | Poll (Ph) <i>Must pick up gene from each parent</i> |
| Poll (Ph) | Poll (Ph) | Poll (Ph) or Poll (PP) or Horned (hh) <i>Can pick up either gene from both parents</i> |
| Poll (PP) | Poll (PP) | Poll (PP) <i>Can only pick up poll genes</i> |

Identifying calves that are horned or poll is not always easy

Feel the top of the head of a newborn calf, you can usually feel the horns under the skin; they will feel like matching little bumps under the skin where the horns would be. If you can't feel them it is most likely a poll calf. Check a week later as sometimes it isn't always easy. A peaked poll indicates an animal that is naturally poll. Calves which have a rounded almost flat head are indicative of them developing horns later usually coming through the skin by 6 weeks of age. Six weeks of age is a good time to dehorn as this is before the horn attaches to the skull bone.

Scurs: There is not a test available for testing scurs but please read the article

Scurs are small horn-like structures that, in young cattle, are usually not attached to the skull. They often look like small horn buds; and can vary in shape and length. In older cattle, they can sometimes attach to the skull like a horn. Having scurs is a separate trait to being polled or having horns.

- Scurs are incompletely developed horns which are generally loose and movable beneath the skin, not attached to the skull.
- Not all horned cattle carry the gene for scurs and not all polled cattle lack scur gene. The gene for scurs is expressed differently from the gene for polledness/horns.

- In males the scur gene is dominant, meaning that if only one of the two genes is for scurs the bull will be scurred. Therefore, it is easy to detect the scur gene in the bull and eliminate it from the herd.
- In females the scur gene is recessive, meaning that she must possess both genes for scurs in order for the cow to be scurred. If the cow possesses only one scur gene she will not have scurs herself but has a 50 percent chance of passing the scur gene on to her calf. The smooth polled cow may have the recessive scur gene, resulting in much more difficulty in identifying/eliminating the scur gene from the herd.

Scurred Inheritance Pattern

| <u>Genotype</u> | <u>Cows</u> | <u>Bulls</u> |
|-----------------|---------------|---------------|
| PP Sc/Sc | Smooth polled | Smooth polled |
| PP Sc/Sn | Smooth polled | Smooth polled |
| PP Sn/Sn | Smooth polled | Smooth polled |
| Pp Sc/Sc | scurs | scurs |
| Pp Sc/Sn | smooth polled | scurs |
| Pp Sn/Sn | smooth polled | smooth polled |

A typical scur



Facts:

- Most scurs remain small but occasionally the scur will grow profusely, grow to the edge of the skull and continue to grow in a downward fashion up to 7 or 8 inches long and appear to be a rigid horn.
- Currently there is no test available to test for scurs.
- It is now believed that poll bulls that do not carry scurs **may** be a homozygote poll but not necessarily. However it is believed that for the bull to be a homozygote poll it will not demonstrate scurs.
- They can have one or two scurs.
- Horned cattle may carry the scur gene, but cannot demonstrate the scur because the animal has horns.
- Smooth Poll means without scurs.