



WHICH CROSSBREEDING PROGRAM SHOULD YOU UTILIZE?

Crossbreeding is used to increase profits by lowering expenses such as feed, veterinary, and labor costs. Although there are many ways to customize a crossbreeding program for a herd, here are three major crossbreeding programs to consider.

TWO-WAY CROSSING

WHAT IS IT?

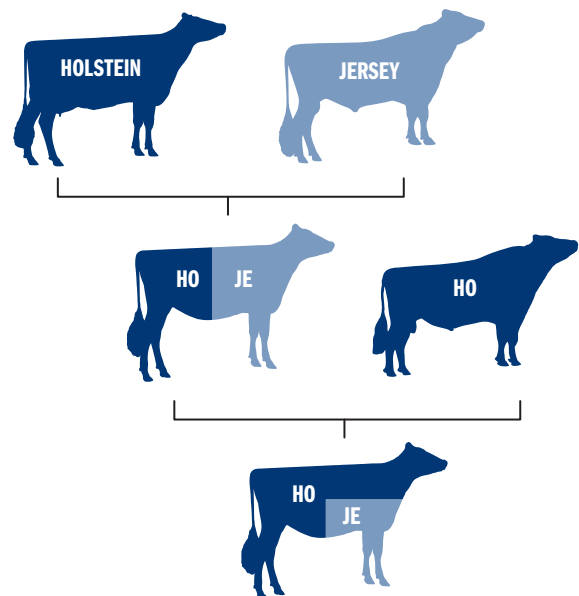
Two-way crossing is the practice of rotating between two breeds to create a pedigree.

EXAMPLE:

Breeding a Holstein dam to a Jersey sire to create an F1 crossbred calf. Next, breed the F1 calf to a Holstein sire, which would result in an F2 crossbred calf that is $\frac{1}{4}$ Jersey and $\frac{3}{4}$ Holstein.

WHY USE IT?

This is the simplest program for crossbreeding. It is easy for the producer to quickly and correctly select the breed of sire to breed to a dam. Two-way crossing results in a sustained heterosis rate of about 66 percent.



THREE-WAY CROSSING

WHAT IS IT?

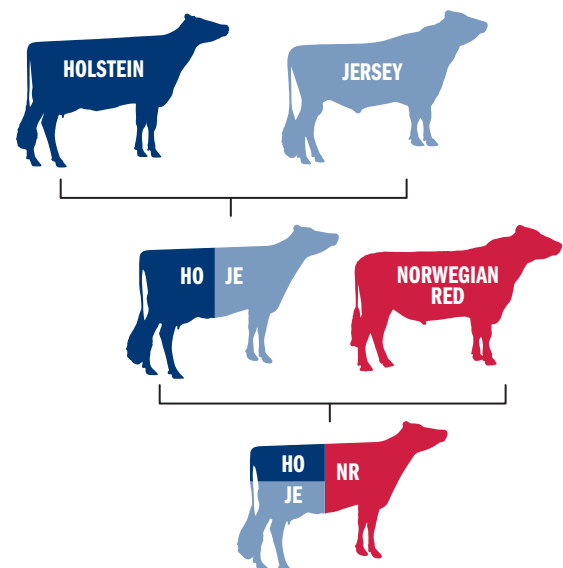
Three-way crossing is the practice of using three breeds in a rotation to create a pedigree.

EXAMPLE:

Breeding a Holstein dam to a Jersey sire to create an F1 crossbred calf. Next, the F1 calf would be bred to a third breed, such as Norwegian Red. The resulting F2 crossbred calf would be $\frac{1}{4}$ Holstein, $\frac{1}{4}$ Jersey, and $\frac{1}{2}$ Norwegian Red.

WHY USE IT?

Utilizing three-way crossing allows for about 85 percent sustained heterosis. However, it can be harder to execute correctly since there is more opportunity for error. Herds using this program must be diligent to correctly identify the sire of a calf from conception until breeding date.



TERMINAL F1 CROSSING

WHAT IS IT?

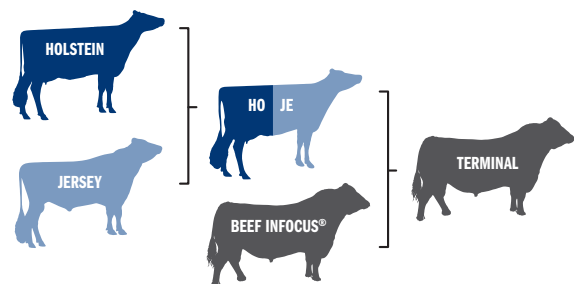
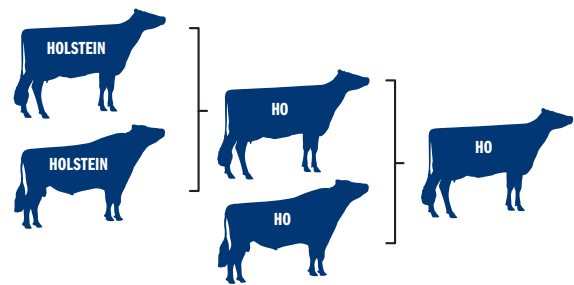
Terminal F1 crossing uses a population of a herd that remains a purebred nucleus herd. From this “nucleus herd,” producers create both replacement purebreds and F1 crosses. The F1 crosses are bred to Beef InFocus® to create a superior beef cross calf. This method results in a herd that is about partially purebred and partially F1 crossbreds.

EXAMPLE:

A herd that is partially F1 and partially pure Holstein uses sexed semen and embryo technology to maintain a population of pure Holsteins and a population of F1 Holstein x Jersey crosses. These F1s are then bred to Beef InFocus®.

WHY USE IT?

This program offers the ability to shift genetics more quickly to respond to market demands, maximize heterosis in the F1 herd, and use tools that are not available to fully crossbred herds, such as genomics. However, there is an increase in management complexity, and the purebred half of the herd will lack heterosis.



The ABS Global team can help you achieve your herd goals faster by planning and creating a customized dairy crossbreeding breeding program for your herd. Contact your ABS Sales Representative to get started.



Profit from Genetic Progress