





We compared the performance of **Pure Holstein** cows with crossbred **Norwegian Red X Holstein** cows in a large **US dairy farm** that has been milking crosses for over 15 years.

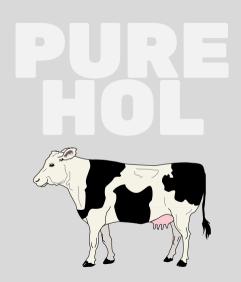
Raw data is collected via Dairy Comp and analyzed using **SAS** (Statistical Analysis System) statistical software.

We looked at data from different generations, including over **2,900 Holsteins** and more than **5,400 NR X Holstein crosses**. This includes F1, F2, F3 and F4 crosses.







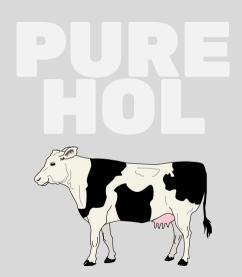




*The monetary calculations provided assumed economic inputs that represent a generic conventional dairy herd selling milk in a component pricing market









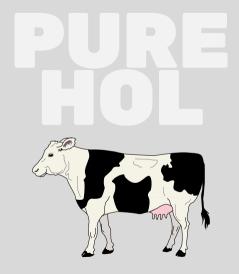
MORE PROFITABLE EARN EXTRA US\$302 IN MILK VALUE PER COW PER YEAR

FROM SIMILAR MILK YIELD BUT HIGHER MILK COMPONENTS AND SHORTER CALVING INTERVAL











MORE SAVINGS FROM BETTER FERTILITY EXTRA US\$17 SAVINGS PER COW PER YEAR

FROM DIRECT REPRODUCTIVE COSTS











MORE COMPLETED LACTATIONS

SAVE EXTRA US\$31 FOR LOWER REPLACEMENT COST PER COW PER YEAR

FROM LOWER COW MORTALITY AND EARLY LACTATION CULLING COSTS









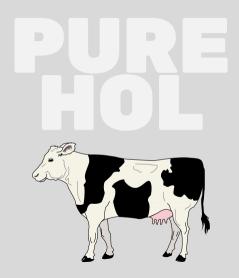


MORE FEED EFFICIENT SAVE US\$31 FEED COST PER COW PER YEAR

FROM SMALLER COWS THAT ATE LESS THAN HOLSTEIN. PRODUCED MORE MILK VALUE







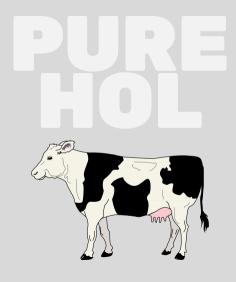


MORE BULL CALF VALUE EXTRA VALUE OF APPROXIMATELY US\$200 FOR NR X MALE CALVES











MORE BEEF VALUE EARN EXTRA US\$17 FOR CULL COWS PER COW PER YEAR

YIELDING MORE PROFIT EVEN WHEN SOLD FOR MEAT, OUTSHINING HOLSTEINS DESPITE HOLSTEINS HEAVIER LIVEWEIGHT





HIGHER NET INCOME

NR crossbred cows give extra US\$ 489 net income per cow per year*

HIGHER MILK SOLIDS YIELDS AND PERCENTAGES

Averages NR crosses 4.25 fat % vs. Holsteins 3.73 fat %.

EQUAL MILK YIELD WITH LOWER FEED COST

During a 305-day lactation period, Holsteins averaged 25,155 lbs. of milk compared to the average of 25,052 lbs. from all generations of NR crosses.

EARN MORE FROM SHORTER DAYS OPEN

NR crosses showed a shorter period of days open, with 17 fewer days open compared to Holsteins which also contributed to more milk sold.

HEALTHIER COWS & IMPROVE TRANSITION SURVIVAL

NR crossbred cows had a health advantage with only 1.7% being sold or dying in the first 30 days of lactation compared to 3.4% for Holsteins during the transition period.



