

## Which Genomic (GGP) Panel Should You Use?

The value of accurate information and its usability in calculating EPDs has driven the acceptance and diversity of genomic DNA testing. At no other point in history has it been viable to collect a sample on a newborn calf and, for around \$40, increase the accuracy of that animal's EPDs, equal to adding 15 to 25 progeny records for some traits.

While this technology is valuable, it will never replace the necessity of collecting phenotypic records. Genomic testing of young animals is unmatched in its ability to help make culling and mating decisions earlier in life. However, high accuracy EPD estimates long-term are achieved by consistent progeny testing and data submission.

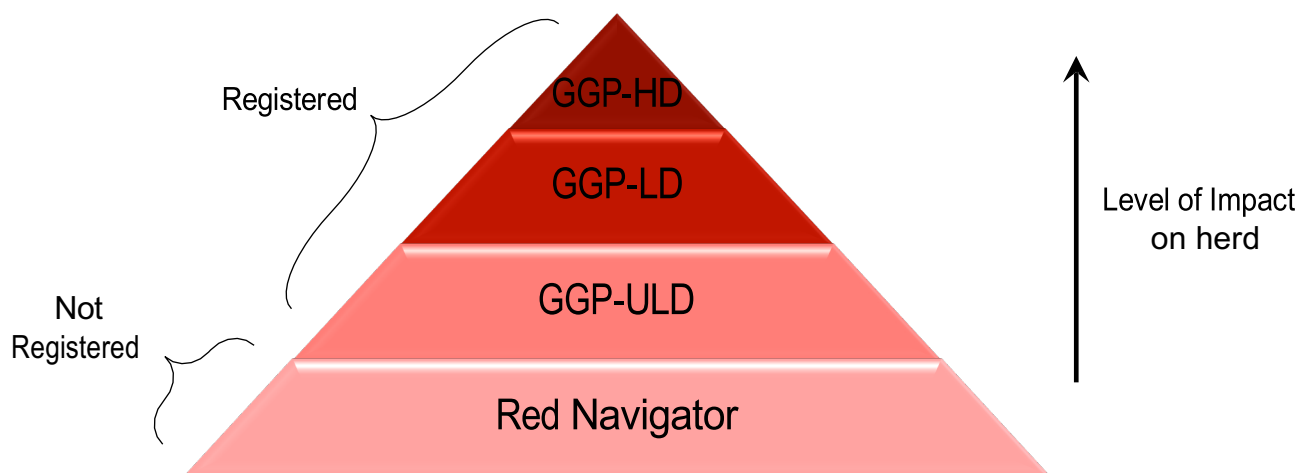
In order to complete a genomic test, the animal *must* be registered (have a RAAA registration number) in the RAAA system, at the time of sample submission. The RAAA currently offers three genomic testing options available through Neogen, known as *GeneSeek Genomic Profilers (GGP)*. All GGP panels include parentage, to meet RAAA 'on file' requirements or verify the parents of the animal, as well as, the genomic enhancement of the animal's EPDs. The panels do differ in density and the availability of add-on defects.

Name	Genomic EPDs	Parentage	Defects Included	Density	Price
<b>GGP-ULD</b> – ultra-low density	Yes	Yes	Not available	33,000 markers	\$35
<b>GGP-LD</b> – low density <i>aka 50K</i>	Yes	Yes	OS and MA	100,000 markers	\$50
<b>GGP-HD</b> – high density	Yes	Yes	OS and MA	150,000 markers	\$90

The increase in density of the LD and HD allows for some defects and traits, additional to OS and MA, to be pulled from the panel without retesting the sample and at a discounted price. If any defects are desired, the GGP-LD is the minimum genomic test that can be ran.

RAAA recommends that any A.I. Sire or Donor Dam is ran on the GGP-HD. An animal that you expect to use extensively or over a longer period of time should be ran on the GGP-LD. Animals that do not need genetic defect testing can be ran on the GGP-ULD.

If you have Red Angus females that cannot and will not be registered, but you would like to obtain genetic information on them, the Red Navigator commercial female test can be completed.



If the question is either to run more animals on a lower density or fewer animals on a higher density, it would always be better to test more animals on a lower density. Additionally, if finances allow it is always better to capture a higher density genotype on an animal.

If you have questions or need further assistance, feel free to contact the RAAA DNA Department at [dna@redangus.org](mailto:dna@redangus.org) or by calling 940-387-3502 ext. 8