

World Angus Evaluation

A collaboration to provide genetic evaluations
for Angus cattle across the globe



Collaboration between USA and Canada started in 2000

- USA and Canada combined genetic evaluations



- Partnership between:

ANGUS
THE BUSINESS BREED



- Goals:
 - Facilitate international commerce and exchange of genetics
 - Join efforts/resources and promote research collaboration

The World Angus Secretariat call to action

- Global organization for Angus Associations
- Call for a global genetic evaluation on Angus cattle
- American Angus Association uniquely positioned to take the lead
 - Big footprint on Angus genetics globally
 - R&D capabilities to do the necessary research through AGI



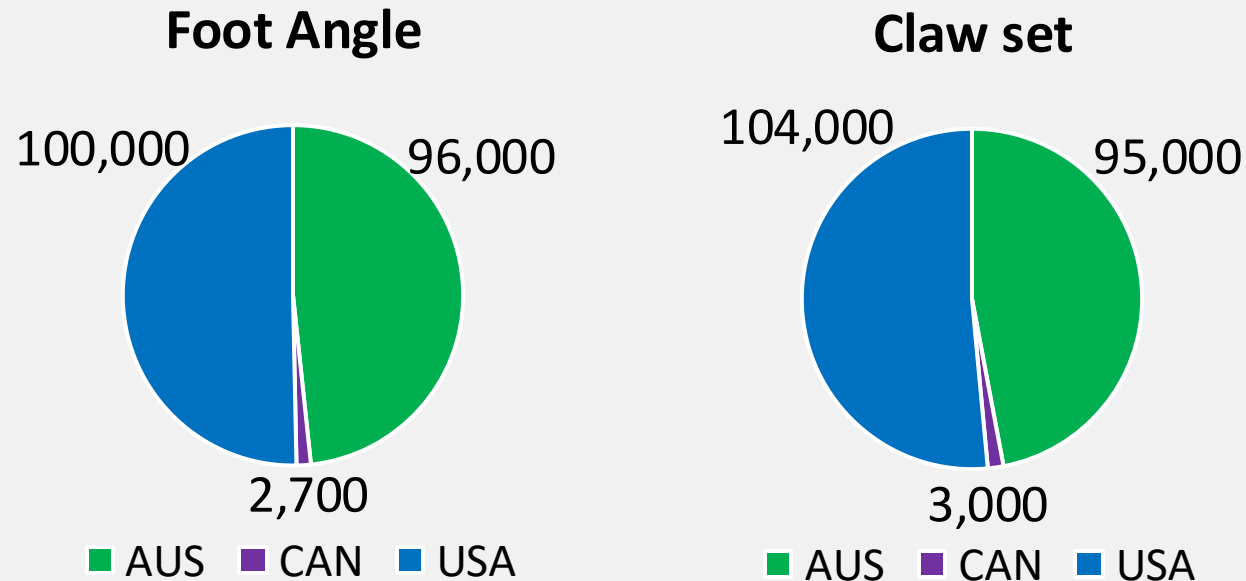
Angus Genetics Inc to take the lead

- Angus Australia brought onboard
- Foot score evaluations were the first step
 - New evaluation/phenotype in the USA
 - Historic phenotyping in AUS
- Data sharing
 - Pedigrees, phenotypes and genotypes
 - ID matching and data exchange pipelines build



It all started with FS evaluations

Adding AUS data doubled the number of records in the genetic evaluation



Successful release in 2020

FOR IMMEDIATE RELEASE

For more information contact:
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To watch the video press release, [click here](#).

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First Ever Joint Partnership with Angus Australia

Angus Australia and the American Angus Association partner on foot score phenotypes.

Research Article | [Open access](#) | Published: 02 November 2023

Across-country genetic and genomic analyses of foot score traits in American and Australian Angus cattle

[Amanda B. Alvarenga](#), [Kelli J. Retallick](#), [Andre Garcia](#), [Stephen P. Miller](#), [Andrew Byrne](#), [Hinayah R. Oliveira](#)
& [Luiz F. Brito](#) 

Genetics Selection Evolution **55**, Article number: 76 (2023) | [Cite this article](#)

After a successful release there was appetite for more

- AGI to continue leading the research
 - AAA to be the host of the data
- Expand genetic evaluations:
 1. Growth
 2. Calving ease
 3. Carcass
 4. Scrotal circumference

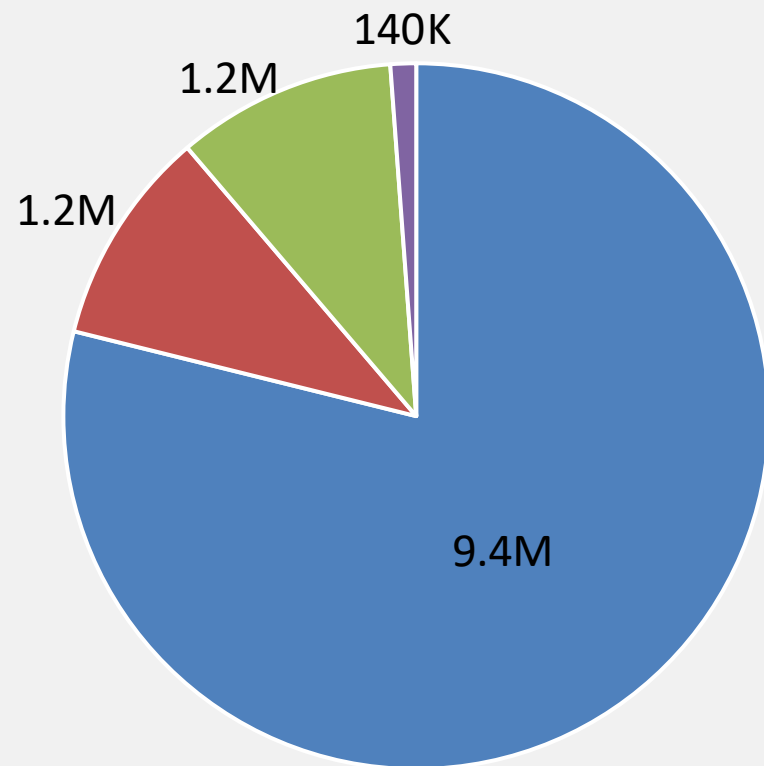


Phenotypes



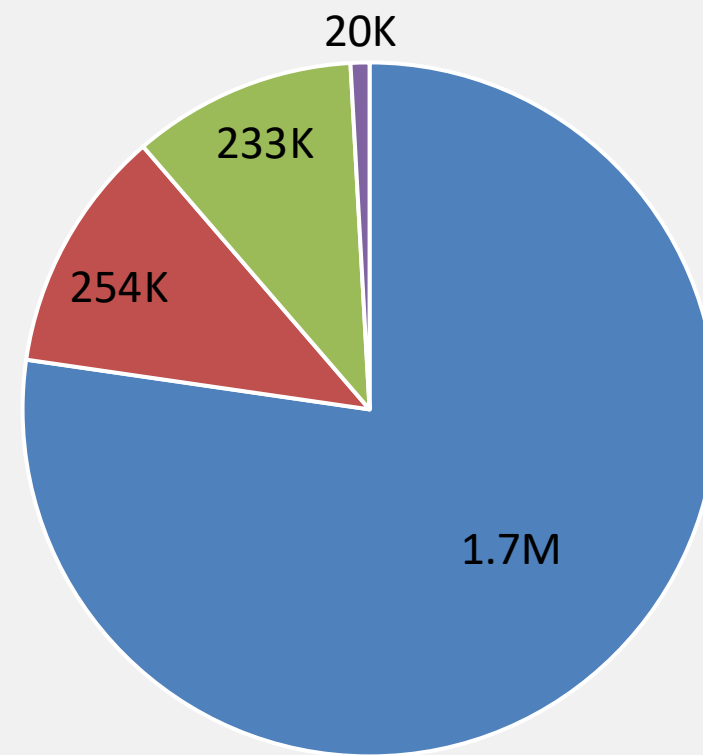
Phenotypes

WW phenotypes



■ USA ■ AUS ■ CAN ■ NZA

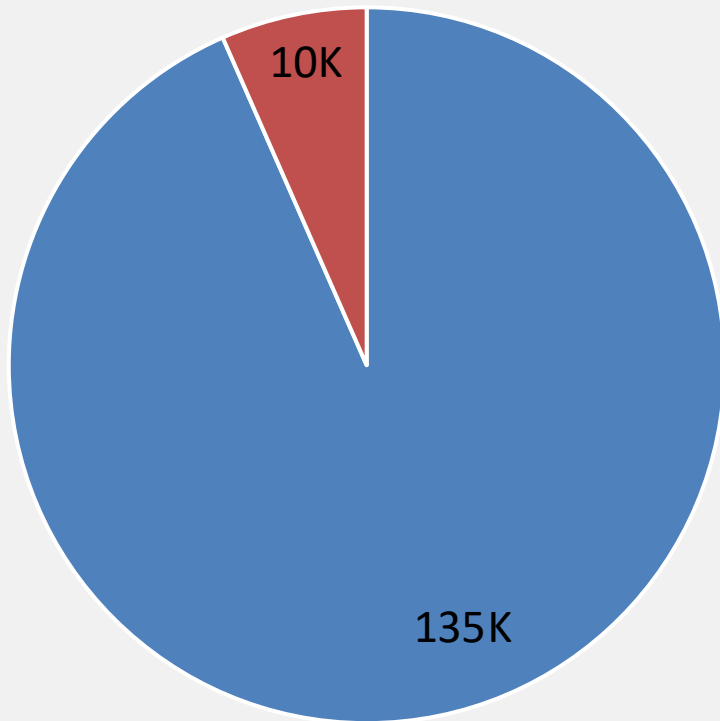
CE phenotypes



■ USA ■ AUS ■ CAN ■ NZA

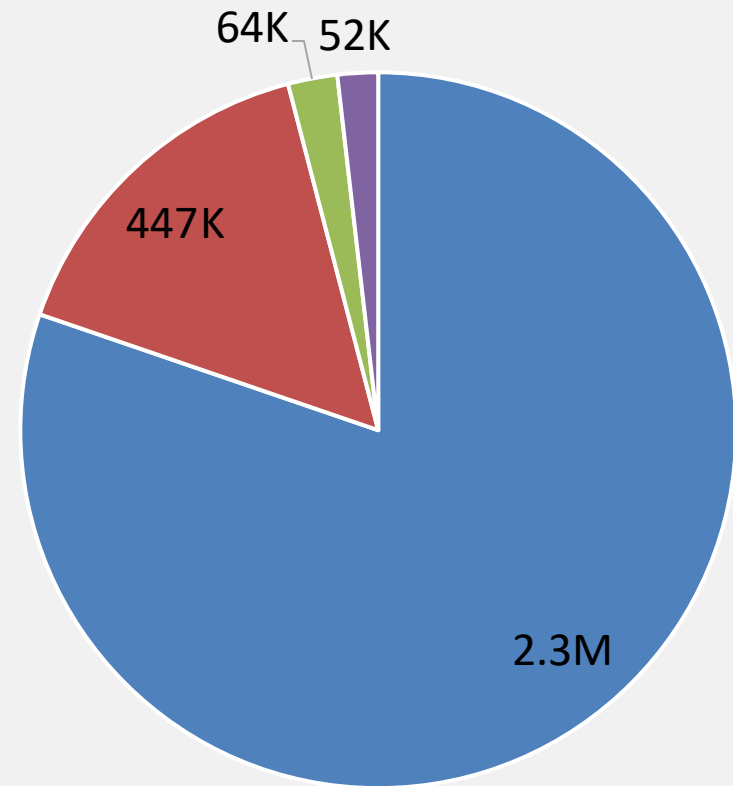
Phenotypes

Carcass (CWT, REA, FAT, MARB)



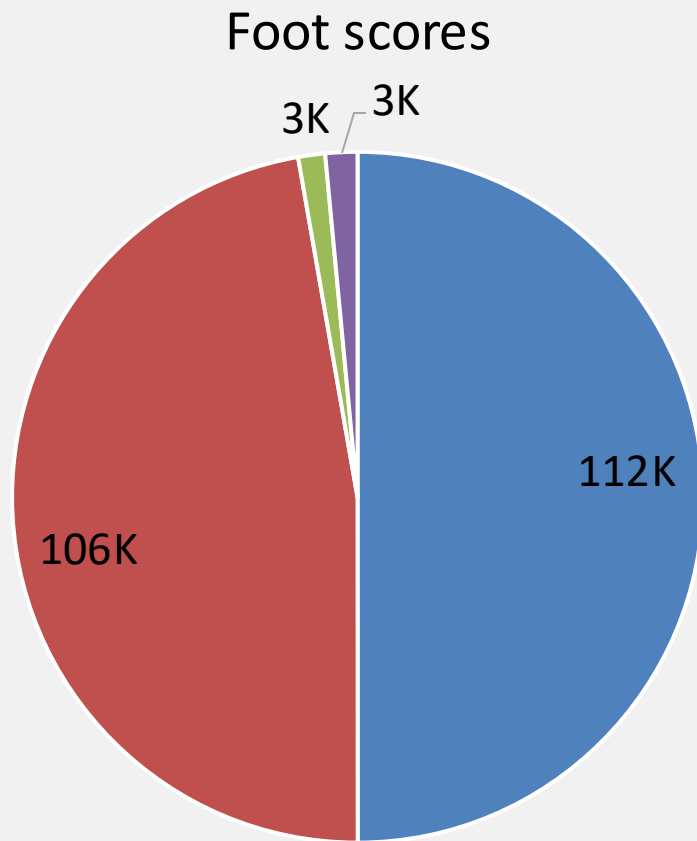
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Ultrasound

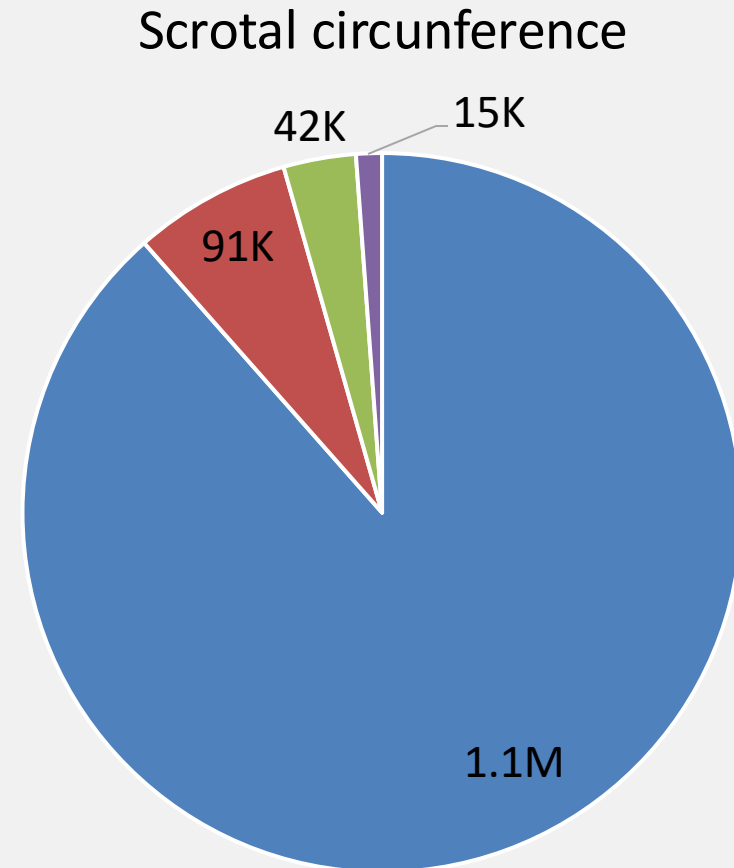


■ USA ■ AUS ■ CAN ■ NZA

Phenotypes



■ USA ■ AUS ■ CAN ■ NZA



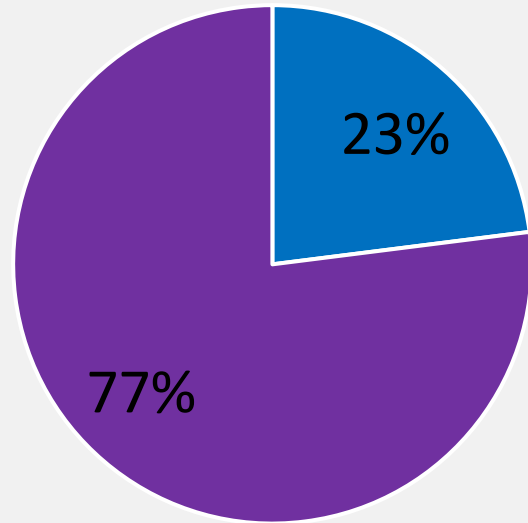
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Pedigree



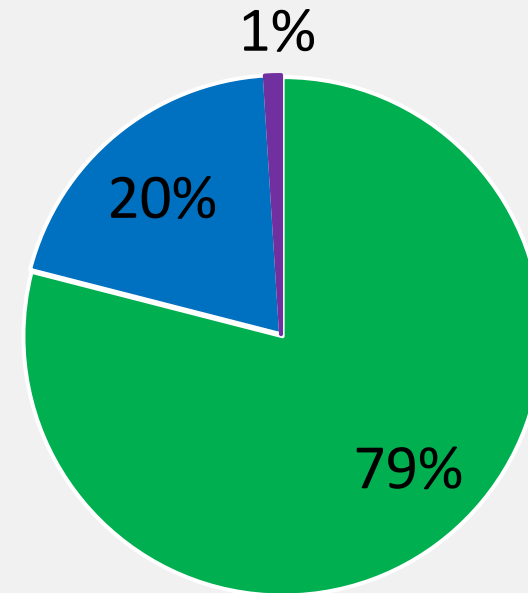
Pedigree and genotypes provide connectivity between populations

Canadian progeny



■ USA sires ■ CAN sires

Australian progeny

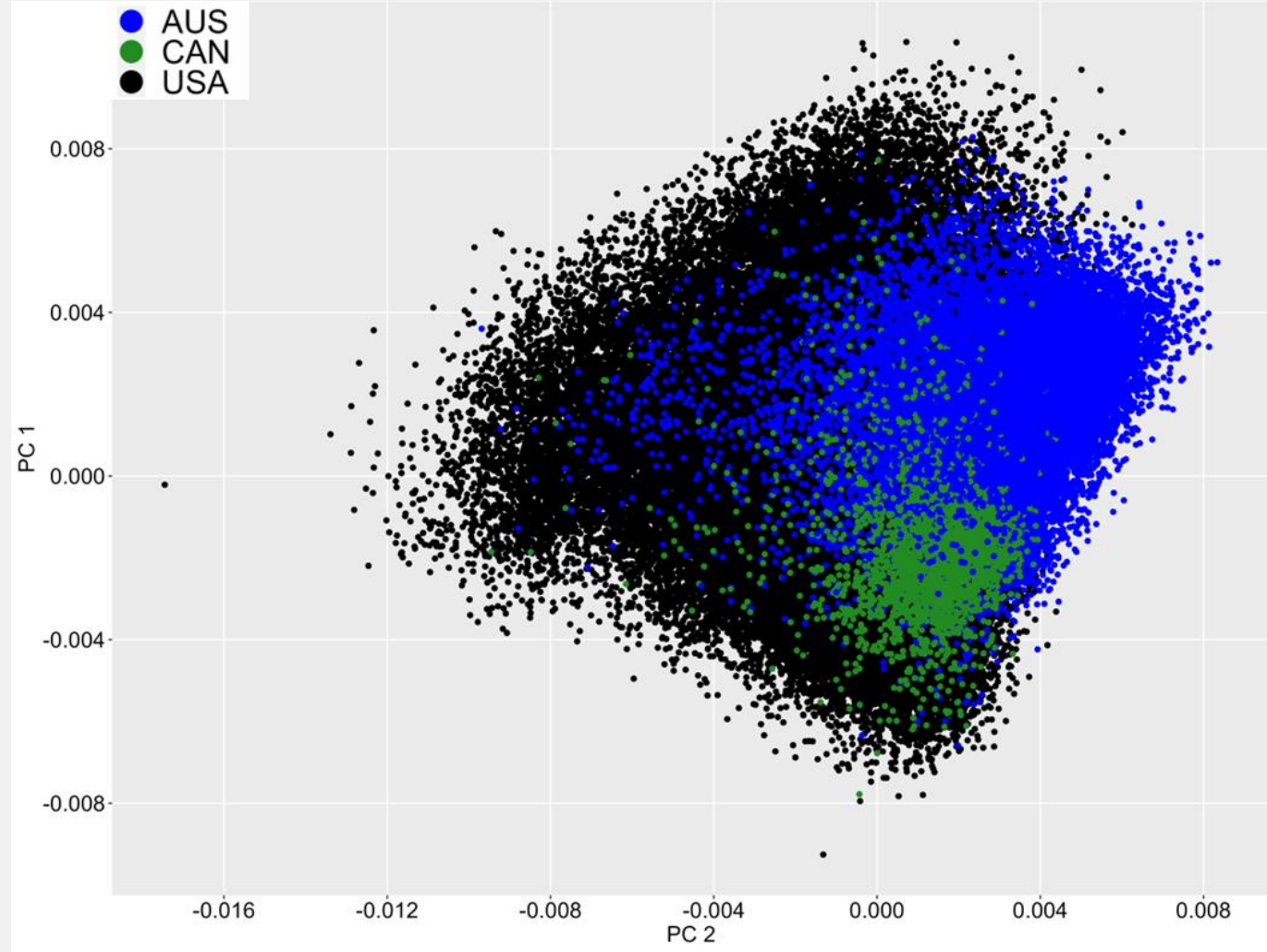
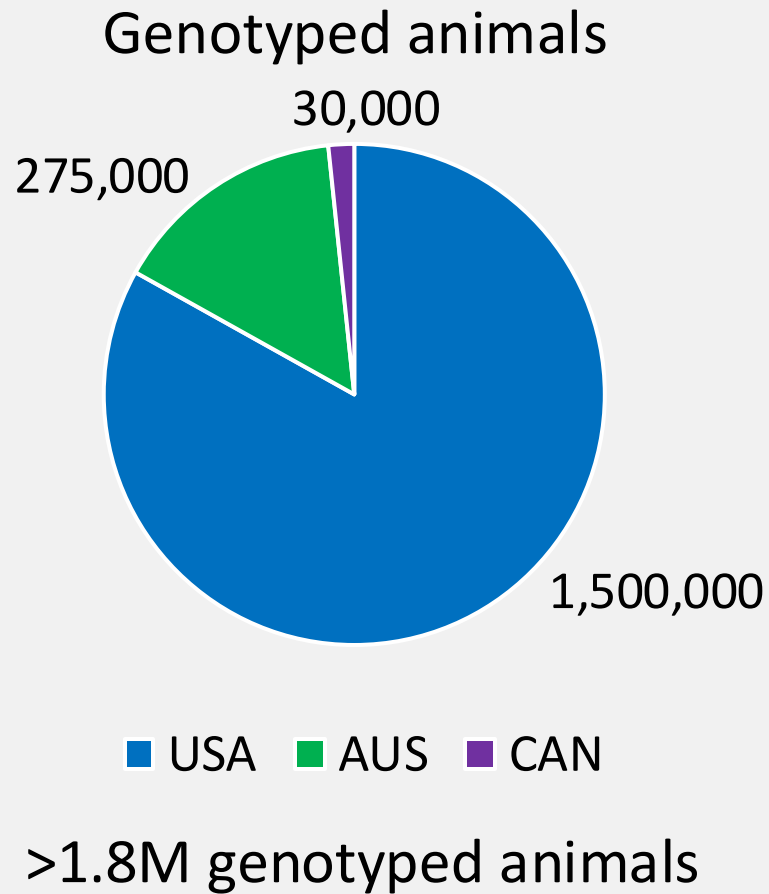


■ AUS sires ■ USA sires ■ CAN sires

Genotypes



Pedigree and genomics provide connectivity between populations



World Angus Evaluation released in Oct. 2023

- 13 traits
 - 11 new + 2 Foot Scores
- Global Sire Search tool



Search sires registered with:

American Angus Association Angus Australia Canadian Angus Association

Displays Top 300 Sires	Valid Range	Minimum	Maximum	Minimum Accuracy .00 to .99	Percentile Rank Filter
Production					
<input type="radio"/> Calving Ease Direct (CED) %	-21 to 23	Min CED	Max CED	Min Acc CED	100% <input type="range"/> 1%
<input type="radio"/> Birth Weight (BW) lb.	-8.9 to 10.0	Min BW	Max BW	Min Acc BW	100% <input type="range"/> 1%
<input type="radio"/> Weaning Weight (WW) lb.	-22 to 111	Min WW	Max WW	Min Acc WW	100% <input type="range"/> 1%
<input type="radio"/> Yearling Weight (YW) lb.	-35 to 196	Min YW	Max YW	Min Acc YW	100% <input type="range"/> 1%
<input type="radio"/> Scrotal Circumference (SC) cm	-1.23 to 3.34	Min SC	Max SC	Min Acc SC	100% <input type="range"/> 1%
Management					
<input type="radio"/> Foot Claw Set (Claw) score	0.05 to 0.97	Min Claw Set	Max Claw Set	Min Acc Claw	100% <input type="range"/> 1%

Successful release and good feedback



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World Angus Evaluation improves US, Australian, Canadian EPDs
Three-country evaluation releases updates for growth, carcass and maternal measures.

BY THE NUMBERS

by Kelli Retallick-Riley, Angus Genetics Inc.

Expanding Genetic Predictions Beyond
U.S. and Canadian Borders

*The American Angus Association has a long-standing history of
being the purveyors of Angus genetics around the globe.*

More opportunities ahead

- More traits coming
 - Feed efficiency, cow longevity, heifer pregnancy, and more
- Combined resources and expertise to move the beef industry forward
- Shared interests
 - Advance research
 - Promote the exchange of genetics
 - Provide better tools for Angus breeders

For great outcomes we need great people



Kelli Retallick-Riley



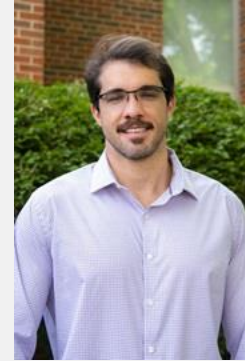
Andre Garcia



Rafael Medeiros



Larissa Novo



Pedro Ramos



Steve Miler



Christian Duff



Kajal Latimer





Thank you

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