

Characteristics of successful breeding programs: AI industry perspective

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It Takes a Team & Tools to Create a Successful Outcome

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Characteristics of successful breeding programs

- What makes me qualified to talk about this?
 - Experience
 - Technology – Child of the ampule time period
 - Synch Systems – Best drug in high school was Lutalyse
 - Years & Locations – lots of states, lots of customers and a few years
 - Success & Failures; zero to hero, **keep in mind – takes a team**
 - Team behind me offering up discussion – Kansas ABS Reps
 - People I've had the opportunity to work with and for over several decades
 - Jack of all trades, master of none – get to hear from the experts over the next two days

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Characteristics of successful breeding programs

- Equation of Reproduction $A \times B \times C \times D = \% \text{ Pregnancy}$

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Characteristics of successful breeding programs

- Equation of Reproduction $A \times B \times C \times D = \% \text{ Pregnancy}$
- Lowly heritable
- Translation - "NO SILVER BULLET"
- Open communication
- Accountability & dedication by everyone involved

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Characteristics of successful breeding programs

Equation of Reproduction $A \times B \times C \times D = \% \text{ Pregnancy}$

- A = Herd members detected in heat (or time bred) and inseminated (%)
- B = Inseminator efficiency (%)
- C = Fertility of Herd (%)
- D = Semen Fertility level (%)

Total CAN'T be Larger Than the Smallest Percentage =
Every Team Member has to perform at a high level

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- A = Herd members detected in heat (or time bred) and inseminated (%)
 - ✓ Effective Synchronization
 - Products & Protocols
 - Dosage
 - Administration – needles, injection location, tails on CIDR's
 - ✓ Effective heat detection (if done)
 - Use tools to help accomplish this & apply effectively
 - Spend the time
 - ✓ Timing – Synch Planner

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- B = Inseminator efficiency (%)
 - ✓ Qualified Technician(s)
 - Experience
 - Knowledge
 - Passion for the job
 - ✓ Ability to complete the job in timely manner without fatigue & with focus
 - Have enough help to make the job efficient/effective
 - Ability to AI without getting tired or wore out
 - Facilities to keep everyone safe

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- C = Fertility of Herd (%)
 - ✓ Management
 - Proper Cattle Handling
 - Post AI management related to transportation during key times in pregnancy
 - ✓ Genetics - Some breed and lines are more fertile, but how do we accurately identify those and relate back to environment – we've got work to do in the area and technology is developing to help us get there faster
 - ✓ Vaccinations - Work with your veterinarian to determine what needs to be given and when, but always make sure it's done at least 30 days prior to the blessed event
 - ✓ Nutrition
 - Gaining plane of nutrition; not too fat or too thin
 - Good mineral program for your area
 - Avoid excess protein in the diet

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- D = Semen Fertility level (%)
 - ✓ Surviving the post thaw evaluation
 - ✓ Semen "put up properly"
 - ✓ Semen handling
 - Thaw procedures
 - Equipment at the right temperature at all times
 - ✓ Sire Differences
 - No test available with repeatability
 - Collection of fertility data is difficult in the beef industry
 - No means to measure among sires with proof due to varying factors
 - That being said...

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Characteristics of successful breeding programs

- Communication through the entire process
 - Expectations
 - Who provides what product and service
 - Timing of events
 - Management of cattle before, during and after
- Accountability & dedication
 - Every member of this team needs to be willing and able to put forth their best effort and dedication, builds trust in the process
 - Don't be the weak link

Put together a great team that can make your "Genetic Dreams Come True"

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Toolbox via the Internet

- **Estrus Synch Planner** – can help select the right synchronization program for your operation and set the dates for each step
 - Estrus synch planner (Excel version): http://www.iowabeefcenter.org/estrus_synch.html
 - Estrus synch planner (mobile version): <http://estrussynch.com/>
- **Cowculator** – Input bull purchase price and costs to test and maintain and the price per pregnancy will be revealed. https://play.google.com/store/apps/details?id=com.app_cowculator.layout
- **Applied Repro Strategies Symposium** – These meetings provide a wealth of knowledge and research. Past programs available for review
 - <http://beefrepro.unl.edu/>
- **Range Beef Cow Symposium** – Valuable information related to the beef industry available on the website. Most presentations have a synopsis, power point, proceedings and audio.
 - <http://www.rangebeefcow.com>
- **Eng Cow Efficiency Workshop**
 - <http://animalscience.unl.edu/eng-symposium>

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May All Your Genetic Dreams Come True...through AI

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