

YOUR DAIRY ISN'T LIMITED TO MILK



Opportunities and Challenges with ET vs AI

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Overview



Increase Profitability



Break into New Markets



Increase Reproductive Efficiencies

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Increase Profitability

Using Beef Semen and/or Beef Embryos on Low to Average Performing Cows:

Allows you to receive an Extra Premium

Optimize the ROI of Pregnancies not Needed for Replacement



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Beef Semen

Easy to Implement
No extra Training
No new Equipment

Low Cost
Semen (\$0 - \$12)

Conception Rates Similar to Dairy Semen



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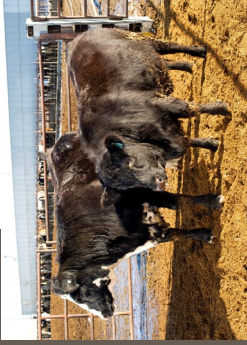
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Challenges

Market for B x D Fed Cattle

Some packers hesitant to buy

Early "Emptying of tanks" impacted the value



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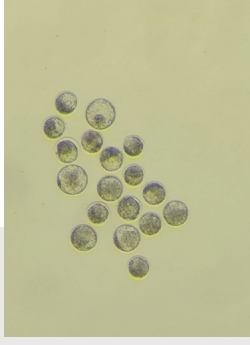
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Embryo Transfer (Beef in Dairy)

Traditionally assisted reproductive technologies (ART) use has focused on genetically superior animals

- Multiple ovulation embryo transfer (MOET)
- In-vitro fertilization (IVF)

Costs have been too high to implement on a large scale in commercial operations.



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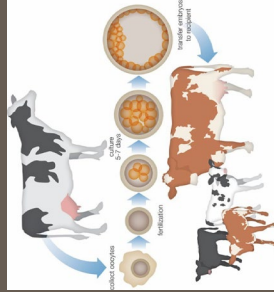
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How are Beef Embryos Created?

Commercially Produced High-Quality IVF Embryos

Dams Selected for Specific Characteristics

Dams Mated to High Genetic Value Sires



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Embryos

Supplier Dependent
\$35 - \$55 per Beef Embryo

Requires
Different Gun

May Require Different Thaw Temp then AI Special Training for Technicians

Conception Rates should follow AI rates



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Keys to a Successful Embryo Transfer Program

Estrus Synchrony Between Recipient and Age of Embryo

7 Days Post Estrus

Technician

CL Identification

Embryo Placement

Recipient Selection

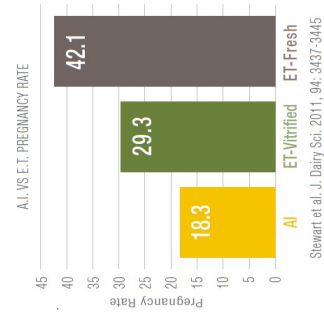
Heifers > 1st Lactation > 2nd Lactation > 3rd Lactation

1st service > 3rd service

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Heat Stress

- Frozen Embryos Had Higher Conception Rates than AI

Increase Reproductive Efficiencies

Beef Embryos

228 Total embryos transferred

91 Pregnancies

39.91% Conception

Beef Semen

1288 Total Units

438 Pregnancies

34.01% Conception

MNCS Heat Stress Data, Unpublished 2019

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End Result



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Marketing Options

Scenario 1	Scenario 2	Scenario 2
Sell At a Day Old	Raise to 400 lbs	Feed Out to Harvest

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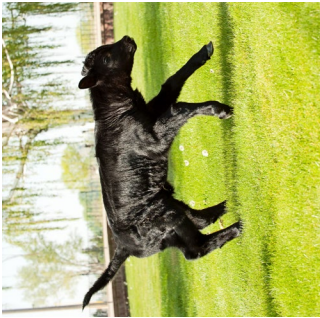
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Calf Value (Day Old)

Holstein - \$30 - \$60 Jersey - ??	Jersey x Angus \$80 - \$140
Holstein x Angus \$200 - \$280	Beef Embryo \$350-400

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Which Will Benefit Your Operation?

Depends...

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Summary

- Both Allow for the maximization of ROI on Calves Sold for Beef
- Both provide the possibility of diversifying of the operation
- Embryos can be Used to Overcome the Effects of Heat Stress

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Summary

Embryos require more management, but have a potential for higher ROI (Especially in Jersey Herds)

Using the strategies together may net the operation the most ROI

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