


College of Agricultural, Consumer and Environmental Sciences

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## Pregnancy Diagnosis in Beef Cows



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The College of Agricultural, Consumer and Environmental Sciences is an engine for economic and community development in New Mexico, improving the lives of New Mexicans through academic, research, and Extension programs.

## Pregnancy Diagnosis



- Only about 17% of producers regularly have their cows checked for pregnancy.
- Vet availability
- Cost
- Labor
- Requires training
- No breeding season

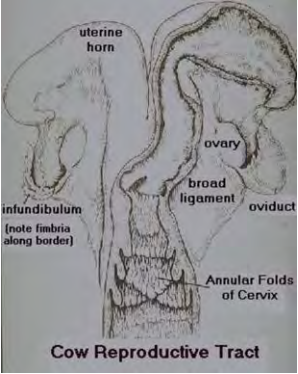
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## What we'll talk about...



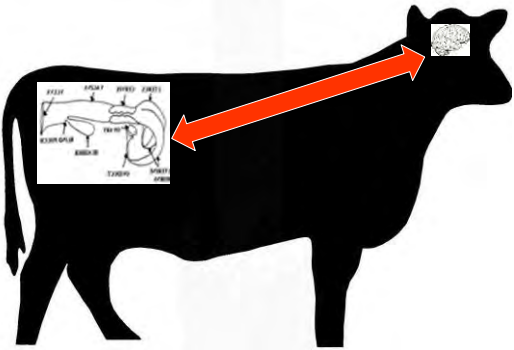
- Cow's reproductive cycle
- Gestation of the fetus
- Diagnosis options
- How it all pays when you do
- What it costs when you don't

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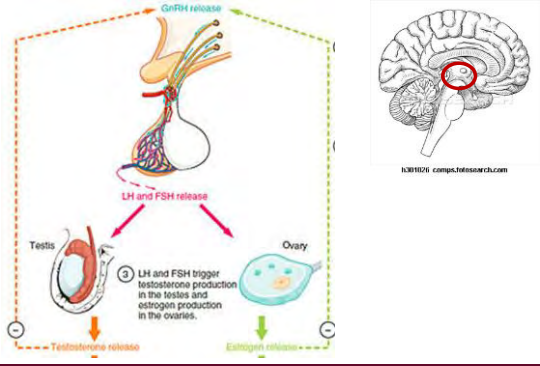


**Cow Reproductive Tract**

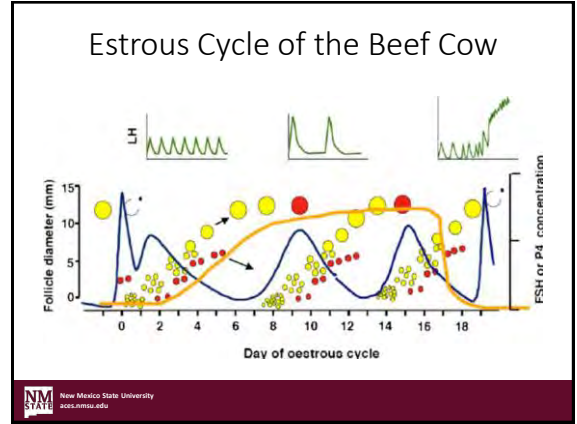
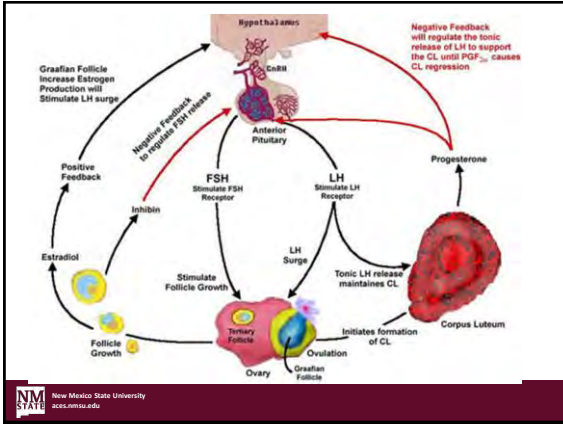
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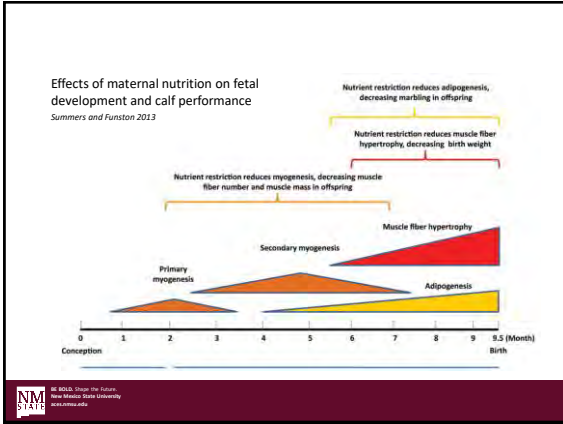


### Oviduct

- Egg and sperm transport
- Three sections:
  - Infundibulum
  - Ampulla
    - Site of fertilization
  - Isthmus
- Takes approximately 6 days for the egg to travel to the uterus

### Fetal Development

### Gestation Length of a Cow = 283 days



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#### FETAL SIZE IN RELATION TO COMMON ANIMALS\*

STAGE OF PREGNANCY	SIZE
2 MONTHS	MOUSE
3 MONTHS	RAT
4 MONTHS	SMALL CAT
5 MONTHS	LARGE CAT
6 MONTHS	BEAGLE DOG

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## The End!

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### The Price of Pregnancy Diagnosis

- Cost of diagnosis
  - Ultrasound = \$5.00
  - Palpation = \$4.00
  - Blood Test = \$9.00
- Labor
  - Ave \$1.50 per head
- Feed Intake and \$
- Loss of Forage
- Income Differences
- Profit Difference

**OPPORTUNITY!**

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### Ultrasound Technology

- Can detect pregnancies as early as 30 days.
- Can determine the health of the fetus up to 90 days
- Can determine sex of the fetus by 60 days
- Machines cost \$3500-\$8000
- Some training is needed.
- Some veterinarians have the technology

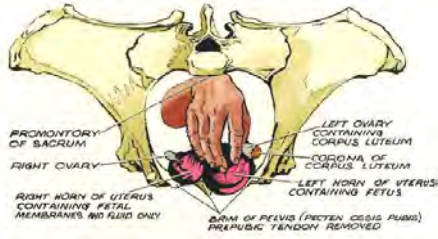
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### Palpation

- Requires a veterinarian or special training
- Takes practice to perfect
  - Approx 20% of cows that go to the sale barn are in fact pregnant.
  - Missed opportunity cost
- Can provide age of calf
- Least expensive option

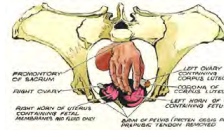
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### First Trimester (0-90 days)



RECTAL EXAMINATION OF PREGNANT COW. GRAVID UTERUS - 70 DAYS.

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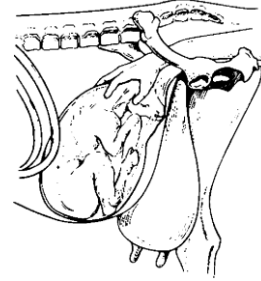
- At least 20-30% of your herd will be in this stage at weaning.
- If sold as "open"
  - \$770.00 - \$750.00 (cow cost)
  - Profit of \$20.00
- If tested/rechecked and kept
  - Calf \$840-\$750 (cow cost)
  - Profit of \$90.00
  - No need to replace the cow.

### 2<sup>nd</sup> Trimester (90 – 190 days)



RECTAL EXAMINATION OF PREGNANT COW. GRAVID UTERUS - 110 DAYS.

### 3<sup>rd</sup> Trimester (190-283 days)



### Blood test pregnancy diagnosis



- Highly accurate
- Measures pregnancy associated glycoprotein (PAG) from placenta
- Samples can be sent to lab OR done chute side
- Requires extra cow management
- Only yes or no, with no calf aging
- Can detect pregnancies as early as 30 days

### Blood test pregnancy diagnosis

- <https://www.idexx.com/en/livestock/livestock-tests/ruminant-tests/idexx-pregnancy-tests/alertys-onfarm-ruminant-pregnancy-test/>



## Blood testing tips



- Assign one person to handle just the blood tests
- Can use a direct transfer of 3 drops of blood to the test kit from a syringe, but needs to happen immediately.
- Use purple top tubes and keep blood in a cooler if testing will take place at a later time or sending samples off.

## Sending them off



- Send in a shipping cooler with an ice pack.
- Overnight
- Make sure the tubes are easy to read.
- *Include a written/typed out list of cow numbers with submission form*
- Takes 2-3 days for results
- Need to manage cows until then?
- Cost averages \$3.00/sample

**NMDA Veterinary Diagnostic Services**  
1101 Camino de Salud, Albuquerque, NM 87102  
[Phone: \(505\) 383-9299](tel:5053839299)

## Tying in to profit

Item	Early Preg Check	Mid term check d205	No check
% open	10	10	10
Feed Intake-10h	23T	36T	64T
Feed \$ for Opens	\$1590	\$4250	\$8500
Preg Check\$	\$500	\$300	0
Labor Cost\$	\$150	\$150	0
Income from the Cow+Calf	\$14,000	\$15,800	\$8000
<b>TOTAL Net Income</b>	<b>\$11,760</b>	<b>\$11,100</b>	<b>-\$500.00</b>
Net Difference			-\$3760

0 Calving      60 Breeding      120-135 Early Preg Pull Bulls      205 Preg @ Weaning      **Just a feed Bill!**      365 Calving

## Why pregnancy diagnosis is so important!

1. Improves profitability of an operation
2. Will save forage and water from being "wasted" on non productive animals
3. Can help identify "good cows" and help with selection decisions.
  1. Early bred cows producer heavier calves
  2. Heifers from these cows have improved herd longevity
4. Can identify fertility problems due to disease, infertile bulls(?), or nutritional deficiency.

Thank you...

