

# UCD Sheep Research

Alan Fahey  
School of Agriculture, Food Science, and Veterinary  
Medicine

15<sup>th</sup> of September 2010

1

## UCD Lyons Sheep Flock

- Research and teaching
- 350 crossbred ewes
- Plans to increase flock to 400
- Laprascopic AI – 85% conception rate
- 20 rams used for clean up
- Part of the Sheep Ireland CPT programme
- DNA tags are used and 10 ml of blood collected from all sheep

2

# The Effect of Novel Ewe on Ram libido and Semen Characteristics

Fair S<sup>1</sup>., P. Duffy<sup>2</sup>, and A.G. Fahey<sup>2</sup>

<sup>1</sup>University of Limerick

<sup>2</sup>University College Dublin

3

- Objective to determine if ram libido and semen quality can be increased
- This could help improve ram trainability
- Increase numbers of straws per ram

4

## Materials and Methods

- Control – ram exposed to ewe not in heat for 60 mins
- Non-novel – ram exposed to ewe in heat for 60 mins and the same ewe was used when collecting semen
- Novel - ram exposed to ewe in heat for 60 mins and a different ewe was used when collecting semen

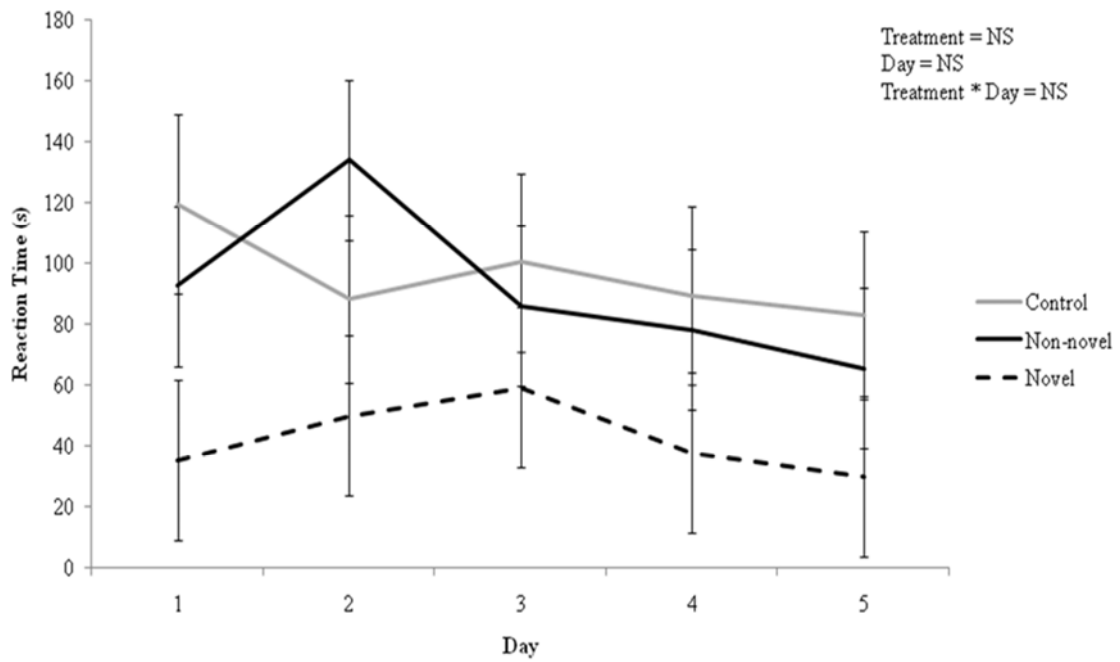
5

## Parameters Measured

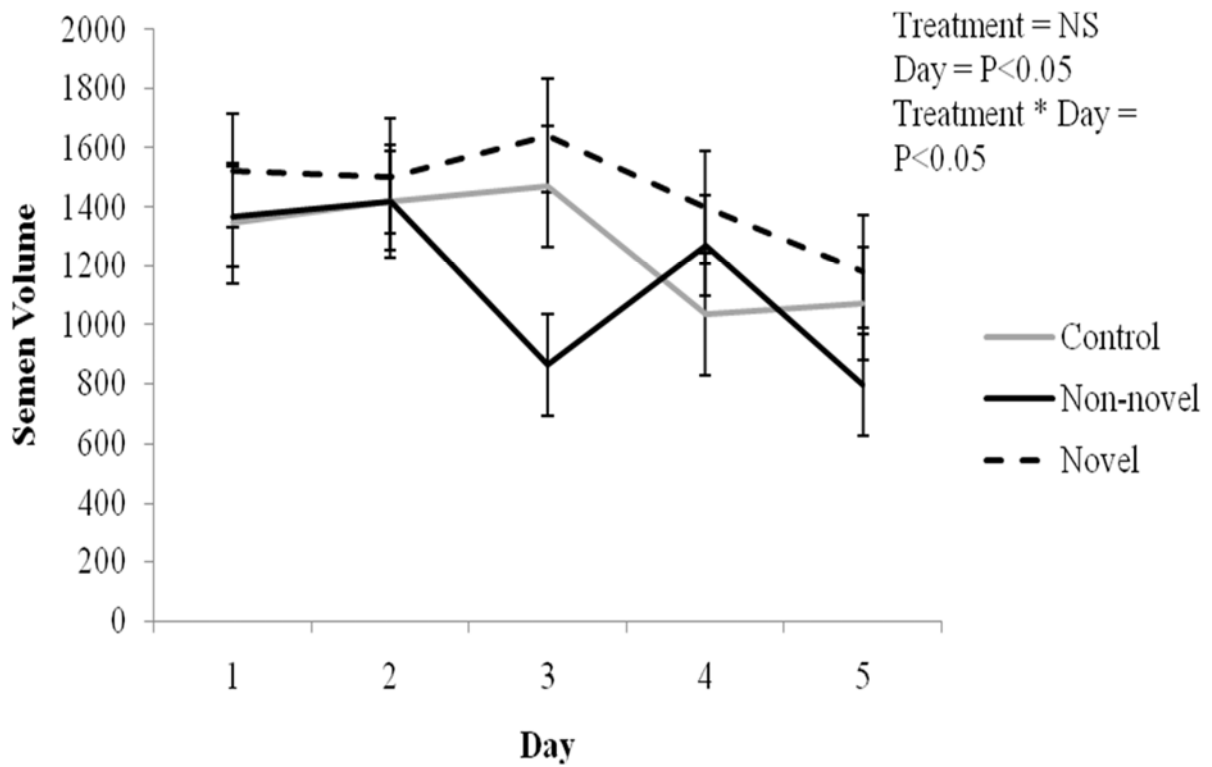
- Time to ejaculate (reaction time)
- Number of mounts before ejaculation
- Body weight
- Scrotum diameter
- Semen volume and concentration
- Sperm wave motion (collection + 1 hr later)
- Progressive linear motion (collection + 1 hr later)

6

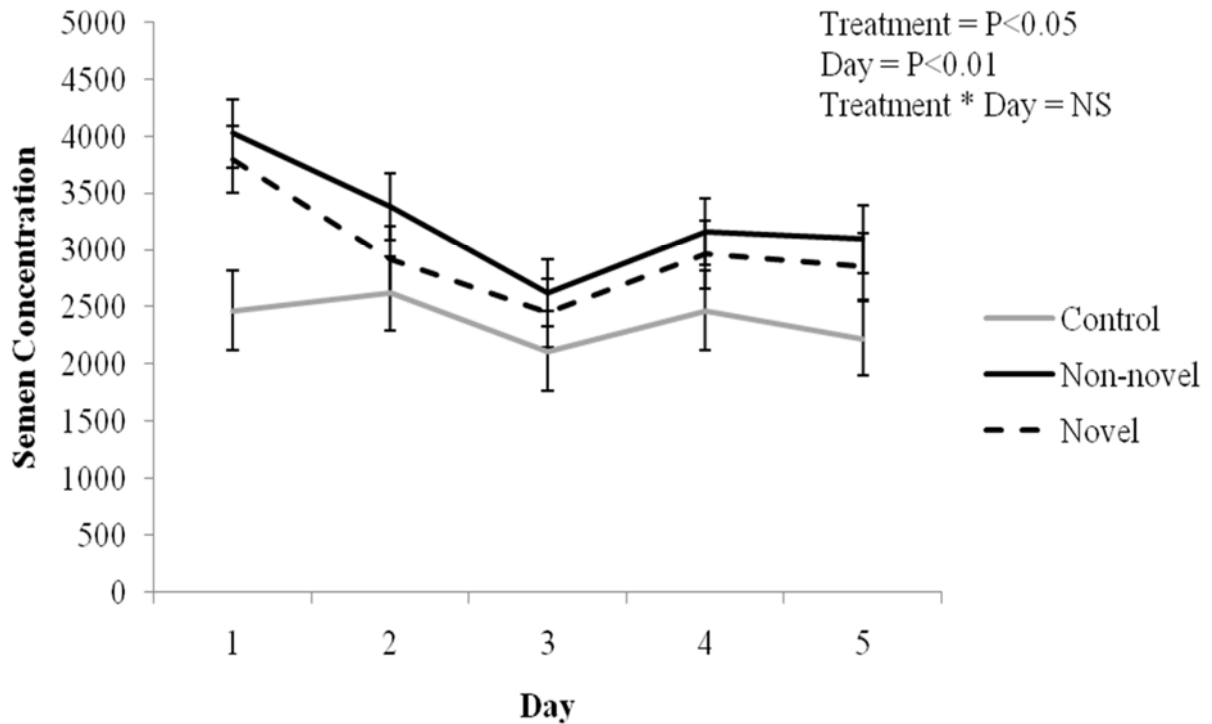
# Results so far.....



7



8



9

## Further work....

- Complete the analysis
- Current study rams were not allowed to come in contact with teaser ewe (sight and smell)
- Next study allow ram to come in contact with teaser ewe (sight, smell, and touch)
- This will be done in November

# Comparison of conception rates when using fresh and chilled semen

Fair S<sup>1</sup>., M.A. Crowe<sup>2</sup>, P. Duffy<sup>2</sup>, and A.G. Fahey<sup>2</sup>

<sup>1</sup>University of Limerick

<sup>2</sup>University College Dublin

11

## Rationale

- Determine if chilled semen yields similar conception rates as fresh
- If conception rates are similar then rams do not have to move to CPT flocks
- Litter size differences?
- Improve biosecurity
- Decrease risk of ram stress/injury
- Improve labour efficiency

|

12

# Future Research

- Feed Efficiency Traits
  - Capacity to individually feed 60 sheep at a time
  - Possible to weigh food in and out
  - Body weights
  - Ultrasonic measurements of muscle and fat

**Overall objective – to estimate BVs for feed efficiency traits**

- Collaborators
  - Dr. Alan Kelly – UCD
  - Dr. David Kenny – Teagasc
  - Dr. David Cottle – University of New England
  - Sheep Ireland

13

# Future Research

- Lambing Difficulty
  - Take skeletal measurements of lambs at birth
  - Determine to relationship between lambing difficulty and various body measurements
  - Is it possible to reduce lambing difficulty without affecting birth weight?

14

Suggestions are welcome