



**ANIMAL WELFARE JUDGING AND ASSESSMENT CONTEST 2017**

# Meat Rabbit Scenario



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# Overview

## Rabbitry N

- Little Rock, Arkansas
- New Zealand white rabbits
- 103 does and 6 bucks
- Temperature:
  - Avg. Year-Round: 63°F (17°C)
  - Avg. High: 51-93°F (11-34°C)
  - Avg. Low: 32-73°F (0-23°C)
- Avg. Humidity: 67%

## Rabbitry S

- Houston, Texas
- Californian white rabbits
- 87 does and 8 bucks
- Temperature:
  - Avg. Year-Round: 70°F (21°C)
  - High: 62-93°F (17-34°C)
  - Low: 44-74°F (7-23°C)
- Avg. Humidity: 82%

# Personnel

## **Rabbitry N**

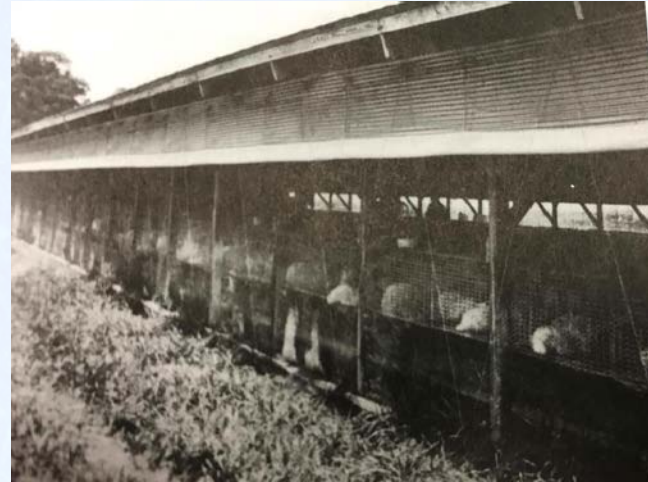
- Wife and husband team
  - Wife works at rabbitry full time
  - Husband teaches Animal Science part-time at a local college
- 3 adolescent/teenage children help before and after school
- Local 4-H members volunteer on weekends

## **Rabbitry S**

- Wife and husband team
  - Husband and wife commute to nearby city daily for work
- Part-time stockperson
  - 2 years experience at current rabbitry and 4 years previous rabbitry
- Local boy scout troop volunteers periodically

# Housing – Rabbitry N

- Pole frame shed
  - 3 solid metal sides
  - Metal roof
  - Open side has roll-up canvas curtain
- Quonset-style cages
  - Single tiered, suspended
  - 3 double rows separated by concrete alleys
  - Manure pits beneath cages
  - Hay V-feeders between cages in each row
- Natural ventilation
  - Air outlets at ridges
  - Ceiling fans



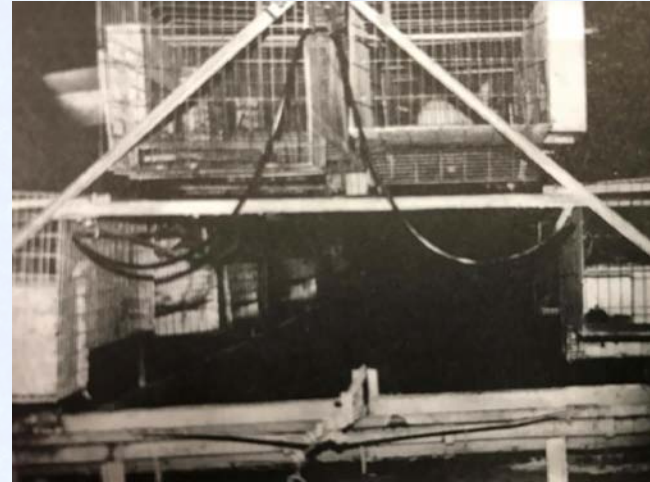
Open-sides with roll-up curtains



Hay V-Feeders

# Housing – Rabbitry S

- Pole frame shed
  - 4 solid metal sides
  - Metal roof
- European-style cages
  - Double tiered, suspended
  - 2 double rows separated by concrete alley
  - Concrete flooring cleaned via cable scraper
  - J feeder with mesh bottom attached to each cage
- Evaporative cooling
  - Additional sprinkler/mister system activated when temperature exceeds 85°F (29°C)



Double-tiered suspended cages



J-Feeder

# Caging

## Rabbitry N

- Quonset-style cages
- 24 x 30 in (61 x 76 cm)
- 16 in height (41 cm)
- Wire mesh:
  - Floor: 3/4 x 3/4" (2 x 2 cm), 16 gauge
  - Sides: 1 x 2" (2.5 x 5 cm), 14 gauge



## Rabbitry S

- European-style cages
- 30 x 30 in (76 x 76 cm)
- 18 in height (46 cm)
- Wire mesh:
  - Floor: 1/2 x 1" (1.3 x 2.5 cm), 14 gauge
  - Sides: 1 x 2" (2.5 x 5 cm), 14 gauge
  - "Baby saver" wire



# Feeding and Enrichment

## Rabbitry N

- Grass hay
  - Fed *ad libitum*
  - Fed via V feeder between cages
- Pelleted diet
  - Fed *ad libitum*
  - Fed via J feeder in each cage
  - Replaced every 2 wk
- Automatic nipple-type water system



V feeder

## Rabbitry S

- Pelleted diet
  - Fed *ad libitum* to pregnant does and does with litters
  - 7 oz (170 g) per day given to bucks and does that neither have litters nor are pregnant
  - Fed via J feeder in each cage
- Occasional succulents
- Pine chewing blocks
  - Replaced every 2 wk
- Automatic nipple-type water system



J feeder



# Daytime Behavior of Breeding Rabbits

	Rabbitry N	Rabbitry S
Sit/Lie (Rest)	44%	58%
Hop/move around cage	5%	5%
Eat pellets	12%	16%
Eat hay/succulents	24%	2%
Chew wood blocks	0%	7%
Bite bars	5%	4%
Rear	0%	1%
Groom	10%	7%

# Breeding – Rabbitry N

- Bucks and does bred following observation of signs of sexual maturity and receptivity
- 42 day breed-back schedule
- Break in the summer
- Doe is brought to buck's cage
- Does are rebred again 10 days after initial breeding



# Breeding – Rabbitry S

- Bucks and does bred starting at 7 months of age
- 21 day breed-back schedule
- Frequently restrain doe for mating
  - ~15% of breeding does try to avoid handling by staff
- Doe and buck are placed in a cage designated for breeding
- Does are rebred again 10 days after initial breeding



# Nest Boxes – Rabbitry N

- Box-type nest box
  - 16 x 10 x 8 in (41 x 25 x 20 cm)
  - Wood, door starting at 6 in (15 cm) height
  - Wood shavings and straw nesting material provided 27 days following conception
  - Box turned with opening at ground level until kits are ambulatory
  - Box turned with opening at 6 in (15 cm) once kits are ambulatory



# Nest Boxes – Rabbitry S

- Drop nest box
  - 15 x 9 x 7 in (38 x 23 x 18 cm) wire basket
  - 1 x 2 in (2.5 x 5 cm) sides
  - 1/2 x 1 in (1.3 x 2.5 cm) bottom
  - Plywood insert on nest bottom
  - Straw nesting material provided following kindling



# Weaning

## **Rabbitry N**

- Weaned at 4 weeks
- Takes place over 1 week
- All kits from a litter are removed to individual cages at same time

## **Rabbitry S**

- Weaned at 6 weeks
- Takes place over 2 weeks
- Kits assessed individually and removed to a new cage once robust
- Kits of like sex from a litter are housed together until 3 months of age, or until conflicts arise

# Behavior of Rabbits after Weaning

	Rabbitry N	Rabbitry S
Sit/Lie (Rest)	44%	50%*
Eat pellets	12%	23%
Eat hay/succulents	13%	2%
Chew wood blocks	0%	10%
Hop, explore, chin rub, burrow & rear	7%	5%
Aggression	0%	1% <sup>§</sup>
Positive social contact (i.e., groom, play)	0%	8%
Abnormal behavior	21% (fur chewing, excessive licking, excessive chin rubbing, bar biting)	1% (fur chewing)

\*Rabbits choose to rest in contact with each other most of the time even though they could spread out

<sup>§</sup>Aggression results in ear lesions and other minor injuries

# Health Outcomes

## Rabbitry N

- 12% overall mortality rate
  - 6% kit
  - 3% grower
  - 3% adult
- Main causes of morbidity/mortality:
  - Kits falling from cages (3% of mortality)
  - Snuffles (10% of morbidity)

## Rabbitry S

- 22% overall mortality rate
  - 8% kit
  - 5% grower
  - 9% adult
- Main causes of morbidity/mortality:
  - Trampled kits (6% of mortality)
  - Pneumonia as a complication of snuffles (5% of mortality)
  - Enteritis (10% of mortality)
  - Sore hocks (15% of morbidity)
  - Snuffles (32% of morbidity)



# Slaughter – Rabbitry N

- “Broomstick method”
  - A broomstick is placed over the rabbit’s neck and, while standing on the stick, the farmer pulls the rabbit’s hind legs up, causing cervical dislocation
  - Followed by decapitation in ~30 seconds
  - Performed by the husband



# Slaughter - Rabbitry S

- Rabbits are shipped to a slaughter facility in Oklahoma
  - Transported in hauler once every 3 weeks
  - Shipped to a facility ~5 hours away
  - Frozen 2 liter water bottles placed in each cage when temperatures above 70°F (21°C)
  - Facility is a converted poultry slaughter plant
- Stunned and slaughtered
  - Rabbits electro-stunned using 100 V
  - Rabbits then shackled upside down and exsanguinated within 15 s



# Slaughter Outcomes

## Rabbitry N

- A second attempt must be made to fully cervically dislocate 2% of rabbits
  - These rabbits struggle and vocalize
- ~5% of rabbits require >1 cut to complete decapitation

## Rabbitry S

- Stunning equipment is applied correctly to >99% of rabbits on first try
- <1% of rabbits require a second stun to be rendered unconscious
- <0.5% of rabbits vocalize or spasm during the process
- The plant fired a worker observed shackling rabbits that had not been stunned