



ANIMAL WELFARE ASSESSMENT CONTEST 2022



Show Chicken Scenario

2022 Animal Welfare Assessment Contest

Prepared by NC State Poultry Extension

NOTES

1. THESE ARE FICTITIOUS ANIMALS AND SITUATIONS. They have been created using pictures and information collected from multiple sources to generate realistic, yet fabricated scenarios. Neither situation exists as presented here.
2. Please use the images provided throughout the presentation as well as text when making your assessment.

Heritage Farm



- Farm is in North Carolina
- Specialize in Rhode Island Red Chickens
- Permanent range house consisting of 4 interior pens with outdoor areas for each pen
- Each pen will hold 60 birds for a total of 240 birds
- The floor is wood slats
- Lower panels are removed for summer air flow
- Visitors can tour the farm

Antique Farms



- Farm is in North Carolina
- Multiple breeds have been kept, working with Buff Orpingtons and New Hampshire Reds now
- 2 portable houses with 2 pens in each house with one outdoor area for each pen
- Houses are moved every 4 weeks
- Each pen holds 30 birds for a total of 120 birds
- The floors are a mesh metal floor, and the sides are curtained
- No outside visitors allowed on the farm due to HPAI* concerns

*Highly Pathogenic Avian Influenza

Heritage Farms: Staffing

- Owner (Frank) is 65-year-old man with a BS (Agr) who lives on the farm
- Works with his daughter-in-law (Lisa) who lives across the road and loves to work with the birds
- Frank looks after the equipment and makes sure the fencing and predator control systems are working
- He mixes the feed and helps with other tasks as needed
- Lisa looks after the care of the birds (i.e. feeding and egg collection). She reports any noticeable problems to Frank. She cares for the flocks after her kids go to school and comes back over in the afternoon when the kids get home so they can help.
- Frank and Lisa work together to select the birds which will be used in the breeding flocks



Antique Farms: Staffing

- The owners are a working couple (Adam and Jean). They work flex schedules, so the flocks are cared for equally by both, but at different times each day.
- On weekends they work together to deal with equipment or housing problems due to predation or normal wear and tear from the old equipment they use
- They have degrees in other fields and took this up as a side business because they both liked chickens and enjoy showing the birds at local exhibitions
- They have relied on their local Extension Livestock Agent for management training and attend small flock meetings to keep up with the latest information
- The care and egg collection are done once a day and the time is dependent on their work schedules



Heritage Farms: Biosecurity

- Frank and Lisa have dedicated boots for the facilities
- They order their birds from a NPIP* certified hatchery
- Equipment was acquired over time and is old but functions well. He doesn't lend it out or take it anywhere except occasionally to the repair shop.
- Chicks are brooded in one pen in the range house until they are fully feathered.
- Once birds grow adult plumage, they are allowed outside the house with the other flocks
- Chickens are housed by age cohort
- Old hens: Show Birds are selected from the last 2 pens
- Each flock is approx. 24 weeks apart. As the pullets come into breeding age the oldest birds are disposed of through a local live bird market and the pullets are moved into the empty pen.

*National Poultry Improvement Plan

Antique Farms: Biosecurity

- Adam and Jean have dedicated clothes and boots to wear when they go to work with the birds
- They scrub the boots with sanitizer at the end of the day and have developed a habit of always working from the youngest to oldest birds
- They liked different breeds but are concentrating on Orpingtons and New Hampshire Reds now
- They wanted to make this into a business so they have joined the NPIP program which they felt would help their reputation
- With their budget they have a couple pieces of equipment but must borrow the neighbor's tractor to move the houses and fencing every month
- Since they have 2 houses
 - House 1, chicks are brooded until they have obtained adult plumage, then are moved into the range house pen designated for pullet rearing
 - Pullet flocks: They are grown in the range house designated for pullets
 - House 2, is for the older breeder flocks (Show Birds) and is divided into the young hens and old hen flocks

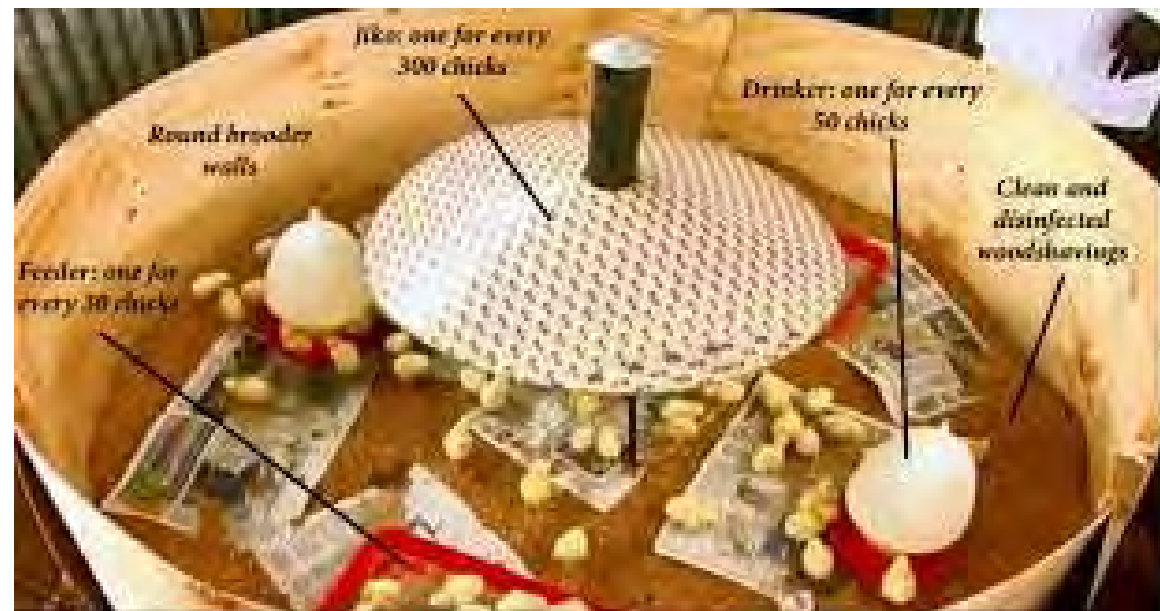
Heritage Farms: Hatchery

- Frank and Lisa drive to pick up the chicks on hatch day. They order the following treatments:
 - Vaccinations for Mareks and a Newcastle and Bronchitis spray vaccine prior to pickup
- When the chicks get home, they are placed in the brooding room which is kept at 35 C for the first week then drop the temperature 2 C each week
 - Feed is mixed using the same Protein premix at 35% premix and 65% corn
 - Water is provided



Antique Farms: Hatchery

- Adam and Jean order their replacement chicks via online from NPIP Hatchery. They let their postman know about when the bird will be shipped.
 - They are vaccinated for Mareks prior to shipment.
 - Typically, 1-2 chicks are DOA
- As soon as the chicks arrive, they are placed in the brooder ring at 35 C
 - Provided food "Chick Starter" 20% CP and 3000 Kcal/kg ME
 - Water has an electrolyte mixed in for the chicks to stimulate drinking



Heritage Farms: At the farm

- No any major disease issues have been identified in the flock
- No other vaccinations are given
- Frank has converted his range house to nipple drinkers and taught Lisa how to manage them and do the needed repairs
- Feeders: Tube feeders that hold 10 kg of feed



Heater

Tube Feeder

Wood slat floor

Roosts

Antique Farms: At the farm

- Adam and Jean heard reports of disease outbreaks at other farms. Concern for their chickens led them to find a source of vaccines through their local vet.
 - They developed a vaccination program that includes spray Newcastle and Bronchitis vaccines at 5, 7 and 15 wks of age and Fowl pox at 11 wks
 - When they spray vaccinate the pullets, they include the older hens as a booster
- Adam adapted their dome drinkers to operate from a 15-gallon tank located near the roof of the house. That way it is portable, and the water will last for a few days until it needs to be refilled
- Feeders: Tube feeders that hold 10 kg of feed



Tube Feeder

Roosts
Dome drinker



Equipment

Heritage Farms



Nest boxes



Nipple Drinkers outside

Antique Farms



Nest boxes



Dome drinker

Wire mesh flooring

Bird Husbandry

Heritage Farms

- Natural daylight
- Work lighting provided in the evening when Lisa is in taking care of the hens
- Diet is based on one of Franks old textbooks
- Feed consists of corn that Frank grinds in an old grinder. He buys a protein supplement which has soybean meal, alfalfa leaf meal and vitamin and minerals. Calcium is added using Coarse ground Limestone. Inclusion rate is about 70% corn and 30% supplement. Based on directions should be about 18% CP with 3.5% Ca



Antique Farms

- Natural daylight
- Lightbulb on wall timer set for 16 hours of light before sun rise and after sunset
- Fed table scraps with some supplemental feed fed in pans in outdoor area
- Supplemented with a standard layer mix from the farm supply store which is corn soy based with 18% CP, ME 1318 Kcal/lb and 3.5% Ca



Environment

Heritage Farms

- Outdoor areas are covered with netting
- Forages are limited and outdoor areas are mostly dirt
- Outdoor Access is 24/7 year round
- Heaters in house to keep house temperature above 7 C



Antique Farms

- Birds are allowed outdoor access only when temperatures are above 13 C
- The birds forage in the grasses
- Birds are temporary pinioned to prevent the hens from flying out of pens
- They rotate the outdoor areas which allows for nature to renew them. The constant moving of the pens makes covering them nearly impossible.



Environment: Heritage Farms



RIR Breeders

Pop hole and Ventilation



Electric Fencer
(Predator Prevention)

Environment: Antique Farms

Orpington
Breeders



Moving the Range House

Water tank
for range
house

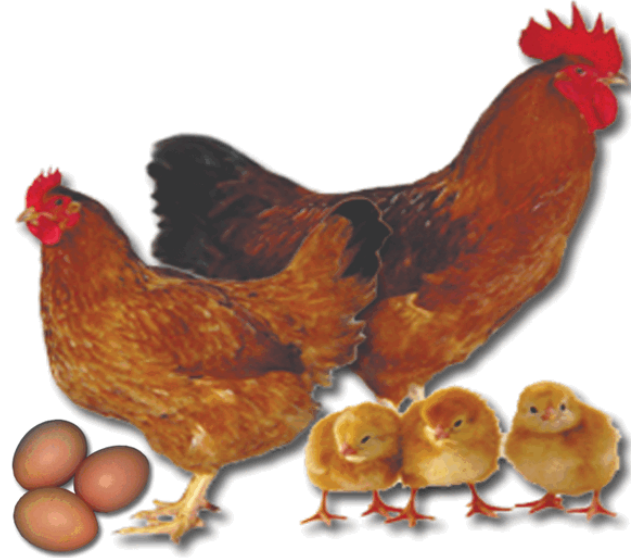


Flock Production: Heritage Farms

- Bird weights (Rhode Island Reds)
 - Hens 5.5-6.5 lbs
 - Roosters 7.5-8.5 lbs
- Male Ratios 1 Rooster for 10 Hens
- Flock Cycle
 - Egg Production (52 week Cycle)
 - Lisa doesn't keep good records but based on fertile egg sales the flocks are producing about 158 eggs/hen



Flock Production: Antique Farms



- Hen weights (Orpington, New Hampshire Reds)
 - New Hampshire Red (NHR)
 - Hens 5.5-6.5 lbs
 - Roosters 7.5-8 lbs
 - Buff Orpington
 - Hens 7-8 lbs.
 - Roosters 8.5 to 10 lbs.
- Male Ratios 1 Rooster for 14 hens
- Flock Cycle
 - Egg Production (52 week Cycle)
 - New Hampshire Red - 165 eggs/hen
 - Buff Orpington - 128 eggs/hen

Bird health: Heritage Farms

- Internal Parasites are an issue in the birds
- Lisa has learned to identify when the intestinal worm counts get high and the hens need to need wormed
- They have ongoing issues with Tape worms, Round worms and Heterakis
- They have periodic mortalities: the diagnostic lab reports indicate a field strain of bronchitis
- Birds are not beak trimmed
- Cannibalism is a problem
- Injured birds placed in recovery pens
- Frank uses cervical dislocation as the euthanasia method when needed



Bird health: Antique Farms



Antique Farms

- There are hawks around the neighborhood. Owls and hawks have been found in their range hut. Dead birds have been found with open body cavities and missing body parts.
- They do not see signs of respiratory disease
- Few internal parasites are found
- Mortalities are also found with signs of cannibalism around the tail and vent
- Non-penetrating captive bolt is used as the euthanasia method when needed



Bird Transport to Shows: Heritage Farms

Heritage Farms

- Prior to the shows Lisa selected the best-looking birds and catches them using a leg hook.
- Birds placed in individual plastic chicken coops to prevent the other birds from damaging the feathers
- Coops are loaded in the back of Frank's pickup truck. They carry a tarp to throw over birds to keep them dry if weather is a concern.
- The State vet tests all birds arriving to the show for disease.



Antique Farms

- Jean selects the birds that would be going to the shows which are then caught with catching nets
- Birds are placed in individual pet crates unless kept in trio cages for breeding trio judging.
- Adam and Jean use pet crates to haul the birds in their van. The crates are tall enough to put litter or towels on the floor.
- Water and feed is provided for long distances traveled to some of the shows.
- Testing is required at the shows prior to the birds being entered.



Birds returning from shows

Heritage Farms

- Frank and Lisa talk to the Veterinarian at the show to discuss the testing results get a general handle on the health of the birds that were entered into the show
- The vet indicates that in general the birds entered in the show were healthy and showed no outward symptoms of disease
 - Birds are loaded into coops and returned home
 - Birds from the show were returned to their respective home flocks
 - Coops were cleaned off with water and stored in the barn
- Frank keeps a small pen in the barn as a quarantine pen incase birds show symptoms of a disease or are injured

Antique Farms

- Adam and Jean talk to the Veterinarian at the show to discuss the testing results and get a general handle on the health of the birds that were entered into the show
- The vet indicates that in general the birds entered in the show were healthy and showed no outward symptoms of disease
- Birds loaded into the pet carrier and return home
- Birds from the show are place in quarantine pens for 5 days and monitored them for any symptoms
- Jean takes the carriers apart, washes them out, and sprays them with a sanitizer
- Once dried, the carriers are reassembled and placed in storage bags to keep it clean
- Van is also cleaned and sanitized after the show