



**ANIMAL WELFARE ASSESSMENT CONTEST 2023**



# Broiler Breeders – Rearing Phase

2023 Animal Welfare Assessment Contest

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# 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.

# Facility Description: Sunnydale Farm (UK)

- Location: Norfolk (Eastern England)
- Farm age: 10 yrs; upgraded to new controller and sensor 2yrs ago.
- Flock size on farm: 15,000 female broiler breeders (pullets)
  - 9,000 females in Barn 1
  - 6,000 females in Barn 2
  - Company usually places 1500 males in pen at back of Barn 2 (but did not for this flock)

## Regions of England



# Facility Description: Sunnydale Farm (UK)

Exterior (2 barns on the farm)



Interior of Barn 1



# Facility Description: Old Oak Farm (USA)

- Location: NE Georgia (USA)
- Farm age: 3 yrs
- Flock size on farm: 40,000 female broiler breeders (pullets)
  - 10,000 placed per barn
  - Males are raised at a different farm



# Facility Description: Old Oak Farm (USA)

Exterior (4 barns on the farm)

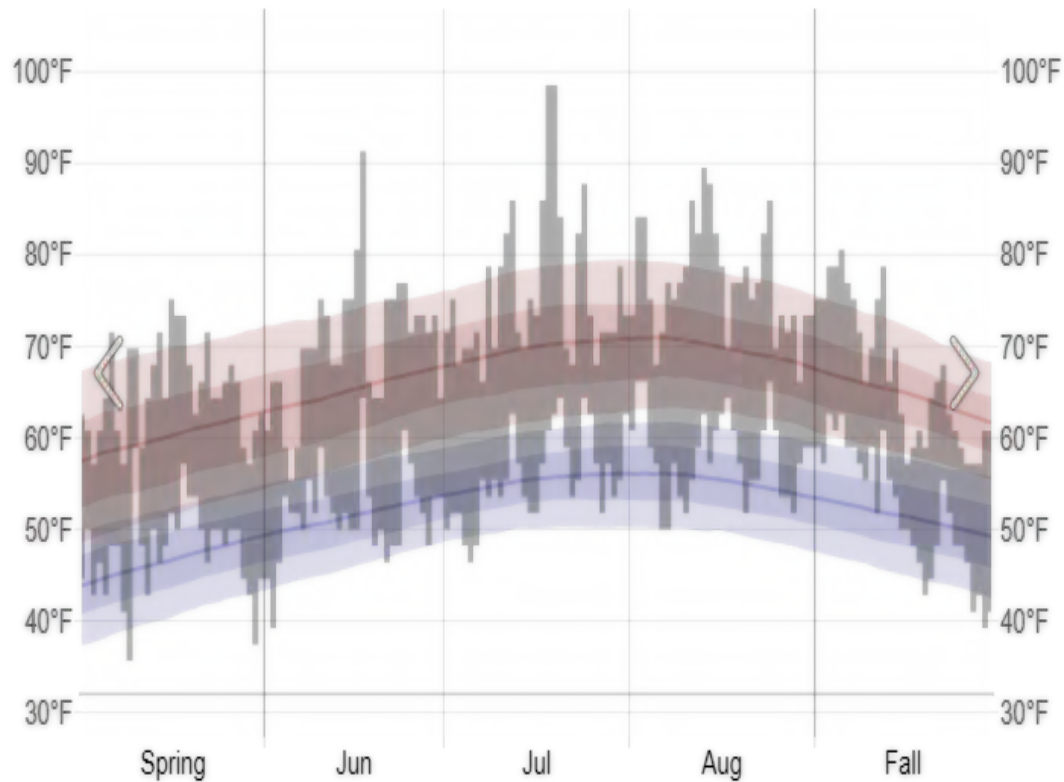


Interior of Barn 1



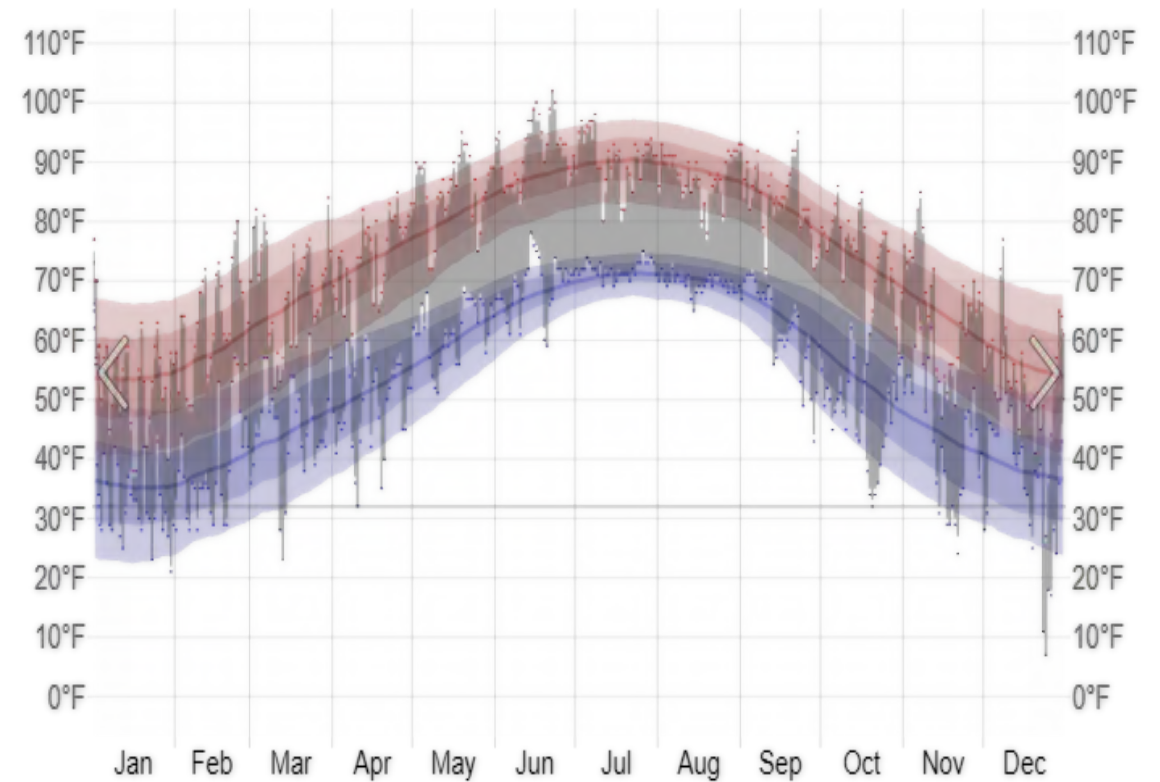
# Climate Summary from 2022 (range, max/min)

## Sunnydale Farm (UK)



2022 Norfolk UK temp data:  
Weatherspark.com

## Old Oak Farm (USA)



2022 Cleveland, GA temp data:  
Weatherspark.com



# Facility Staff

## Sunnyside Farm (UK)

- Family-owned, has been a farmer for Golden Poultry Co. for 10 years
- Weekdays: staffed by 1 full-time family member
  - 10 years of experience
- Weekends: staffed by family member or teenagers in family
  - 6 months to 10 years of experience

## Old Oak Farm (USA)

- Family-owned, has been a farmer for Lakeland Farms Co. for 3 years
- Weekdays: staffed by 2 full-time contracted, hourly staff who have housing next to farm
  - 2-5 years of experience
- Weekends: staffed by hired-help (neighbor) or same contract staff
  - 6 months to 5 years of experience

# Technical Support for Farm / Farm Staff

## Sunnyside Farm (UK)

- Company Poultry Technician
  - 1 year of experience with pullets
  - Visits weekly (always on Monday)
- Company Poultry Veterinarian
  - Visits once per flock and as needed
  - 1 vet: responsible for 1 million poultry
- Quality assurance/welfare auditor
  - Auditor from poultry company, no certification but has 10yrs poultry experience
  - Visits monthly for AW audit
  - Provides video for annual welfare training required by company

## Old Oak Farm (USA)

- Company Poultry Technician
  - 10 years of experience with pullets
  - Visits weekly (alternates days, but only on days when birds are fed)
  - Provides annual & monthly welfare training (written) required by company
- Company Poultry Veterinarians
  - Visits as needed /requested by tech
  - Team (3 vets) responsible for 10 million
- Quality assurance/welfare auditor
  - Auditor from poultry company, PAACO poultry certified with 5 years experience
  - Visits quarterly for AW audit



# Biosecurity Requirements

Biosecurity Measures on Farm	Sunnydale Farm (UK)	Old Oak Farm (USA)
Farm entry requirements for visitors	Cloth coveralls and rubber boots provided by farm. Coveralls laundered after each use (on farm)	Disposable coveralls (single use) and double-plastic disposable boots.
Barn entry requirements	Wet boot dip outside barn door. Then, Danish-style entry with designated areas for boot changes (external/transfer/inside zones)	Remove outer layer of plastic boots & then step into boot pan in controller room. Dry (bleach) boot pan located inside barn door.
Biosecurity requirements for visitors	Mandatory 7 days with no bird contact prior to visit. Visitor must be approved & test neg for Salmonella	Mandatory 48 hours with no bird contact prior to visit. Visitor must be approved
Downtime between flocks on farm	60 days	20 days
Rodent control plan	Program implemented by external contract rodent control provider; visits farm quarterly	Company provides rodenticide to farmer; QA auditor checks quarterly

# Brooding Plan: Sunnydale Farm (UK)

## ○ Brooding plan:

- HEAT: Barn is pre-heated for minimum 72hrs before placement. Heat source is box (space) heaters only.
- FEED: Start with 60g feed on paper that is consumed the first 2-3 days and paper feed trays. Start spin feeders at day 7.
- WATER: Nipple drinker lines only (0-21 wks). Lines are flushed every 4 hours during first 2 weeks.
- BROOD AREA: Use cardboard brooder guard to keep chicks near feed and water during first 7 days, then removed.

Age (days)	Placed (Day 1)	2-3	4	5	6-7	8-9	10-11	12-13	14-16	17-18	19	20+
Hours of light	24	23	21	20	18	17	16	14	13	11	8	8
Light Intensity (lux)	70	60	60	60	50	50	30	20	20	10	10	5-7
Barn Temp (F)	89	88	87	86	85	84	83	81	80	78	76	75 then 70



# Brooding Plan: Old Oak Farm (USA)

## ○ Brooding plan:

- HEAT: Barn is pre-heated for 48hrs before placement. Heat source is box (space) heaters (2/) and radiant brooders (10)
- FEED: Start with 60g feed on paper that is consumed the first 2-3 days + feed pans until 7 days. Start trough feeder at day 8
- WATER: Supplemental (bell) drinkers for first 7 days (refilled daily or more often if needed). Nipple drinkers also 0-21 wks.
- BROOD AREA: Use lights (front of barn) to keep chicks near feed and water during first 7 days (lights off in back section of house until 8 days of age).

Age (days)	Placed (Day 1)	2-3	4	5	6-7	8-9	10-11	12-13	14-16	17-18	19	20+
Hours of light	23	23	21	19	17	15	12	11	8	8	8	8
Light Intensity (lux)	70	60	20	20	20	10	10	10	4	2.5	2	2
Barn Temp (F)	88	87	86	86	86	84	84	84	84	82	78	78 then 71



# Ventilation/Temp Plan: Sunnydale Farm (UK)

- Ventilation system and plan:
  - Controller (thermostat) present in each barn (touchscreen is monitored daily). Farmer (off-site) can monitor sensors (temp ranges, CO2 level, ammonia level) via at-home computer & see all alarms for system.
  - Ventilation program provided by company and farmer sets program in controller. Settings are verified by technician each month.
  - Ventilation system includes:
    - Sidewall inlets on each side
    - Sidewall fans and ceiling exhaust fans
    - Tunnel-curtain inlet present, but no system for evaporative cooling



# Ventilation/Temp Plan: Old Oak Farm (USA)

- Ventilation system and plan:
  - Controller (thermostat) present in each barn (system monitored daily by contract staff). Farmer notified via phone of any alarms for temp sensors present in barn.
  - Ventilation program set by the technician during weekly visit. Farmer does not make any adjustments.
  - Ventilation system includes:
    - Sidewall inlets on each side
    - Minimum ventilation fans and tunnel exhaust fans on end of barn
    - Tunnel-curtain inlet present & cool cell pad system for evaporative cooling



# Feed & Water: Sunnydale Farm (UK)

## ○ Feed:

- Feed type: wheat-based pellet diet
- Feeder: spin feeder in center of each pen
- Feeding plan: fed daily at 7am. Lights are ON when feed is distributed.
- Feed distribution: Feed sprays out of feeder (distance of 12 feet) in 1-2 minutes on to the litter. Birds eat the feed within 15 minutes at 12 wks of age.

## ○ Water: municipal water

- Drinker system: water "ON" when lights are on; electric shock line present on top of drinker line is used as needed to discourage perching from 5 weeks onward. Water is "OFF" in controller when lights are off at 20+ days of age.





# Feed & Water: Old Oak Farm (USA)

## ○ Feed:

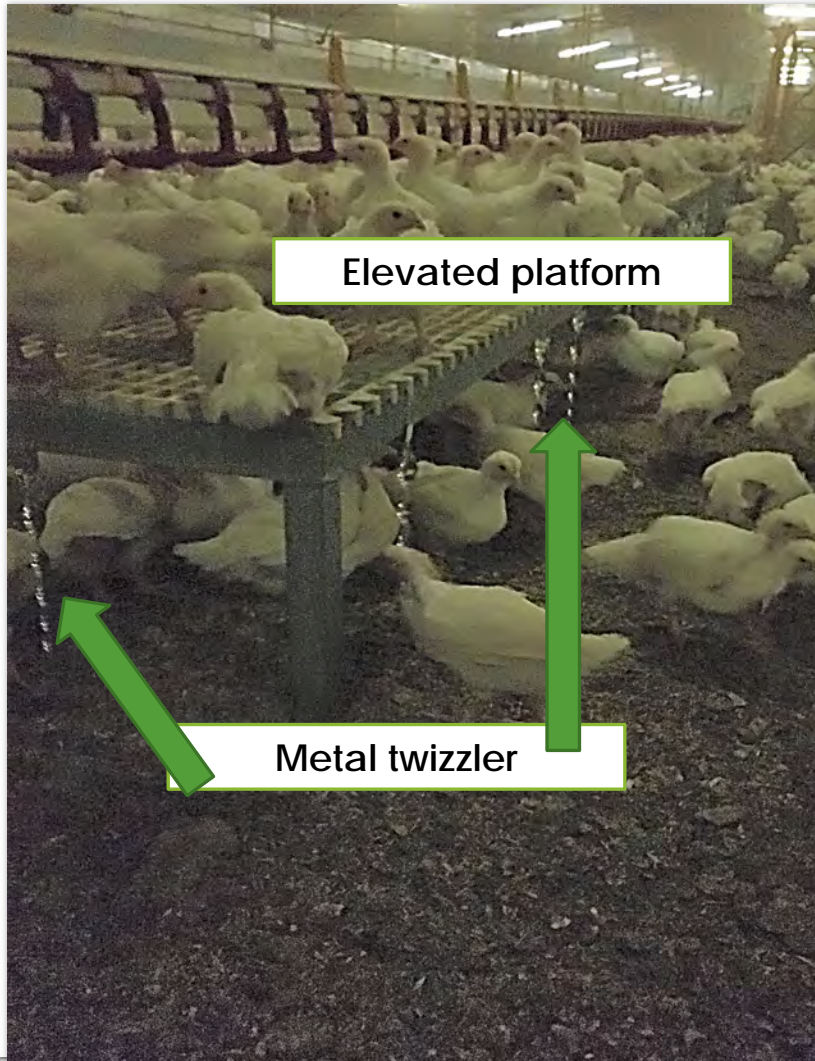
- Feed type: corn-based mash diet
- Feeder: trough (chain) feeder (4 loops in each barn); 15cm feeder space per female at 12wks
- Feeding plan: fed at 6am. Lights are OFF when feed is distributed; lights come "ON" at 6:05am. Starting at 6 wks. of age, use skip-a-day program; switch to 6/1 at 18wks.
- Feed distribution: Feed is distributed within 3-5 minutes via the high-speed chain in the trough. Birds eat the feed within 30 minutes at 12 wks. of age

## ○ Water: primary well + on-site 2000gal water tank

- Drinker system: water "ON" during feed days when lights are ON. Water restriction program has specific hours of "ON/OFF" time during off-feed days hours to limit excessive drinking and playing in water. Metal fin is on top of drinker line to discourage perching & water is "OFF" in controller when lights are off at 20+ days of age



# Behavior & People Interactions: Sunnydale Farm (UK)



## ○ Enrichments:

- Ramps/platforms and A-frame perches included from day 1 to 21 wks.
- Platforms are placed under drinker line (1/400 birds).
- Farm is trialing 'metal twizzlers' hanging below platform as pecking enrichment (8 per platform).

## ○ People interactions:

- Barns are walked twice daily (once after feeding; once after lunch) to check for mortality, culls and to verify barn / equipment condition.
- All staff working on farm and all visitors wear the same color (green) cloth coveralls.



# Behavior & People Interactions: Old Oak Farm (USA)



## ○ Enrichments:

- Non-elevated platforms included from day 1 to 22 wks.
- Baskets are provided from day 21 to 22 wks.
- Platforms/baskets are placed away from feeder and drinker lines (1/800 birds).
- Farm is trialing a 'pecking stone' enrichment from day 28 to 22 wks (1 per barn, placed in center).

## ○ People interactions:

- Barns are walked twice daily on feed days and once daily on non-feed days to check for mortality, culls and to verify barn / equipment condition
- Staff working on farm wear blue cloth coveralls. All visitors and contract vaccination staff wear white disposable coveralls.



# Bird Handling / Breeder Service Procedures

## Sunnydale Farm (UK)

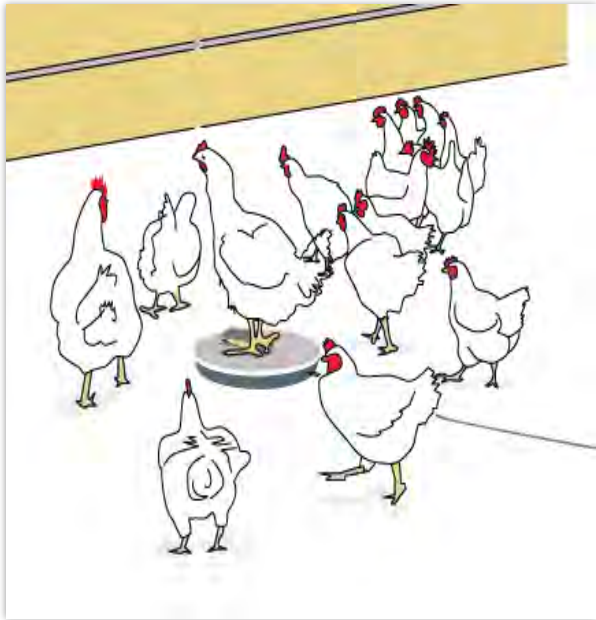
Age	Process / Breeder Service
3-4 wks	Grading (birds handled and separated into HI/LO weight pens)
8 wks	Grading (birds handled and separated into HI/LO weight pens)
10 wks	Individual bird vaccination by company staff (birds handled by double legs only)
16 wks	Individual bird vaccination by company staff (birds handled by double legs only)
21 weeks	Birds moved from rearing farm to laying farm during daylight hours. Max transport duration to laying farm is 4 hours.

## Old Oak Farm (USA)

Age	Process / Breeder Service
12 wks	Individual bird vaccination by contract vaccination crew (birds handled by legs only since vaccination wheel is used)
18 wks	Individual bird vaccination by contract vaccination crew (birds handled by wings only)
22 weeks	Birds moved from rearing farm to laying farm during night (summer) or early daylight hours (winter). Max transport duration to laying farm is 1 hour.

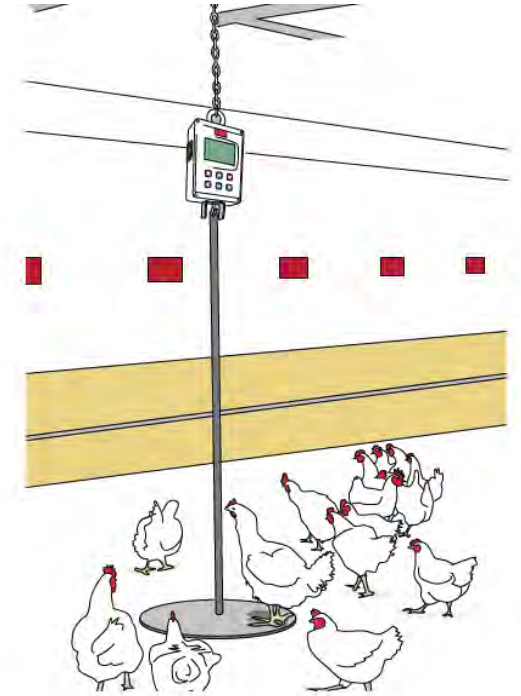
# Technical Support for Flock: Body Weight Evaluation

## Sunnyside Farm (UK)



- Fixed platform scale (above) is used to sample flock's weight.
- Birds weighed and sorted during grading at 3-4wks and 8wks of age

## Old Oak Farm (USA)



- Swinging platform scale (above) is used to sample flock's weight.
- Sample of 100 birds per barn are weighed individually (above by legs) by technician at 4, 8, 12, 16, 20wks of age

# Health Outcomes & Farm History from 2022

Outcome this flock	Sunnydale Farm (UK)	Old Oak Farm (USA)
1st week mortality (culls + dead)	2.0 %	0.8 %
Flock livability (0 to 21 weeks)	93%	95%
Veterinary treatment for this flock	Treated for Staph infection (omphalitis) at 1 wk of age	Treated with low dose of Amprol for coccidiosis
Body weight uniformity at 16 wks of age	87% (CV of 5)	75% (CV of 15)
Downtime between flocks on farm	60 days	20 days
History of last flock raised on farm in 2022	Sunnydale Farm (UK)	Old Oak Farm (USA)
Body weight uniformity at 16 wks of age	90% (CV of 9)	80% (CV of 11)
NOTES about previous flock	High death losses occurred in last flock in July 2022 (pullets had 82% livability)	HPAI outbreak in area resulted in limited in-person technician visits in Fall 2022



# 10 wks old: Notes from Sunnydale Farm (UK) Auditor Visit

## Bird behavior, injuries & health

- Birds seem very stressed and are running around in circles as soon as they see a person enter the barn. This is likely related to birds associating a person with the feed.
- Interview with farmer highlighted that some recent mortality is due to bird piling under spin feeder
- Overall health (footpad, hock, feathering) is excellent. No culls seen during visit in Barn 1 or 2

## Environmental (barn) conditions

- Litter quality is dry and friable in most of the barn. Litter is moist and very thin in the area around the spin feeder.
- Ammonia level in house is <20 PPM
- No signs of thermal stress noted; barn temperature has been within expected range for last 7 weeks.
- No rodent activity seen, but wild bird nest seen at roof eave at end of Barn 1.

# 16 wks old: Notes from Old Oak Farm (USA) Auditor Visit

## Bird behavior, injuries & health

- Welfare indicators (footpad, hock and feathering) are excellent. During audit, 3 birds were culled in pen 1 (cross beaks) and 2 birds were culled in pen 2 (sexing errors).
- Interview with farm staff highlighted that service technician will visit tomorrow and he normally culls more birds during weekly visits
- Few birds seen with scab-injury on top of head (related to feeder?)

## Environmental (barn) conditions

- Litter quality is dry and friable in back of each barn. Litter is dry but caked in center of Barn 1.
- Ammonia level in house is 25 PPM
- No panting observed; tunnel fans operational during visit (outside temp was 90°F)
- 4 light bulbs flickering in Barn 2
- 3 of the cool cell pads need to be replaced on Barn 1



# Transportation from Rearing Farm to Laying Farm

## Sunnydale Farm (UK)



- Birds caught in dim lighting in barn.
- Birds are loaded in house and placed in these drawers in the 4-deck high module containers.
- Truck has curtain sides.
- Leg handling only, 1 bird per hand limit.
- Company crew of 6 people who do pullet vaccinations, grading and moves for breeders.

## Old Oak Farm (USA)



- Birds caught in dark (crew use red headlamps).
- Birds are loaded in barn in these 5-deck high module containers.
- Truck has boards on modules if  $<30^{\circ}\text{F}$ .
- Wing handling, 2 birds per hand limit.
- Contract crew of 10 people who only do bird catching & moves for breeders.