

Purdue University Laboratory Animal Program Standards of Care

Title: Husbandry Care of Poultry and Waterfowl

I. Purpose:

The purpose of this policy is to outline the minimum standards of care for poultry.

II. Policy:

All units providing animal care for poultry used in agricultural research and teaching must meet or exceed these minimum requirements based on the Guide for the Care and Use of Agricultural Animals Used in Research (*Ag Guide*). Poultry used in biomedical research and non-standard agricultural teaching must additionally meet the requirements in the Guide for the Care and Use of Laboratory Animals (*Guide*). Deviations or exceptions must be approved by the Attending Veterinarian and the IACUC.

III. Procedure:

Daily (365 days a year without exception):

- Observe each animal and check for health concerns (*Guide* pg. 112).
- Ensure adequate feed and potable water is available (*Guide* pg. 65-68).
- Record sick and dead animals, and report unusually high morbidity and/or mortality to the Lab Animal Program (LAP) or designated clinical veterinarian per standard operating procedure (*AWR 2.33, Ag Guide* pg. 10).
- For temperature-controlled housing, record minimum and maximum temperatures and humidity.
 - Temperature range for adult poultry is 61°F to 81°F (*Guide* pg. 44).
 - Chicks and ducklings should be housed at a warmer temperature appropriate for their age and housing environment.
 - Humidity range for poultry is 30% to 70% (*Guide* pg. 44).
- Spot clean excessively soiled or flooded areas of housing (*Guide* pg. 70).
- Clean and organize room, anterooms, and surrounding premises (*Guide* pg. 72).
- Record daily completion of each task, initial each task, and date the log.
- Clean footbaths, if applicable.

Weekly (For facilities other than ASREC):

- Clean cages, feeders and waterers (*Guide* pg. 70).
- Replace bedding for animals in solid-bottom caging/housing.

As needed:

- Disinfect the animal room including walls, floors, and ceilings (if possible) (*Guide* pg. 72).
- Remove and replace worn or damaged equipment from primary enclosures and surrounding facility (*Guide* pg. 72).
- Chow must be discarded after 6 months of the milling date unless manufacturer guidelines recommend a shorter or longer expiration date (*Guide* pg. 66).
- Clean and sanitize feed storage containers (*Guide* pg. 67).
- Standard practices that protect colony health or improve production, such as toenail and toe trims, beak trims, partial comb and wattle removal, induced molting, and pinioning, must be performed by a trained individual according to facility SOPs (*Ag Guide* pg. 188-189).
- Each facility will develop their own best practices with sanitization typically occurring every 6 months or whenever there is a change in species but may vary with facility.

Environmental Enrichment:

- Refer to the Social and Environmental Enrichment Program for Research and Teaching Animals (IACUC SOP #: 305).

Facilities:

- Temperature alarms should be installed in all temperature-controlled rooms housing poultry (*Guide* pg. 143).
- Adequate ventilation must be provided for the health and comfort of the animal at all times.
 - A minimum of 10-15 fresh room air exchanges per hour shall be provided in animal housing areas (*Guide* pg. 46).
- Floors shall be moisture-resistant, non-absorbent, impact-resistant, and relatively smooth (*Guide* pg. 137).

Housing:

- Whenever possible, poultry should be socially housed in compatible groups (*Guide* pg. 51).
- Floor space taken up by food bowls, water containers, and enrichment devices should not be considered part of the floor space (*Guide* pg. 56).
- Pasture poultry should be provided shelter, such as a hutch or coop, to protect them from inclement weather and which can accommodate all individuals (*Guide* pg. 54).
- Fencing should be erected around pastures and be of a sufficient height and mesh size (fine netting) as to secure birds within in and prevent predators and other wild species from entering the pasture. Overhead fine netting should be provided to protect poultry from birds of prey (*Ag Guide* pg. 160, 179). Electrified fencing may be used to enhance these capabilities, but must be easily disarmed and of a voltage low enough to not traumatize individual animals or people.

- Space requirements for agricultural research and teaching poultry can be found in Table 11-1 page 165 for Meat-Type Poultry, Table 12-1 thru Table 12-4 pages 180-184 for Egg-Type Poultry, and Table 13-1 thru Table 13-3 pages 200-202 for Waterfowl in the *Ag Guide*.
- Space requirements for poultry (*Guide* Page 60)

Animal	Weight (kg)	Floor area/animal (ft ²)	Height
Pigeons	—	0.8	Cage height should be sufficient for the animals to comfortably stand erect with their feet on the floor
Quail	—	0.25	
Chickens	<0.25	0.25	
	Up to 0.5	0.5	
	Up to 1.5	1	
	Up to 3	2	
	>3	≥3	