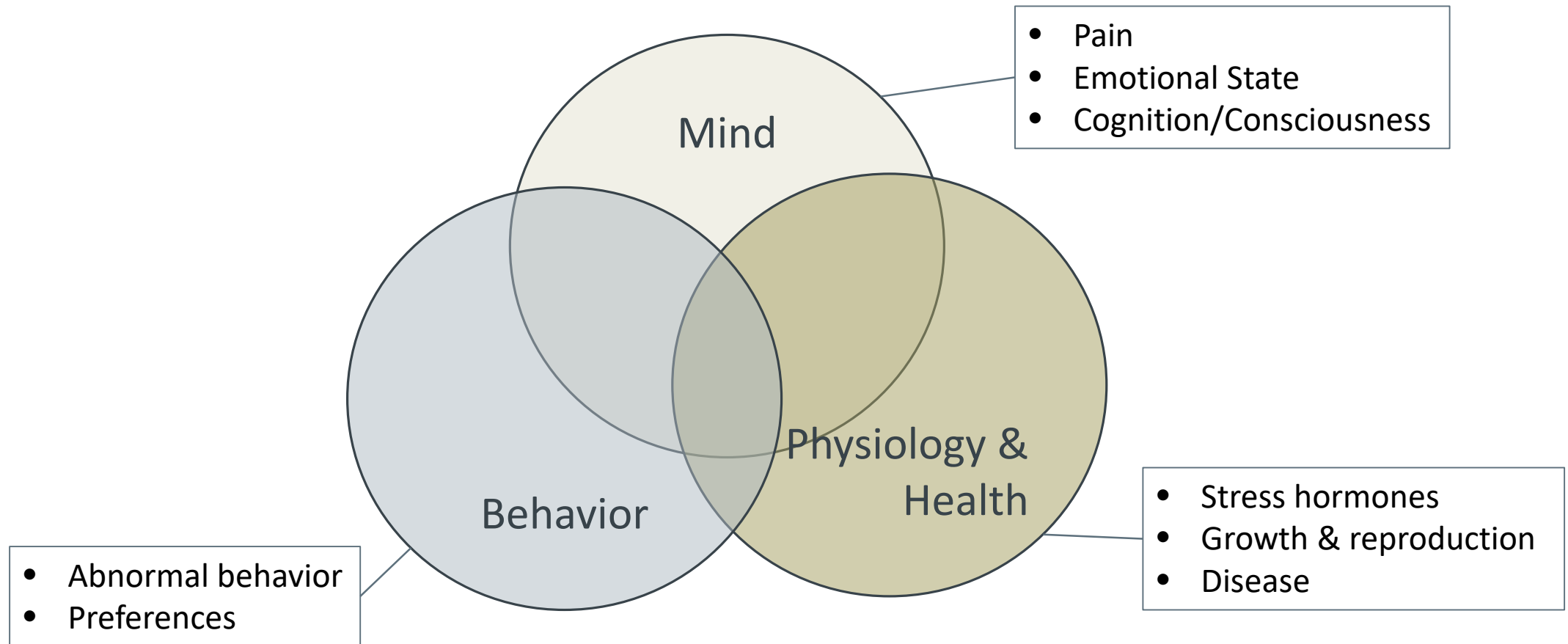


Understanding Animal Welfare and the Small Farm

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Animal Welfare



Animal interests and welfare science

Avoiding pain

Ability to experience + and/or – emotions

Intelligence/rationality

Consciousness

Self-awareness

Relationship to humans

A need to assess these interests

Which is better for the animal?



A note on ethics

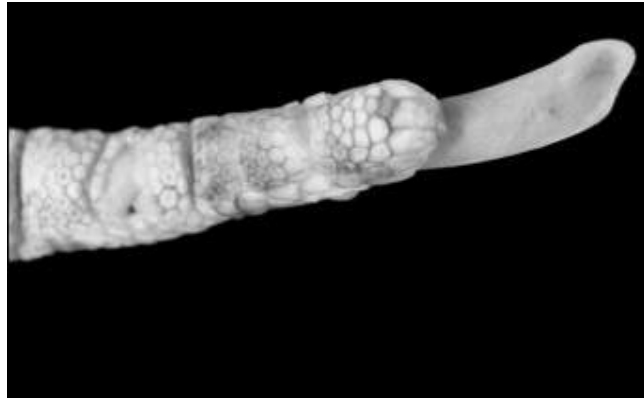
Cage Free Issues – Laying Hens

Welfare Issues

- Foot Condition
- Skeletal Disorders
- Behavioral Management
- Health/Predation
- Consumer Confusion



Foot Condition



HYPERKERATOSIS



PODODERMATITIS



HYPERKERATOSIS



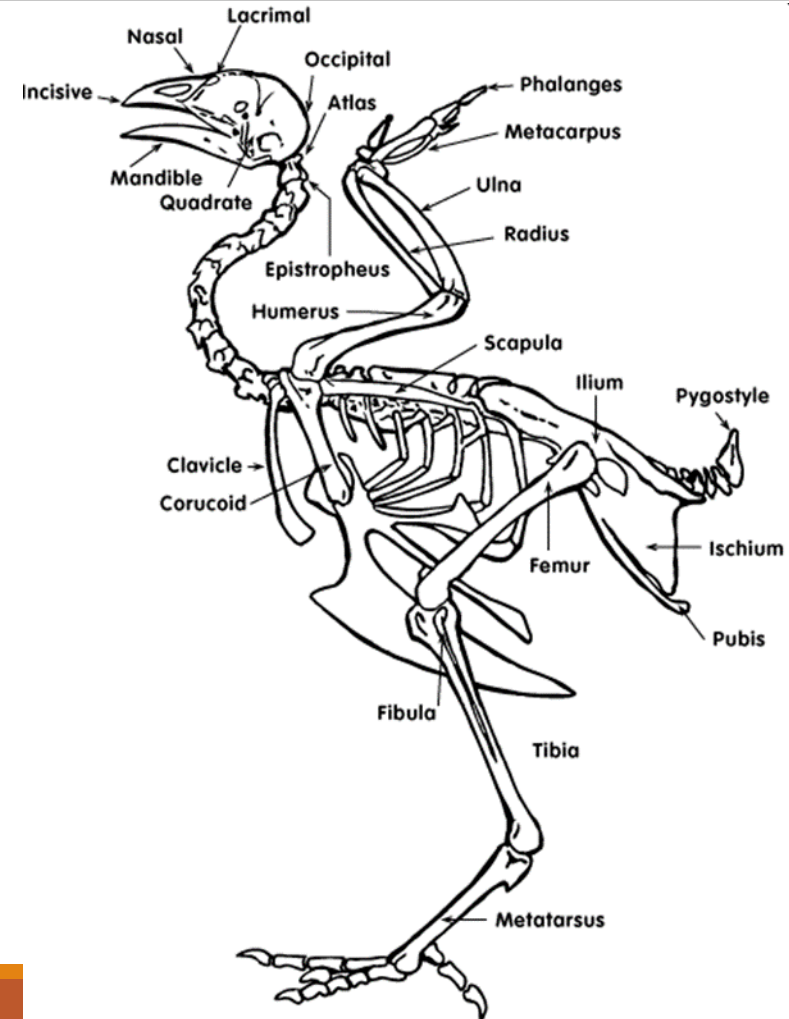
BUMBLEFOOT

Foot Condition

- About 60% of caged hens overall have hyperkeratosis, can decrease to 3% with well-coated flooring and a low floor slope
- Hens in furnished cages or small group systems: >86% showed footpad disease, about 7% were severe
- Overall, 4 times as many hens in non-cage systems had poor foot condition as compared to furnished cages

Skeletal Disorders

- Hens develop osteoporosis
- Keel bone damage
- More broken legs in alternative housing systems



Behavioral Management Considerations

- Range use
- Going back into coop
- Stocking Density (inside v. out)
- Perching
- Nest box



Cage Free Issues - Broilers

Welfare Issues

- Lameness
- Litter Quality
- Lighting
- Stocking Density
- Fast Growth



Lameness

- Generic link between greater mass and greater lameness
- Pathology or Conformation?

Pathology

Femoral Necrosis



Tibial dyschondroplasia



Conformation



Assessing Lameness

Gait Scoring

- subjective assessment of walking ability
- relatively easy to learn
- must be familiar with “normal” gait

Modified Gait Scoring System

(Garner et al., 2002 *British Poultry Science*)



Litter Quality

Environmental Impacts

- dust levels
- humidity
- ammonia levels

Broiler Impacts

- hock burns
- foot pad dermatitis
- respiratory risk



What Effects Litter Quality?

Related to:

- type of substrate
- nutrition
- ventilation
- water supply

Daily visual inspections, prompt removal of wet litter important for prevention

Contact Dermatitis

Hock burns

- wet litter
- ammonia
- broiler weight



Foot pad dermatitis

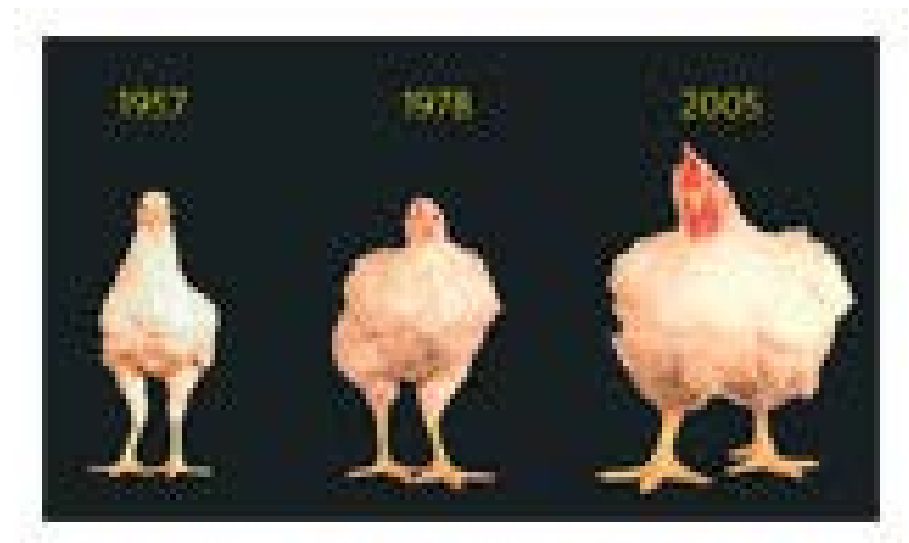
- wet litter
- ammonia



Fast Growth

- Many welfare issues derived from growth rate
- Growth rate achieved through genetic selection
- Hormones illegal
- Antibiotic use can promote growth

- 6 weeks vs 12 weeks (Pre-WWII)



Slow Growing Broilers

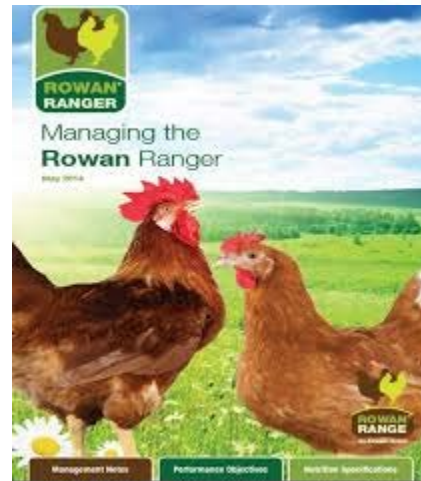
➤ Whole Foods require for sale in stores in the next 8 years

➤ Not feed efficient

➤ Less/poor breast yield

➤ More expensive

➤ Typically colored



If 1/3 of producers switched:

- Additional feed – enough to fill 670,000 more tractor trailers
- Additional land – 7.6 million acres more needed for extra feed (size of Maryland)
- Additional manure – 28.5 billion lbs more (at farm longer)
- Additional water – 5.1 billion gal more water/year (excludes irrigation for feed crops)
- 9 billion additional cost to industry

- Welfare consequences?

Welfare Certifications

3rd Party Certifiers

- May be required
- Who are they?
- What is the difference?
- Do they help with consumer confusion?



*Meets the Humane Farm Animal Care Program standards, which include nutritious diet without antibiotics, or hormones, animals raised with shelter, resting areas, sufficient space and the ability to engage in natural behaviors.



STEP 5+	ANIMAL CENTERED; ENTIRE LIFE ON SAME FARM
STEP 5	ANIMAL CENTERED; NO PHYSICAL ALTERATIONS
STEP 4	PASTURE CENTERED
STEP 3	ENHANCED OUTDOOR ACCESS
STEP 2	ENRICHED ENVIRONMENT
STEP 1	NO CAGES, NO CRATES, NO CROWDING

Resources Available

Training courses like this

Extension Services

- Talk with advisors and specialists
- Get resources
- Have an advisor or specialist give a talk
- Request/Sponsor a workshop
- We are here to help!

