How We Grow Chickens

P. A. Stayer, DVM, MS, ACPV Corporate Veterinarian Sanderson Farms, Inc.



- How We Grow Chickens
- National Chicken Council
- Professional Animal Auditor Certification Organization
- ✓ What we've tried
- Questions we answer



Sanderson Farms, Inc.

Animal Welfare Policy

Sanderson Farms, Inc. believes that the humane treatment of animals is a moral ethical responsibility owed by every corporation holding assets in livestock. Because of this belief, the Company is committed to setting and upholding the highest animal welfare standards in the poultry industry. All personnel who are involved with live poultry operations are expected to treat live poultry in a manner consistent with the Company's Animal Welfare Program.



✓ How We Grow Chickens
MOVIE TIME



- How We Grow Chickens
- National Chicken Council



National Chicken Council

- The National Chicken Council (NCC) is the national trade association representing vertically integrated broiler producer-processors.
- NCC recommends the following guidelines to its members to assure the humane treatment of animals and to promote the production of quality products.



National Chicken Council

The following principles (which apply to all types of housing and strains of chickens) were considered in the development of this document:

- 1. Poultry raised for food should be cared for in ways that prevent or minimize fear, pain, stress, and suffering.
- 2. Guidelines for welfare should balance scientific knowledge and professional judgment with consideration of ethical and societal values.
- 3. It is the welfare of the chickens themselves that is foremost, not how humans might perceive a practice or an environment.
- 4. Poultry should be treated with respect throughout their lives and provided a humane death when processed for food or when they are euthanized for any other reason.
- 5. The NCC Animal Welfare Guidelines and Audit Checklist are formally reviewed every two years, with the current review conducted by a committee of scientific advisors followed by a review by the NCC Animal Welfare Committee, who recommends final changes to the NCC Board of Directors. This two-year cycle will continue indefinitely. **LATEST UPDATE 2/2/17**



NCC Animal Welfare Audit Checklist

National Chicken Council Animal Welfare Audit Checklist

The following checklist is provided to assist chicken companies in complying with the Animal Welfare Guidelines recommended by the National Chicken Council and voluntarily adopted by this company. This audit checklist is used in conjunction with the Guidelines.

Auditors are reminded of the importance of maintaining biosecurity. Flocks that may be experiencing a disease must not be chosen for auditing due to biosecurity reasons.

This audit applies to the following company, complex, or facility:

Auditor:

Company and Plant:

Address:

Phone:

Fax:

Date:

Accompanied by:

Title

Summary:

Area Maximum Score Needed Facility Score to Pass Score A. Corporate Commitment 160 B. Training 40 290 C. Hatchery Operations 250 570 490 D. Growout Operations 200 170 E. Catching and Transportation F. Processing Operations 470 400 Point Total for ALL Areas 1510



- How We Grow Chickens
- National Chicken Council
- Professional Animal Auditor Certification Organization



Professional Animal Auditor Certification Organization

- Our mission is to promote the humane treatment of animals through education and certification of animal auditors, as well as the review and/or certification of animal audit instruments, assessments and programs. Animal welfare issues affect multiple segments of our animal and food industry. We must rely on allied groups to support the comprehensive animal care areas we serve.
- Here at PAACO, we provide uniform minimum standards for auditors in education and experience, training, continuing education and applicable code of conduct to maintain certification.

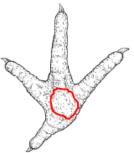


Professional Animal Auditor Certification Organization

- General: American Association of Avian Pathologists
 (AAAP), (AASV), (AABP), Poultry Science Association
 (PSA), American Society of Animal Science (ASAS),
 American Dairy Science Association (ADSA), American
 Registry of Professional Animal Scientists (ARPAS)
- Species specific: National Pork Board, PQA; North American Meat Institute; National Cattlemen's Association, BQA; Poultry, Broilers (National Chicken Council), Layers (United Egg Producers), Turkey (National Turkey Federation)



aaap



Broiler Paw Scoring Guide

Paw scoring is an important part of welfare audits for broiler flocks. To optimize scoring accuracy & to minimize welfare concerns with handling broilers in the field, broiler paws should be evaluated in the processing plant to more precisely and efficiently assess the bottom of the foot. The paw includes the broiler foot pad (red circled area) and the toes.

At the processing plant, broiler paws should be assessed after the removal of the cuticle, or alternatively after paw cleaning. A random sample of 200 paws (representing 100 broilers) should be evaluated per flock and a pass or failure score should be assigned to each paw.

A result of 90% (or greater) of paws with a pass score is considered to be acceptable for animal welfare when evaluating broiler paws.

PASS (Score Criteria)

- Normal color* and skin (*note, skin color may vary from yellow to white due to breed or diet)
- · Slight discoloration or darkened skin
- Hyperkeratosis (thickening of skin)
- · Lesion covering less than 1/2 of foot pad



Pass (washed paws with no lesions & normal skin color)



Pass (paws with no cuticle and normal skin color)



Pass (washed, post-scald paws with scab covering less than 1/2 some color variation, healed the area of the foot pad)



Pass (paws with no cuticle & skin and no ulcerations)

FAIL (Score Criteria)

- · Erosions, ulceration, or scab formation that covers more than 1/2 of foot pad and may include the toes
- · Hemorrhages or swelling of foot pad



Fail (washed paws) Ulceration is present and lesion is more than 1/2 the area of the foot pad; lesions are also present on the toes



Fail (paws without cuticle) Ulceration is present and the

lesion is more than 1/2 the area of the foot pad. Swelling of the foot pad is also visible.

Produced by the AAAP Animal Welfare & Mgmt Committee, 2015



- How We Grow Chickens
- National Chicken Council
- Professional Animal Auditor Certification Organization
- ✓ What we've tried



What We've Tried

- Gait scoring
 - Kestin gait scoring system (7 point, European)
 - US gait scoring system (3 point, Georgia for all US)
- Lights
 - Europeans brighter, longer: non-poultry ask same
 - Natural vs. artificial light
- Stress
 - Measure well-being in addition production parameters
 - Objective means to determine "peace"



Gait Scoring in Commercial Broiler Production

Dr. Philip A. Stayer, Sanderson Farms
Dr. Timothy S. Cummings, MSU CVM
Dr. A. Bruce Webster, UGA Poultry Science Dept.
Dr. Marty Ewing, Sanderson Farms
Dr. John Rice, Sanderson Farms

Mississippi Veterinary Medical Association Winter Meeting, Starkville, MS; February 18, 2005.



Mississippi Veterinary Medical Association Winter Meeting, Starkville, MS; February 18, 2005.

Conclusions

• Low overall percentage of commercially reared processing age broilers with lameness, especially when compared to reported studies

• The gait scoring technique utilized in this project easily adopted by field personnel



A Comparison of Two Customer Requested and One Industry Derived Lighting Program

Dr. Philip A. Stayer, Sanderson Farms
Dr. John P. Thaxton, MSU Poultry Science Dept.
Dr. Marty Ewing, Sanderson Farms
Dr. John Rice, Sanderson Farms

143rd Annual Convention of the American Veterinary Medical Association, Honolulu, HI; July 17, 2006.



143rd Annual Convention of the American Veterinary Medical Association, Honolulu, HI; July 17, 2006.

Summary of Results

- ← Livability miniscule and inconsistent differences
- 1 Body Weight both brighter light variations increased live body weight at slaughter
- † Feed Conversion higher (worse) for all replicates of both brighter light treatments
- 1 Standard Cost higher for both brighter treatments
- ↓ Gait Scores dim controls better than brighter lights



Measurement of Stress in Broilers

Dr. Philip A. Stayer, Sanderson Farms
Dr. John P. Thaxton, MSU Poultry Science Dept.
Dr. Marty Ewing, Sanderson Farms
Dr. John Rice, Sanderson Farms

142nd Annual Convention of the American Veterinary Medical Association, Minneapolis, MN; July 18, 2005.



142nd Annual Convention of the American Veterinary Medical Association, Minneapolis, MN; July 18, 2005.

Stress Hormone Summary

- None of the rearing conditions measured induced stress responses up to 60 days
- No relationship of stress hormones with decreasing space (increasing age)
- Suggestion that chickens may be less stressed in subdued lighting



What We've Tried

- Webster, A.B., B.D. Fairchild, T. S. Cummings, and P.A. Stayer, 2008. Validation of a gait scoring system for field assessment of walking ability of commercial broilers. SPSS Meeting Abstracts: Abstract T112.
- Stayer, P.A., J. P. Thaxton, M. L. Ewing and J. Rice, 2006. A Comparison of Two Customer Requested and One Industry Derived Lighting Program. American Veterinary Medical Association 2006 Convention Notes. (published on CD; no page number)
- Stayer, P.A. and J. P. Thaxton, 2006. Who knows best? poultry customer's idea of better broiler lighting. Mississippi Veterinary Medical Association Winter Meeting, Starkville, MS.
- Thaxton, J.P., P. Stayer, M. Ewing and J. Rice, 2005. Corticosterone in Commercial Broilers. Journal of Applied Poultry Research, Vol.14, No. 4, pp. 745-749.
- Ewing, M.L., J. Rice, P. Stayer, A.B. Webster, and T.S. Cummings, 2005. Evaluation of broiler mobility. American Veterinary Medical Association 2005 Convention Notes. (published on CD; no page number)
- Stayer, P.A., J. P. Thaxton, M. L. Ewing and J. Rice, 2005. Measurement of Stress in Broilers. American Veterinary Medical Association 2005 Convention Notes. (published on CD; no page number)
- Cummings, T.S., P.A. Stayer and M. L. Ewing, 2005. Assessing the Effect of Light Intensity on the Eyes and Behavior of Broilers. American Veterinary Medical Association 2005 Convention Notes. (published on CD; no page number)
- Stayer, P.A., 2005. Practical Welfare Measures in Commercial Poultry. Texas A&M Poultry Science Graduate Student Seminar March 31, 2005, College Station, TX.
- Stayer, P.A., T. S. Cummings, A. B. Webster, M.L. Ewing and J. Rice, 2005. Gait Scoring in Commercial Broiler Production. Mississippi Veterinary Medical Association Winter Meeting, Starkville, MS.
- Rice, J., P.A. Stayer, T. S. Cummings, A. B. Webster, and M.L. Ewing, 2005. Gait Scoring in Commercial Broiler Production: A Measure of Poultry Welfare. Proceedings of the Fifty-fourth Western Poultry Disease Conference, p. 53.
- Cummings, T. S., P. A. Stayer, and A. B. Webster, 2005. Field assessment of walking ability in commercial broilers. Poultry Science 84 (Suppl.1): Abstract S114.
- Thaxton, J.P., P.A. Stayer, M. L. Ewing and J. Rice, 2005. Plasma cortisone levels in commercial broilers. Poultry Science 84 (Supplement 1): Abstract S115.

- How We Grow Chickens
- National Chicken Council
- Professional Animal Auditor Certification Organization
- ✓ What we've tried
- Questions we answer



Q1: Slower growth poultry?

- Currently not available on large scale.
- Economically non-sustainable.
- Smaller meat chickens can be produced:
 - Bring to market sooner: "Cornish hens".
- Skinnier meat chickens are not natural:
 - Return to non-selected lines, e.g. dual purpose.
 - Withhold feed to starve into skinny condition.



Q2: Reduce stocking density?

- Stocking densities based upon:
 - Needs of the birds.
 - Economic return of the farmers.
- Larger birds need more room.
 - Fewer chickens for deboning vs grocery size.
- Sanderson Farms has extra feed & water lines.
 - More birds per house with more access to feed.



Q3: Enrichments?

Maslow's
Chicken Pyramid
(4 Freedoms?)

Frolic

Food, Water

Thermal Comfort

Farm Animal Welfare Committee (UK)

- 1. Freedom from Hunger and Thirst
- Freedom from Discomfort
- 3. Freedom from Pain, Injury or Disease
- 4. Freedom to Express Normal Behavior
- 5. Freedom from Fear and Distress adopted by ASPCA

Freedom from Predation



Q3: Enrichments?

- Chickens naturally spend most of their days eating and relaxing when not being eaten.
- Since commercial chickens are protected....

- "Enrichments" = obstacles.
- Hay bales and perches may induce trauma.
- Windows may incite bad behavior.



Q4: Control Atmosphere Stun?

- Sanderson Farms continues to evaluate.
- CAS has not produced improved outcomes:
 - Peri-mortem activity.
 - -Broken wings.
 - -Scratches.
- U.S. low voltage electrical stun different than European high voltage.



Q5: Eliminate antibiotics?

- Ideally no antibiotics needed.
 - Human or animal.
 - Bacteria exist even in modern society and agriculture.
- U.S. poultry has very few antibiotics available.
 - Declining even one FDA approved antibiotic limits.
- Sanderson Farms flocks under direct supervision of licensed, board certified poultry veterinarians.
 - ACPV poultry veterinarians are undisputed experts.
 - No reasons to further limit FDA approved medication use than marketing ploys and peculiar preferences.

- How We Grow Chickens
- National Chicken Council
- Professional Animal Auditor Certification Organization
- ✓ What we've tried
- Questions we answer



And that's How We Grow Chickens

P. A. Stayer, DVM, MS, ACPV Corporate Veterinarian Sanderson Farms, Inc.

