How We Grow Chickens

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

✅ 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.
Topics

✓ How We Grow Chickens
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- How We Grow Chickens
- 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.
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
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: ___________________________ Est. No.: __________

Address: __________________________________________

Phone: _______________ Fax: _______________ Date: _______

Accompanied by: ___________________________

Title ___________________________

Summary:

<table>
<thead>
<tr>
<th>Area</th>
<th>Maximum Score</th>
<th>Score Needed to Pass</th>
<th>Facility Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Corporate Commitment</td>
<td>160</td>
<td>160</td>
<td></td>
</tr>
<tr>
<td>B. Training</td>
<td>40</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>C. Hatchery Operations</td>
<td>280</td>
<td>250</td>
<td></td>
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<tr>
<td>D. Growout Operations</td>
<td>570</td>
<td>490</td>
<td></td>
</tr>
<tr>
<td>E. Catching and Transportation</td>
<td>200</td>
<td>170</td>
<td></td>
</tr>
<tr>
<td>F. Processing Operations</td>
<td>470</td>
<td>460</td>
<td></td>
</tr>
<tr>
<td>Point Total for ALL Areas</td>
<td>1730</td>
<td>1510</td>
<td></td>
</tr>
</tbody>
</table>
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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)
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

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

[Images of paws with different conditions for pass and fail criteria]

Produced by the AAAP Animal Welfare & Mgmt Committee, 2015
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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.
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.
Summary of Results

↔ Livability - miniscule and inconsistent differences

↑ Body Weight - both brighter light variations increased live body weight at slaughter

↑ Feed Conversion - higher (worse) for all replicates of both brighter light treatments

↑ Standard Cost - higher for both brighter treatments

↓ Gait Scores - dim controls better than brighter lights

↔ Corticosterone – consistently (but not significantly) higher for either brighter light treatment
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.
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


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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?)

- Freedom from Predation
- Thermal Comfort
- Food, Water
- Frolic

Farmed Animal Welfare Committee (UK)
1. Freedom from Hunger and Thirst
2. 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
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.
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And that’s How We Grow Chickens

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