Report E018R01

MEASURING BETTER CHICKEN COMMITMENT–COMPLIANT CHICKEN SUPPLY

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EXECUTIVE SUMMARY The Better Chicken Commitment (BCC) provides a five-part standard to improve the welfare of chickens raised for meat by 2024. As of June 2020, about 180 food businesses have agreed to this commitment as a result of efforts by animal advocates. While these commitments are a valuable step toward improved animal welfare, it is important to also measure their actual implementation and the resulting supply of chicken products meeting these higher welfare standards. We review potential approaches for measuring the supply of BCC-compliant chickens and available data for making such measurements. We find that relatively little data is currently available in the US and that efforts by industry and government agencies may be necessary to collect such data.

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1. INTRODUCTION

Many animal advocacy groups work to improve animal welfare by setting industry standards. Through engagement with advocates, food businesses then commit to source ingredients from animals raised in accordance with these higher-welfare standards. However, to actually improve animal welfare, these commitments must translate to changes on the farm. Thus evaluation of these programs requires not just data on which companies are committed, but holistic data on the industry’s progress towards higher welfare standards.

Our ongoing work [1] studying efforts to eliminate the use of egg-laying hens to battery cages—tiny cages which house 7 to 10 birds each—provides an illustrative example [2]. Using country-level data on the global prevalence of cage-free housing over time, we expect to not only track the correlation between commitments and cage-free housing, but also measure how commitments *cause* shifts toward cage-free housing. In the US, advocates began campaigning against battery cages in the early 2000s, and by the peak of the campaigns at the end of 2015, around 90 US companies had made commitments [3; 4]. In response, the United States Department of Agriculture (USDA) began publishing a monthly report on the national production of cage-free eggs [p178 5], based on data collected from existing surveys of egg producers modified to include cage-free questions. This data set served both the industry in fulfilling their cage-free commitments and advocates in evaluating the country’s progress towards improved animal welfare.

With much of the US food industry committed to cage-free eggs, advocacy has moved to focus on the welfare of the 9.3 billion broiler chickens killed annually for meat in the US [6]. By June 2020, around 180 corporations had adopted the Better Chicken Commitment (BCC) [4],

which sets an improved standard for broiler welfare [7]. As with cage-free advocacy, understanding progress on broiler welfare will be well-served by the direct measurement of improvements in the broiler supply chain. However, while data on cage-free housing quickly became available in the US and was widely available elsewhere in the world, data on key broiler welfare parameters is currently less forthcoming. Furthermore, while cage-free campaigns focus on a single, easy-to-observe change from caged to cage-free housing, broiler welfare improvements are multi-faceted and may be more difficult to measure.

The most commonly used version of the BCC (“Version 2”) [3] has five components, each designed to address a particular aspect of broiler welfare. By 2024, the BCC will require chicken suppliers to:

- 1. have a maximum stocking density, a measure of crowdedness, of 6 pounds of chickens per square foot and prohibit cages;
- 2. provide chickens enriched environments including litter, lighting, and other enrichments;
- 3. slaughter chickens in a manner that avoids pre-stun handling and instead utilizes controlled-atmosphere stunning (CAS) that induces an irreversible stun;
- 4. demonstrate compliance with all standards via third-party auditing;
- 5. and, by 2026, adopt breeds of chicken that demonstrate higher welfare outcomes.

A less commonly used version of the BCC (“Version 1”) [3] is largely the same as the above version but requires third-party auditing to be administered by the Global Animal Partnership (GAP); this in turn requires higher-welfare breeds to be adopted by 2024 rather than 2026 and more specific implementations of components 1 and 2 [8]. In both versions, the five components provide potential avenues to measure the industry’s progress on the BCC. We will discuss the feasibility of collecting data on each of these components in turn and identify existing data products from the USDA that could be modified to include measures of BCC progress.

2. BREED

The USDA National Agricultural Statistics Service (NASS) surveys all hatchery operations that hatch at least one million chicks annually for the weekly Broiler Hatcheries Report [9]. The report accounts for roughly 95% of the eggs and chicks that supply broiler production

in the country. As with many other aspects of the poultry industry, hatcheries are either vertically integrated with or owned by a particular poultry company, so breed information is likely to be kept on hand [10; 11]. However, this data may be considered proprietary to the processors who commission specific cross-breeds from their primary breeding company, and data collection agencies may be unwilling or unable to collect such information. Disclosing chick placement numbers of a breed exclusive to one particular company might lead to indirect collusion, since these numbers are essentially future quantities sold.

(When large companies can account for their similarly large competitors' quantity output, they may adjust their own production quantities in order to influence the final market price. Examples of collusion in the US poultry industry have been under investigation for several years. In a few of the cases, data provider AgriStats played a key role in sharing competitively sensitive information about prices, quantity sales, and other key variables amongst poultry production companies, thereby facilitating collusion by providing information that could be used to reasonably forecast future production [12].)

3. CONTROLLED ATMOSPHERE STUNNING

The USDA's Food Safety and Inspection Service (FSIS) actively inspects slaughter facilities accounting for 99% of chickens slaughtered in the US [p13 13], and the range of the number of chickens slaughtered at each facility is public record. Thus it would be relatively easy for the FSIS to add survey information on the stunning method used for chickens slaughtered at these facilities. Alternatively, contact information for these facilities is also part of the public record [14; 15], which could facilitate a novel survey of these facilities. Finally, publicly available information on companies using CAS, like Tyson Foods [p50 16], could likely be cross-referenced with these records to identify which individual facilities use CAS. A low estimate for the portion of US chickens slaughtered with CAS could then be made using either the included ranges of number of chickens slaughtered, or by requesting a custom report from the USDA.

4. STOCKING DENSITY AND ENRICHMENTS

Stocking density and enrichments prevalence will likely be difficult to measure. To the best of our knowledge, the

USDA does not directly survey the growers who operate the farms that raise young chickens to the age of slaughter. Data collected about broiler housing enrichments would then require a new survey of growers, a greater investment than simply adding a new question to an existing survey. Furthermore, the BCC requires that growers provide a minimum number of environmental enrichments approved by GAP's 5-step animal welfare rating system, but does not specify which of the approved enrichments must be provided [8]. Therefore, enrichment data may not be standardized and thus more difficult to survey.

5. THIRD-PARTY AUDITING

GAP offers third-party auditing services that can be used to fulfill several components of the more commonly used policy version in addition to being a central component of the lesser-used policy version. Participation in GAP auditing could then be used to measure nearly full compliance with both versions of the BCC, rather than just a single component of the policies. However, one would need to know not just whether a company submits to auditing, but how many chickens are in their supply chain. In our experience, companies are not forthcoming with this information nor is it available publicly. Furthermore, additional potentially invasive requests in GAP auditing could interfere with company relationships. Finally, GAP-audited producers are only a subset of BCC-compliant producers, since other third-party auditing services may be used. Therefore, measuring GAP-audited companies would account for only a subset of all BCC-compliant chicken supply.

6. CONCLUSIONS

Given the complexity of the BCC, it is unlikely we will soon be able to measure the percentage of chickens raised and slaughtered in compliance with all five components. Further, there does not emerge a clear candidate for "best single metric" to measure, since no data on any of the components is currently collected. However, even accurately measuring one component of the BCC will provide an upper bound on total supply; that is, if a given percentage of the chicken supply complies with one component of the BCC, at most that percentage of the chicken supply is compliant with all components of the BCC. Thus, while metrics for compliance with the full BCC are unavailable, establishing the prevalence of either CAS or BCC-compliant breeds might be the most tractable first steps. Ideally, government agencies like the USDA might lead

these data collection efforts, as was the case with cage-free campaigns, but it seems unlikely the USDA will soon do so. Of course, widespread commitments representing a large fraction of the industry might convince government agencies to begin such data collection.

Like cage-free housing in 2015, the BCC is gaining momentum through hundreds of committed retailers. Ensuring that the chicken supply chain can adapt to this shifting demand is in the interest of both industry and advocates. Regular, reliable data to inform this adaptation would then be a prudent investment for any industry, advocacy, or governmental group equipped to collect data from broiler supply chain participants. As we have demonstrated, the USDA could collect data on certain aspects of the BCC with only modest changes to existing survey infrastructure. However, until such time, and given the value of establishing baseline metrics prior to intervention, it may be worthwhile for advocates to independently establish metrics like the prevalence of CAS where possible.

7. ACKNOWLEDGEMENTS

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8. REVISION HISTORY

8.1. September 3, 2020

- Removed the incorrect claim that the USDA does not report rates of cage-free housing for pigs and modified surrounding sentences.
- Replaced “actively surveys” with “actively inspects”
- Correct URL in bibliography.

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