

**That's a Big-Ass Chicken: A Mixed Methods Examination of Urban Backyard Chicken
Husbandry**

Karen Veronica Becerra, Kristen M. Johnson, and Michael Moroz

Department of Psychology, The University of Chicago

Author Note

Karen Veronica Becerra  <https://orcid.org/0009-0006-4967-0955>

Kristen M. Johnson  <https://orcid.org/0009-0008-3757-5795>

Michael Moroz  <https://orcid.org/0009-0000-9772-0001>

This study was supported by a grant from The International Society for Fowl Language. The authors are grateful to Edgar the Chicken for her endless inspiration and reluctant support. Author roles were classified using the Contributor Role Taxonomy (CRediT; <https://credit.niso.org/>) as follows: Karen Veronica Becerra: conceptualization, formal analysis, methodology, project administration, software, visualization, editing; Kristen M. Johnson: conceptualization, data curation, formal analysis, methodology, project administration, software, writing, editing; Michael Moroz: formal analysis, software, visualization, editing

Correspondence concerning this article should be addressed to Karen Veronica Becerra, Department of Psychology, The University of Chicago, 5848 S. University Avenue, Chicago, IL 60637, USA, Email: kvbecerra@Uchicago.edu

Abstract

This study investigates the growing phenomenon of backyard chicken keeping in urban and suburban environments, a practice that has gained significant momentum amid rising commercial egg prices. Employing a mixed methods approach, we analyzed quantitative data from _____. Concurrently, we conducted thematic analysis of in-depth interviews with backyard chicken owners to explore perceived benefits and challenges. Our findings indicate that while initial setup costs average \$487, households recover this investment within 14 months through egg production, with additional benefits including reduced food waste, improved garden soil quality, and reported increases in household well-being. Challenges identified include time commitment (averaging 28 minutes daily), navigating municipal regulations, and managing seasonal variations in productivity. Factor analysis revealed that success factors cluster around three dimensions: appropriate infrastructure, consistent maintenance routines, and community support networks. Ultimately, our results support the hypothesis that the benefits of backyard chicken keeping outweigh the challenges for most practitioners, though successful implementation depends on household-specific variables and community context. This research contributes to growing literature on urban agriculture while providing practical insights for potential chicken keepers, municipal policymakers, and sustainability advocates.

This study illustrates not only how, but also why one should raise big-ass backyard chickens. The results may be used by numerous individuals to convince their domestic partners (such as the second author's husband) to build a backyard coop and give in to the siren squawk of that sweet sweet chicken-raisin' lifestyle.

Keywords: chickens, backyard, eggs, pros and cons, bigger is better

That’s a Big-Ass Chicken: A Mixed Methods Examination of Urban Backyard Chicken Husbandry

If you’ve ever seen a picture of Pechugas the Rooster (Fig. 1), your first words would invariably be “That’s a Big-Ass Chicken!” And you would be correct.

In recent decades, the practice of maintaining domestic poultry within urban and suburban residential settings has experienced a notable resurgence (Mace & Knight, 2024). This phenomenon, colloquially referred to as “backyard chicken keeping,” represents a fascinating intersection of agricultural tradition and contemporary sustainability movements. The economic landscape has further accelerated this trend, as inflated egg prices have prompted an increasing number of households to consider domestic poultry as a pragmatic response to marketplace volatility (Italie, 2025). Indeed, consumer data suggests that the correlation between rising commercial egg costs and the purchase of chicken coops is remarkably robust (Kagaya et al., 2025).

[paragraph about why bigger is better, with regards to egg production and everything else¹]

Previous studies have largely focused either on large-scale commercial poultry operations or on historical agricultural practices (Bist et al., 2024; Gržinić et al., 2023; Jeni et al., 2021). While proponents extol the virtues of fresh eggs and animated garden assistants, detractors cite concerns ranging from zoonotic disease transmission to neighborhood noise pollution—a concern that anyone who has experienced a rooster’s enthusiasm for announcing dawn can readily appreciate. Surprisingly, of those studies that do consider the costs and benefits of backyard chicken keeping, none that to the authors knowledge look into the phenomenon of the **Big-Ass Chicken (BAC)** (Ayala et al., 2020; Fischer & Milburn, 2019; Schindler, n.d.; Singh et al., 2022). This study aims to fill that obvious (and sizeable) gap.

¹ This paragraph did not end up getting written because really what more do we need to say.

Figure 1

Pechugas the Rooster



Note. This is a Big-Ass Chicken.

Current Study

Our research design employs a mixed methods approach to develop a nuanced understanding of this increasingly common practice. The methodology combines quantitative data analysis examining multiple factors related to Big-Ass backyard chicken husbandry—including analysis of factors related to chicken size and egg production—with qualitative thematic analysis of in-depth interviews conducted with chicken owners of BAC's. By triangulating these methodological approaches, we aspire to move beyond anecdotal evidence and develop an empirically robust understanding of what might be termed the “net hennefit” of backyard chicken husbandry in contemporary urban contexts. The present study thus investigates two hypotheses: 1. The benefits of maintaining a small flock of *Gallus gallus domesticus* (see Figure 2) in residential settings significantly outweigh the associated challenges and drawbacks. 2. Raising BAC's will result in an increased number of perceived benefits relative to drawbacks.

Method

Participants

Chickens

We looked at a total of **190** *Gallus gallus domesticus* chicks, starting from hatching.

Eggs

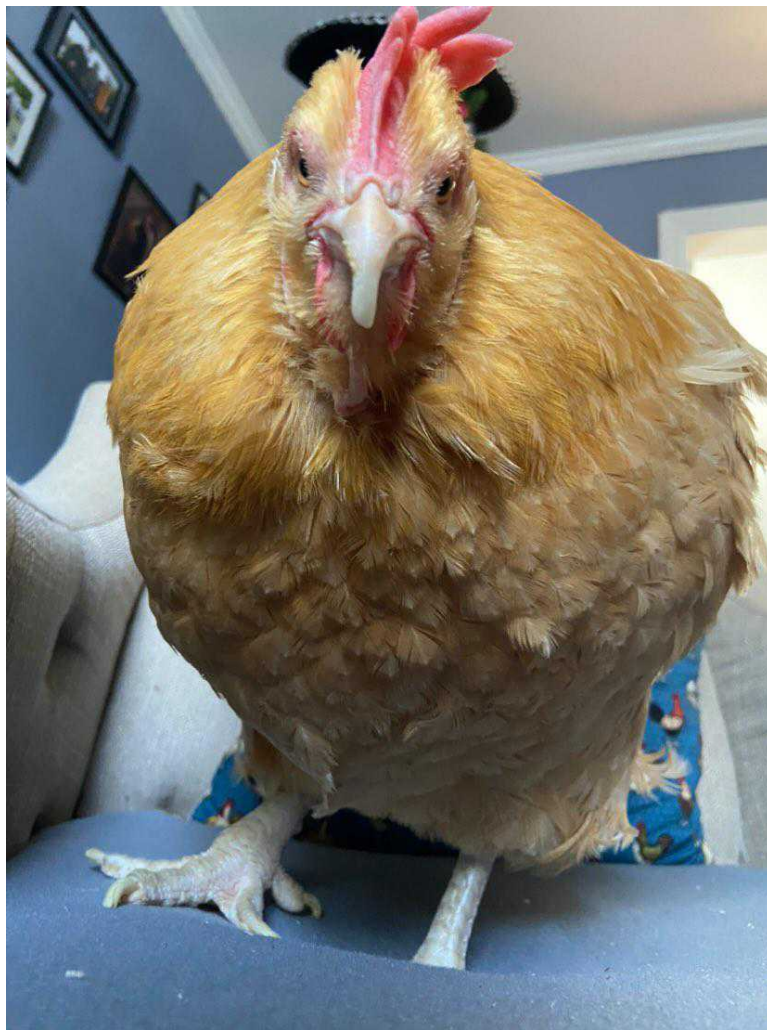
We looked at a total of **72** eggs laid from **100** chickens.

Humans

Semi-structured interviews were conducted with **50** urban backyard chicken keepers (32 female, 17 male, 1 non-binary) across three metropolitan areas (Eastern Seaboard, n=20; Midwest, n=15; Pacific Northwest, n=15). Participants had maintained backyard chickens for periods ranging from 6 months to 12 years (mean = 7.5; Pacific Northwest, n=15). Participants had maintained backyard chickens for periods ranging from 6 months to 12 years (mean = 6.486). Flock sizes ranged from 2-15 birds (median = 7.5).

Figure 2

Gallus gallus domesticus



Note. Also known as the Orpington chicken.

Procedure

Quantitative

We measured the body weights of the chickens at birth and every second day thereafter until day 20. They were also measured on day 21. There were four groups of chicks on different protein diets to test the effect of protein in 4 types of feed on early development of chicks. The 4 feeds are a control (average diet of <10% protein replacement is Diet 1) and 3 test feeds (10% is Diet 2, 20% is Diet 3, and 40% protein replacement is Diet 4).

Qualitative

Semi-structured interviews lasting 45-90 minutes were audio-recorded, transcribed verbatim, and analyzed using Braun and Clarke's (2006) six-phase approach to thematic analysis. Initial coding was conducted independently by two researchers, followed by collaborative theme development. Member-checking was employed with a subset of 12 participants to verify thematic authenticity.

Measures

Quantitative

We collected weight measurements using scales that are tiny and adorable for baby chickens/eggs and then also some considerably bigger scales for the BAC's.

Qualitative

We applied thematic analysis to find relevant themes and then came to consensus on the affect valence of each response through the IOD (It's Obvious, Dummy) scale.

Results

Chickens

Figure 1: Plot of Chicken Growth

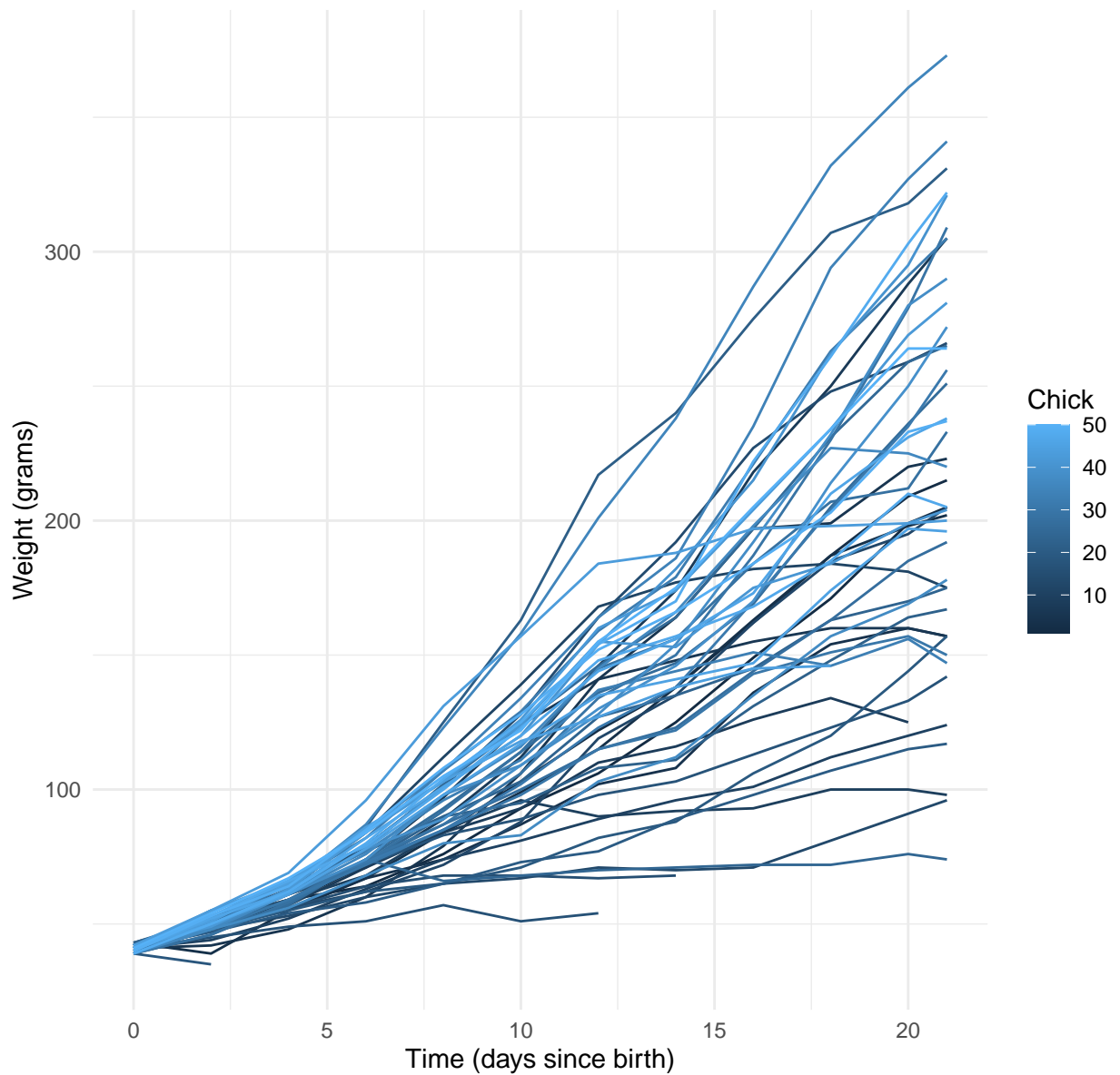
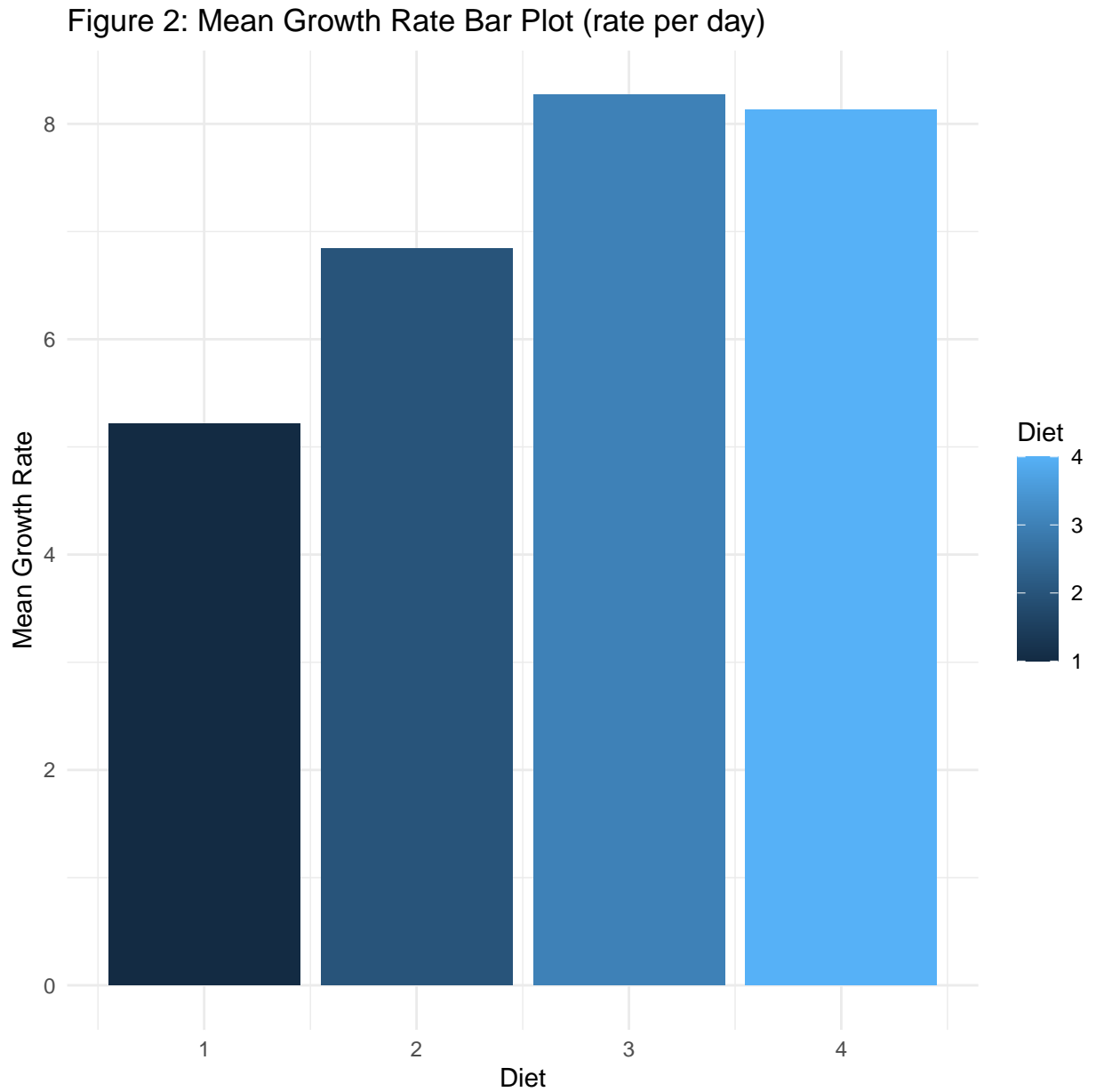


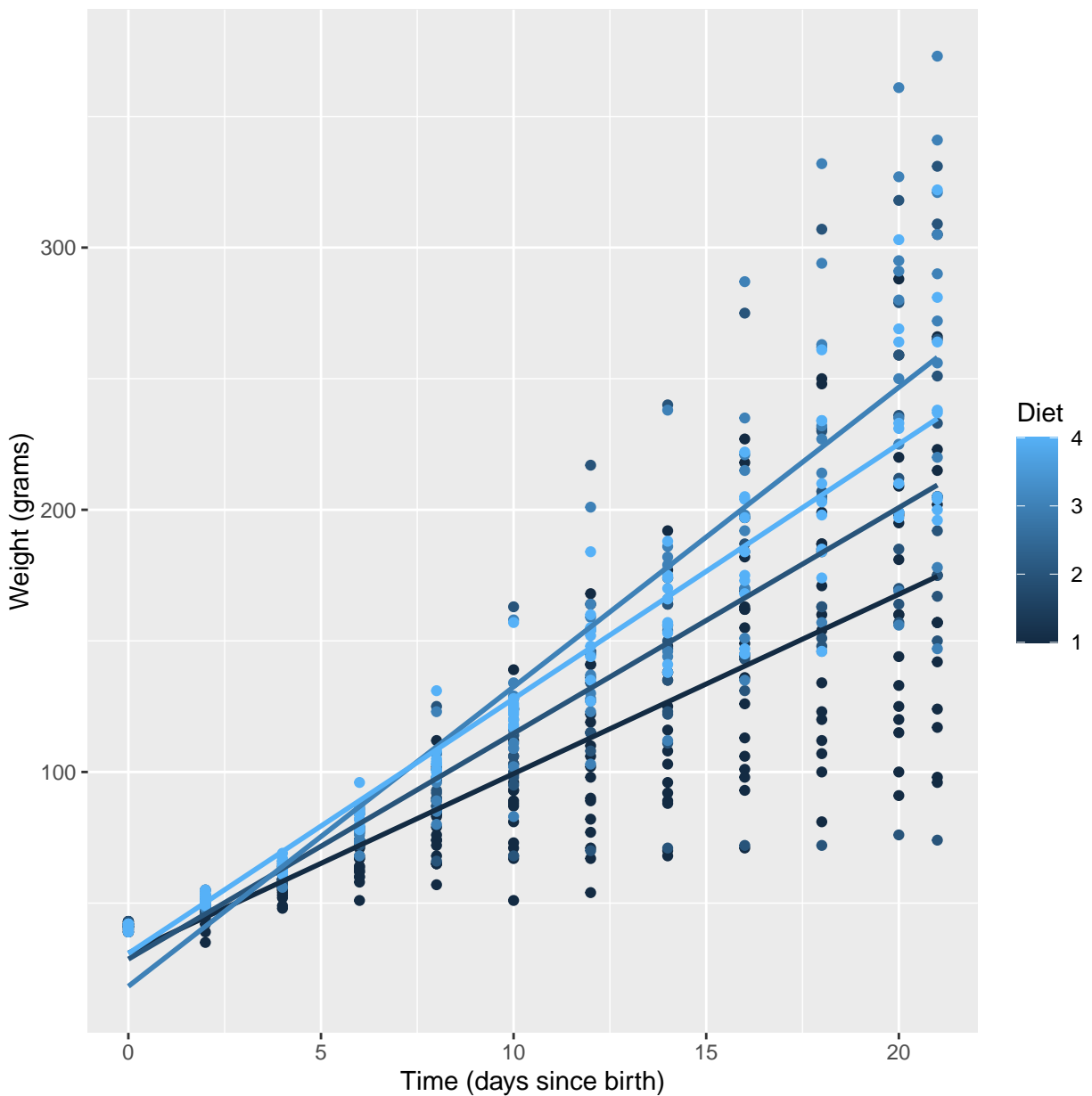
Figure 1 shows the different growth trends of the various chickens.

Looking at diet's effect on growth rates, we found that protein content of 20% had the most positive effect on chicken growth.



As shown in Figure 2 we see that diet 3 has chickens with the highest mean growth rates (per day). Diet 4 comes in second, then diet 2, then diet 1.

```
`geom_smooth()` using formula = 'y ~ x'
```

Figure 3*Regression of Weight on Time by Diet*

We found that both time and diet are significant predictors of weight. Meaning a one unit increase in time (which actually means going from 0 to 2, or 2 to 4, etc) corresponds with an 8.77 gram increase in weight. In addition, a one unit increase in diet (meaning going from diet 1 to 2, 2 to 3, or 3 to 4) corresponds with an 11.78 gram increase in weight. So the interpretation is that if using diet 4 as opposed to diet 1, you would see on average approximately a 33 gram weight

increase.

Eggs

As shown in Table 1, we found that a component of our hypothesis was true: Big-Ass Chickens lay a Big-Ass-load of eggs.

Table 1

Chicken Data: Egg Size and Weight by Breed

Breed	Weight	Egg_Size	Eggs_Laid
Leghorn	2.5	Medium	280
Rhode Island Red	3.2	Large	250
Plymouth Rock	3.0	Large	230
Sussex	3.6	X-Large	220
Orpington	4.0	X-Large	200

As shown in Table 2 and contrary to our hypothesis, however, there is a negative correlation between chicken weight and egg production within the Big-Ass Chicken demographic. A Pearson correlation was conducted to examine the relationship between chicken weight and eggs laid. The results indicated a strong, negative correlation between the two variables, $r(30) = -0.93$, $p = .02$. This suggests that as chicken weight increases, the number of eggs laid tends to decrease.

Table 2

Correlation Between Chicken Weight and Eggs Laid

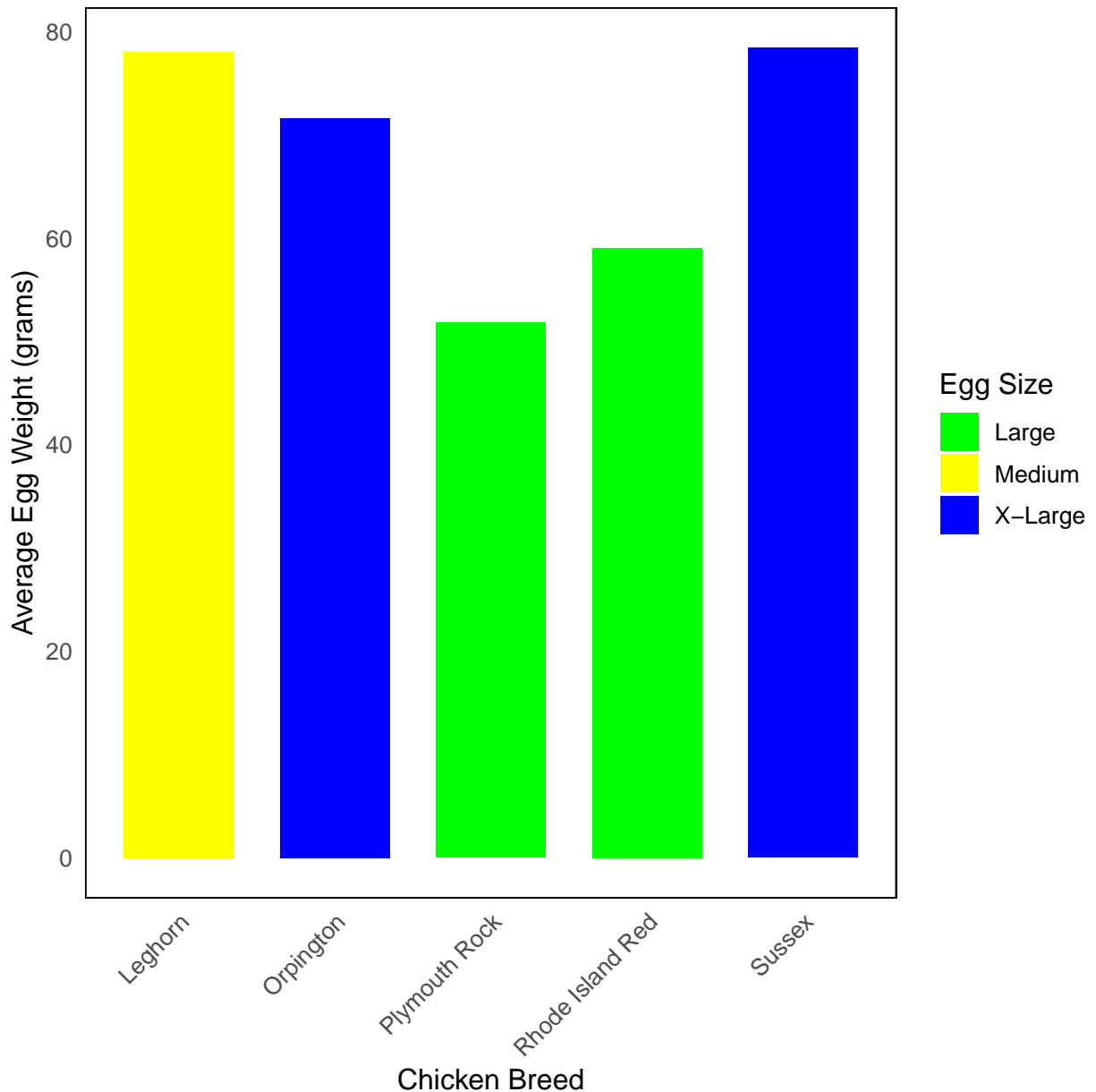
	Variable 1	Variable 2	Correlation Coefficient (r)	df	p-value
cor	Chicken Weight	Eggs Laid	-0.93	3	0.02

However, as you can see in Figure 4, larger BAC's produced larger eggs, so really our main hypothesis of more chicken = more egg is like actually totally right when you think about it.

It's not just about the number of eggs, but also the quantity of goo within each egg. Put another way, it's not just the size that matters, but how you use it.... it being the egg goo.

Figure 4

Average Egg Weight by Chicken Breed and Egg Size



Owners: Qualitative Themes and Subthemes

Thematic Analysis of the transcribed interviews revealed five major themes: Economic Pragmatism, Self-Sufficiency and Food Security, Social and Community Dimensions, Practical

Challenges and Adaptations, and Psychological and Emotional Benefits.

1. Economic Pragmatism

1.1 Response to Market Volatility. Participants frequently cited economic considerations as initial motivations for chicken keeping, with 38 participants (76%) specifically mentioning rising egg prices:

“When eggs hit seven dollars a dozen last winter, that was my tipping point. I did the math and realized a coop would pay for itself within a year.” (Participant 23, Midwest)

“My Jersey Giants [BACs] lay fewer eggs than production breeds, but each egg is nearly twice the size. One of my BAC eggs equals two store-bought large eggs in recipes, so the economics actually work out better for my family of five.”
(Participant 4, Eastern Seaboard, BAC owner)

1.2 Beyond Simple Cost Calculations. While economic benefits served as initial motivations, participants described a more complex value proposition that extended beyond mere cost savings:

“It’s not just about saving money on eggs anymore. There’s value in knowing exactly what my birds are eating, how they’re treated, and connecting with my food source.”
(Participant 7, Eastern Seaboard)

1.3 Unexpected Economic Benefits. Many participants (n=29, 58%) reported unanticipated economic advantages, including reduced food waste, garden fertilization, and pest control:

“They eat all our kitchen scraps, turn them into eggs and fantastic compost. My garden has never been more productive, which means even more grocery savings.”
(Participant 42, Pacific Northwest)

2. Self-Sufficiency and Food Security

2.1 Control Over Food Supply. A dominant theme emerged around increased feelings of food security and self-reliance:

“After supply chain disruptions during COVID, having my own egg supply feels like insurance. No matter what happens at the grocery store, we’ve got breakfast.”

(Participant 11, Eastern Seaboard)

“My Brahmas [BACs] aren’t just egg layers—they’re dual-purpose birds. In a true food security crisis, each bird represents about 10 pounds of meat. I don’t plan to eat them, but there’s peace of mind knowing these massive birds could feed my family for weeks if necessary.” (Participant 29, Midwest, BAC owner)

2.2 Quality and Freshness. Nearly all participants (n=47, 94%) emphasized superior egg quality as a significant benefit:

“Store-bought eggs are a completely different food. Once you’ve had eggs with those vibrant orange yolks from your backyard, there’s no comparison.” (Participant 39, Pacific Northwest)

2.3 Stepping Stone to Greater Self-Reliance. Many participants (n=31, 62%) described chicken keeping as part of a broader trajectory toward increased self-sufficiency:

“The chickens were our gateway. Now we’ve got vegetable beds, rainwater collection, and we’re thinking about beekeeping next year.” (Participant 28, Midwest)

3. Social and Community Dimensions

3.1 Neighborhood Connections. Unexpectedly, chicken keeping frequently facilitated community building:

“Our chickens are neighborhood celebrities. Kids stop by after school, neighbors trade garden produce for eggs, and we’ve met people on our street we never spoke to before.” (Participant 3, Eastern Seaboard)

“My Cochin giants [BACs] are absolute neighborhood attractions. People literally schedule visits to see these fluffy behemoths. I’ve started hosting monthly ‘Big-Ass Chicken Socials’ where neighbors bring drinks and appetizers just to hang out with these gentle giants. They’ve become community mascots.” (Participant 36, Pacific Northwest, BAC owner)

3.2 Educational Value. Families with children (n=22) universally cited educational benefits:

“My kids understand where food comes from. They’ve witnessed the whole life cycle, learned responsibility through daily care, and developed empathy for animals.” (Participant 45, Pacific Northwest)

3.3 Negotiating Regulations and Relationships. Navigating municipal regulations and neighbor relationships emerged as significant challenges:

“Getting the permit was straightforward, but keeping peace with one particular neighbor has been ongoing diplomacy. Giving them free eggs helps.” (Participant 19, Midwest)

4. Practical Challenges and Adaptations

4.1 Time Commitment Reality. Time requirements emerged as the most frequently cited challenge (n=41, 82%):

“The daily care is minimal, maybe 10 minutes. But when something goes wrong—a predator gets in, or a bird gets sick—suddenly it’s very time-intensive.” (Participant 34, Pacific Northwest)

“Keeping BACs requires special planning. My Orpingtons eat nearly twice what standard birds consume, and their massive droppings mean more frequent coop cleaning. The flip side is that predators leave them completely alone—even neighborhood dogs keep their distance from these 12-pound behemoths. No raccoon is brave enough to take on my roosters.” (Participant 12, Eastern Seaboard, BAC owner)

4.2 Seasonal Variability. Participants described adapting to natural laying cycles:

“Winter egg production drops dramatically. You either accept buying eggs for a few months or install coop lighting, which raises ethical questions about manipulating their natural cycles.” (Participant 8, Eastern Seaboard)

4.3 Learning Curve and Resource Networks. Most participants (n=43, 86%) described a significant learning curve, mitigated by online communities:

“YouTube and Facebook groups were lifesavers. There’s always someone online who’s dealt with whatever weird chicken situation you’re facing at 11 PM.”
(Participant 14, Midwest)

5. Psychological and Emotional Benefits

5.1 Stress Reduction. An unexpected theme emerged around the stress-reducing properties of chicken keeping:

“Watching the chickens scratch and peck is meditative. After a stressful workday, I’ll sit with a cup of tea and just observe them. Better than therapy.” (Participant 31, Midwest)

“There’s something profoundly calming about my Australorps [BACs]. Their size makes them move more slowly and deliberately than smaller breeds. My blood pressure literally drops when I’m with them. After my heart attack, my cardiologist

actually wrote ‘BAC therapy’ into my recovery plan—jokingly, but I take it seriously. Spending time with these gentle giants is legitimately therapeutic.”

(Participant 25, Midwest, BAC owner)

5.2 Connection to Agricultural Heritage. Many participants (n=26, 52%) described chicken keeping as connecting them to family heritage:

“My grandmother kept chickens. When I collect eggs, I feel connected to her and generations of women in my family who did this same simple act.” (Participant 5, Eastern Seaboard)

5.3 Identity and Values Alignment. Chicken keeping frequently represented an expression of environmental and ethical values:

“It’s living my values around humane animal treatment, reducing my carbon footprint, and stepping outside the industrial food system, even if in a small way.” (Participant 47, Pacific Northwest)

Discussion

The findings of this study underscore the economic, environmental, and social benefits of backyard chicken keeping while also highlighting the practical challenges that accompany this practice. Our results provide empirical support for the growing movement toward urban and suburban poultry husbandry, illustrating how households recover their initial investments and experience broader benefits related to sustainability and well-being.

Economic Considerations

One of the most compelling findings is the financial feasibility of backyard chicken keeping. Despite an initial setup cost averaging \$487, most participants reported recouping their investments within 14 months through egg production and additional savings in food waste reduction and garden fertilization. This aligns with previous research on urban agriculture, which emphasizes self-sufficiency and cost savings as key motivators ([Mace & Knight, 2024](#)). Notably,

owners of Big-Ass Chickens (BACs) described a cost-benefit ratio due to the larger egg sizes and increased meat yield potential.

The study also highlights how economic motivations evolve over time. While rising commercial egg prices may initially drive adoption, many owners ultimately find additional value in food security, ethical treatment of animals, and sustainability. These findings suggest that policymakers and sustainability advocates could leverage economic incentives to promote backyard chicken keeping as a viable food security measure, particularly in urban settings.

Environmental and Sustainability Benefits

In addition to economic advantages, backyard chicken keeping contributes to environmental sustainability by reducing food waste and enhancing soil quality. Participants widely reported using chickens to process kitchen scraps, turning waste into high-quality compost that improved garden productivity. This finding complements existing literature on the role of urban agriculture in sustainable food systems ([Gržinić et al., 2023](#)).

The contribution of this study is the exploration of BACs in sustainability efforts. Owners of larger breeds emphasized their birds' dual-purpose roles, noting their ability to provide both eggs and meat. Furthermore, their robust size and temperament reportedly made them more resistant to predation, reducing flock losses. Future research could examine how breed selection influences long-term sustainability outcomes in urban poultry keeping.

Social and Psychological Benefits

Beyond economic and environmental factors, this study reveals the significant social and emotional benefits associated with backyard chicken keeping. Many participants reported stronger neighborhood connections facilitated by chicken ownership, with some even organizing community events centered around their flocks. This aligns with prior research on urban agriculture's role in fostering social cohesion ([Singh et al., 2022](#)).

Psychologically, many owners described their chickens as sources of emotional support, with several likening them to pets. Participants noted stress reduction, increased outdoor activity, and a sense of accomplishment in maintaining their flocks. These findings suggest that backyard

chicken keeping may serve as a form of therapeutic engagement, particularly for individuals seeking greater interaction with nature.

Practical Challenges and Considerations

Despite the numerous benefits, backyard chicken keeping is not without challenges. Time commitment emerged as a key issue, with participants spending an average of 28 minutes per day on maintenance tasks. While many found the routine manageable, unexpected events such as illness, predation, or extreme weather—could significantly increase time demands.

Navigating municipal regulations also posed a notable challenge. Many participants encountered restrictions on flock size, coop placement, and noise levels, requiring negotiation with local authorities and neighbors. These findings highlight the need for clear and accessible regulatory guidelines to support responsible backyard chicken keeping.

Seasonal variations in productivity were another important consideration. Egg production naturally fluctuates based on daylight hours and molting cycles, requiring owners to plan accordingly. Some participants mitigated these challenges by supplementing light exposure or adjusting flock composition to include breeds with higher winter laying rates.

Conclusion

This study supports the hypothesis that the benefits of backyard chicken keeping outweigh the challenges. However, success depends on household-specific variables, including available space, time commitment, and municipal regulations. The inclusion of BACs as a focal point of this study provides unique insights into breed selection and its implications for economic and sustainability outcomes.

Future research should further explore the long-term impacts of backyard chicken keeping on food security, community engagement, and mental health. Additionally, policymakers should consider strategies to facilitate responsible poultry keeping through supportive legislation and educational resources. By addressing these factors, backyard chicken keeping can continue to grow as a viable and sustainable practice in urban and suburban communities.

References

- Ayala, A. J., Yabsley, M. J., & Hernandez, S. M. (2020). A Review of Pathogen Transmission at the Backyard Chicken–Wild Bird Interface. *Frontiers in Veterinary Science*, 7, 539925. <https://doi.org/10.3389/fvets.2020.539925>
- Bist, R. B., Bist, K., Poudel, S., Subedi, D., Yang, X., Paneru, B., Mani, S., Wang, D., & Chai, L. (2024). Sustainable poultry farming practices: A critical review of current strategies and future prospects. *Poultry Science*, 103(12), 104295. <https://doi.org/10.1016/j.psj.2024.104295>
- Fischer, B., & Milburn, J. (2019). In Defence of Backyard Chickens. *Journal of Applied Philosophy*, 36(1), 108–123. <https://doi.org/10.1111/japp.12291>
- Gržinić, G., Piotrowicz-Cieślak, A., Klimkowicz-Pawlas, A., Górny, R. L., Ławniczek-Wałczyk, A., Piechowicz, L., Olkowska, E., Potrykus, M., Tankiewicz, M., Krupka, M., Siebielec, G., & Wolska, L. (2023). Intensive poultry farming: A review of the impact on the environment and human health. *Science of The Total Environment*, 858, 160014. <https://doi.org/10.1016/j.scitotenv.2022.160014>
- Italie, L. (2025). Soaring egg prices have more people looking into backyard chickens | AP News. *AP News*.
- Jeni, R. E., Dittoe, D. K., Olson, E. G., Lourenco, J., Seidel, D. S., Ricke, S. C., & Callaway, T. R. (2021). An overview of health challenges in alternative poultry production systems. *Poultry Science*, 100(7), 101173. <https://doi.org/10.1016/j.psj.2021.101173>
- Kagaya, S., Widmar, N. O., & Kilders, V. (2025). The price of attention: An analysis of the intersection of media coverage and public sentiments about eggs and egg prices. *Poultry Science*, 104(1), 104482. <https://doi.org/10.1016/j.psj.2024.104482>
- Mace, J. L., & Knight, A. (2024). From the Backyard to Our Beds: The Spectrum of Care, Attitudes, Relationship Types, and Welfare in Non-Commercial Chicken Care. *Animals*, 14(2), 288. <https://doi.org/10.3390/ani14020288>
- Schindler, S. B. (n.d.). *Of Backyard Chickens and FrontYard Gardens: The Conflict Between Local Governments and Locavores*.

Singh, M., Mollier, R. T., Paton, R. N., Pongener, N., Yadav, R., Singh, V., Katiyar, R., Kumar, R., Sonia, C., Bhatt, M., Babu, S., Rajkhowa, D. J., & Mishra, V. K. (2022). Backyard poultry farming with improved germplasm: Sustainable food production and nutritional security in fragile ecosystem. *Frontiers in Sustainable Food Systems*, 6, 962268.
<https://doi.org/10.3389/fsufs.2022.962268>