

ASSESSING RESIDENT KNOWLEDGE AND ATTITUDES TOWARDS URBAN LANDSCAPE FERTILIZER ORDINANCE IN HERNANDO COUNTY, FLORIDA

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INTRODUCTION

In Florida, more than 100 county and municipal ordinances regulate residential fertilizer application, restricting it to certain times of the year. These restrictions often vary by area, governing the types of fertilizer used, their placement, and the timing of application.

As a case study, this investigation focused on Hernando County, where recent amendments to the existing ordinance expanded seasonal restrictions.



Figure 1. Geographic Location of Hernando County, FL (indicated in red)

OBJECTIVES

The goal of this research is to understand Hernando County residents' fertilizer usage behaviors and attitudes towards current fertilizer ordinance.

Specific objectives include:

- Investigate and analyze the **fertilizer usage behaviors** among Hernando County residents.
- Examine residents' **knowledge and perceptions of existing fertilizer ordinances**.
- Identify prevalent **concerns or misconceptions** regarding fertilizer application practices and the fertilizer ordinance.

METHODS

The research employed both **quantitative** and **qualitative** methods, including an online survey and focus groups.

Survey

- Administered online via the Qualtrics platform.
- Offered incentives for participation.
- Included questions on lawn care knowledge, awareness of the county fertilizer ordinance, current landscape condition, and fertilizer use practices.
- Distributed through County Extension and County Utilities networks.
- Targeted only Hernando County residents.

Focus Groups

- Conducted sessions both in person and online.
- Offered incentives for participation.
- Used an independent facilitator.
- Discussed current fertilizer application practices, understanding, and concerns related to the ordinance.
- Invited participants directly from the survey pool.



Figure 2. Flyer to recruit survey participants

QUANTITATIVE RESULTS

A total of 740 responses were collected, with **383 valid responses** after considering the screening questions, achieving a **95% confidence level**.

Based on these valid responses, most of respondents were:

- White (87%) , female (55%) , and college educated (75%).
- Work full-time (48%) and reside in urban or suburban areas (60%).
- Fertilize their lawns themselves and make fertilizer application decisions for their properties (73%) .

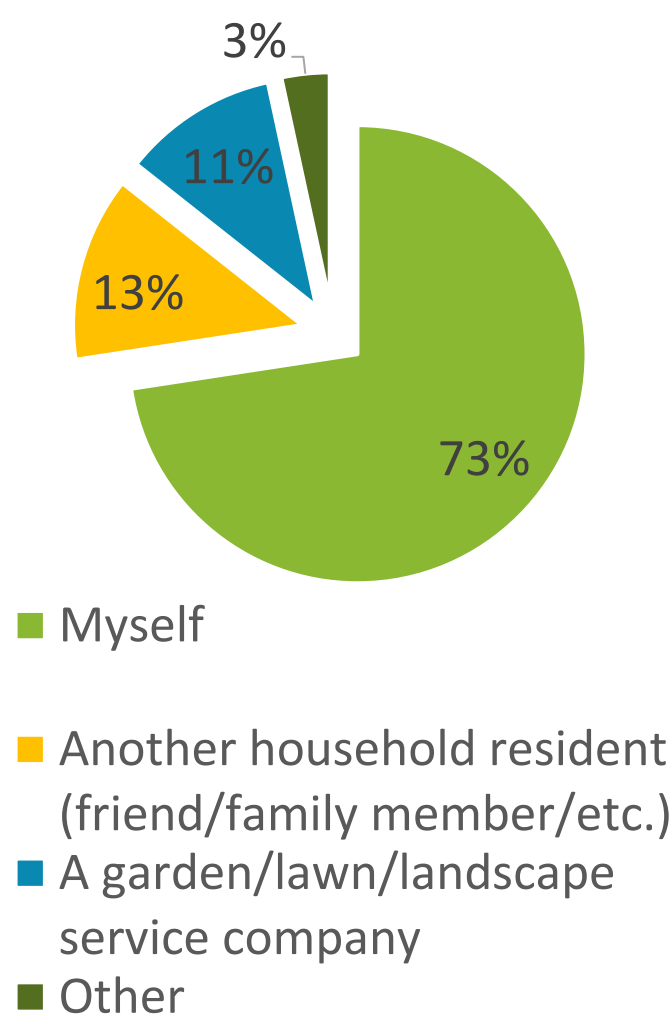


Figure 3. Who primarily manages the lawn

Knowledge of Lawn Care Practices

Most respondents understood the meaning of "N-P-K" (Nitrogen-Phosphorus-Potassium) ratios indicated on fertilizer bags, but they were less knowledgeable related to questions involving fertilizer application procedures and irrigation practices.

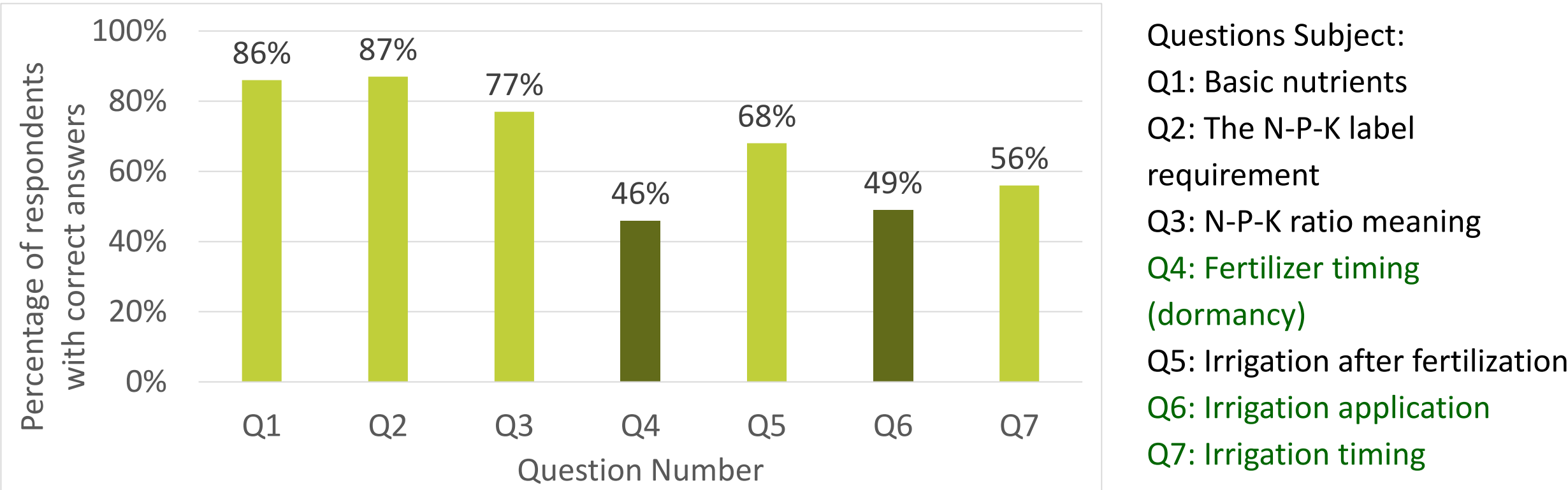


Figure 4. Residents' Knowledge of Proper Lawn Care Practices

Knowledge of Residential Fertilizer Ordinance

Respondents were asked about their knowledge of the recently expanded residential fertilizer ordinance. Approximately 51% of respondents reported they were not familiar with Hernando County's residential fertilizer ordinance.

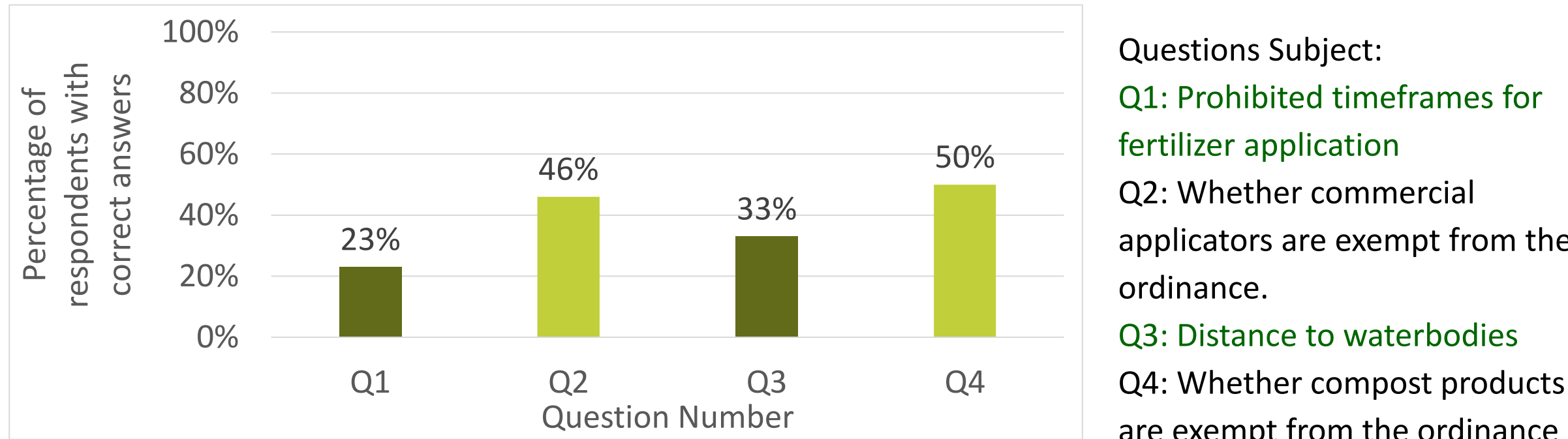


Figure 5. Residents' Knowledge of Expanded Residential Fertilizer Ordinance

Current Landscape Condition

Approximately half of the respondents reside on properties ranging from one-fourth to one-half acre. On average, their landscapes consist of 52% turfgrass, 26% annual/perennial plants, and 22% naturalized/forest areas.

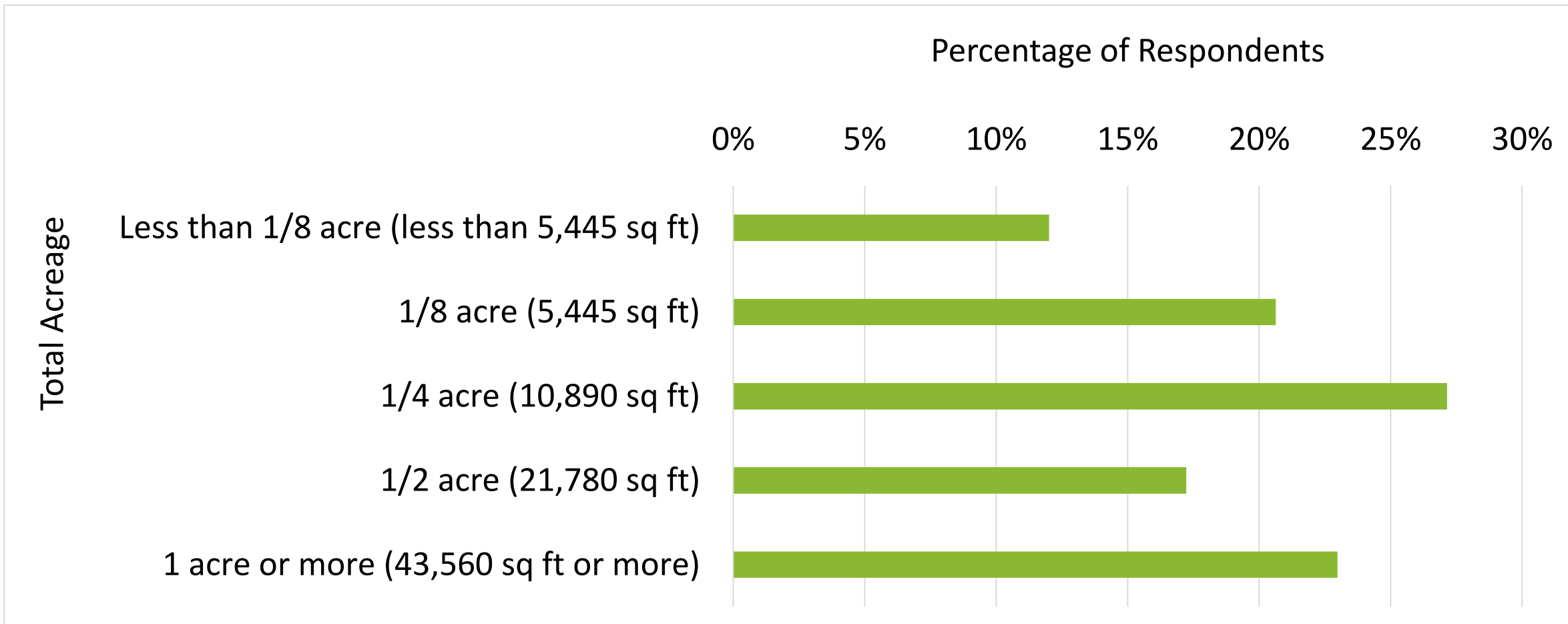


Figure 6. Home Lot Size

Residential Fertilizer Use Behavior

Respondents most often fertilize their lawns in April, May, and October. 65% indicated that they had not tested their soil within the last 12 months.



Figure 7. Fertilizer Application by Month

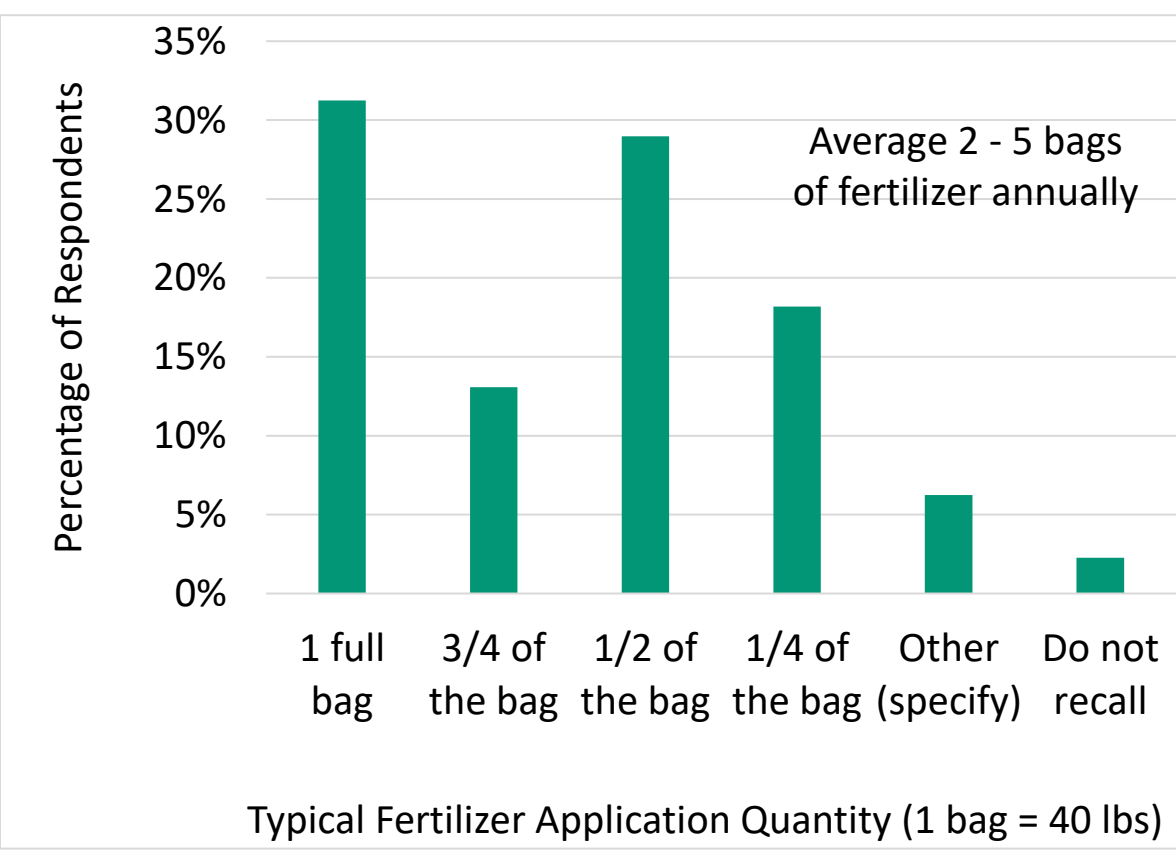


Figure 8. Bags of Fertilizer Used per Application

QUALITATIVE RESULTS

Sixteen residents participated in the focus groups. The majority reside in suburban and rural areas within Hernando County. Key findings include:

- Most were unaware that the current ordinance was an expansion of a previous one.
- Most participants were unaware of key details of the current residential fertilizer ordinance.
- Participants expressed strong support for the ordinance's environmental goals, particularly its potential to reduce stormwater runoff and protect local ecosystems.
- Questions arose regarding mechanisms for identifying violations, consistency and fairness of enforcement, and provisions for educating violators before imposing penalties.
- Participants expressed interest in receiving more detailed and accessible information on both ordinances and best practices for fertilizer use.

DISCUSSIONS

Fertilizer Application Education

- Many respondents lack understanding of proper fertilizer and irrigation practices. Extension professionals could develop comprehensive education programs on best practices.

Soil Testing Practices

- Most respondents do not test their soil, despite its importance and availability at local Extension offices. Enhanced outreach could promote these services and their benefits.

Awareness of Fertilizer Ordinances

- There is a significant knowledge gap regarding local residential fertilizer ordinances. Targeted awareness campaigns should clarify differences between residential and agricultural regulations and prohibited timeframes.

Enforcement Clarity

- Residents need clear information on ordinance enforcement and penalties. Providing straightforward information can foster trust and encourage cooperation, leading to better adherence.

Communication Strategies

- Expanding communication through social media, local newspapers, and community meetings is essential. Special attention should be given to rural communities and homeowner associations.

LIMITATIONS AND FUTURE WORK

The focus group lacks diverse representation, particularly from urban and homeowner association communities. Including these groups in the future efforts is crucial for a comprehensive understanding of fertilizer ordinances and lawn care practices. Additionally, comparing findings with other counties or state averages could provide valuable insights.

CONCLUSIONS

The results of this study indicate a lack of public awareness and understanding surrounding fertilizer ordinances and practices. Extension professionals, subject matter experts, policy makers, and community leaders have an opportunity to utilize these findings to better inform the public on fertilizer policy and recommendations.