

## Introduction

- Residents and visitors at Marion county lake may have conflicting opinions on how the park is utilized and managed.
- Public outreach can be used to find a better understanding of how the visitor and residents want to see the park and lake managed.
- It is important to understand the desires of both residents and visitors to establish best use and management practices.



(Figure 1) Species identification

## Methods

- General research on visiting population of the park and lake
- Production of signage after certification for surveys
- Distribution of surveys via signs and social media
- Collection of data
- Analysis of statistically important data
- Look at new concerns and conclude results



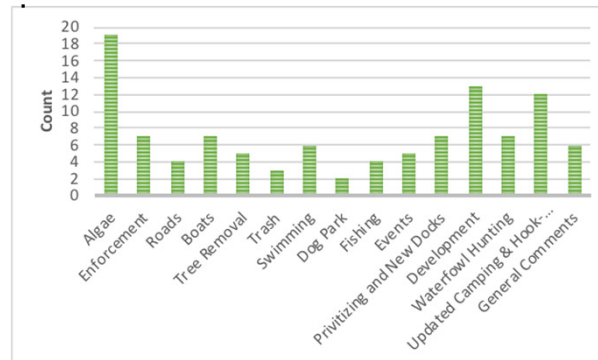
((Figure 2) Informational brochures



(Figure 3) Park and Lake office

## Results

- Of 180 survey respondents, 55% were visitors and nearly 50% reported visiting the park multiple times per week
- Visitors and residents differed significantly in where they seek information on the park and the type of information sought
- $F(3, 659) = 131.2, p < 0.01$
- Stakeholders reported seeking information on water quality, events, and general park information
- Most respondents' suggestions to improve the park concerned controlling algae, limiting development, and updating campsite infrastructure (Fig, 4)
- When asked about items and practices that potentially impact blue-green algae, visitors and residents disagreed the most concerning geese
- Residents had less favorable opinions about the presence of geese at the lake than visitors
- Many respondents reported willingness to alter their own behavior and support for buffer strips to mitigate blue-green algae



(Figure 4) Resulting data



(Figure 5) Blue-green algae awareness

## Conclusion

- The number one issue was the large amount of Blue-Green Algae (cyanobacteria) present in the lake; which can be minimized by using an established buffer strip located at the inflow of the lake to settle any fertilizer from upstream by trapping sediment and allowing nutrient infiltration.
- While social media outreach proved to provide a significant amount of public outreach, preferred posts were in relation to Park and Lake events and water quality updates.
- While Marion County Park and Lake has county and federal level regulations there was a significant need for increased enforcement of the rules and regulations.
- Quality visitor outreach could increase awareness of the impacts to the Lake's environment while minimizing the impacts on the park's positive image.

## Acknowledgments

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