



Identifying aquaponics information gaps: An examination of educational resources available to home hobbyists in Minneapolis garden center sites

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Introduction

Aquaponics home hobbyists may rely on garden centers as an important source of materials and information. Our study evaluated garden center staff knowledge about aquaponics in order to help the staff close their own information and training gaps, and strengthen their exchanges with home hobbyists. Over time this will strengthen the aquaponics network of garden centers and home hobbyists and enhance the diffusion of aquaponic systems.

Research Questions

What aquaponics information and assistance is available at garden center market sites for home hobbyists in Minneapolis?

Is there a difference between small business versus big box store garden centers and if so, how do they differ?

What are the common gaps in aquaponics information at these potential assistance and diffusion sites in the aquaponics network?

Methods

27 independent and 3 big box garden centers within 19 Minneapolis zip codes were identified using yellowpages.com.

12 retail market sites remained in the sample.

Excluded were stores closed for the season, permanently closed, only accessible with an appointment, and with out a true garden center.

Surveys were distributed to the manager or owner of each garden center willing to participate for a response rate of 58% (n=7).

The survey included eleven questions with sub-questions, designed to evaluate the level of physical and biological aquaponic system information available to Minneapolis home hobbyists at these sites.

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Findings & Discussion

Minimal aquaponics information available at small or big box garden center nodes. On average the level of personal and employee comfort explaining home aquaponics systems was low, 2/5 and 1.4/5 respectively.

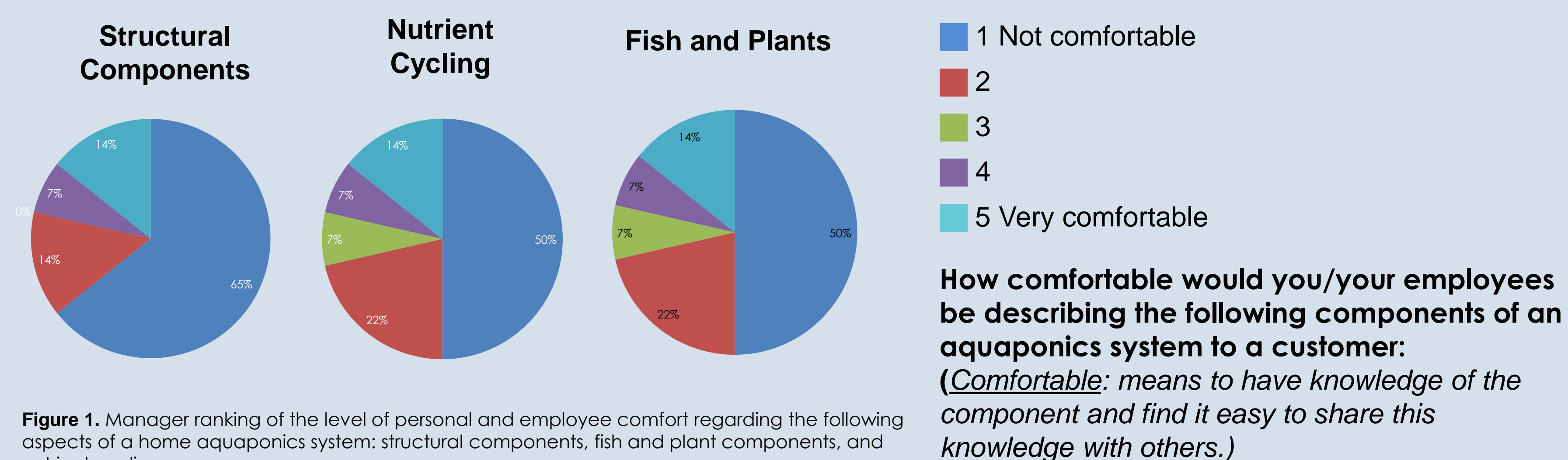


Figure 1. Manager ranking of the level of personal and employee comfort regarding the following aspects of a home aquaponics system: structural components, fish and plant components, and nutrient cycling

Small garden centers are closing, reducing the potential aquaponics network nodes to support diffusion.

Network nodes are disappearing due to independent garden centers going out of business; 2014-15 had a 25% decrease in the Minneapolis, MN area (4/17). Therefore, customers have fewer options of where to go to get information. This decreases the information being shared and the diversity in knowledge.

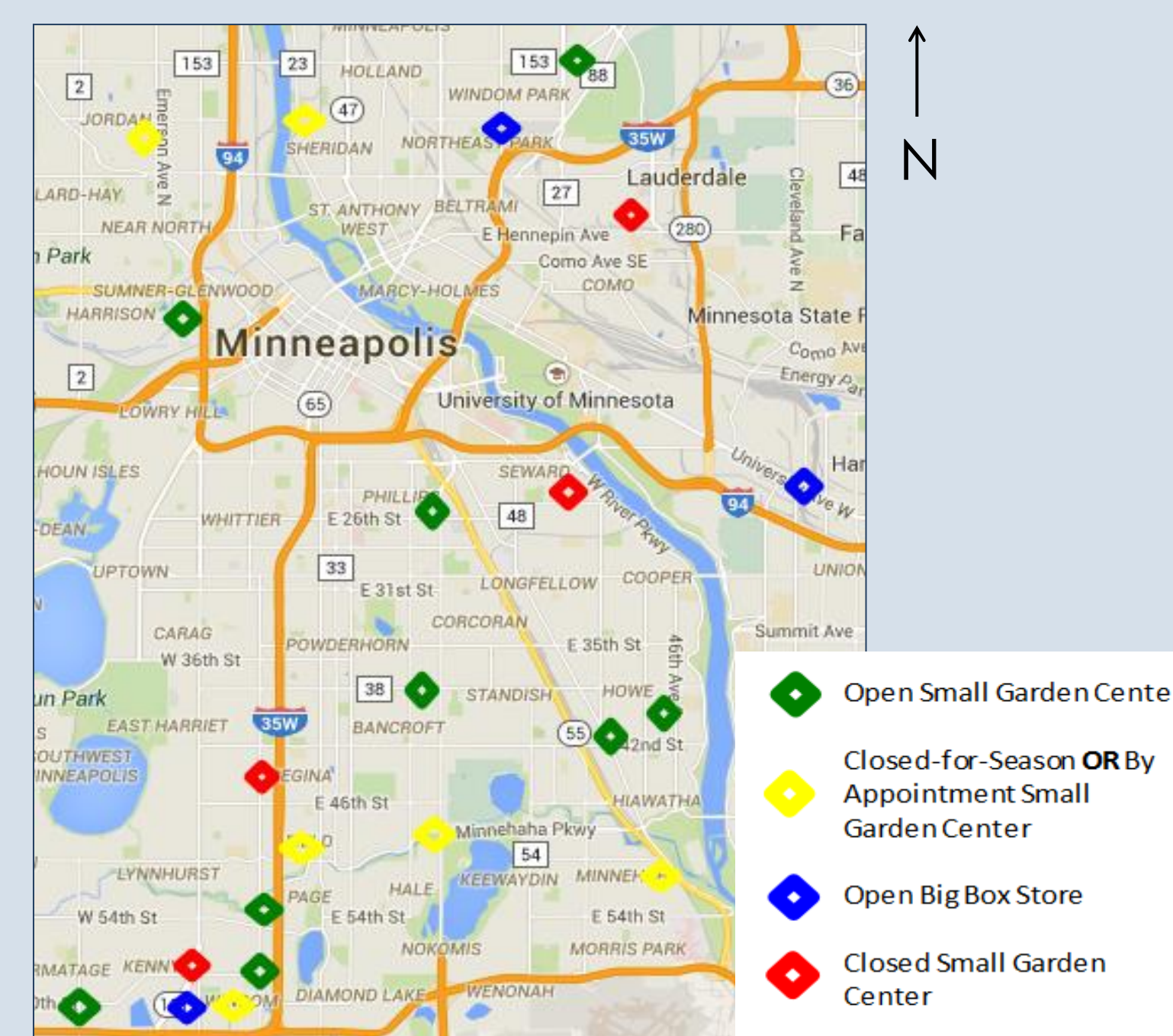


Figure 2. Map of all big box and small independent garden centers in Minneapolis zip codes included in the study population, 2015. (n=22)

Differences between independent and big box garden centers. Big box stores rated their familiarity with aquaponics and their employees comfort level with aquaponics higher than small garden centers. Overall, they seemed more open to discussing aquaponics and more interested in learning about the topic. This adaptability will give big box stores an advantage in the aquaponics market.



Figure 3. Average rank of manager familiarity and employee comfort at big box stores versus small independent garden centers, Minneapolis, 2015.

Recommendations

Educate a few key managerial staff on the basics of aquaponics and identify currently stocked merchandise that can be utilized in aquaponics systems.

Identify several staff members as reference points for the rest of staff. This could also include training employees about where to direct customers when the store does not supply what they're looking for.

Expand aquaponics networks for home hobbyists by providing ongoing training at the market site. In doing so consumers will be more effective and return.

References

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