

ORGANIC LANDSCAPING IS SUSTAINABLE BUSINESS

A Report by the

Neighborhood Network Research Center, Inc.

On the State of Long Island's Organic Landscaping



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We would like to thank the Long Island Community Foundation for their generous grant that made this report possible, and supported our work to promote safer, non-toxic methods of lawn care.

Thanks also to the many organic landscapers who agreed to be interviewed for our survey, and who provided invaluable information about their businesses and insights into the state of the industry.

INTRODUCTION

The objective of this report is to provide evidence regarding general trends in the organic landscaping industry based on information gathered by interviewing companies that are included on the *Neighborhood Network Organic Landscaper List*. The report provides a general background of the organic landscaping industry on Long Island, an analysis of its growth, and the development of conclusions based on the data and information that has been collected through the examination of numerous Long Island organic landscaping companies. It is the Neighborhood Network's belief that there exists great opportunity for development of the organic landscaping industry on Long Island. This report will demonstrate that there has been wide adoption of organic alternatives by the landscaping industry and that organic landscapers on Long Island are increasing their business and hiring more employees.

At this time there is growing concern about the detection of pesticides in Long Island's groundwater, and rising calls for regulatory action. A coalition of environmental groups is calling for a new regional entity to manage the protection of Long Island's aquifers and 'zero-tolerance' for continued use of pesticides detected in Long Island's groundwater. This report demonstrates that the organic approach to lawn care on Long Island, in addition to being environmentally preferable, is also economically viable. The confirmation of the success of businesses that eschew the use of toxic, synthetic pesticides creates a strong argument that the pesticides that pose the greatest threat to our groundwater can be strictly regulated or banned, without impeding the ability of Long Islanders to maintain healthy, green lawns, and without causing undue economic hardship to Long Island's landscaping industry.

BACKGROUND

Long Island Pesticide Use Management Plan

The 2011 Draft Long Island Pesticide Use Management Plan (LIPUMP) provided a comprehensive overview of the state of knowledge concerning pesticide detections in Long Island groundwater. (Palmer, 2011) Nearly three million Long Islanders are completely dependent on underlying groundwater resources for all their freshwater needs. The regional use of millions of pounds and hundreds of thousands of gallons of pesticides annually underscores the critical need to properly manage the use of pesticides in Nassau and Suffolk counties. Groundwater surveillance activities during

the past 32 years have revealed the presence of pesticide-related contaminants in groundwater underlying Nassau and Suffolk counties in thousands of instances. In total, approximately 116 pesticides and pesticide degradates have been discovered, many of which are currently prohibited from being used in Nassau and Suffolk counties. LIPUMP recognizes that while relatively few pesticides currently require attention, public health and environmental quality risks involved with the use of any pesticide can be significantly minimized with an integrated pest management approach that involves transitioning to effective pest management options other than conventional pesticides that are likely to enter and contaminate groundwater. (Palmer, 2011)

The LIPUMP has been renamed the **Long Island Pesticide Pollution Prevention Strategy**. (NYS DEC, 2013)The Strategy released as a draft in early 2013, drew criticism from community activists as being less protective of water quality than the Draft LIPUMP. (Esposito, 2013) As of the writing of this report, the final version has not been released by the DEC.

Neighborhood Network

The Neighborhood Network (NN) has a long track record of successful efforts that have both reduced the amount of pesticides used on Long Island and increased the adoption and use of organic alternatives.

In the past, the NN has been a part of some of the most far-reaching legislative efforts in the landscaping industry, including the **48-hour Neighbor Notification of Pesticide Spraying Law** as well as the **Safe School Grounds Bill**. In addition, the NN has been a primary contributor to a number of initiatives that have been implemented in many locations across Long Island, including the **4 Steps to a Toxic Free Organic Lawn** educational forum which provide ordinary homeowners an introduction to organic landscaping and lawn care. These initiatives and outreach activities have helped to maintain the NN reputation as a nonpartisan and pragmatic partner on these issues, positioning the organization as a trusted source of good information for both the general public and landscaping industry.

The NN began working on pesticide issues after learning of outrageous incidences of pesticide drift crossing property lines and exposing neighbors, including vulnerable children, the elderly, and pets. In 1991, the **NN Pesticides Project** was launched and since that time the **NN Research Center** has been educating Long Islanders about, and encouraging the use of, non-pesticide pest control alternatives. In 1995, the NN published and distributed **Pesticides & Children: Avoiding the Risks**, one of the first highly publicized educational initiatives to draw attention to the special risks pesticides pose to children. In 1998, the NN began the **Pesticide Alternatives Project**, which focused on the availability of alternative

and organic lawn and garden maintenance products. As a part of this project, we organized staff and volunteers to complete a survey of over 100 stores from across Long Island that sell lawn and garden supplies. The results of our research were published in the report, **Choosing Family Safe Alternatives, A Survey of Low Risk Lawn Care Product Availability**. In May of 2000, a follow-up report entitled **Finding Family Safe Alternatives** was published that found that most stores selling toxic pesticides provide few, if any, safer alternatives to chemical pesticides. Fortunately however, we did find that those stores that sell organic products were increasing their selection of alternatives and are getting positive responses from their customers.

The Neighborhood Network also worked to promote non-toxic approaches to golf course maintenance. The **Organic Golf** project brought together golf course superintendents with environmental and health advocates and opened up the idea of innovative non-chemical turf care in the Long Island golf industry. Two successful lawsuits brought by the NN challenged chemically dependent golf courses planned by municipalities in New York State. The staff of the NN worked with the developers of the acclaimed Sebonac Golf Club to develop a maintenance protocol based on organic principles, which stringently limits use of synthetic pesticides.

Since 1995, the NN has compiled and distributed the **NN Organic Landscaper List**—a directory of landscapers that serve Long Island and can provide completely organic service to their customers. In order to be included on the List, companies must demonstrate training in and knowledge of organic practices, and sign an agreement to provide 100% organic service to clients who contact them through the listing. In its inaugural year the list contained only 6 organic landscapers, but has since grown to include 34 companies in 2011 and 38 companies in 2012. In 1999, the Neighborhood Network organized the first of its kind Organic Trade Show. Now in its 13th year, and renamed the **Organic Turf and Tree Show**, it is one of the oldest and largest event committed to organic horticulture in the Northeast. It features vendors of 100% non-chemical products and services for turf care, and a full day of DEC accredited classes that educate professionals about the latest in methods of caring for turf and ornamental plants without the use of chemical pesticides or synthetic fertilizers. Over 200 green industry professionals attend the show each year.

Our work on the **Organic Landscaper List** and **Organic Turf and Tree Show** has allowed us to create trusted relationships with many of the individuals and companies in the organic landscaping industry. This report was possible due to the cooperation of members of the industry.

METHODS

The companies included in the *NN Organic Landscaper List* differ in size, type, and location to provide a diverse population in which representative data was collected. This data was analyzed to make general assumptions about trends reminiscent of the Long Island organic landscaping industry. The NN conducted outreach efforts to contact the 38 individual *Organic Landscaper List* participants to ask them questions about aspects of their business. *Organic Landscaper List* participants were also asked to voice their major concerns in regards to the organic landscaping industry, and to give their interpretation of how the industry has progressed over the years and what presence they expect it to have in the future. In addition, *Organic Landscaper List* participants were asked to provide information relating to general trends that they perceive in the industry, their customer base, the size of their business, and specific products and techniques that they utilize in order to maintain customer retention.

The process for collecting information was extensive, but not exhaustive, and it is important to note that this study was not conducted to be a scientific analysis of the entire landscaping industry on Long Island. Rather, it was conducted to provide a platform in which general observations about the organic landscaping industry could be made based on the opinions and experiences of a large portion of that industry. It is relevant to note that not all *Organic Landscaper List* participants provide 100% organic services to all of their customers. Some are exclusively organic, but others provide 100% organic services to some clients and more conventional service to others. All provide 100% organic services to at least a significant portion (more than 5%) of their customer base. This characteristic of the *Organic Landscaper List* has helped to provide a well-diversified set of landscaping companies in which representative data could be collected for our analysis and the formulation of our reports conclusions.

The data used in this report was obtained in the summer of 2012, by telephoning companies on the *Organic Landscaper List* and asking them eight questions about specific aspects of their business. These questions were formulated based upon questions asked of *Organic Landscaper List* participants in the past, as well as questions that the NN believed were relevant to this study. Most of the companies on the list were engaged in the questions and indulged with follow up commentary that was used to complement the overall conclusions of this report. The individual phone conversations lasted anywhere between 10-40 minutes per company, and the overall opinions expressed in each conversation often differed in detail but maintained aspects of scope; that is, all respondents refrained from talking about issues that were not directly related to aspects of their business or the organic landscaping industry in particular. Of the 38 companies on the *Organic Landscaper List*, a total of 27 (71%) provided a response.

We believe that this high level of response is sufficient to make general assumptions about the state of the organic landscaping industry on Long Island.

After the data from the *27 Organic Landscaper List* participants was collected, it was consolidated and included in an Excel sheet that was created for this report. After the information was recorded into the Excel sheet it was further refined to yield a matrix table in which all information could be viewed in a single table. This matrix table separated the eight questions into different categories that allowed us to compare aspects of the different companies. A direct and indirect analysis of the data was carried out to draw conclusions as they pertain to the survey respondents. These conclusions were then extrapolated to include the entire organic landscaping industry on Long Island, which was determined based on the size and number of organic landscapers contained on the NN list and similar lists maintained by Grassroots Environmental Education (Grassroots), and the New York State Department of Environmental Conservation (DEC). It is assumed that the organic landscapers contained on these three lists (115 in total) are an accurate representation of the size of the organic landscaping industry on Long Island. Based on this information, general conclusions in regards to the organic landscaping industry on Long Island could be assessed and general assumptions about the trends apparent in the organic landscaping industry could be made.

RESULTS & ANALYSIS

The following is a summary of the analysis results based on the eight questions asked of the organic landscapers during survey collection.

Question 1: How many employees do you have?

Based on the data that was collected from the 27 responding organic landscapers, most respondents are small business owners that maintain a limited number of employees. The data shows that 13 (48%) respondents have 5 or fewer employees; 9 (33%) respondents have between 6-10 employees; and 5 (19%) respondents have more than 10 employees [FIGURE 1].

Based on the answers given by the responding companies, there are 219 full-time employees distributed amongst the 27 businesses. Collating these responses with the answers provided to Question 3 shows that 85 (39%) full-time employees are employed by companies that provide strictly organic services to 100% of their customers; 11 (5%) full-time employees are employed by companies that provide strictly organic services to 66-99% of their customers; 14 (6%) full-time employees are employed by companies that provide strictly organic services to 33-66% of their customers; and 109 (50%) full-

time employees are employed by companies that provide strictly organic services to 5-33% of their customers [FIGURE 2].

Percentage of Respondents by Number of Employees

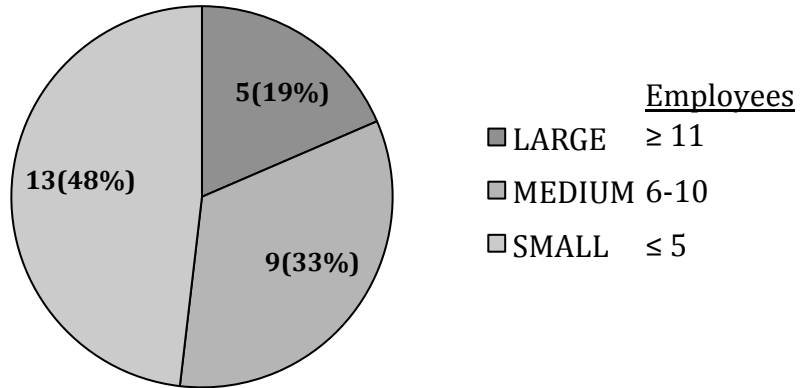


FIGURE 1: Distribution of Responding Companies by Number of Employees

Extrapolating these results to the approximately 115 landscaping companies included in the NN, Grassroots and DEC lists, there are an estimated total of approximately 900 full-time employees that are employed in the organic landscaping industry on Long Island.

Employees by Company Organic Customer Base Percentage

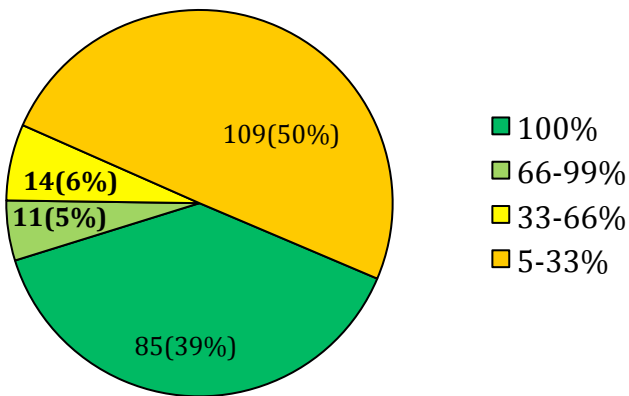


FIGURE 2: Workforce by Company Percent of Customers Receiving 100% Organic Services

Question 2: Do you currently have a greater or less number of employees than in the past?

Based on survey responses, trends in market expansion as demonstrated by additional employee hiring is mostly neutral. The data shows that 9 (33%) companies stated that they have not recently gained or reduced employees; 9 (33%) stated that they have recently reduced the number of employees; and 9 (33%) companies stated that they have recently hired additional employees. Comparison of recent hiring with the answers to Question 3 shows no difference in experience based on the extent of a company’s customer base that receives organic service. For companies who provide strictly organic services to 100% of their customers there is no net change in the size of their workforce; for companies who provide strictly organic services to 66-99% of their customers there is no net change in the size of their workforce; for companies who provide strictly organic services to 33-66% of their customers there is a slight increase in the size of their workforce; and for companies who provide strictly organic services to 5-33% of their customers there is a slight decrease in the size of their workforce [FIGURE 3].

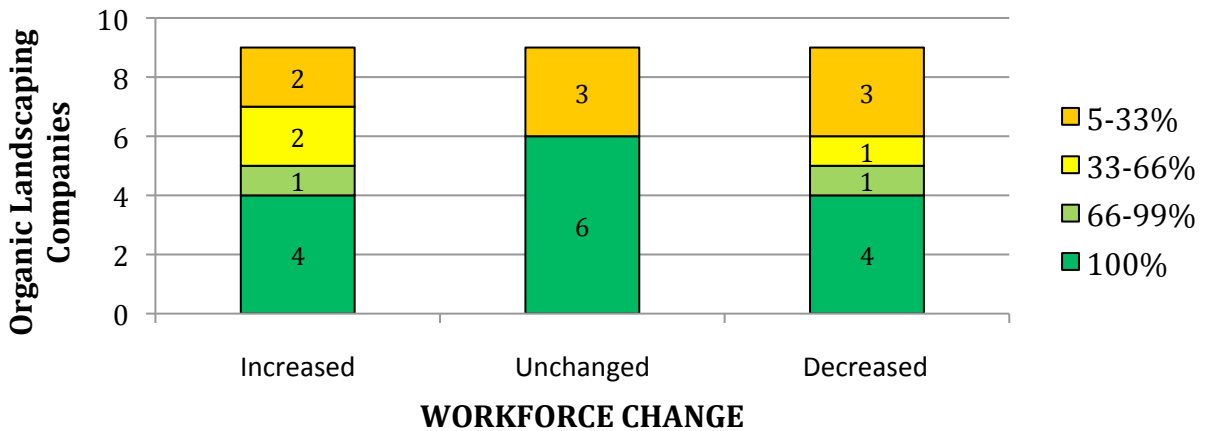


FIGURE 3: Workforce Change by Percent of Organic Services Provided to Customers

Question 3: How many of your customers utilize strictly organic services?

Inclusion on the Organic Landscaper list and in the survey does not require that a company’s entire customer base receive organic services, only that any customer contacting the company through the listing be provided with strictly organic services. Based on the data that was collected from the 27 respondents, most of the companies that responded provide strictly organic services to 100% of their customers. The data shows that 14 (52%) companies provide strictly organic services to 100% of their customers; 2 (7%) companies provide strictly organic services to 66-99% of their customers; 3 (11%) companies provide strictly organic services to 33-66% of their customers; and 8 (30%) companies provide strictly organic services to 5-33% of their customers [FIGURE 4].

The responding companies are made up primarily of specialized organic companies (slightly more than half). The next largest group is companies that offer primarily conventional services, but have some customers receiving strictly organic service, making up less than one-third of their customer base. For these companies, organic service is either a small side-line, or a premium service. Companies between these extremes are rare; less than 20% of the responding companies provide strictly organic service to more than a third of their customers, but are not fully specialized in organic service.

Companies by Organic Customer Base Percentage

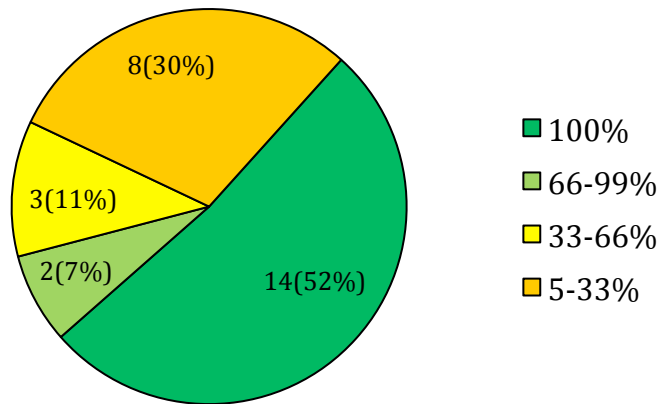


FIGURE 4: Company Distribution by Percent of Customers Provided Exclusively Organic Services

Question 4: How many customers do you have?

According to the answers from the 27 respondents, there are a total of 7,422 customers on Long Island that utilize their services. The data shows that of these 7,422 customers, 1,487 (20%) customers are retained by listed companies who provide strictly organic services to 100% of their customers; 450 (6%) customers are retained by listed companies who provide strictly organic services to 66-99% of their customers; 400 (5%) customers are retained by listed companies who provide strictly organic services to 33-66% of their customers; and 5,085 (69%) customers are retained by listed companies who provide strictly organic services to between 5-33% of their customers [FIGURE 5].

Based on this information and the information collected from question 2, we were able to conclude that of these 7,422 customers of companies included on the *Organic Landscaper List*, 3,276 receive strictly organic services from listed companies. Of these 3,276 customers, 1,487 (45%) customers retain the services of a company that provides strictly organic services to 100% of their customers; 358 (11%) customers retain the services of a company that provides strictly organic services to 66-99% of their customers; 203 (6%) customers retain the services of a company that provides strictly organic

services to 33-66% of their customers; and 1,228 (37%) customers retain the services of a company that provides strictly organic services to between 5-33% of their customers [FIGURE 6]. We found that the responding companies that provide primarily conventional service to most of their customers have a larger overall customer base. However, the majority (56%) of Long Island consumers receiving strictly organic yard care are serviced by companies that primarily provide organic service, and almost half (45%) are serviced by companies completely specialized in organics.

Total Customers by Company Organic Customer Base

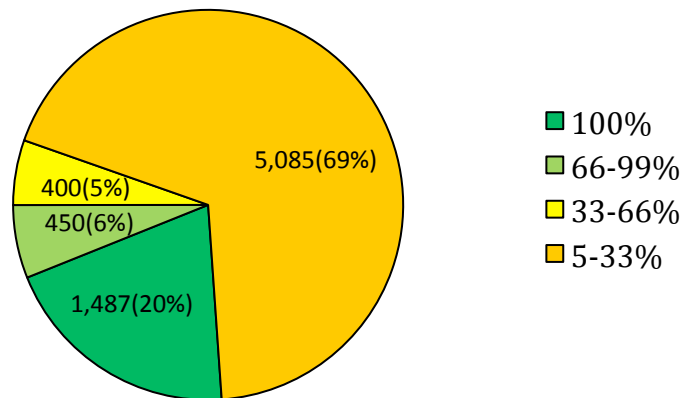


FIGURE 5: Total Customers by Company Percentage of Customers Receiving Strictly Organic Services

Extrapolating these results to include the approximately 115 landscaping companies included in the NN, Grassroots, and DEC lists, there are an estimated total of approximately 32,000 customers who utilize the services of organic landscaping companies, and approximately 14,000 customers who utilize strictly organic services from organic landscaping companies on Long Island.

Number of Organic Customers by Company Organic Customer Base

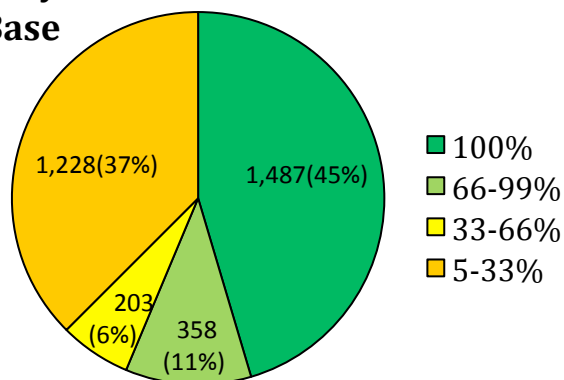


FIGURE 6: Strictly Organic Customers by Company Percentage of Customers Receiving Strictly Organic Service

Question 5: Are your organic customers satisfied with their lawns?

The 27 responding companies reported that there are typically high levels of satisfaction amongst customers in regards to the perceived results from organic service and landscaping activities. The data shows that 14 companies stated that all of their organic customers are completely satisfied. Fewer than half (13) of the respondents reported instances of complaints or customers switching back to conventional landscaping after being unsatisfied with the results of organics. The issues with customer satisfaction explicitly voiced by respondents involved unrealistic customer expectations and time required to achieve results. Of the 13 companies reporting any customer satisfaction issues, 4 companies cited customers with expectations that they were unable to obtain with organics. Just 2 companies noted that customers were sometimes less satisfied during the two to three years it takes to make the transition to organic landscape care. An important focus for organic landscaping companies is up-front communication with customers about possible aesthetic differences from chemically maintained lawns and realistic time frames for achieving results.

Question 6: Are you maintaining customers?

Based on the data that was collected from the 27 respondents, most responding companies have been able to retain adequate levels of customer retention by providing organic products and services. The data shows that 15 respondents stated that they are maintaining customers very well and have kept many of the same customers for many years. In some cases, landscapers have had to drop customers to keep their business specialized. Only 5 companies stated that they regularly do have some customers who switch to conventional lawn care; however, these customers are usually replaced by new organic customers. Only 2 companies reported that they are struggling to maintain customers and have had to make cuts in the size of their operations. Many of the responding companies expressed the opinion that the economy is to blame for lack of growth in their customer base.

Question 7: Are you growing your number of organic customers?

According to the answers received from the 27 respondents, a majority of companies are maintaining or growing the number of their organic customers. The data shows that 4 (15%) companies reported that they are growing at a fast pace; 13 (48%) companies reported that they are growing at a slow pace; 5 (19%) companies reported that they are experiencing neither positive or negative growth; and 5 (19%) companies reported that they are experiencing negative growth. 7 of those companies that

are experiencing slow-paced growth are providing organic services to 66-100% of their customers; 5 companies provide organic services to 5-33% of their customers; and 1 company provides organic services to 33-66% of their customers. It is relevant to note that 3 of the 4 companies who are experiencing fast paced growth provide organic services to 100% of their customers. It may also be significant that of the 14 companies who provide organic services to 100% of their customers, 12 (86%) are experiencing neutral or positive growth.

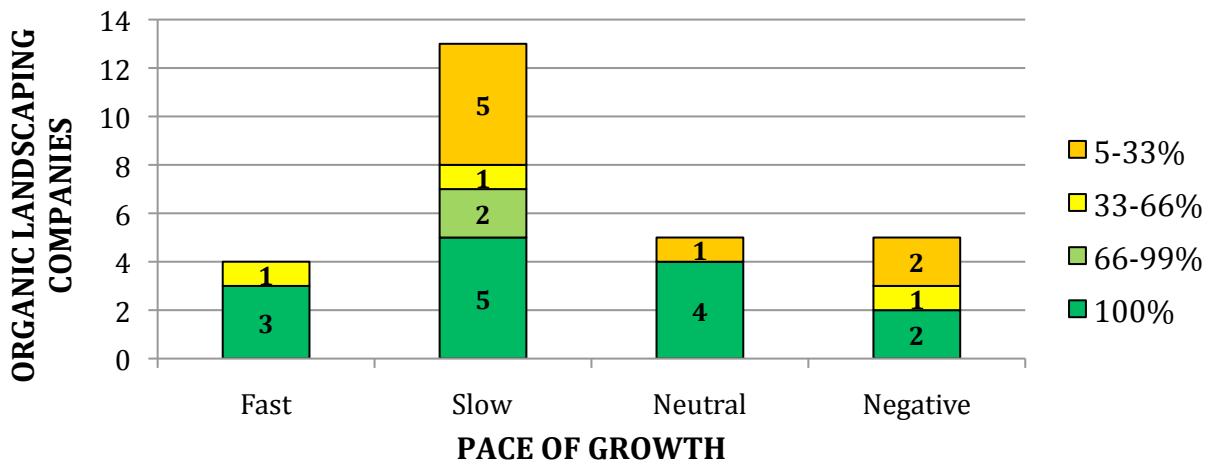


FIGURE 7: Reported Pace of Growth by Percent of Customers Receiving Strictly Organic Landscaping Service

Question 8: What are three of your go-to products or services?

Based on the data that was collected from the 27 respondents, the most common and effective techniques that are used by organic landscapers is the application of organic minerals and fertilizers, keeping the PH of the soil balanced, maintaining high levels of soil aeration, the use of native species, and most importantly a high level of information gathering and awareness of the site being treated. This high level of information and awareness includes taking a preliminary assessment of the property before performing any work, maintaining the property on a weekly to bi-weekly basis, as well as minimizing the exposure to synthetic or toxic chemicals. Among all products or services quoted by respondents, the importance of education and information was the most highly emphasized and commonly referenced aspect of successful organic landscaping.

CONCLUSIONS

The use of organic products and techniques in landscaping is a sustainable alternative to conventional, pesticide-based lawn care. The growth of the organic lawn care sector in just a couple of decades, and the resilience of companies using organic methods in the past few years of widespread economic difficulties resulting from the recession and slow recovery indicate that organic landscaping can be an economically feasible solution. This report provides empirical evidence that safer, organic yard care alternatives are being used by successful businesses today, which are effective in attracting customers and maintaining stable, if slow, growth. The current slow rate of growth could not be considered unusual in the current economy, and could be a reflection of the landscaping industry in general, although this study did not investigate the broader industry.

This study provides testimony from professionals in the field that, overall, landscaping businesses utilizing organic products and techniques are experiencing customer growth, and most are retaining or hiring new employees. This conclusion is based on the data that was collected from 27 *Organic Landscaper List* participants, which represent about 23% of the 115 companies that have been listed as providing organic services on Long Island, by independent non-profits or government agencies. The analysis of data from *Organic Landscaper List* participants shows that most of these companies provide strictly organic services to a majority of their customers. Furthermore, the majority of Long Island customers seeking strictly organic lawn care hire companies that provide organic care to most or all of their customers, rather than primarily conventional companies that also offer organic services.

Most companies included on the *Organic Landscaper List* are considered smaller operations with 5 or fewer employees. More than half of the companies that provide only organic service to all customers employ 5 or fewer workers. Based on these observations, and the responses from landscapers on common methods and materials used in organic landscaping, it is reasonable to conclude that the barriers to entry in the organic landscaping sector are low in terms of equipment and staff resources. According to the comments of those landscapers interviewed, education and training in organic methods is the most important requirement for an individual wanting to start an organic landscaping company, or an existing company wanting to transition from conventional to organic methods.

Because of this low barrier to entry, it is probable that as the economy recovers and concerns about groundwater contamination continue or grow, more companies will enter the organic landscaping

sector and it will employ more workers. However the availability of training focused on organic land care is necessary for this expansion.

The *Suffolk County Draft Comprehensive Water Management Plan* found that pesticides were detected in about 23% percent of the community supply wells tested. (Tomarken & Dawydiak, 2010) This finding and similar findings reported in the Draft LIPUMP (Palmer, 2011) have resulted in calls for reduced pesticide use, more stringent regulation of pesticides, and bans on pesticides that present the greatest risk or evidence of groundwater contamination, to protect drinking water quality. The recently completed Cleaner Greener Long Island Regional Sustainability Plan included recommendations for development of a regional entity to manage the aquifer system, continued groundwater monitoring, and curbing the use of pesticides. The fact revealed by our survey, that right now, companies that have completely eschewed the use of synthetic pesticides are maintaining customers and customer satisfaction is strong evidence that pesticides are not necessary for maintaining either green lawns or profitable businesses.

The relative ease of entry into the organic landscaping sector is important to bear in mind when considering the economic impact of stricter regulation of pesticides. Companies that now use pesticide dependent methods can convert their operations without great costs, and new companies specialized in non-pesticide dependent service can be established to take advantage of the new business environment. Therefore pesticides that threaten to contaminate drinking water or harm the ecology of the Long Island Sound, bays and other water bodies can be banned or strictly regulated without significant economic hardship to the industry.

With or without regulatory action in regards to pesticides, a widespread transition to organic landscaping methods would improve environmental quality throughout Long Island, through the reduced use of toxic chemicals that negatively impact the quality of our aquifers, surface and costal waters. Furthermore, the increased practice of organic landscaping would also reduce health risks from the incidence of accidental pesticide exposures and pesticide poisonings on Long Island.

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