Encouraging Residents to Request Wildlife-Friendly Landscape Maintenance from Their Chosen Professionals: A Stages of Change Approach for Extension and Other Practitioners¹

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Introduction

There is a trend in the landscape management industry to offer services that account for wildlife conservation. Programs designed to educate and encourage residents to employ these services should recognize the associated decision-making processes. This publication explains Florida residents' current involvement in requesting wildlife-friendly landscape maintenance (WFLM) and the perceived barriers and motivators associated with this behavior using the concept of stages of change. The intended audience for this document is Extension and environmental professionals, educators, researchers, and policymakers. Effective Extension programs and other educational initiatives require a tailored approach based on audience research to ensure maximum impact. It is important to understand the audience's current behavior, engagement level, and other relevant factors before designing educational interventions. This knowledge not only informs the customization of the program but also helps

craft messages that resonate with the audience and align with their needs. Assessing the audience's position on a specific behavior allows for progress tracking and program refinement.

Key Findings

Highlights from a 2023 Florida consumer survey revealed:

- One-third of individuals employing landscape maintenance professionals are not actively considering ensuring that their chosen professional incorporate WFLM.
- Enjoying the appearance of one's yard is the biggest motivator to requesting WFLM from one's landscape professional.
- The perceived cost of WFLM is the most important barrier to requesting WFLM from one's landscape professional.
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Wildlife-Friendly Landscape Maintenance

With mounting evidence of global biodiversity decline, urgent action is needed to protect wildlife and their habitats (Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, 2019; Ripple et al., 2017; World Wildlife Fund, 2022). This is particularly true in rapidly developing areas where habitat loss and fragmentation pose significant threats to biodiversity. Numerous efforts are ongoing to support wildlife in such highly urbanizing areas through the development of habitat corridors or stepping stones to facilitate their movement, reproduction, and survival. One such effort is to encourage WFLM among residents in urban areas who are currently hiring professionals to provide "traditional" landscape maintenance practices (Kalauni et al., 2023). WFLM refers to activities such as plant maintenance practices, landscape design approaches, plant selection decisions, and pest (insect, weed, disease) management strategies that are specifically intended to increase the environmental and wildlife conservation value of a yard or landscape (see Kalauni et al., 2023 for a list of such practices). Although individual resident decisions may seem small, they collectively impact biodiversity on a broader scale (Goddard et al., 2010; Lerman et al., 2012). Tailored programs can be developed to effectively motivate residents to request these services from landscape professionals. Audience research, as presented in this publication, can be used to identify appropriate strategies to encourage decision-makers like residents to request WFLM services from the professionals they hire.

Stages of Change

This publication uses the stages of change model to understand and describe the behavior of interest. This concept is valuable because it recognizes that behavior change is not a discrete event but a progression through multiple stages (Prochaska, 1979; Prochaska & DiClemente, 1982; Warner et al., 2021). People in each stage have distinct needs. Programmatic impact can be improved with a tailored approach to the audience's current stage (Warner et al., 2021). Thus, it is important to understand the audience's current stage in the behavior change process.

An additional concept from stages of change explains that people weigh the pros and cons associated with behavior (Krebs et al., 2018; Prochaska, 1979; Prochaska & DiClemente, 1982; Warner et al., 2021). In this publication, we categorize pros and cons as motivators (or benefits) and barriers, respectively, to behavior adoption. Generally, people in the precontemplation and contemplation stages perceive many cons and little to no pros to making the change. People in the later stages see the pros as outweighing the cons. In seeking to understand Florida residents' behavior of requesting WFLM from landscape maintenance professionals, it is helpful to understand this audience's current stage of change and their perceived pros and cons (herein operationalized as motivators and barriers) in order to craft effective educational messages.



Figure 1. The stages of change model for behavior change (adapted from Prochaska & DiClemente, 1977). Credits: Laura A. Warner, UF/IFAS

Research Approach

To understand how programs can effectively promote WFLM, we used an online survey (created with Qualtrics^{XM}) to collect data from Florida residents in October and November of 2023. Quota sampling was used to ensure representativeness of the sample, and a total of 3,337 individuals opted into the panel. Out of those, 2,615 provided adequate or complete responses. From this pool, we identified 1,219 participants who met our target sample criteria (i.e., having decision-making authority for their yard and hiring a landscape professional). To ensure consistent understanding, participants were presented with a researcher-developed definition of WFLM at the start of the survey: plant maintenance practices, landscape design approaches, plant selection decisions, and/or pest (insect, weed, disease) management strategies specifically intended to increase the environmental and wildlife conservation value of a yard or landscape.

Participants' stage of change regarding WFLM was gauged using five statements representing precontemplation, contemplation, preparation, action, and maintenance. Respondents selected the statement that best described their current mindset and behavior related to ensuring wildlife-friendly landscape maintenance practices.

Motivators and barriers to respondents making sure their landscape professionals use WFLM practices were assessed

using 14 and 22 statements, respectively, based on existing research. Participants rated the extent to which each statement encouraged or hindered their efforts in ensuring their landscape professionals employed WFLM practices. Responses were collected on a five-point Likert scale ranging from 1 (not at all a motivator/barrier) to 5 (a very strong motivator/barrier).

The information was analyzed using statistical methods, including frequencies, percentages, means, and standard deviations. These analyses aimed to interpret the results and identify patterns related to participants' stage of change, motivators, and barriers in requesting WFLM services. This comprehensive approach provides valuable insights into the residents' current stage on a continuum of precontemplation to maintenance and establishes a foundation for tailoring programs to effectively promote WFLM.

Results and Use of This Information Stage of Change

In terms of our respondents (n = 1,219) making sure their landscape professional uses WFLM, we found:

- 33.7% were in the precontemplation stage (not thinking about it).
- 18.4% were in the contemplation stage (considering it).
- 18.3% were in the preparation stage (getting ready to adopt).
- 15.2% were in the action stage (regularly engaging).
- 14.4% were in the maintenance stage (continued engagement).

This means 70.4% were not in active stages of making sure landscape maintenance professionals use WFLM, while 29.6% had taken action. It is important to recognize residents are in different stages of change related to WFLM and to tailor programs and messaging to each stage. For example:

- Precontemplation: Raise awareness of WFLM benefits.
- Contemplation: Help weigh pros/cons to motivate decisions.
- Preparation: Provide support for goal setting and planning action.
- Action: Reinforce benefits and provide positive recognition to prevent relapses.
- Maintenance: Leverage as WFLM advocates.

• All stages: Emphasize the most impactful motivators.

There is an opportunity to document audience members' current stage of change and future stages of change as a means of assessing behavior change for program evaluation.

Emphasizing the Most-Valued Motivators

All motivator items fell between 3.00 (a moderate motivator) and 4.00 (a strong motivator) on a five-point Likert scale (ranging from "not at all a motivator" to "a very strong motivator"). See Table A1 for the complete list of motivators.

The top motivators were:

- Enjoying yard appearance (mean score: 3.90/5.00)
- Doing the right thing (mean score: 3.85/5.00)
- Enjoying nature (mean score: 3.85/5.00)

Here are a few suggested strategies for ways to integrate those top motivators into programs encouraging residents to make sure their landscape professional uses WFLM:

ENJOYING YARD APPEARANCE

- Showcase visually appealing WFLM yards with appropriate plants, rain gardens, strategic tree placement, etc., through photos, tours, or videos.
- Address misconceptions that WFLM looks messy or unkempt; highlight aesthetic features that align with WFLM.
- Feature artisan contractors creating unique natural yard designs vs. the "standard" look.
- Promote visits to model WFLM yards to inspire people visually.
- Create demonstration WFLM gardens on high-visibility public land.

DOING THE RIGHT THING

- Share research on biodiversity gains from WFLM adoption, like less frequent mowing.
- Quantify measurable environmental benefits such as water conservation.
- Highlight support from conservation groups to emphasize that WFLM aligns with larger conservation goals.
- Tap into trends like "rewilding" and sustainable landscaping.
- Obtain testimonials from respected community members and leaders who have adopted WFLM.

- Award yard signs to recognize adopters' contribution to habitat conservation.
- Tap into the satisfaction of "walking the talk" on sustainability.

ENJOYING NATURE

- Host wildlife walks through neighborhoods to showcase nature that thrives near WFLM yards.
- Set up bird feeders, bee boxes, etc., next to demo gardens to engage visitors and increase visitor interest.
- Feature images of vibrant flowers, butterflies, and other wildlife attracted.
- Train volunteers to identify interesting species spotted near WFLM yards.
- Ask supporters to document or share wildlife diversity observations from their yards.
- Tap into people's joy of watching and learning about nature up close.

Reducing or Removing Salient Barriers

The barriers to making sure landscape professionals use WFLM practices fell between just under 2.00 and just over 3.00, or between a slight and moderate barrier. See Table A2 for the complete list of barriers.

The top barriers were:

- Costs (mean score: 3.10/5.00)
- Homeowners association penalties for non-compliance (mean score: 2.91/5.00)
- Homeowners association landscaping restrictions (mean score: 2.82/5.00)

Below are a few suggested strategies to reduce or remove the top barriers.

COST OF IMPLEMENTING WFLM PRACTICES

- Conduct/provide price analysis on the upfront costs of key WFLM practices such as wildlife-friendly plant selections, strategic tree planting, rain gardens, etc.
- Position WFLM as an attainable investment through valid side-by-side comparisons with conventional practices over an extended timeframe.
- Highlight potential cost savings from fewer replacements needed with native or adapted plants suited to the climate, or from fewer fertilizer and pesticide treatments.
- Create living case studies quantifying costs for a converted yard over time. Include before and after photos.

- Provide compelling financial cases and budget-sensitive options to help overcome assumptions of excessive costs by:
 - Sharing sample yard designs tailored to different investment levels (good/better/best options)
 - Partnering with landscape companies to offer bundled WFLM installation and maintenance service packages at reasonable rates
 - Exploring local rebates available for rain barrels, gardens, tree planting, etc., that can offset startup expenses

HOMEOWNERS ASSOCIATION (HOA) RULES, PENALTIES, AND RESTRICTIONS THAT POTENTIALLY PROHIBIT WFLM PRACTICES

- Assess the extent to which HOA rules truly impede WFLM.
- Partner with HOAs.
- Research common HOA bylaws that create barriers to WFLM in your area.
- Identify the specific clauses, language, or interpretations impeding adoption.
- Prepare alternative recommended language aligned with WFLM goals.
- Request presentations at HOA board meetings to propose policy changes.
- Provide sample successful case studies of HOAs adopting more flexibility.
- Offer to co-develop community WFLM demonstration gardens as pilots.
- Give presentations to community residents to build buy-in and address concerns.
- Recognize HOAs publicly that expand allowances for WFLM.
- Offer ongoing liaison support during bylaw amendment processes.
- Position yourself as an expert resource for HOAs on implementing policy changes. By understanding common roadblock language, sharing convincing examples, and rallying community support, you improve the chances of policy shifts.

Summary

Audience-specific research enables and equips professionals with knowledge that is essential to develop local tailored programs. It is important to understand which stage of change residents are currently in when it comes to ensuring their landscape professional uses WFLM, and what pros and cons they weigh as they progress from their current stage toward the desired one. The audience research presented here can be integrated into WFLM outreach and Extension programs.

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Appendix

Table A1. Florida residents' perceived motivators to ensuring their landscape professional uses wildlife-friendly landscape maintenance practices (n = 1,219).

	Mean	SD
Enjoying the way my yard looks	3.90	1.06
Doing the right thing	3.85	1.10
Enjoying nature	3.85	1.12
Protecting natural resources like water	3.82	1.09
Supporting my well-being	3.73	1.13
Supporting diversity of birds, butterflies, and other wildlife	3.72	1.20
Reducing the cost of taking care of my yard	3.69	1.15
An opportunity to watch butterflies, birds, and other wildlife	3.66	1.22
Feeling connected to where I live	3.56	1.18
Supporting environmental values of the community	3.55	1.19
Reducing the time spent taking care of my yard	3.52	1.18
Supporting plant diversity	3.50	1.20
Taking pride in my neighborhood's conservation efforts	3.34	1.24
Meeting neighborhood expectations	3.11	1.29

Table A2. Florida residents' perceived barriers to ensuring their landscape professional uses wildlife-friendly landscape maintenance practices (n = 1,219).

	Mean	SD
The cost	3.10	1.32
Possible penalties (e.g., warnings or fines) from my homeowners association (HOA) ^a	2.91	1.41
Homeowners association (HOA) restrictions ^a	2.82	1.35
Homeowners association (HOA) requirements for how my yard must look ^a	2.82	1.38
Not knowing enough about wildlife-friendly landscape maintenance	2.81	1.27
Not knowing what is allowed in my homeowners association (HOA) ^a	2.77	1.35
My homeowners association (HOA) maintains and dictates management style for some or all of my yard ^a	2.76	1.34
Not knowing how to get started with wildlife-friendly landscape maintenance	2.71	1.28
Homeowners association (HOA) requirements for how I cut my lawn ^a	2.69	1.38
Homeowners association (HOA) requirements for applying pesticides ^a	2.66	1.38
Homeowners association (HOA) requirements for how I water my yard ^a	2.65	1.39
A lack of labeling for products and plants that align with wildlife-friendly landscape maintenance	2.64	1.23
The time it takes	2.63	1.28
Not knowing what company to hire for wildlife-friendly landscape maintenance	2.61	1.32
Incompatibility of these practices with my yard's characteristics (e.g., water availability, shade, available space)	2.51	1.25
Not knowing how to ask my landscape professional about wildlife-friendly landscape maintenance	2.47	1.32
Not seeing or believing the apparent benefits of wildlife-friendly landscape maintenance	2.36	1.26
My personal landscape preference is not for wildlife-friendly landscape maintenance	2.36	1.30
My neighbors' expectations for how I take care of my yard	2.19	1.30
My dislike for the aesthetic appearance of wildlife-friendly landscape maintenance	2.18	1.31
My fear of wildlife	2.13	1.34
My dislike of wildlife	1.97	1.30
^a n for these items is 595, which corresponds to the number of respondents who reside in these types of community.		