Preferences for Sustainable Residential Lawns in Florida: The Case of Irrigation and Fertilization Requirements

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The American landscape is well defined by the presence of turfgrass. To maintain the lush, green carpet, irrigation, fertilizer, and other necessary inputs are required. When these inputs are applied to excess, they are harmful to the natural environment. In this investigation, we evaluate the Florida homeowners’ preferences of high- and low-level inputs of irrigation water and fertilizer using Generalized Multinomial Logit and Latent Class Logit regression models. Results indicated that there are heterogeneous preferences for the level of irrigation water and fertilizer application by Florida homeowners, including high-input users (33% of the sample), irrigation conscious users (27%), fertilizer conscious users (23%), and moderate input users (17%).

With approximately a third of the sample, and two classes of consumers seeking low-input turf grasses, it is clear there is a desire by some consumers for low irrigation and fertilizer tolerant species. This overall result also suggests that there is a considerable majority of consumers who either are indifferent to the amount of water, chemicals, and maintenance they contribute to their turfgrass, as is the case for the Moderate Input consumers, or they have stronger pressures to have fit social norms and have relatively low knowledge how to care for their lawn (High Input consumers). This result is supported by previous studies where attractiveness, maintenance, and cost contribution to the consumer’s prioritization of how they care for their lawn.

This was true with Irrigation Conscious and Fertilizer Conscious consumers, both environmentally conscious consumers, having higher knowledge about turfgrass than Moderate Input and High Input consumers. Florida homeowners are also willing to pay more for low-input attributes and they place high value and prefer low input into their turfgrass.