

## Motivations for and Psychological Benefits of Participating in the Florida Master Naturalist Program

### Abstract

We explored the motivations for and psychological benefits gained from participating in the Florida Master Naturalist Program (FMNP). We surveyed 3,904 participants, and 1,983 participants responded with completed questionnaires, for a 50.79% response rate. Florida master naturalists participated to learn, help the environment, and act on altruistic values. The respondents indicated that their participation in the FMNP provides psychological benefits related to helping the environment, exploring, and being social. To foster support for master naturalist programs, program designers should attend to motivations and perceived benefits related to participation in such programming.

**Keywords:** [environmental stewardship](#), [program evaluation](#), [adult education](#)

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### Introduction

Master naturalist programs (MNPs) across the United States are providing new opportunities for adults to learn about their states' natural histories, environments, and conservation issues (Guiney et al., 2006). These programs also endorse nature-based community service by citizen volunteers and provide continuing educational opportunities (Bonneau, Darville, Legg, Haggerty, & Wilkins, 2009; Guiney et al., 2006; Larese-Casanova, 2011). All programs include educational programming for adults, community service, and a statewide network that facilitates the program (either through a state's land-grant institution or via chapters across a state).

Master naturalists use their knowledge in voluntary or required nature-based community service. This service typically falls into one of four categories:

- citizen science, which involves collecting data for scientific research (e.g., collecting water quality data or participating in a Christmas bird count);
- organizational assistance, which involves helping nature-based organizations with activities (e.g., building a boardwalk);
- interpretation, which involves conducting educational activities (e.g., designing a brochure or facilitating a nature walk); and

- ecological restoration, which involves participating in conservation-based land management projects (e.g., removing invasive species, planting native species of plants, or assisting with a land management plan) (Guiney et al., 2006).

Several states, such as Texas, Missouri, Minnesota, and Georgia, have documented success stories of MNPs. The Texas Master Naturalist program was founded in 1997 to "develop a corps of well-educated 'Master Volunteers' to provide education, outreach, and service dedicated toward the beneficial management of natural areas and natural resources within their communities for the state of Texas" (Guiney et al., 2006, p. 4). Since the program's inception, its volunteers have contributed over 2.8 million hr of service valued at more than \$40.6 million (Texas Master Naturalist Program, n.d.). Missouri established an MNP in 2005 which, after 2 years, grew to eight active chapters (Broun, Nilon, & Pierce, 2009). The members of these chapters trained over 380 volunteers, 200 of whom donated over 16,000 hr of service to enhance the natural resource bases of their communities (Broun et al., 2009). The economic impact of this volunteerism was valued at over \$330,000 (Broun et al., 2009). Minnesota started an MNP in 2005 after consulting the Texas and Florida MNP organizers and conducting a needs assessment with state professionals and environmental educators (Guiney et al., 2006). In this program, master naturalists are required to volunteer 40 hr per year (Guiney et al., 2006). In the first year of the Minnesota MNP, 135 master naturalists volunteered for approximately 6,000 hr, a contribution valued at \$107,000 (Guiney et al., 2006). The Georgia Master Naturalist program saw similar success and growth between 2009 and 2012 (Hildreth & Mengak, 2016).

The Florida Master Naturalist Program (FMNP) is an adult education program developed by University of Florida Institute of Food and Agricultural Sciences Extension and delivered by many Extension offices and partner organizations throughout the state (Florida Master Naturalist Program, n.d.). Between 2001 and 2011, the number of modules provided annually increased from 12 to 66, training locations expanded from one county to 41 of the 67 counties in Florida, and the numbers of graduates increased from 160 to over 6,000 individuals (Florida Master Naturalist Program, n.d.). Main (2004) found that of a sample of Florida master naturalists (FMNs), 35% of participants were involved in career-related roles, 41% were involved in volunteering programs, and 44% stated that learning was a primary motivation for joining the FMNP. Several adults participated in the program for professional development purposes (e.g., environmental education and ecotourism). The demographic of the program has changed over the years as the program has grown. It currently includes a large number of retirees and seasonal residents.

Although MNPs have expanded, little is known about why people participate in MNPs and what they perceive as benefits of doing so. Strong and Harder (2010) conducted a study exploring the motivations of adults participating in the Florida Master Gardener Program and found that master gardeners were motivated most by cognitive interest, followed by interest in community service and desire for interpersonal relationships. Given that the subject matter of interest differs for master naturalists and master gardeners, we speculated that the former might have different reasons for program participation. Therefore, we conducted a study to determine motivations for and psychological benefits of participation in the FMNP. We wanted to discover the factors that influenced adults to join the program and the psychological benefits that participants gained from their experiences in the program.

## Methods

We implemented an ex post facto research design whereby we used an online questionnaire distributed via email to collect information from participants included in the FMNP database from 2001 to 2015. We included two scales in the instrument. One was a modified version of the Volunteer Functions Inventory (VFI) (Clary et al., 1998) developed by Bruyere and Rappe (2007) and used by Jacobson, Carlton, and Monroe (2012). The other was a psychological benefits scale by Grese, Kaplan, Ryan, and Buxton (2000). Our questionnaire consisted of eight items on FMNP participation, 18 items related to five constructs from the modified VFI (career, helping the environment, learning, social, and values), 12 items related to three constructs from the psychological benefits scale (exploration, helping the environment, and personal/social), and six demographic items, for a total of 44 items. For the modified VFI scale, response options comprise a 7-point Likert scale ranging from *not at all important* to *extremely important*. For the psychological benefits scale, response options comprise a 5-point Likert scale ranging from *not at all true* to *extremely true*.

We used guidelines related to the tailored design method (Dillman, Smyth, & Christian, 2014) for survey design and data collection. Specifically, we used six points of contact (preletter from the FMNP coordinator, invitation to participate in study with link to questionnaire, and four reminder emails sent to eligible participants and nonrespondents encouraging them to complete the questionnaire), with email contacts as a uni-mode methodology. Data were collected May 28 through July 8, 2015. We used descriptive statistics and independent-samples *t*-tests to analyze the questionnaire items.

## Results

The initial sample was 5,251 FMNs (drawn from a population of 6,100 FMNs). The first email containing the questionnaire link was sent to the 5,251 FMNs, but many emails bounced back as undeliverable. After updating the email lists to eliminate nonoperational email addresses, the adjusted sample size was 3,904 reachable FMNs. A final response rate of 51% ( $n = 1,983$ ) was achieved during data collection.

Table 1 shows respondent demographic data. Respondents were predominantly female (60.2%), and a majority of respondents were 61 years of age or older. In addition, approximately 76% of respondents had a bachelor's degree or higher. A majority of respondents reported being very satisfied with the FMNP. Although not reported in Table 1, our results indicated that 93% of respondents were White, non-Hispanic.

**Table 1.**

Florida Master Naturalist Program (FMNP) Participant  
Demographic Statistics ( $n = 1,983$ )

Characteristic	<i>f</i>	%
Gender		
Female	1,194	60.2
Male	789	39.8
Age		
18–50 years old	468	23.6
51–60 years old	437	22.0
61–70 years old	706	35.6

71 years old or older	372	18.8
Education		
High school diploma or GED	42	2.1
Some college	251	12.7
Associate's degree	185	9.3
Bachelor's degree	687	34.6
Master's degree	621	31.3
Doctoral degree	98	4.9
Professional degree	99	5.0
FMNP overall satisfaction <sup>a</sup>		
Very dissatisfied	42	2.0
Dissatisfied	22	0.9
Neutral	23	2.0
Satisfied	507	24.9
Very satisfied	1,363	70.2

<sup>a</sup> $n = 1,957$ , with 26 participants not responding to the item.

The results from items related to the modified VFI indicated that the prospects of learning and helping the environment were highly influential ( $M = 6.19$ ,  $SD = .91$  and  $M = 6.00$ ,  $SD = .91$ , respectively) in respondents' deciding to participate in the FMNP (Table 2). The influence of values was moderate ( $M = 5.71$ ,  $SD = 1.21$ ), and the influence of social aspects of participation was low ( $M = 3.30$ ,  $SD = 1.74$ ) (Table 2). The independent-samples  $t$ -test results indicated that the mean for each construct was significantly different from the mean for each of the others.

**Table 2.**  
Overall Means for Constructs of the Volunteer Functions  
Inventory ( $n = 1,983$ )

<b>Construct</b>	<b><i>M</i></b>	<b><i>SD</i></b>
Career	3.45*	2.05
Helping the environment	6.00*	1.20
Learning	6.19*	.91
Social	3.30*	1.74
Values	5.71*	1.21

*Note.* Scale: 1 = not at all important, 2 = low

*importance, 3 = slightly important, 4 = neutral, 5 = moderately important, 6 = very important, 7 = extremely important.*  
*\* $p < .05$ .*

The results from items related to the psychological benefits scale indicated that helping the environment was a very important psychological benefit of participating in the FMNP ( $M = 4.20$ ,  $SD = .75$ ) (Table 3). The results also suggested that respondents found both the exploration and personal/social aspects of participation to be somewhat important psychological benefits of participating in the FMNP ( $M = 3.80$ ,  $SD = .89$  and  $M = 3.71$ ,  $SD = .89$ , respectively) (Table 3). The independent-samples  $t$ -tests results indicated that the mean for each construct was significantly different from the mean for each of the others.

**Table 3.**  
 Overall Means for Constructs of the Psychological Benefits Scale ( $n = 1,983$ )

<b>Construct</b>	<b><i>M</i></b>	<b><i>SD</i></b>
Exploration	3.80*	.89
Helping the environment	4.20*	.75
Personal/social	3.71*	.89

*Note. Scale: 1 = not at all true, 2 = slightly true, 3 = somewhat true, 4 = very true, 5 = extremely true.*  
*\* $p < .05$ .*

## Discussion

Respondents were predominantly older, White, well-educated women. These characteristics align with those of the respondents for other MNPs (Broun et al., 2009; Hildreth & Mengak, 2016; Larese-Casanova, 2011). According to Strong and Harder (2010), older adults and adults who have earned formal educational degrees are more likely to participate in educational programs than those who are younger or have not earned formal educational degrees. Additionally, adults with higher annual salaries have a greater likelihood of participating in educational programs than adults with low incomes (Strong & Harder, 2010).

Our findings suggest that more than one audience segment exists within the FMNP. Another subset of the analytic sample consisted of young, career-motivated respondents. Yet the current FMNP may not be appealing to a diverse population of Floridians. According to census estimates, approximately 19% of Floridians are over the age of 65, 56% are White non-Hispanic, 26% have bachelor's degrees or higher, and 51% are females (U.S. Census Bureau, n.d.), proportions that are dissimilar to those in our respondent demographic. Our respondents may represent a unique audience segment of Florida (i.e., affluent retirees operating within similar social norms regarding the environment) who have time available to devote to FMNP participation.

Additionally, our findings were similar to those from other studies that have addressed adult motivations for participating in master naturalist and other environmental stewardship programs (Bonneau et al., 2009; Broun et

al., 2009; Bruyere & Rappe, 2007; Jacobson et al., 2012) in that many master naturalists were motivated to join the FMNP to help the environment. On our study instrument, the helping the environment motivation construct was associated with statements addressing attitudes or actions related to directly assisting with some level of environmental protection. Our results also showed that many FMNs found the prospect of learning new information to be a very important factor in their decision to join the FMNP. This finding is similar to trends seen in past master naturalist research (Bonneau et al., 2009; Broun et al., 2009; Bruyere & Rappe, 2007; Jacobson et al., 2012). Although the FMNP does not require master naturalists to volunteer, its mission of developing environmental literacy and making a difference in communities (i.e., helping the environment) is realized, in part, through the work of volunteers.

Finally, according to our findings, respondents believed that helping the environment was an important psychological benefit gained from participating in the FMNP. At the same time, the findings indicate that respondents believed other factors to be somewhat less important as psychological benefits of participating in the FMNP. These results are similar to findings from the study conducted by Grese et al. (2000), in which only helping the environment was reported to be an important psychological benefit of stewardship volunteerism. With the importance our respondents placed on helping the environment, a common theme across the research is the desire to make a tangible difference, to have a positive effect in protecting nature. In this instance, having opportunities to help the environment empowers participants through the idea that their actions make a difference (Grese et al., 2000).

## Implications for Practice

Our findings can help Extension professionals involved with MNPs create marketing tools that emphasize how participation in MNPs fulfills needs related to motivations and desired benefits of joining these programs. Although the FMNP has grown and changed since its inception in the early 2000s, continued expansion could be bolstered by attracting new participants through a focus on themes that relate to their interests and needs. Similarly, MNP designers should ensure that content and delivery methods address participants' desire for learning, helping, and demonstrating values. Program managers could survey new MNP participants to determine their motivation(s) for joining the program and then use that information to modify program activities to better relate to participants' motivation(s) for joining. For example, some program activities could be changed to focus on helping the environment through stewardship. Other activities could be changed to focus on the application of program material in natural resources-related professions. Finally, attending to master naturalists' motivations and perceptions of program benefits can help foster committed volunteers, make the programs more accessible to diverse audiences, and ensure support for MNPs in the years to come.

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