

Assessing Miami Dade and Orange County Extension Offices' Social Media Use

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Honors Thesis

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Abstract

The purpose of this research is to assess how the University of Florida's Institute of Food and Agricultural Sciences (UF/IFAS) Miami-Dade and Orange County Extension Offices effectively use social media to communicate with consumers. During the 2017 calendar year, Facebook, Twitter and YouTube for the Extension offices were monitored by myself to gauge their effectiveness. This monitoring also included the pages for the various programs that operate under the Extension offices. This includes the Orange County Master Gardener's, 4-H, Home and Family Finances, Food and Nutrition as well as the Residential Horticulture Programs. In Miami-Dade County the 4-H, Urban Conservation Unit, and Florida – Friendly Landscaping programs were monitored. The results indicated that Extension offices as well as their specialized programs have a social media presence however, are not using social media as effective as possible to engage with their audience.

Introduction

As of 2016, only 1.5% of the population in the United States (Employment by Major Industry Sector, 2017) was employed in agriculture, forestry, fishing and hunting. There is a disconnect between consumers and these industries. With the recent rise of documentaries such as, Food Inc., Cowspiracy, and In Defense of Food, it seems the disconnect is growing. Due to this disconnect, it is important for the agricultural sector to be as transparent as possible with consumers.

In April of 1964, the Department of Education in the state of Florida created the Institute of Food and Agricultural Sciences (UF/IFAS) at the University of Florida. Today UF/IFAS has Extension offices in each of the 67 counties throughout the state, as well as 12 research and education centers (Institute of Food and Agricultural Sciences, n.d.). The primary goal of Extension offices in the state of Florida is to broaden the reach of UF/IFAS and provide educational outreach through various outlets including workshops, seminars, and social media (University of Florida Institute of Food and Agricultural Sciences, 2017/2018). With the rapidly growing use of social media it is imperative for Extension offices to use social media to reach their consumer base.

For the purpose of this research, I will focus specifically on Miami-Dade and Orange Counties' Extension offices. Miami-Dade is the most populous county in the state, while Orange County follows close behind at fifth most populous county. Both counties are known for their tourist attractions and urban city life rather than agriculture. Orange County is home to Walt Disney World, Universal Studios, and the city of Orlando. Miami-Dade County is home to three professional sports teams, the Port of Miami, and South Beach. Orange County is located in the central region in the state of Florida and was founded in 1845. As of 2016, there were 1,314,367 people living in the county (U.S. Census Bureau, 2016). Miami-Dade County was founded in 1836 it was home to 2,712,945 people in 2016 (Miami-Dade County Online Services, n.d.).

As a society, we often look to social media to stay connected to one another, as a source of news, and most importantly to build relationships. According to Merriam-Webster's collegiate dictionary, social media is an electronic form of communication in which users of a community share information, ideas, personal messages, and other content (Social Media, n.d.). Today, there are approximately 2.8

billion social media users worldwide, a number expected to grow within the next two years. (Blackburn & Hitz, 2017). Although social media is still considered to be a relatively new marketing channel (Blackburn & Hitz, 2017), many businesses have seen great outcomes of being actively present on various outlets. Each of the 67 Extension offices in Florida can be found on various social media sites, primarily Facebook (Institute of Food and Agricultural Sciences, Social Media, n.d.). Websites are no longer the only place consumers go to find information about services. According to Fuess et al., (2014) social media should be seen as an efficient and effective means for outreach.

The purpose of this study was to assess how the Extension offices in Miami-Dade and Orange county use social media to engage with their audience, in order to aid Extension offices across the state by creating more beneficial ways to effectively use social media. The research objectives were to 1) describe the current usage of social media usage for Extension Offices in Miami-Dade and Orange County, 2) describe the current usage of social media usage for specific programs operating under Extension offices in Miami-Dade and Orange county and 3) recommend efficient ways to use social media as a platform to promote Extension and programs.

Review of Literature

Barriers to Social Media Use

Fuess, Humphreys, & Newbury (2014) found that there are key barriers Extension educators perceive as risks to using social media. These barriers were identified as “control, time, money and access to internet and training” (Fuess et al., 2014). For example, 80% of outreach activities occur in rural areas therefore, educators believe that this population would not have readily available access to the internet (Fuess et al., 2014). Despite these findings, Fuess et al (2014) also found that 47% of residents in these rural areas have access to broadband internet.

Social media is rapidly expanding, today 69% of Americans use at least one form of social media (“Social Media Fact Sheet, 2018”). However, in a study conducted by Cooper, Cox, & Corbin (2012) it was determined that although social media tools for Extension educators are available they are not widely used. Cooper, et al. (2012) defined these tools as Facebook, Twitter, YouTube, Flickr, Myspace, Blogs and emails. This study highlights one main barrier being generational preferences, with the average of participant being 64 years old. The study ultimately finds that social media may not be an ideal form of communicating with older generations however, it should be heavily considered when targeting children and young adults (Cooper et al., 2012).

Other studies have highlighted barriers for social media use when it comes to various outreach platforms. For example, Briones et al., (2011) on behalf of the American Red Cross found that staff availability, time, content management and the publics’ abilities to use and access content were all barriers. Another major barrier was identified as cross-cultural differences, such as language, in a study conducted by Ray (2014).

New Extension Approaches

Despite the aforementioned barriers to social media use, there are still key advantages to using social media. In a study conducted by Duggan & Brennan (2012) 83% of adults use social media, creating 2.8 billion global users thus making social media a vital form of communication and outreach. According to Nielsen & Schroder (2014), traditional media results in the dissemination of “one-way” communication, while social media facilitates “two-way” communication through enabling users to

engage through posts, shares, and comments. This study also states that the facilitation of new forms of communication, enabling users to engage as well as network, and produce and share their own content can be accredited to social media (Nielsen & Schroder, 2014).

In the study conducted on behalf of the American Red Cross, social media was deemed beneficial in building relations with volunteers, the community, and media outlets (Briones et al., 2011). Social media also creates faster service, better media coverage and feedback through the two-way dialogue it enables. For example, if the public relied solely on traditional media in the form of news broadcasts, they would be forced to wait until a set time to hear headlines. Whereas, with social media the general public can stay up to date with real time updates via social channels such as Facebook, Twitter, or Instagram.

In a study sponsored by the Upper Midwest Agricultural Safety and Health Center, Heiberger & Evans (2017) found that the available safety information for farm-life safety was deemed adequate or somewhat adequate by respondents. However, one respondent said that “Safety information seems to come out once a year for farm safety and then goes silent.” (Heiberger & Evans, 2017). Due to the multifaceted changes in agriculture, Heiberger & Evans (2017) found that there is a need to provide prevention information to farmers/ranchers more often. The way farmers/ranchers are able to view this safety information is increasing towards nontraditional media sources such as social media. This study also reports that 76% of agricultural journalist used Facebook in disseminating information, and the potential for agricultural media to use Extension information is best suited for social media bearing its availability (Heiberger & Evans, 2017). This study identifies respondents’ interests in safety information being provided through Extension and Agricultural media (Heiberger & Evans, 2017).

Importance of Social Media

In 2005, when the Pew Research Center began tracking social media usage only 58% of American adults were using networking sites, in 2015 it increased to 65% (Perrin, 2015). As of January 2018, 69% of American adults are using social media (“Social Media Fact Sheet, 2018”). In a study conducted by Da Silva et al., (2016), it was shown that consumers want social media to be a source of information. For example, the Expanded Food and Nutrition Education Program offers educational outreach on nutrition and food intake for low income families, and 82% of participants would like to use social media to receive free information from these Extension educators (Da Silva et al., 2016).

This study also shows that viewers prefer content be delivered in the form of videos, recipes, links, tips and also be delivered once a day or up to a few times a week (Da Silva et al., 2016). This study also points out the necessity to tailor content for an intended audience's interests and needs (Da Silva et al., 2016).

Often times the general public deems large operations secretive or untrustworthy. Whether it be the Agricultural Industry, the Government, or Scientific research (Jaafar et al., 2014). In a study conducted by Jaafar et al. (2014), the inherent need to fill the “gaps” through online engagement was highlighted. The study suggests that these institutions use social media as a platform to enhance online engagement and close the gap (Jaafar et al., 2014). Respondents of this study also point out that the most effective publication will be posted on social media and also include a call to action (Jaafar et al., 2014).

It is not enough for Extension educators to just post on social media. Posts should also use engaging and colorful visuals (Da Silva et al., 2016). Engagement does not only include visuals, it is also wanting feedback from viewers, it builds loyalty with consumers, and defines success for certain entities (Kerpen et al., 2015). In order to be truly engaged with consumers Kerpen et al., (2015) find that it takes a single person, a single action and commitment and focus to do so. It is concluded that social media should be seen as an effective and efficient means for outreach and a tool to be used with others towards building social capital with their stakeholders” (Fuess et al., 2014).

Methodology

The purpose of this study was to monitor Extension offices in Miami-Dade and Orange Counties' social media usage. The following research objectives guided this study:

1. Describe the current usage of social media for Extension offices in Miami-Dade and Orange County.
2. Describe the current usage of social media for specific programs operating under Extension offices in Orange and Miami-Dade County.
3. Recommend efficient ways to use social media as a platform to promote Extension and programs.

To meet this objective, social media usage for the 2017 calendar year was monitored for both Orange and Miami-Dade Counties' Extension offices. This research also included specific programs that operate under the main office (i.e. Orange County Master Gardner's and Miami-Dade County 4-H program).

The data gathered included the amount of original posts, shares, and engagement between the accounts and their followers. According to Kerpen, active engagement (i.e. responding to comments and actively posting) builds loyalty with consumers and is the basis for your authenticity (Kerpen et al., 2015). Each office and their various platforms will have their own set of data to be analyzed by myself. The data was analyzed for its effectiveness to engage with the audience. Below is the list of programs monitored for each county.

Table 1: Miami-Dade Counties' Social Media Platforms

Miami-Dade County	Facebook	Twitter	YouTube	Website	Instagram
Main Office	UF IFAS Extension Miami-Dade County		UF/IFAS Extension Miami-Dade County	http://sfyl.ifas.ufl.edu/miami-dade/	
4-H Youth Program	UF IFAS Miami-Dade County 4-H Youth Program				
Florida-Friendly Landscaping	UF IFAS Miami Dade Florida-Friendly Landscaping Program				
Urban Conservation Unit		UF/IFAS Miami U.C.U			

Table 2: Orange Counties' Social Media Platforms

Orange County	Facebook	Twitter	YouTube	Website	Instagram
Main Office	UF IFAS Extension Orange County		UF IFAS Extension Orange County	http://sfyl.ifas.ufl.edu/orange/	
4-H Youth Program	Orange County Florida 4-H - UF IFAS Extension	Orange County 4-H			OC_4H
Home & Family Finances	Creating Healthier Homes & Families				
Food & Nutrition	UF IFAS Extension Orange County FCS				
Master Gardener's Program	UF IFAS Extension Orange County Master Gardener's	OC Master Gardener's			
Residential Horticulture	Garden Florida! UF IFAS Orange County Extension	Garden Florida!			

Results

Objective 1: Description of social media usage for Orange and Miami-Dade Counties' Extension offices.

Both Miami-Dade and Orange County have two forms of social media being Facebook and YouTube. They also have websites which underwent construction in December 2017 giving this platform a more modern look. Miami-Dade County posted an average of 15 times per month and 4 times per week on Facebook. Orange County was very similar, posting an average of 12 times per month and 3 times per week. Table 3 displays the posts per month on Facebook.

Table 3: Facebook postings per month

	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Orange	12	18	12	13	14	18	14	19	22	5	4	2
Mami-Dade	19	20	13	13	24	15	12	11	17	8	15	19

Miami-Dade County Extension office had a total of 380 followers and 368 people that like the page on Facebook, at the end of the year. However, engagement with posts was low. On average posts would get three likes or four shares. The month of May had the most posts during the year for Miami-Dade County, and the most engaging post had a total of 8 likes, 2 shares, and 2 comments (Figure 1). The post was actually an advertisement for an informative talk on the topic of pests and diseases that affect gardens. Moderators responded to comments and questions often and also provided further resources for their audience as requested.

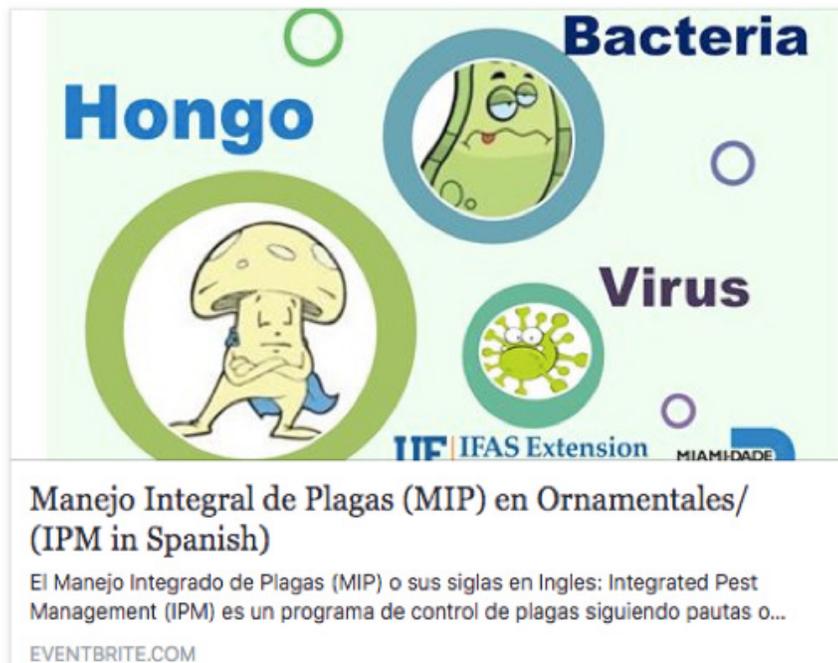
Figure 1: Miami-Dade Engagement



As you can see in Figure 1, residents in Miami-Dade County are looking to gain information in another language. Despite workshop facilitators being bilingual, there was only one post advertising a workshop taught in Spanish for the entire year of 2017 (Figure 2).

Figure 2: Bilingual Post Advertising Workshops in Spanish

Need training in Spanish? Necesita capacitación en español? Say no more, come and learn during the IPM in ornamental crops on May 25 . Learn about plant diseases, how they affect your plants and earn CEUs. More info and registration. #ornamentalstraining, #nurseryIPM, <https://ipm2017spanish.eventbrite.com>



Hongo

Bacteria

Virus

IFAS Extension MIAMI-DADE

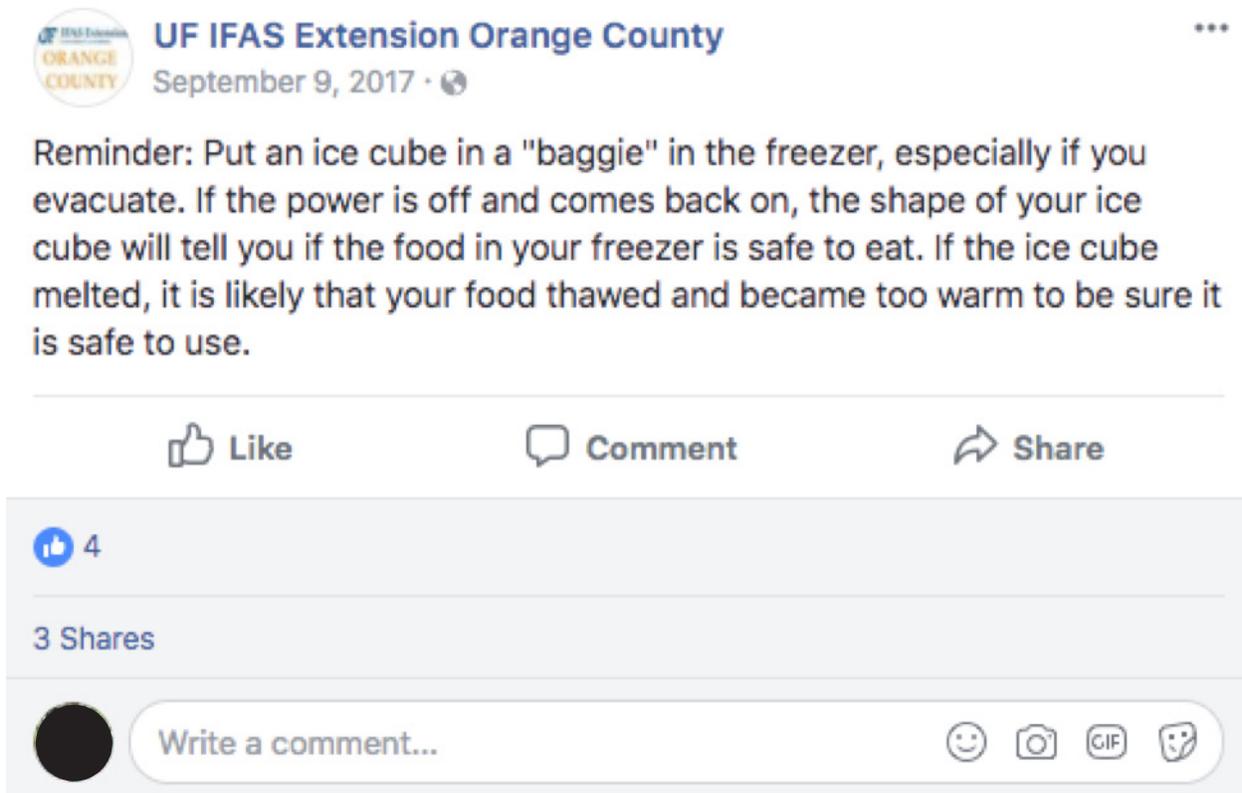
**Manejo Integral de Plagas (MIP) en Ornamentales/
(IPM in Spanish)**

El Manejo Integrado de Plagas (MIP) o sus siglas en Ingles: Integrated Pest Management (IPM) es un programa de control de plagas siguiendo pautas o...

EVENTBRITE.COM

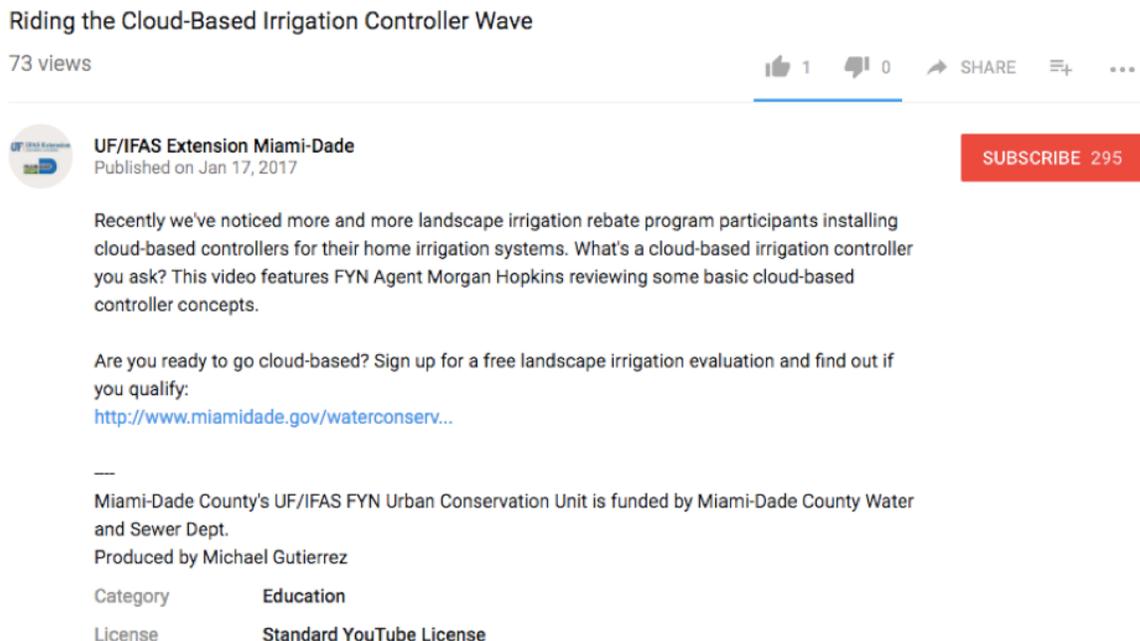
Orange County Extension office has a total of 1,161 followers and 1,155 people that like the page on Facebook. Similarly, to Miami-Dade County, engagement with posts was extremely low. These posts averaged two likes, and the most engaging posts had 13 reactions. The month of September had the most posts, with the most engaging post having three shares and four likes (Figure 3). The post included a tip on how to tell if your food is safe to eat in the case of a power outage during a Hurricane.

Figure 3: Most Engaging Post for Orange County



YouTube had low engagement during the 2017 calendar year. Orange County had a total of 17 subscribers and did not have any posts during the year. Miami-Dade County had a total of 295 subscribers and 8 total posts last year. The most viewed video was 2 minutes and 25 seconds long informing viewers on what Cloud Based Irrigation Controllers were. These devices were a part of their Irrigation Rebate Program (Figure 4).

Figure 4: YouTube Video Description

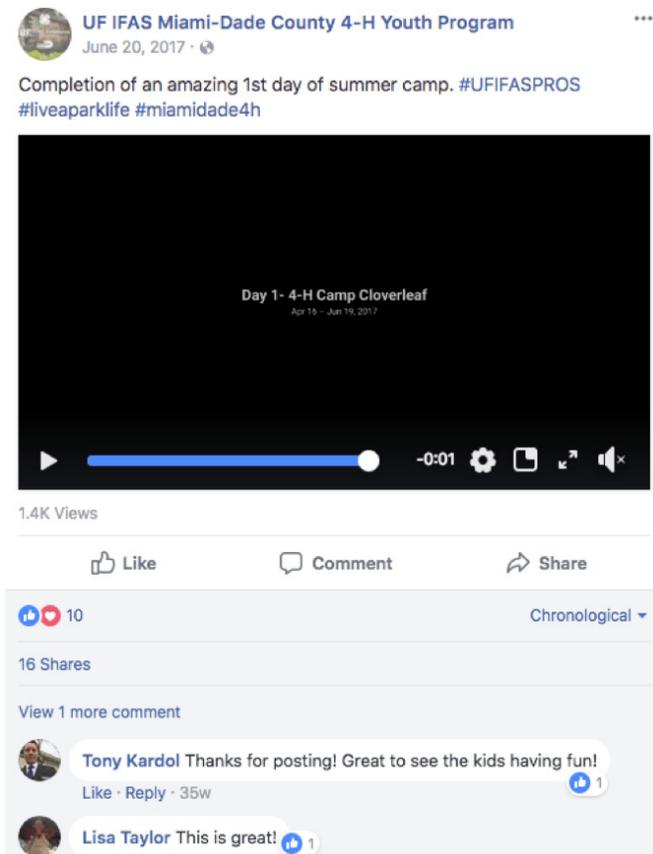


Objective 2: Description of social media usage for specific programs operating under Orange and Miami-Dade Counties' Extension offices.

Miami-Dade County 4-H Program

The Miami-Dade 4-H Program currently has one social site being Facebook, which had a total of 441 followers and 431 people that like the page. This program is statewide and provides youth with the opportunity to accrue knowledge, develop skills and explore career paths through a hands-on approach (4-H Youth Leadership Development, n.d.). Unlike the main Extension offices' Facebook page, the 4-H Youth Program had just under 100 posts for the 2017 calendar year. Despite having less posts, these posts had significantly more engagement than the main Extension Office. Of the 93 posts, 88% of posts included a piece of engagement (i.e. a video, graphic, or hashtag). In Figure 5, a combination of engagement elements was used to create a post summing up 4-H camp.

Figure 5: Summer Camp Video



Miami-Dade Florida-Friendly Landscaping

Similarly, to the 4-H Program in Miami-Dade County, the Florida-Friendly Landscaping currently has one social site being Facebook. Florida-Friendly Landscaping is referred to as Florida Yards and Neighborhoods Programs in Miami Dade County. The primary goal is to promote the Florida-Friendly Landscaping principals to homeowners, landscapers, and municipalities in Miami-Dade (IFAS Communications: Florida Yards and Neighborhoods, n.d.). The page currently has 725 followers and 730 people that like the page. Florida-Friendly had just over 100 posts for the 2017 calendar year with 97% of posts including element of engagement. Florida-Friendly Landscaping also captivates their audience by including trends in their posts. For example, Emoji's and Memes are popular throughout all social media platforms today. Figure 6 is an example of great use of emoji's and Figure 7 is an example of great use of a meme.

Figure 6: Use of Emoji's



Figure 7: Use of a Meme



Miami-Dade Urban Conservation Unit

Miami-Dade's Urban Conservation Unit uses Twitter as their only social media platform unlike other programs in the county. According to their twitter page, their primary goal is to manage Miami-Dade Water & Sewer's irrigation rebate program. The platform is more constricting than Facebook, only allowing users to post a specific amount of characters. Therefore, the content posted here was different than what would be posted on Facebook. The majority of these posts were retweeted from other Twitter accounts for example, in the month of September there was a total of 178 posts but 118 of those were retweeted. Of the 60 original tweets only six included a picture or video, the other 54 were links to stories. Figure 8 shows an original tweet and Figure 9 shows a retweet in the month of September.

Figure 8: Original Content



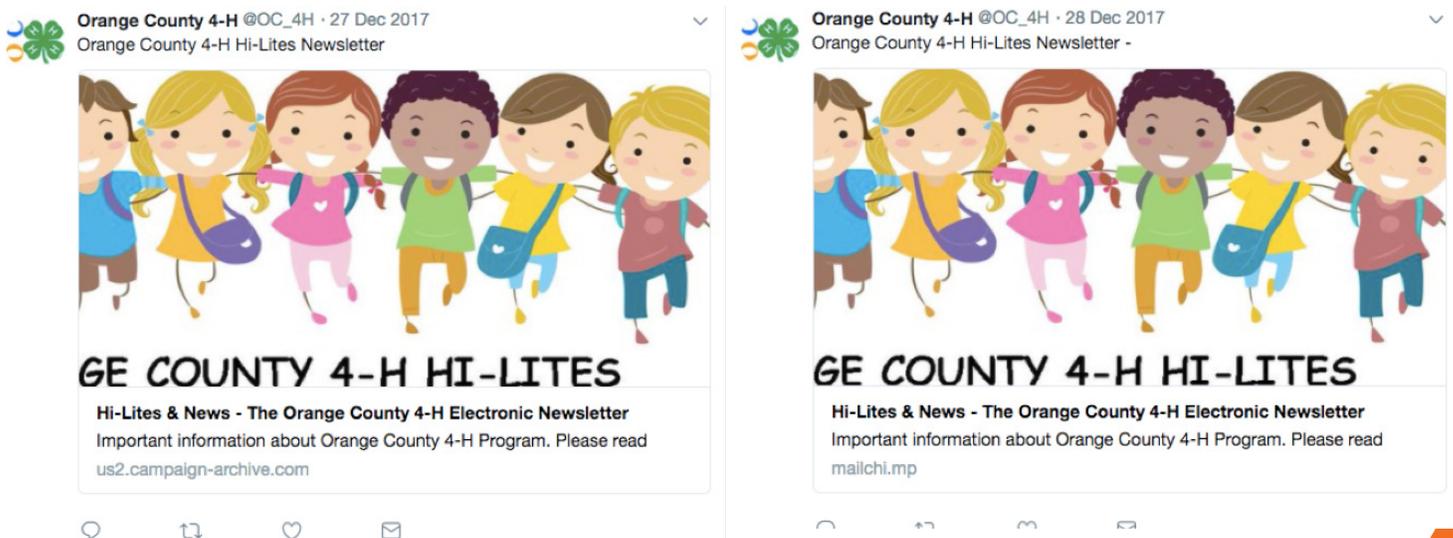
Figure 9: Retweeted Content



Orange County Florida 4-H UF IFAS Extension

The 4-H program in Orange County is one of the few programs that has multiple social media sites. Facebook, Twitter and Instagram comprise this program’s social media presence and they are the only program to use the Instagram platform. Throughout the year there was a total of 34 posts on twitter, 53 posts on Facebook, and seven posts on Instagram. Although, the tweets were original and not retweeted from another source, the same content would be posted either twice a day or one day apart (Figure 10).

Figure 10: Two Posts with the Same Content



Surprisingly, Facebook had significantly less posts than the main Extension offices' page as well as Miami-Dade's 4-H Facebook page, However, they were the only page to use the polling options through Facebook to engage with their audience (Figure 11).

Figure 11: Use of Facebook polls



Instagram had a total of seven posts for the 2017 year. Despite being a platform dedicated to sharing pictures and a program dedicated to building young leaders however, only three of the posts included pictures of current 4-H members (Figure 12).

Figure 12: National Youth Science Day



Orange County Home and Family Finances

Orange County Home and Family Finances had one post throughout the year. The page also has a picture of a person as the profile photo instead of a logo like the other programs have. According to their Facebook Page, Home and Family Finances aims to educate, inform and provide updated information on topics related to wellness, healthy homes, home ownership and family finances.

Orange County Food and Nutrition

Similarly, to the Home and Family Finances program, the Food and Nutrition program had low engagement on Facebook. According to their Facebook page, the primary goal is to teach consumers science, nutrition, food preparation, and resource management. However, they did have an average of one post per month. Each post is advertising a service that the program offers such as, workshops on food preservation or newly available webinars.

Orange County Master Gardner's

Orange County Master Gardner's program is active on both Facebook and Twitter. The accounts are linked therefore, everything that is posted on Facebook also gets posted on Twitter. The Master Gardner's assist Extension agents in providing information based on horticultural research in Florida and is volunteer based (IFAS Communication: Orange County Master Gardner's Program, n.d.). During the 2017 calendar year, the social sites for this program had a total of 276 posts far surpassing the main Extension offices' Facebook page.

Orange County Residential Horticulture

Much like the Master Gardner's program, the Residential Horticulture program in Orange County can be found on Facebook and Twitter. These accounts are also linked and had a total of 89 posts throughout the year. These posts were not original to Twitter and were re-posted from Facebook. The Residential Horticulture program provides University of Florida research information to help consumers care for their landscapes through classes, seminars, clinics and workshops (IFAS Communications: Residential Horticulture, n.d.).

Discussion and Conclusion

From the quantitative data drawn in this study, it can be concluded that Extension offices and their special programs in Orange and Miami-Dade County have an active presence on social media. However, this presence is limited at most and does not accurately depict the outreach done through the programs. These sites have become a place for viewers to find information on events and activities offered through the office, as well as engage with other members of the community and Extension officers. Previous research shows that consumers would use social media to receive free information from Extension Educators (Da Silva et al., 2016). From the findings of this research it can also be concluded that there were barriers to using social media as well as understanding its importance for Extension Educators.

When comparing the main Extension offices to their special programs, it can be concluded that special programs generate more engagement on social media. For example, in Miami-Dade County the 4-H program is highly active on social media and stays up to date with trends, interacting with community members, and posting more often. The same can be noted for the Master Gardener's program in Orange County. These findings suggest that efforts are concentrated in maintaining relationships with those invested in the program.

One potential barrier for Extension offices would be the use of time (Fuess et al., 2014). It is telling from the inconsistent posting and posting the same content across various platforms that time plays a major role in managing social media. Programs with more than one social media site (i.e. Orange County Florida 4H IFAS Extension) can often be found highly engaged on one site and lacking on the others. These behaviors can also be attributed to funding; not being able to allot one sole person to the management of social media.

Another potential barrier for Extension offices to effectively use social media is understanding its importance. As pointed out by Jaafar et al. (2014), social media should be used as a platform to enhance online engagement and fill the gap between large operations and the general public. However, currently social media platforms for the Extension offices in Orange and Miami-Dade County are not as engaging as they could be. They are not used as frequently as they could be either. Although, there were several posts per month, much of the content posted was done so without a clear though process.

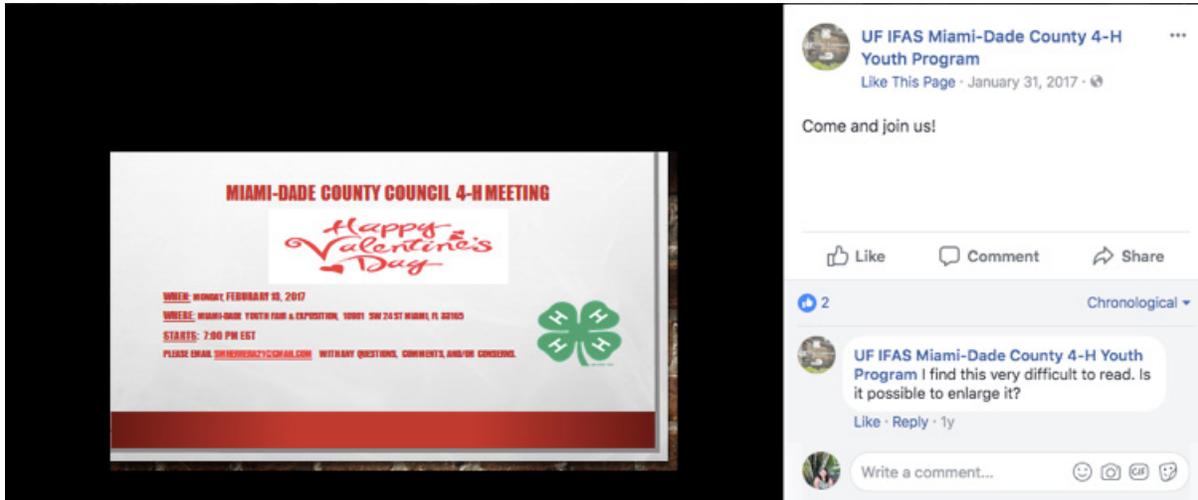
It is hard to gauge what was expected of viewers in many of the posts. Social media was made to be an effective and efficient outreach tool in order to build social capital (Fuess et al., 2014). Without understanding this importance social media can often be misconstrued and seen as a waste of resources. Another potential barrier is understanding how to use social media. From the research it can be concluded that opportunities to engage with viewers was often missed. For example, in Figure 13, a post sharing proposed budgets to slash Agricultural programs in the state of Florida included the caption “Your action needed...”. This post did not contain any visuals, nor an explanation for how this proposed budget would affect producers in the state and would be considered a standard for all their posts.

Figure 13: Missed Opportunity to Engage



It is also vital to proofread posts and comments prior to delivering content on the various platforms. For example, in Figure 14 there is a post from January 2017 advertising an upcoming meeting. However, part of the visual was not easily readable and was pointed out by viewers. Unfortunately, the comment came from one of the page moderators that seemingly forgot to switch accounts before commenting. Viewers can tell that the post did not go through proofreading prior to making it on the page.

Figure 14: Watch Where You Post From



In Figure 15, the moderators of the Orange County 4-H Facebook page are responding to comments about accents of a presenter in a video. However, the word accent was spelled wrong giving it an entirely different meaning.

Figure 15.: Watch Spelling



Recommendations

Overall, it is recommended that Extension offices in Orange and Miami-Dade County continue to improve social media use in order to ensure its effectiveness as a tool for outreach. These offices should be well aware of the importance of social media and its rapidly growing usage within the community. It is recommended that the Institute of Food and Agricultural Sciences at the University of Florida offer educational training on social media usage to all Extension offices as well as their special programs within the state of Florida.

The implementation of educational trainings for Extension Educators is imperative in creating a positive outlook on social media usage. The training should be offered through the University of Florida and Mandated by the Institute of Food and Agricultural Sciences. This training should be implemented in a series and include an informational session on the various social sites and what they are primarily used for. For example, Instagram is used to share photos and videos primarily from smartphones, while Facebook offers users to share lengthier posts, join groups, and works on mobile and computer platforms. Understanding the use of each social media platform is essential to aligning with current trends. As previously mentioned, meme's and emojis are very popular today in society however, there were only a few posts that included these. Keeping up to date with current trends will also create more engagement with viewers. Engagement is one of the key factors that contributes to brand loyalty. Hosting question and answer sessions or going live during a meeting would incite viewers to engage more with the brand.

This training should also focus on assessing the various needs of each counties' audience. For example, the website for the Extension office in Miami-Dade County can be viewed in English, Spanish and Creole due to the varying populations in the county. This will not be necessary for every county in the state however, being able to assess consumer needs is imperative for each county. Prior to the training, Extension Educators should be given an assessment to identify barriers related to social media usage. This same assessment should also be given post training to measure effectiveness. These barriers can also be addressed within the training to provide realistic solutions. For example, if time is identified as a barrier, social media management tools such as Hootsuite or Meltwater can be used to help plan, schedule and maintain posts across platforms.

In closing, if used effectively social media can be an excellent outreach tool for Extension

Educators. Aside from implementing educational training, future research should assess public perceptions of programs' engagement and outreach through social media. This research should be conducted multiple times a year to effectively measure growth. These findings can be compared over time and depending on their outcomes, justify allotting monetary funds to hire social media managers and/or social media teams. These findings will also show the need for social media and provide context for further improvements for Agricultural outreach.