Developing A Plan for The Future at Midori Farm



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Developing A Plan for The Future at Midori Farm

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Abstract

Midori Farm is an organic farm north of the city of Kyoto, Japan. The farm's mission is to farm sustainably and educate people on the value of small-scale organic farming, encouraging environmentally friendly consumer behavior by raising awareness of the importance of eating locally grown food. Our goal in this project was to assist Midori Farm in further developing in person and online content to raise awareness of major environmental issues such as climate change and revive rural farm areas. We provided written instructions and short YouTube videos on improving online content and updated the website to assist in implementing our recommendations.

Executive Summary

Midori Farm is a small organic farm north of the city of Kyoto, Japan. The farm's owner, Chuck Kayser uses his farm to raise awareness of environmental issues, climate change, and the importance of healthy food. The farm uses farm visits, events in Kyoto, and online content to achieve its mission. Mr. Kayser is continuously reevaluating his farm's approach in order to effectively reach the maximum number of people. The farm's primary income comes from selling baskets of produce through the **teikei system**- a Japanese form of community supported agriculture.



Figure A: Map of Midori Farm's location relative to the city of Kyoto

Due to the current pandemic, Mr. Kayser has been studying how to improve the farm's online presence to continue to reach people despite the limitations of social distancing. Improvements that could help the farm build a stronger connection with the Japanese community, as well as use the global reach of the Internet to spread the farm's message outside of Japan would be beneficial for Midori Farm.

Our mission was to assist Midori Farm in developing strategies for in person and online content to ensure the success of the farm through the pandemic and beyond. We completed four major objectives to achieve this:

- 1. Understand strengths and weaknesses of Midori Farm's current educational workshops.
- 2. Identify applicable strategies that are used by other farms in Japan as well as abroad.

- 3. Assess how Midori Farm can implement online strategies alongside current programs.
- 4. Develop a plan for Midori Farm to evolve its offerings to increase community awareness of the farm and its mission of environmental protection.

We reached out to previous Midori Farm volunteers, interviewing them to collect information on their experience at the farm, what aspects of the farm's operations they felt were strong or weak, and how it compared to their experience at other farms. The biggest point that was raised during the interviews is that Midori Farm is primarily limited by volunteer-power because Mr. Kayser can only accomplish so much on his own and does not have enough assistance.

We also collected information by surveying people on their experience visiting small farms. This survey asked about both small farms in general, and about Midori Farm specifically, and provided information on what people in general look for when visiting a farm. While the main focus of the project was to improve Midori Farm's online content, we have some recommendations for future, in person improvements that Mr. Kayser can make. The recommendations are worth noting, but immediate implementation is not necessary or feasible.

Results, Recommendations, and Deliverables

Midori Farm aims to become a **registered non-profit organization**. We included a question in our survey on non-profit organizations, and 62% of respondents indicated that they would be more comfortable spending money at a farm that is a nonprofit. We make no further recommendations on this strategy because Mr. Kayser has already begun to fill out paperwork for this and we are unable to add any further value in this regard.

We found through the survey that people are interested in doing recreational events (like hiking and barbeque) at Midori Farm. Eighty-six percent of survey respondents indicated interest in events at the farm, while 61% of respondents selected events in Kyoto. Mr. Kayser already includes recreational activities at his community events and tours. We recommend that Mr. Kayser hold more **events focused on recreation** to draw more people to the farm. The primary challenge would be if Mr. Kayser increases the amount of recreational outdoor activities and events in Kyoto, then he will have less time to hold the productive events that help him plant and harvest vegetables.

Mr. Kayser has held events in Kyoto in the past, but they have been structured as a meet and greet rather than an organized activity. We recommend that Mr. Kayser focus on doing more **educational workshops in Kyoto**. Our survey showed that interest exists in these events, as 61% of respondents indicated they would like to attend workshop type events in Kyoto. For

example, Mr. Kayser could have a workshop where he teaches attendees basic farming and gardening techniques, charging an entrance fee to cover the materials and time cost. The workshops will allow for people in Kyoto to have more interaction with the farm without having to travel there, helping build Mr. Kayser's connection with the community there. These events will advertise the farm, enticing more people to visit and volunteer in the future.

During an interview with a Midori Farm volunteer, the volunteer mentioned that Mr. Kayser could partner with a chef from a restaurant nearby or in Kyoto to build his relationship with the community. Mr. Kayser would provide the chef with vegetables, which the chef would use to cook meals and advertise the meal on his or her social media. Other farms have tried similar **chef partnerships** and have been very successful. Such a relationship between farmer and chef can provide the farmer with more exposure to the community. Chefs often make large purchases, which could be an avenue to increase Midori Farm's sales in the future. While this strategy will help with connections to restaurants in Kyoto and make more people aware of the farm, The initial task of finding chefs will be a significant time commitment for Mr. Kayser, and it will require large amounts of vegetables. As such, we recommend that Mr. Kayser focus first on the easier online recommendations below, but keep this partnership in mind as a future option.

During our interview with Many Hands Organic Farm, a small organic farm in Massachusetts, they described to us a program in which they give working shareholders a CSA basket for their time. Many Hands Organic Farm utilizes this **food for farm work** approach as part of their CSA, but are unsure if it improves retention of the workers or attracts new ones. Additionally, we found that none of the other seven Massachusetts farms we researched offer an equivalent program. There was a limited amount of information on such a strategy online. We recommend that Mr. Kayser also keeps this idea in mind as an option for developing the farm in the future. This strategy may entice more volunteers, but we do not have enough data to make a strong recommendation on it.

The workload of farm tasks leaves Mr. Kayser with little time to work on his online content. We recommend that Mr. Kayser **expand his search for volunteers** to find people willing to work remotely on his online content. As one of the big issues with attracting volunteers to Midori Farm has been the travel time, remote volunteering may be appealing to many people unable to volunteer at the farm in person. Establishing virtual volunteering opportunities could help to solve the time issues associated with online content, as remote volunteers could assist in updating social media and editing YouTube videos. Mr. Kayser would be able to focus his available time more on making the farm related content (videos and

pictures), while the volunteers can work on editing and presenting that material he provides. The strategy will be relatively easy to implement, as all Mr. Kayser needs is a profile and a short description on one of these websites.

One strategy that has seen success for other farms is **short instructional videos**. Videos should be instructional, aimed toward beginners, short, and informatively titled. A number of YouTube channels with significant numbers of subscribers post videos in this format, and evidence from Midori Farm's YouTube channel backs this approach. These videos are approachable, helping to draw in new viewers to the channel and allow the farm to reach a broader audience. We recommend that Mr. Kayser expand his YouTube videos to include more educational YouTube videos on basic farming techniques that follow this format in order to attract a wider audience. These videos would supplement his current in depth discussions which appeal to a smaller, dedicated audience.

Website Improvements

We assisted Mr. Kayser by constructing online guidelines to **strengthen organization** and **efficient use of available features** from online platforms. The farm currently has its own website, as well as a presence on Facebook, Instagram, and YouTube. Each platform has additional features that can be used to strengthen the farm's online presence, including advertising, organization, and live streaming features. We created guidelines to describe the benefits of using certain features from online platforms and to provide recommendations for improving online appeal. We provided YouTube tutorials that give detailed instructions on how to use each feature. We have also implemented a Linktree, which streamlines navigation between social media sites. With online guidelines for each online platform and the implementation of Linktree, Mr. Kayser can effectively utilize available online resources from each platform and explore more features and other platforms in the future.

When talking with Many Hands Organic farm, we discussed the **recipe listing** on their website that provides instructions on cooking simple meals using their food. The recipes are designed to be easily prepared, helping people to figure out how to cook effectively with the food they purchase from the farm. This is common amongst small farms in Massachusetts, as 4 of the 8 farms we contacted had a variation on this listing. Midori Farm's teikei customers may not be very experienced with the vegetables in their basket, so posting a list of recipes would help to teach customers how to use the less common vegetables in their teikei share, encourage them to visit the site regularly, and reassure people considering joining the teikei program that they would be able to use their share and be part of a community. We have added this section to Midori Farm's website for Mr. Kayser to fill with his recipes at a later date. Customers will be

provided with the option to submit their own recipes through the website, reducing the time and effort required from Mr. Kayser and his volunteers while providing teikei customers a sense of involvement and community.

We added an **online store** to the Midori Farm website, which allows Mr. Kayser to easily make sales of products like hot sauce, individual vegetables, and teikei baskets online through a single page. Mr. Kayser can enter the products and quantities he wishes to sell, and the website will track inventory and provide shipping options based on the current delivery system. Integrating this into a unified online store would not be a significant change from the current approach, and automating the ordering process would help to counteract the time spent maintaining the store. An online store increases accessibility and makes the website look more professional, which will help to expand the farm's customer base.

By developing a stronger web presence, Midori Farm will be able to expand their reach to a wider audience. Reaching this wider audience is key to the farm's goal of raising awareness of environmental issues and the importance of local food, as well as securing a pool of customers and volunteers to secure the farm's long-term growth.

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Authorship

Atharva Dikshit, William Engdahl, Antonio Ramirez, and Chris Son all contributed to the development of deliverables. All four members contributed to the editing and review of all sections. The following describes more on what each individual member accomplished.

Abstract

William Engdahl contributed writing

Executive Summary

William Engdahl contributed writing

Introduction and Background

Atharva Dikshit contributed writing to sections 1.3 and 1.4 William Engdahl contributed writing to 1.1 and 1.2 Antonio Ramirez contributed writing to sections 1.3 and 1.5 Chris Son contributed writing to sections 1.4, and 1.5

Methodology

William Engdahl contributed writing to sections 2.3 and 2.4 Antonio Ramirez contributed writing to sections 2.1 and 2.2

Results and Findings

Atharva Dikshit, William Engdahl, Antonio Ramirez, and Chris Son all contributed writing

Recommendations and Deliverables

Atharva Dikshit, William Engdahl, Antonio Ramirez, and Chris Son all contributed writing

Conclusion

Antonio Ramirez contributed to writing

1. Introduction and Background

Japan currently imports over 60% of its food supply due to a steady decline in farms and consequently farmland (Yamashita, 2008). Much of the arable land in Japan has been converted away from farming to develop housing and infrastructure, and few people are interested in the farming profession due to its labor intensive nature (Yamashita, 2008). However, small and local farms have several key benefits over their larger counterparts, including preserving biodiversity and reducing the environmental costs of food transport. Smaller farms also spearhead the shift away from chemical pesticides and fertilizers more than their larger and more commercialized counterparts (Kondoh, 2015). Midori Farm is a farm north of Kyoto that fits into such a category. The goal of this project is to assist Midori Farm in developing a plan to raise awareness of the importance of agriculture and continue to expand organic farming in Japan through online education.

The literature review begins with a definition of local food and illustrates the advantages it has over produce from commercial farms, as well as the challenges local farmers face in Japan. In order to provide context for this, we then describe the history of farming in Japan from the neolithic period through the postwar era, "teikei" community supported agriculture, and contemporary organic agriculture. This history is followed by an exploration of environmental education in Japan, agro-tourism and hands-on learning, and why it is valuable for farmers to get involved. Then, we illustrate how small farms today are interacting with the community. We finish with an in-depth discussion of Midori Farm and how their current challenges relate to all these topics.

1.1 Definition and Importance of Locally Grown Food

As today's global food system developed through technological advancements and expanding trade, the phrase "local food" emerged to distinguish food provided by smaller farms from food provided by their larger, commercialized counterparts (Granvik, 2017). Local food is a broad phrase with no universal definition, which can lead to misinterpretations. One definition defines "local" by the distance between where the food is grown and the place where it is consumed. For example:

According to the definition adopted by the US Congress in 2008... a product can be considered a 'local or regionally produced agricultural food product' if (a) the total distance traveled is less than 400 miles from the source (approximately 644 km) or (b) the product is produced in the same state in which it is marketed (Martinez et al., 2010).

For the purpose of this report, local food is defined as both:

- 1. Grown geographically close to the consumer. It should be a short enough distance that it is shipped direct to market instead of overseas or to a distribution center
- 2. Handled by farmers throughout the growing and harvesting, neither being packaged in a commercial or factory style facility

Local food has a number of benefits - for consumers, environment and community -, over food from large-scale commercial operations. Locally grown produce is fresher, tastes better, and is more often organic: shortened transit times ensure that fruits and vegetables are at optimum freshness by the time they end up in a home or restaurant without needing chemical preservatives (Grubinger, 2010). By contrast, commercial farms often transport food to intermediate distribution centers over long distances and use chemical methods to counteract a loss of freshness. Locally grown food also offers health benefits: while large-scale farms utilize agrochemicals such as pesticides or chemical fertilizers, smaller local farms tend to steer clear of using the often dangerous agro-chemicals and instead use more natural methods (Wittman, 2017). Such chemicals are bad for the environment, consumers, and the farmers who use them, pushing local farmers toward safer alternatives. Small-scale farms that do not use industrial methods or chemicals preserve biodiversity, which benefits the environment by allowing wild species - such as insects and birds - to thrive alongside the crops (Coelho, 2018). Wild species can in turn benefit crops, allowing organic farms to produce food with fewer adverse environmental effects.

Local farms also benefit their community in ways that larger scale commercial farms cannot. Buying from local farmers keeps money within the local community. Proximity between farmer and consumer breaks the social barrier between them, allowing farmers to exchange ideas, raise awareness of environmental and agriculture topics, and to foster communities (Auld et al., 2003). Local farmers often sell directly to consumers at farmer's markets, which "...give consumers the ability to discover where their food comes from and who is producing it, and with that knowledge, a certain assurance about the production methods on-farm" (Coelho, p. 85 2018). Larger farms often use multiple intermediaries, which means that money spent on their produce is moved away from the community, while consumers are less aware of where their food comes from and how it is produced. Technological advances in the previous century have resulted in the decline of traditional local and small-scale farms.

1.2 History of Organic and Local Farming in Japan

Throughout most of Japan's agriculture history, from the first organized farming on the islands around 8000 years ago through World War II, the majority of people got their food from small, local, organic farms. After the war, large-scale factory farming began to replace traditional farming, but by the 1980's consumer preferences began to shift back toward more traditional organic farming.

1.2.1 Agricultural Roots and the Decline of Traditional Farming

Thousands of years before the invention of chemical fertilizers, pesticides, and refrigeration, Japanese farmers grew strains of crops uniquely suited to their environment without needing any of those conveniences. Agriculture in Japan was flourishing by around 1000 BCE. During this period, farmers in Southern Japan grew rice, millet, wheat, barley, soybeans, adzuki beans, and tree fruits. Northern farmers instead raised crops such as beans, barley, wheat, and melons using dry field agriculture while trading with the southern regions of Japan for rice (Gorlinski, 2012, p. 59, 70-71). Through the 1600's agriculture was based on regional plants, methods, and traditions. Traditional plants would enjoy a modern resurgence, but first the introduction of large-scale commercial farming would reshape Japanese agricultural methods and species.

When Japan rebuilt itself after World War II, traditional agriculture was pushed aside in favor of large farms designed to compete in a global food market. In 1961, Japan's new Agriculture Basic Law sought to increase farm efficiency. The resulting mechanization, commercialization, and pesticide application would shift Japanese farming away from traditional subsistence methods and toward a commercial approach in line with the rest of the world (Kondoh, 2015). The government pushed small farmers to sell their land to establish larger, more efficient farms, but this was broadly unsuccessful due to fierce resistance from farmers who refused to give up their traditional holdings. At the same time, mechanization replaced traditional Japanese techniques, while government "extension experts" taught rural communities the value of chemical pesticides (Kondoh, 2015). This was the lowest point of Japanese organic agriculture, as the boundless technological optimism of the mid 1900's led people to place unconditional trust in the modern convenience of chemically treated food. It was not until later that people began to consider the drawbacks of pesticides, but at that point organic food was effectively unavailable in Japan.

1.2.2 Counterreaction: the Teikei System

By the early 1970's, consumer distrust of pesticides was increasing. However, markets at the time offered very few organic options. To counter this, consumer purchasing groups were formed to make bulk purchases directly from producers (Kondoh, 2015). This relationship would evolve into the teikei system, a uniquely Japanese form of community supported agriculture named after the Japanese word for "partnership". One such group, *Anzenna Tabemono-wo Tsukutte Taberu-kai* (ATTT), visited a farming village near Tokyo in late 1972 and asked the farmers to raise organic egg-laying chickens and grow organic produce for them. Seventeen farmers agreed to the generous terms offered by ATTT (Kondoh, 2015). The key points were:

- 1. They would purchase the entire volume of organic produce that the farmers grew
- 2. They would provide volunteer labor to assist the farmers
- 3. The farmers would be able to set prices as needed to ensure a viable operation

These basic rules became the basis of the teikei philosophy. Volunteer labor increased individual buy in and helped to increase consumer awareness. Following this success, teikei groups formed in other urban regions of Japan, while many smaller farmers turned to teikei organic agriculture as a way to preserve their livelihood (Kondoh, 2015). This change would be accelerated by farmer's feelings of betrayal toward the government when it reversed its postwar policies that had been designed to ward off starvation. In 1971, the government implemented policies to prevent overproduction, angering farmers who had struggled to boost crop yields for the preceding two decades. Disaffected farmers began shifting toward organic farming, which required less of the expensive and hazardous supplies - fertilizers, pesticides, and the equipment to apply them - that were driving farms to bankruptcy (Kondoh, 2015). Many of the farmers would find urban teikei groups a ready market for their products (Kondoh, 2015). The partnerships established in the 1970's would help to slow the collapse of small Japanese farms, but the teikei system would not be on the rise forever.

1.2.3 The Post-Teikei World

The teikei system declined since its peak in the 1980's, partially due to demographic shifts, and partially as a result of its own success. Consumers are able to purchase organic foods from markets once again, as teikei success made pesticide-free food popular again. Small food co-ops, followed by larger regional or national organizations recognized the rising popularity of organic food and began to partner with farmers to offer organic food. Following the success of organic food with co-ops and mail deliveries, regular supermarket chains began to offer organic

produce in the mid 80's, but did not aim to create the same interactions as teikei (Kondoh, 2015). Organic food is now far more accessible, but the interaction fostered by the teikei system has not stood the test of time. Teikei both won a dramatic victory and suffered a significant defeat; it succeeded spectacularly in making organic products mainstream, but was broadly unsuccessful in its goals of directly connecting farmers and consumers.

The decline of teikei can be attributed to a number of social and legal factors. Teikei relied substantially on volunteer labor (both assisting at the farms and distributing food), which is less available in modern Japan as a higher fraction of the population has entered the workforce, leaving fewer people able to contribute to projects like teikei (Kondoh, 2015). Younger generations are often appreciative of the work their parents did through teikei to acquire organic food, but prefer to buy it through more conventional - and less time consuming means. The increasing age of the Japanese population is also an issue, as original teikei members are becoming too old to be able to contribute the same way, and there is not enough interest from Japan's younger generation. In 2000, the Japanese government passed a law establishing an organic certification process. Smaller farms often remain uncertified rather than commit the money and time needed for the official certification, and many teikei farmers disagree with this government certification, defining "organic" as including careful consideration of local factors, not just the absence of chemicals (Kondoh, 2015). Japan's agricultural laws like this seldom benefit the smaller teikei farmers. Between social changes and the new availability of other organic options, traditional teikei farming is struggling. Farms planning to remain viable in the long run will have to adapt to this new reality. With consumers prioritizing convenience, they are less willing to participate in teikei now that easier options are available. Farms who aim to raise awareness about agricultural issues - both the environmental aspects such as pollution and economic challenges - will need to focus on actions other than food sales alone.

1.3 Relevance of Small Farms in the Modern Era

Small farms cannot remain relevant without ensuring the support of the younger generation, which is why farms must make an effort to raise awareness of the critical role they play in people's lives. Such a role is especially important in Japan's highly tradition-based culture (Maurice, 2014). Farms can begin to raise awareness of their importance through education. Environmental education is important for small farms, as many of their techniques emphasize positive environmental impacts. Making people aware of their own environmental impact can help to highlight the important role of small farms. Attitudes towards the environment need to be changed in order to change people's actions toward the environment (Ito

et al., 2014). Agricultural related experiences can show people their role in the ecosystem and the importance of preserving nature (Ito et al., 2014). This encourages them to be more grateful to nature and improve their attitudes towards it (Ito et al., 2014). Japan's system of environmental education helps to further this idea.

Japan's system of environmental education has been under constant change since the end of World War II. However, Since 1991, school systems have followed a program called "Kankyōkyōiku shidōshiryō". The program allows schools in Japan to take a more holistic approach on environmental education. Instead of having an environment class, many school systems incorporate environmental topics into all their classes. (Kodama, 2017, p. 2). For example, a home economics class might include a section about how to conserve electricity, water, and manage waste. The classes also include a period for integrated study (PIS). The PIS is a period from 1st to 9th grade where the school and the students try to work on a problem that is affecting the area that they live in. This allows for a connection between schools and the community which is important in environmental education. Environmental education is unique in the fact that it is important for the whole society to learn about environmental topics, not just the individual (Ito et al., 2014). As part of the community, farms can play a role in community and school engagement as well, using the farm as a classroom.

1.3.1 Agro-Tourism and Hands-on Learning

Agro-tourism (sometimes spelled agritourism) describes any agricultural activities that attract visitors for the purpose of entertainment or education while also generating income for farm owners. It involves activities such as farming, fishing, and other agricultural practices targeted toward visitors, such as petting zoos, orchard picking, corn mazes, and hay rides (Sofield, 2005). Since most tourists do not have any experience with agriculture or any farm-related activities, agro-tourism is a good way to raise awareness and generate repeat customers (Agius, 2006). Many recognize agro-tourism as one of the most crucial tools to promote the "richness of nature and cultural heritage", while simultaneously contributing to the economic development of the local communities (Stanovčić et al., 2018). Agro-tourists are fascinated by traditional methods of farming that may be unique to a specific farm or region (Jęczmyk et al., 2014). As a result, agro-tourism can draw tourists from a large area. Tourists pay to explore the farm and attend workshops on various agricultural or environmental subjects. This engagement is key to ensuring continued interest in farms and their practices.

Agro-tourism can help supplement the benefits of childhood education. Studies have found that childhood experiences such as spending more time outdoors, taking classes in school

related to the environment, and attending summer camps can lead to more nature positive behavior in adult life (Molinario et al., 2020; Collado et al. 2013). Such positive behaviors can also be defined as actions taken to minimize a negative impact on the environment (Molinario et al., 2020). The studies also proved that involvement in hands-on environmental programs had positive effects on the participants' view on ecology, their emotional connections with nature, and their pro-environmental behaviors in school (Molinario et al., 2020). While it is important to make people of all ages aware of environmental issues, children and young adults can benefit the most from this kind of learning. Agro-tourism also takes advantage of the fact that being in the environment of the subject being taught improves retention and appreciation of the topic. (Hinds & Sparks, 2008).

A case study in the village of Hinase, on the southern coast of Honshu, proves hands-on learning can effectively teach environmental topics. Over 3 years researchers interviewed students from 1st to 3rd grade who participated in the Marine Conservation Education Program (MCEP) at Hinase Junior High School. It includes hands-on interactions with the town fisherman. One of the keys to the success of this program is that:

While these activities require energy, are tiring, and sometimes take place in poor weather, by participating in these activities, students think and struggle. Furthermore, they not only learn about the local environment but also draw connections between the local environment and their life (Sakurai & Uehara, 2020, p. 7).

While the tasks that students perform are sometimes challenging, this helps build a stronger connection to the environment. It is clear from this study that programs with a hands-on component benefit the children that are involved and the things they learned from it carry with them into adulthood. Even into adulthood, hands on learning has proven to be effective. Activities such as learning how to paint has proven to promote positive cognitive development in the older population (Lawton & La Porte, 2013). At any age, this kind of learning can allow individuals to explore by themselves and engage with the community through their experiences (Lawton & La Porte, 2013). Beyond agro-tourism, small farms have the opportunity to continue to raise awareness of environmental issues that affect them by utilizing 21st century technology such as e-learning.

1.3.2 Connecting through E-learning

Access to online resources is key to 21st century education. The increase in information and knowledge has transformed the working world and reshaped teaching (Derouin et al., 2005). E-learning can be described as, "a range of activities, from the effective use of digital resources and learning technologies in the classroom, through personal learning experiences enabled through individual access at home or elsewhere"(DfES, 2002). E-Learning can be classroom supplemented by technology, or learning remotely, at one's home or elsewhere. For this paper, E-learning can be defined as:

- 1. Learning that is done through the use of online media, such as video programs and online submission pages.
- 2. Learning that can be done away from the classroom and at the students pace

E-learning can benefit the student and the teacher in many ways. It can be more cost effective and convenient than its in person equivalent (Derouin et al., 2005). The on demand availability of online learning can help the user complete learning modules at their own pace. E-learning can also provide quick reference contents which can ease the learning process (Moore et al., 2011). E-learning is most utilized by schools, but also allows organizations to spread their message and raise awareness. E-learning can be especially effective with the rise of video sharing websites such as YouTube and Vimeo. The video sharing platforms allow free and accessible knowledge to anyone with an Internet connection.

While this type of learning is a stark contrast to the hands-on learning discussed in the previous section, online and hands-on learning can be combined to maximize knowledge and convenience. As technology improves, the possibilities for combined learning continues to grow. Businesses looking to grow their online presence may be able to utilize new tools such as augmented reality to give a "hands on" experience at home (Joshi et al., 2020). Other methods such as combining educational videos with traditional classroom learning have been proven effective. The country of Lesotho showed that a group of students who were taught a section of chemistry using traditional teaching combined with YouTube videos performed better than students with no access to the videos (Bohloko et al., 2019). Instead of the teacher teaching the subject, YouTube videos were used. The teacher would interject at strategic points and ask questions. E-learning allows for an organization to maximize their outreach by combining hands on learning experiences with easy to access online learning resources. Beyond education, there are even more ways for businesses to improve community outreach, without the use of education.

1.4 Building a Farm Community

Community connections are integral to the success of small scale farms, and can be utilized beyond educational programs. Many farms use the Internet to connect with their local communities, reach a broader audience, and gain more attention. Some farmers use online marketing to promote their agricultural products (Ma, 2018). Many small farms sustain themselves through a Community-Supported Agriculture (CSA) model. They often use websites where consumers can order their groceries online or subscribe for a weekly box of groceries to be delivered to their doorstep (Nickelsberg, 2020). As a result, the farms are able to continue to maintain their CSA model by integrating the use of Internet resources. By making it easier for consumers to buy their produce, farms reach a large number of people in their local community. Furthermore, the COVID-19 pandemic has accelerated the promotion of online platforms among small local farmers as they scramble to sell their produce and make a living. Due to the shutdown of farmers' markets and other communal places, small-scale farmers are searching for alternate options for selling their products and engaging the community. The use of the Internet and social media has assisted in the survival of the local farmers during such uncertain times.

1.4.1 Small-scale Farms and Social Media

As social media continues to grow in popularity, the interconnectivity it allows can improve an individual's social behaviors, such as communication and exchanging nonverbal signals (Pulido, 2018). Social media enables a wider audience and allows access to unlimited, unrestricted information. This unlimited access eliminates social barriers, with software such as Google translate allowing people to learn and read foreign languages (Amedie, 2015). Breaking the social barrier also grants opportunities for people to be open and participate in online discussions and events (Amedie, 2015). Platforms such as Facebook, Instagram, and YouTube let people connect with others virtually, provide entertainment, and find information on any subject (Pulido, 2018). Such social media platforms permit communities and establishments to develop and improve businesses, knowledge, and connect with the global society. Many social media platform developers are consistently improving their platforms to make them easier for users to utilize, allowing individuals such as small farmers to be more interconnected with society and offer more than physical interactions (Storey, 2017).

Small-scale farming is commonly isolated, but modern tools like the Internet and social media allow farmers to counteract isolation and boost their business (Watts, 2018). Social media platforms give the opportunity for small farmers to educate, communicate, and promote not only

their establishment, but also raise awareness of agricultural issues. Small farms that do not regularly practice social interaction see a decrease in support from local communities (Watts, 2018). Through social media and the Internet, farmers are able to share valuable information, such as how to grow or care for certain plants (Post, 2012). Social media gives farmers alternative methods of reaching the community and improving their farm and livelihoods. However, some small farmers struggle in transitioning and opening up to social media and the Internet due to the lack of knowledge on new technology (Watts, 2018). Farming is heavily focused on physical labor that takes most of the day leaving farmers lacking in time to learn new virtual technology. Such a focus results in farmers requiring the assistance of organizations that provide the necessary training in order to begin utilizing social media (Watt, 2018). Social media has the power to influence small farmers establishments and easily connect with the online community, making an impact on their livelihoods.

1.5 Our Project with Midori Farm

Chuck Kayser established Midori Farm in 2008 (Midori Farm, 2017). Midori Farm aims to farm sustainably and educate people on the values of small-scale organic farming, encouraging environmentally friendly consumer behavior by raising awareness of the importance of eating locally grown food. The farm highlights the value of the direct links between farmers who grow the food and the consumers who eat it. Mr. Kayser consistently attempts to create a healthier environment for everyone and provides opportunities for people to connect and learn about agricultural practices. Mr. Kayser's ambition to farm began with him growing peppers in his backyard, and soon grew into a desire to open both a beneficial organic farm, and an educational campground. Midori currently has, among other things, vegetable picking workshops, overnight farm stays, and opportunities to volunteer.

The activities primarily attract dedicated volunteers, while accomplishing Midori Farm's goal of raising awareness requires drawing more casual visitors too. However, Midori Farm still struggles to achieve the significant impact it wants in teaching people about the agricultural practices of small-scale farms. Due to the remote location of some farms including Midori, in person activities such as agro-tourism are highly dependent on private transportation, such as a car. Tourism at remote farms can be unattractive to many Japanese residents. Japan is a heavily urbanized nation with a well-developed public transport system. Because of this, almost 31% of Japanese people do not own cars (Engelmann, 2019). In comparison, only 8.7% of US households do not own cars (Peterson, 2020). Midori Farm is approximately an hour away from

the nearest city, Kyoto. With so many people reliant on public transportation networks it often struggles to attract visitors.

Mr. Kayser has asked for help in expanding his online offerings to increase peoples' engagement with the farm. Expanding Midori Farm's outreach programs to an online platform will help to raise awareness of the farm while simultaneously allowing it to grow and better the community around it.

2. Methodology

The team's goal was to assist Midori Farm in further developing in person and online content to continue to raise awareness of major environmental issues - such as climate change - and revive rural farm areas. To achieve this, we accomplished the following four objectives:

- 1. Understand the strengths and weaknesses of Midori Farm's current educational workshops.
- 2. Identify applicable online strategies that are used by other farms in Japan as well as abroad.
- 3. Assess how Midori Farm can implement online strategies alongside current programs.
- 4. Develop a plan for Midori Farm to evolve its offerings to increase community awareness of the farm and its mission of environmental protection.

In the following sections, we discuss how we accomplished the above objectives. To accomplish such objectives, we interviewed visitors, surveyed Midori Farm volunteers, conducted literature research, and interviewed a local farm in the Worcester, MA area. We used the information we gathered from such analysis to form a plan for Midori Farm.

2.1 Objective 1: Understand the Strengths and Weaknesses of Midori Farm's Current Programs

In order to understand the strengths and weaknesses of Midori Farm's current programs, we needed to understand both what Midori Farm offers, and what potential visitors were looking for. The data allow us to determine where Midori Farm is succeeding, and where improvements could be made to attract more visitors.

2.1.1 Interviews

To understand the offerings and capabilities of Midori Farm, we interviewed a number of Midori Farm volunteers. Mr. Kayser, the farm's owner, provided contact information for thirteen of his volunteers, who we reached out to via email (see appendix A preamble). We scheduled a Zoom interview with each of the 8 volunteers who responded, and chose a single lead interviewer for each discussion. The lead interviewer asked the scheduled questions such as how the interviewee feels about Midori Farm's activities, how they heard about the farm, and how the farm could be improved. Following a semi-structured interview format, any additional probing

questions were asked when necessary (Berg and Lune, p. 109, 2012). We analyzed all the information gained from the interviews for keywords and common ideas brought up by the interviewees.

Information from the interviews and surveys is valuable to us for many reasons. Interviewing the volunteers gave us an in-depth look at the farm from people who dedicated many months of their time helping Mr. Kayser with day to day operations. Through the interviewing process, we gained information about:

- Typical volunteer work on the farm
- Other perspectives on Midori Farm's operations
- Improvements that can be made to Midori Farm's online presence
- Farm activities that could be recorded for educational purposes
- Issues with Midori Farm's operations

The semi structured interview format has allowed us to collect responses that would not be possible in a strictly structured interview. The probing questions enabled us to explore the areas where each interviewee had assisted Midori Farm in more detail, which would not be possible using only scripted questions (Berg and Lune, 2012, p. 109).

2.1.2 Surveys

In order to understand how visitors would prefer to interact with the farm online or in person, we collected data through an online survey. We used Qualtrics to create a survey containing a number of questions on visiting small farms in general and on Midori Farm offerings (see Appendix B). We created a survey with a tree structure, in which survey takers are only shown relevant questions. We used www.deepl.com and the assistance of several Japanese friends to translate the survey for the farm's Japanese speaking customers. We confirmed the results by translating deepl's Japanese translation back into English using Google Translate. Our Japanese speaking friends verified that our translations were easy to understand and carry the same meaning as the English version. In order to test the survey, all group members sent it to their peers. They were asked to give feedback on whether the questions asked made sense and if the survey flowed well. Once the feedback was taken into consideration, final changes were made to the survey. The survey was then distributed to the Midori Farm community and the WPI community through social media. The survey provided us with useful data such as:

- The quality of Midori Farm's programs.
- How people view Mr. Kayser's website, YouTube, and social media.
- How people might compare Midori Farm to other farms.
- What people look for in a local farm.

2.1.3 Online Content

In order to understand the online offerings of Midori Farm, we evaluated Mr. Kayser's online content. We analyzed his Facebook page, Instagram page, YouTube channel, and website to better understand their strengths and weaknesses. In order to attract visitors through online postings, it is important that the farm's content is clear, approachable, and platform appropriate. When we assessed the online platforms, we kept a couple guidelines in mind. To us, a good separation between personal and farm content meant little personal posts should be posted on the farm's page. The farm's page is meant to be a professional environment where the farm can be advertised. We felt that too many personal posts would distract the viewer from the farm. We also felt that posts should advertise the farm in an appealing way. Beyond our own personal opinion, we investigated other farms' social media and compared them to Midori Farms', as well as discussed the social media pages with volunteers. We also took survey data to evaluate what visitors were looking for in social media posts and took this into consideration as well. In answering the YouTube and website questions, we used our own judgement on length and quality, as well as data from our survey.

For Instagram and Facebook pages

- Is there a good separation between personal life and the farm in posts compared to other farms?
- Are the posts helpful in advertising Midori Farm?
- Are there things that we feel could be posted that are not being posted?

For YouTube channel

- Are the videos clear and easy to follow?
- Is it easy to understand Mr. Kayser?
- Are the videos too long/short?
- What value does the watcher get out of this video?

For the farm's website

- Is key information easy to access- how to purchase produce, scheduled events, contact information?
- Does the website keep the reader updated with the current events going on at the farm?
- Is there any information that may be useful to add?

2.2 Objective 2: Identify Applicable Online Strategies at Other Farms

In order to understand how to improve the programs at Midori Farm based on the information gathered from interviews and surveys, we looked at what farms similar to Midori have done. We first started by researching local farms in the Worcester area. We created a list of farms within approximately thirty minutes drive of WPI. We chose this radius to make it easier to drive to the farm, however the pandemic prevented us from visiting in person. First, we found the farms online using keyword searches such as "organic farm near Worcester" and "small farms near me". The list of farms can be found in appendix D. Finally, we contacted the farms via email and one interview was set up. The email to the farms can be found in the preamble of appendix C. We performed the interview on zoom. Because we were unable to travel to the farms, we decided to broaden our search range. We looked into farms across the country for strategies that could be applied at Midori Farm. The interview was structured similarly to the interview in section 2.1. Semi-structured interviews with probing questions asked when necessary. We have learned from the interviews:

- How farmers adapted to COVID-19
- How and when farmers have been expanding their online presence
- What it means to be a nonprofit and why it is important

Due to low response rate among the farms, we also performed analysis of farm's websites and social media to find strategies that could be analyzed. We analyzed the data once the interviews and literature review were completed. We also went outside the scope of farms, as many small businesses are facing similar problems with COVID-19 related guidelines. Data on small businesses did not relate to small farms as well as we hoped, so we did not include any of the strategies. We analyzed small farms websites and social media as well. This data helped us get a better idea of online strategies that can be used at Midori Farm. We anticipated a low

response rate, so we also modified the survey to give us some more general responses. We asked questions about people's general farm experiences. Such questions allowed us to formulate guidelines for Midori Farm based on people's experiences with other farms. With the data from this section and section 2.1, we were able to move on to the next step.

2.3 Objective 3: Assess Online Strategies for Midori Farm to Implement

Our group developed strategies to advance the two major goals of Midori Farm:

- Ensure the continued functioning of the farm in the short-term
- Expand the reach of Midori Farm and its educational initiatives, while ensuring the stability and growth of the farm

In objective 2, we identified what online resources and platforms other farms are using as strategies for increasing online engagement, as well as some strategies that assist more with inperson activities. We considered each of the strategies we found in objective 2 in terms of its ability to assist Midori in one or both of their goals. To evaluate each of the online strategies, the group devised a chart where each strategy will be assigned a numerical score from 1 to 5 in each of several categories as per Appendix F, with higher numbers indicating strategies that are better, more effective, or more useful for Midori Farm. The categories are:

- Demonstrated effectiveness: The team evaluated the results at the farm where the strategy originated ("Example farm" for the remainder of this section). Ideal data to evaluate this included number of visitors, amount of views/likes for web content (easily visible on most platforms), or income over time. The team also estimated the farms confidence in the results based on how long they have been using this strategy as well as information from interviews.
- Short-term and long-term goals (separate categories): The strategies the group recommended to Midori farm aimed to address either the short-term goal, the long-term goal, or both.
- Fit with existing Midori programs: Integrating with existing activities done by Midori is more efficient, while also increasing the effectiveness of those existing programs.
- Effort required to implement: The group is not present in Japan, so the strategies were designed to minimize the amount of time and effort Midori personnel need to invest in

changes. This entailed discussions with Mr. Kayser to establish how easily he feels he could implement the strategy.

After completing this chart, each plan was assigned a total score from the sum of each category score, with higher scores indicating the strategies that should be more useful for Midori Farm. The team selected several options based on this chart and adapted them into recommendations for Midori Farm.

2.4 Objective 4: Develop a Plan for Midori Farm

After data were collected, we developed a plan for Midori Farm, taking into account the farm's unique characteristics. The data that we have collected gave us information on the farm's capabilities and current situation, which was used to develop a plan for Midori Farm's physical and online offerings by tailoring the strategies identified in objective three to fit Midori Farm's needs and ability (identified in objective one). This plan is presented in the recommendations and deliverables.

2.4.1 Analyzing Midori Farm

With data from volunteer interviews, visitor surveys, and social media analysis, we were able to perform a SWOT analysis on Midori Farm's programs. A SWOT analysis includes the strengths, weaknesses, opportunities, and threats of the entity you are analyzing (SWOT Analysis, n.d.). We asked the following questions in order to fill out the SWOT analysis table found in appendix E:

- What do participants like about Midori Farm's programs?
- What do participants like about the online offerings?
- Where are their weak points in Midori Farm's programs?
- What opportunities is Midori Farm equipped to take advantage of?
- What problems does Midori Farm face in adapting their current programs and adding new ones?

We used this analysis to begin to form a plan for Midori Farm. First, we looked at the strengths of Midori Farm. We want to ensure that such strengths are things that Mr. Kayser continues to do well. In our findings, we highlight and utilize the strengths. We also included the weaknesses that we found in Midori Farm's programs. We analyzed feedback from surveys and volunteer interviews to find the weaknesses. With the strengths and weaknesses, we were able to

discuss the opportunities and threats that Midori Farm faces. The opportunities include ways that Midori Farm can feasibly improve their offerings by continuing to build on strengths and assessing weaknesses. We also addressed the threats that Midori Farm faces. In a typical SWOT analysis, the threats category lists threats to the company from outside sources (*SWOT Analysis*, n.d.). We changed the definition of this category to fit the farm better. We felt that Midori Farm is not directly competing with any other farm. Instead of focusing on the threat from other farms, we evaluated general threats facing small organic farms, as well as threats facing the implementation of new strategies. We anticipate that such are the challenges that Mr. Kayser will face in implementing the strategies we evaluated in the following section.

2.4.2 Developing Strategies

Having assessed the capabilities of Midori Farm, we then determined which strategies would fit best at Midori Farm. We collected the strategies from other farms, and they had been focused on the conditions at the farm on which they were developed. We used our prior analysis of Midori Farm to understand what aspects of each strategy would be effective and easy to implement, as well as where Midori Farm would struggle with new strategies. Then, we adjusted each strategy to lean more heavily on the areas where Midori Farm could excel, and to reduce the reliance of the strategy on areas where Midori Farm is currently less prepared. We tailored the adjusted strategies to smoothly integrate with Midori Farm's existing programs and goals, and to minimize the drain on Mr Kayser's time. Once strategies were optimized for Midori Farm, we presented them in the recommendations.

3. Results and Findings

In the following section, we discuss our findings in completing our objectives. Through the interviewing and surveying process, we discovered many things about Midori Farm's operations.

Midori Farm grows and harvests six to seven vegetables per season. The vegetables include, but are not limited to, sweet potatoes, daikons, and carrots. Mr. Kayser, the owner of Midori Farm, utilizes homemade compost, natural bacteria spray, and homemade insecticidal soaps to organically grow his crops. Mr. Kayser sells primarily through the Teikei system. He has a high number of customers to whom he sells baskets of vegetables every season. The baskets include the crops that are in season. Mr. Kayser is in constant need of extra help on the farm, so he has a volunteering program. Volunteers primarily assist through physical labor such as harvesting, weeding, and watering. The volunteers also help run events on the farm and contribute to general maintenance. The farmhouse is equipped with beds, a bathroom, hot water, and basic cooking supplies suitable for two volunteers at a time. Volunteers live on the farm for up to a month at a time. Food is provided to the volunteers but they must cook for themselves.

Events on the farm include community events, tours, and workshops run by Mr. Kayser and the volunteers. A majority of the farm's day visitors participate in a mixture of farming activities and community events. Farming activities include, but are not limited to, seeding, weeding, and watering. Midori Farm offers community events which include farming and leisure activities. For example, "Community Event #5" listed on the farm's Facebook page included planting and harvesting, hiking, swimming in the nearby river, and a tour of the farm. People visiting outside community event days help with general maintenance and farm work similar to that done by long-term volunteers. Mr. Kasyer also holds tours of his farm through airbnb.com. The tours include detailed discussion on how the farm works, lunch on the river, and hikes in the countryside. There has also been music nights, campouts, and cooking workshops held at the farm.

To further understand Midori Farm we learned about the volunteering program. We accomplished this through discussion with Mr. Kayser and his volunteers. Mr. Kayser draws volunteers to his farm first through websites such as Workaway.com, Wwoof.net, Facebook posts, and referrals from previous volunteers and customers. Such methods allow Mr. Kayser to attract volunteers from around the world. We were able to get in contact and interview seven of the volunteers at Midori Farm to discuss the program with them. All seven of the volunteers that we interviewed moved to Japan from another country. The volunteers' backgrounds are similar

as well. A majority (4) of the volunteers interviewed were in a Master's or PhD program at the time of the interview. The remaining three split their time between volunteering at the farm and working a full-time job. They have since moved on from Midori Farm to focus on their job, move back home, or move onto other volunteering opportunities. We also found the volunteers heard about the farm largely through word of mouth, and not the volunteering sites. Only two of the seven volunteers interviewed heard of the farm through one of Mr. Kayser's volunteering posts. Upon further analysis of Mr. Kayser's Workaway profile, we found that he has found seventeen volunteers through the site. All of the volunteers left five-star reviews. None of the Workaway volunteers were interviewed. The remaining five volunteers said they heard about Midori Farm through word of mouth or Midori Farm's website. None of the interviewed volunteers owned a car during their time at the farm, so Mr. Kayser personally drove them to the farm. This knowledge of the volunteer program helped us to further understand the farm's operation and assess its strengths and weaknesses.

3.1 Strengths and Weaknesses of Midori Farm

In order to assess Midori Farm, we conducted a SWOT analysis (strengths, weaknesses, opportunities, and threats) on Midori Farm's operations. We have broken our SWOT analysis into two parts. One describes our analysis of the strengths and weaknesses of in person and online offerings, and the other discusses the opportunities and threats that the strengths and weaknesses create. The full SWOT analysis table can be found in appendix E. In Section 3.1.1 and 3.1.2 we discuss in person operations. Our first objective was to evaluate the strengths and weaknesses of Midori Farm's online offerings. However, we have discovered more on Midori Farm's operations than we originally planned for. Such findings provide important context to Midori Farm's programs which will help us justify our recommendations in section 4 more rigorously. Our findings come from interviews conducted with volunteers and our survey - which was distributed on Midori Farm's social media and to the WPI community. We conducted 8 interviews and received 148 responses from the survey in total.

3.1.1 Strengths of Midori Farm's In-Person Operations

We found that community events are a major strength of Midori Farm's operations. Respondents of the survey who indicated they had visited Midori Farm were given a set of statements from which to select a level of agreement:

- 1. I learned something from the activities I participated in.
- 2. The activities were explained to me in an understandable and efficient way.
- 3. I was able to connect with people while participating in the activities.

Nine respondents indicated that they had visited Midori Farm. Seven of the nine (78%) respondents selected that they strongly agree with statements one and two. The remaining respondents selected "neither agree nor disagree" for the two. For statement three, 67% (6 out of 9) said they strongly agree with the statement. The remaining respondents selected "somewhat agree" or "neither agree nor disagree." When given the option to elaborate on their response to the statements, respondents elaborated on their appreciation for the programs. It is clear that people who participate in the programs are thankful for the effort that Mr. Kayser puts in to ensure the programs go well. One respondent said, Mr. Kayser "... has a lot of knowledge to share and when he do(es) not know he will tell you and try to figure it out together." Interviews with volunteers also support this finding. Volunteers mentioned how the farm was their escape from urban life, how it was a place to relax in the countryside, and how the surroundings were beautiful and relaxing. There are some limitations to the finding. Although we got 148 responses to our survey, only 39 heard of Midori Farm, and 9 had been to Midori Farm. Such numbers are a rather small sample size. However, it appears that the people who did go to Midori Farm enjoyed their time there. Midori Farm also has a strong connection with the international community in Kyoto. Most of his volunteers are expats, which allows Mr. Kayser to build a strong connection with the expats in Kyoto. The farm's teikei community is well established there as well, with many of its customers helping to bring others onboard, and several of his volunteers having been introduced to the program through teikei customers. Such a community is a valuable asset that helps provide much of Midori Farm's resources in both finances and work hours. Mr. Kayser has built an experience that is enjoyed by many people, but there are some weaknesses that prevent his farm from growing further.

3.1.2 Weaknesses of Midori Farm's Operations

The main weakness of Midori Farm is its lack of consistent volunteers, which leads to a heavy workload on Mr. Kayser. All seven volunteers we interviewed discussed this issue. Farm activities such as planting, weeding, and harvesting are the primary focus for Mr. Kayser and his volunteers. The primary work on the farm is so time consuming that it limits the amount of online content produced for outreach. Mr. Kayser is not able to have a volunteer who is a dedicated photographer for social media or a web designer because he needs all his volunteers working on the farm and harvesting. Some volunteers said they were also involved in some other less physical activities. However only one volunteer said they worked on the website, and none helped with social media. A more stable supply of volunteers will provide enough work hours to ensure that necessary farm work is done while maintaining the farm's online presence.

Trying to solve this issue of workload sheds light on another weakness of Midori Farm. Midori Farm has had limited success reaching out to Japanese communities. Mr. Kayser has a large number of foreign volunteers, but little to no Japanese volunteers. Several volunteers viewed Mr. Kayser's lack of Japanese language skills as the main reason for such difficulties. We found that Mr. Kayser tries to reach out to the Japanese communities in several ways. His website contains a blog that details what is happening on the farm, but it can not be viewed in Japanese and has not been updated since January 2019. He has been on several radio shows in Kyoto and was also featured in the *The Japan Times* newspaper. The radio show was being broadcasted in Japanese, and Mr. Kayser had a translator. He also holds the previous mentioned community events on his farm. Such attempts have been successful in attracting more of the Japanese community to his farm for the day, but not as long-term volunteers. One volunteer reinforced this point, saying that "[Mr. Kayser] is having a hard time attracting these people [from the surrounding community]. He is definitely known in Kyoto, but only with certain groups."

Another weakness that makes it more difficult to attract farm volunteers is the inconvenient location of Midori Farm. While the remote location adds to the appeal and beauty of the farm, all the volunteers stated that the drive to Midori Farm was long, and that the farm is not easily accessible by public transport. Public transport is a large part of Japanese society, so the fact that Midori Farm is not easily accessible by train or bus is an issue. The volunteers were driven by Mr. Kayser himself, as many Kyoto residents do not own a car, but he is unable to drive to the farm daily. The challenge is due to geography, and may not be easily solved. However, we must acknowledge that such an issue will persist, and solutions must work around this constraint. When asked about commute time, one volunteer answered, "Most of the time I

went to Midori Farm, [Mr. Kayser] drove me there. It is about an hour away." Another responded, "You need a car [to get there]. Not really accessible by public transit. It takes about an hour and a half one way... I usually got a ride from [Mr. Kayser], which meant I needed to make sure my schedule matched [his]." The findings on the strengths and weaknesses are important to us in assessing how we can implement online strategies in effective ways. We must be aware of Mr. Kaiser's limited workforce and distance from population centers when formulating recommendations. We must also keep the strengths in mind, and advise Mr. Kayser to continue to do things that people have enjoyed.

3.1.3 Strengths and Weaknesses of Online Content

Through the interviewing and surveying process, as well as our own personal experience, we found strengths and weaknesses of Midori Farm's online content. Midori Farm has an active Facebook page, Instagram page, and YouTube channel. Midori Farm also has a website, but it has not been updated in almost 2 years. Mr. Kayser has been offering online options to his most recent community events as well. Viewers can watch the community event through Zoom while Mr. Kayser talks to them. Survey respondents who interact with Midori Farm's social media are very satisfied with their experience. When asked "What did you like about Midori Farm's social media in general (select all that apply)?", 60% (15 of 25) of the respondents selected that the posts were relevant to the farm and kept them updated about farm activities. All respondents selected "Nothing" when asked, "What didn't you like about Midori Farm's social media." Three respondents indicated they had participated in Midori Farm's online community events. All three indicated that the program they interacted with was easy to follow, the speaker was easy to understand, and they were able to interact. The findings are good, but the sample size is very small. The small sample size may also be due to the novelty of Midori Farm's online events, as few people have had the opportunity to attend at this point. The data that we collected shows that people feel like Midori Farm's social media is currently in a good place.

We found that the main weakness of Midori Farm's social media is that Mr. Kayser has not had the time to become property acquainted with the capabilities of social media platforms. Most of the volunteers have stated that the farm is not rigidly structured, and that this carries over into social media. From our own analysis, we found that videos lack structure and are often too long. Volunteer's response to Midori Farm's social media has provided us with the understanding that Mr. Kayser is new to social media. Seven out of the eight interviewed volunteers have little to no interaction with Midori Farm's social media platforms such as Facebook, Instagram, and YouTube. Many of the volunteers have interacted with Midori Farm's

Facebook only to communicate with Mr. Kayser. Given the responses from volunteers, Mr. Kayser has not had the proper training to know how to effectively use the online platforms.

It occurred to our group that Mr. Kayser can improve on organization and establish a stronger professional social media profile on Midori Farm's Instagram and YouTube. From researching similar organic farms in Massachusetts, we discovered that the organic farms have a more professional online appearance and a high usage of online platform features on Instagram and YouTube, unlike Midori Farm. Many of the local organic farm's Instagram profiles provide a concrete description and indication of the farm. Many of the local organic farms use techniques that provide viewers easy accessibility and professionalism. Such techniques include:

- Having a logo of the farm as the profile picture
- Using the description feature under the profile homepage to provide a background on the farm and its goals
- Putting links in the description to provide access to other platforms

Investigating into the social media of organic farms in Massachusetts, we identified the brand of content that is being published relates more to organic farming. Content consists of growing crops, daily activities such as cooking healthy dishes, and promoting sales of harvests. We compared and evaluated Midori Farm's Instagram profile and discovered that Midori Farm publishes content on a variety of themes, which is difficult to distinguish the account as the Midori Farm account or Mr. Kayser's personal account.

We also researched other social media platforms of the local organic farms such as YouTube. From first glance, local organic farms provide organization to their channels as well as videos. There are features that these farms use for organization and categorization for their YouTube channel that Mr. Kayser does not. Such features include:

- Playlists
- Home videos
- Live stream recordings
- Categorizing video content into themes

These features provided in YouTube allowed the local organic farms in Massachusetts to provide viewers easy access to explore their channel. We can use these data to further improve Mr. Kayser's social media presence and offerings, which will be discussed in our report under recommendations.

It also appears that Mr. Kayser can improve his advertisement through social media. As seen through volunteer responses, only two volunteers heard of Midori Farm through an advertisement. When it comes to other visitors of Midori Farm, only 1 of 9 (11%) selected that

they had heard of Midori Farm through social media. The rest indicated they heard of Midori Farm through word of mouth. The opposite is true for people who have heard of Midori Farm, but not visited. When asked how they had heard about Midori Farm, 11 of 33 (33%) said they had through social media. 10 of 33 (24%) selected word of mouth. From the data, it appears that word of mouth is still effective. However, social media has more responses in this question than the question given to visitors. Such data may point to a couple things. It appears that people do hear about Midori Farm through social media, but it does not depict the farm in a way that entices the viewer to visit. Another reason is revealed in the next survey question. When asked, "What has stopped you from visiting Midori Farm?" 20 of 28 (71.4%) selected that they live too far away to visit. Eleven of those twenty indicated they lived abroad. Such data indicate that Midori Farm's social media is attracting a more international audience, which further complicates the previously explained community outreach challenges. We can use these data and findings to further formulate recommendations for Mr. Kayser's online content.

3.2 Potential Strategies from Research and Interviews

After recording data throughout the project, we explored several potential strategies which could benefit Midori Farm. We found the strategies through discussions with Mr. Kayser, interviewing Midori Farm volunteers, and researching the approaches taken by other farms. The strategies can help improve Mr. Kayser's online content and in person operations. We assessed each of the potential strategies based on the criteria in section 2.3 Objective 3:

- Demonstrated effectiveness details how effective the strategy is to other farms. This is based on literature review on the strategy, our interview with Many Hands Organic Farm, an organic farm in western Massachusetts, and interviews with Midori Farm volunteers.
- Through discussion with Mr. Kayser, we found that he has short-term and long-term goals. Mr. Kayser's short-term goal is to improve online content and reach a broader audience of people to bring to his farm. We assessed each strategy based on how it develops Mr. Kayser's online content to build community with people who are already interested in the farm while drawing in new people at the same time. Mr. Kayser's long-term goal is to continue online content, but also to improve volunteer numbers and his impact on the Kyoto community. We assessed each strategy based on how it would help this goal.

• We assessed how similar the found strategy is to ones that Midori Farm already has in place (and thus how difficult it will be to integrate with existing operations), and how worthwhile it would be for Mr. Kayser to implement the strategy.

Strategies were ranked from 1 through 5 in each category, with 1 being least optimal and 5 being most ideal. Based on the strengths and weaknesses of each strategy, we evaluated how to recommend them to Mr. Kayser.

3.2.1 In-Person Strategies

We have determined the following strategies would help Midori Farm with its in person operations. They offer limited improvements to online content - potentially being subjects of a video or providing content for social media posts - but are still strategies we feel Mr. Kayser should consider due to their other benefits.

Food for Farm Work

During our interview with Many Hands Organic Farm, they described to us a program in which they give their working shareholders a CSA basket for their time working on the farm. These people are no longer volunteers, as they are compensated for their services. We consider this program the food for farm work strategy.

Many Hands Organic Farm utilizes this as part of their CSA, but are unsure if it improves retention of the workers or attracts new ones. Upon further examination of local farms in the Worcester area (Appendix D), we found that none of the other seven Massachusetts farms offer an equivalent program. There was a limited amount of information on such a strategy online. Because of the limited usage of this strategy, we rated demonstrated effectiveness a 2 out of 5. The strategy will not benefit Midori Farm's online content. For that reason, we gave effect on short-term goal a 1 out of 5. Due to a lack of information on effectiveness, we are unsure how it will help Mr. Kayser's long-term goal. While it could potentially help develop a group of long-term workers, Many Hands Organic Farm was unable to verify whether they had seen this result. We gave effect on long-term goal a 2 out of 5. Mr. Kayser has stated that he has tried a similar program, but has since stopped. Similarities received a 1 out of 5 because of such reasons. Finally, for ease of implementation, the strategy would be easy to implement. Mr. Kayser already has Teikei baskets. He would only need to reserve some for his long-term workers. For such reasons, we gave the strategy a 3 out of 5 for implementation.

Non profit organization

Mr. Kayser aims to be a non-profit organization in Japan. He has begun to fill out the required paperwork for this. We included a question in our survey on non-profit organizations. The question stated, "A non-profit organization (NPO) is one which is not driven by profit, but by dedication to a given cause that is the target of all income beyond what it takes to run the organization. If a farm you visited was a nonprofit organization, and the cause of this farm was known to you, would you feel more comfortable paying for their services?" Sixty two percent (65 out of 105) of respondents answered "Yes". We inferred from the question that people are more likely to visit the farm and spend their money if they are aware that the farm is a nonprofit and its cause is known to the people. We make no further recommendations on this strategy because it is already in progress and we are unable to add any further value in this regard.

Eco Restoration Camp

Mr. Kayser asked us to research more into the Eco-Restoration Camps Foundation. The foundation works with interested parties to become an Eco-Restoration Camp (ERC). The camps work on rehabilitating degraded land. For example, Camp Altiplano, located in southern Spain, works on restoring degraded wheat farms into a new "haven for life" ("Camp Altiplano," n.d.). We found that in order to become a camp, the farm must consider the following seven requirements:

- 1. The farm must be in or near degraded land.
- 2. The farm needs to have an eco-restoration plan in place.
- 3. The farm must have solid infrastructure(housing, food, water, etc..) in place or have a plan to create it.
- 4. All land must be legally owned by the farm
- 5. It must be safe to travel to the location of the camp
- 6. The farm must be able to pay for all project related costs
- 7. The farm must document its work

Becoming a restoration camp has many benefits. Some benefits include being connected to a community of other restoration camps, being connected to an international audience of volunteers, and help from the Eco-Restoration Camp Foundation with funding and planning. Many camps require volunteers to pay a fee in order to cover food, transportation, and project expenses, but not all eco-restoration camps charge this fee to volunteers (*New Home*, n.d.).

In Mr. Kaysers's case, he has rice fields that are not in use, and require significant modifications to be used in dry field agriculture. He would like to become an eco-restoration

camp to attract more volunteers who can help him out with the rehabilitation. We consider the eco-restoration camp a strategy to improve the farm's volunteering presence.

For demonstrated effectiveness, we assigned the strategy a 4 out of 5. Over 20 ERC farms exist around the world. Researching those farms, we found they have been successful in restoring land and attracting in volunteers to do so. For example, Camp Mombase Mangroves in Kenya has planted over 500,000 mangrove trees since 2011 and more than 2000 people have helped with the project ("Camp Mombasa Mangrove Forest," n.d.). For effect on the short-term goal, we gave this method a 1 out of 5. The camps are entirely in person and are irrelevant to any improvement to social media or the website. We gave effect on the long-term goal a 5 out of 5. Becoming an eco-restoration camp improves volunteer numbers, restores degraded land, and brings additional funding to the farm. All of these benefits fit Midori Farm's long-term goal. In terms of similarities to existing strategies, we gave it a 2 out of 5. Mr. Kayser's current volunteers focus on tasks related to growing and harvesting crops. Additionally, his current volunteer program is quite small, supporting only a pair of overnight volunteers. Therefore, this approach is not very similar to Mr. Kayser's existing programs and would require heavy financial and logistical planning. Finally, we gave ease of implementation a 1 out of 5. Becoming an eco-restoration camp requires paperwork, planning, and implementation. Mr. Kayser is already short on time due to commitments to CSA customers, training volunteers, keeping the social media up to date, and running events. Implementing this strategy will be a heavy time commitment and would require more time on the farm for Mr. Kayser.

Restaurant Partnership

During an interview with a Midori Farm volunteer, we discussed a potential idea that Mr. Kayser can use to improve his relationship with surrounding communities and add more content to his social media. The idea involves Mr. Kayser partnering with a chef from a restaurant nearby or in Kyoto. The chef would then receive a teikei basket from Mr. Kayser. The chef can use this teikei basket to cook meals on his own time and then advertise the meal on his social media. The chef could also use the Midori Farm vegetables at his restaurant and in the meals he sells. We would consider this idea to be the chef partnership strategy. We further researched the chef partnership strategy to assess its effectiveness. We determined that this strategy is very effective for other farms that have used it and gave the strategy a 4 out of 5. An article from cuesa.org gave us some information on why a chef partnership is beneficial to both sides. Such a relationship between farmer and chef can provide the farmer with more exposure to the community. Joe Schirmer, an organic farmer in southern California, explained, "In terms of media, restaurants are make-it-or-break-it. They're the trendsetters. Their food is not necessarily

what people are going to make at home, but it's what people are looking at" (*Why Chefs Matter to Farmers*, 2012). Chefs often make large purchases, which can increase sales. They also are able to provide feedback on the vegetables and give suggestions to the farmer on how to improve or expand. For the chef, the relationship can provide benefits too. Chefs can be more informed on the vegetables they will be receiving at certain times. Most importantly, the relationship can allow the chef to have fresh and quickly delivered produce (*Why Chefs Matter to Farmers*, 2012).

In terms of the long and short-term goals of Midori Farm, the chef partnership strategy will have more of a long-term effect on Midori Farm's goals. The strategy will be sustainable because the chef can continue to receive vegetables as long as they are available. Mr. Kayser can eventually build a network of chefs that will help bring attention to Midori Farm. For this reason, we gave the strategy a 4 out of 5 for effects on long-term goals. In terms of the short-term goal of improving online content, the strategy offers limited opportunities. The strategy is mainly focused on the advertisement done by the chef for Mr. Kayser. It may involve some online promotion through social media by the chef, but that is not the main focus of the strategy. For such reasons, we have given the strategy a 2 out of 5 for effects on short-term goals.

Mr. Kayser does not have any program similar to this, and for that reason, we gave the strategy a 1 out of 5 for similarities to Midori Farm's existing programs. Finally, we gave the strategy a 2 out of 5 for effort required to implement. The strategy will take time to implement at the start, as chefs must be found and contacted. Once the partnership is made, Mr. Kayser may have to grow more crops and spend time harvesting.

Increased Events

We found through the survey that people are interested in doing hiking and barbeque events at Midori Farm. When asked to select all that apply to the question, "Would you be interested in any of the following activities that Midori Farm offers?" Eighty six percent of respondents selected outdoor events such as hiking and barbecuing. Sixty one percent of respondents selected events in Kyoto. Mr. Kayser generally has such activities at his community events. Kyoto has a great number of trails and mountains to hike nearby. He has also hosted events in Kyoto in the past. We gave this strategy a 4 out of 5 for demonstrated effectiveness. The strategy will have much more of an effect on the long-term goal of Midori Farm than the short. This strategy offers no improvement to online content, and therefore received a 1 out of 5 for effect short-term goal. It does provide Midori Farm with more activities and the visitors time outdoors and in nature. For such reasons, we gave the strategy a 4 out of 5 for effect on long-term goals. Mr. Kayser already does outdoor events at his community events and tours. Because

of this, we gave it a 5 out of 5 for similarity to existing programs. Finally, this would be rather easy to implement, as Mr. Kayser already does such events. The one constraint would be if Mr. Kayser increases the amount of recreational outdoor activities and events in Kyoto, then he will have less time to hold the productive events that help him to plant and harvest vegetables. Because of such reasons, we gave the strategy a 3 out of 5 for effort to implement.

3.2.2 Online Strategies

The following strategies have the potential to strongly improve Mr. Kayser's online content. The strategies were found from our interviews with Many Hands Organic Farm and Mr. Kayser, along with our literature research.

Online Recipe Listing

When talking with Many Hands Organic farm, we discussed a feature on their website, which includes a recipe listing that provides instructions on cooking simple meals using their products. The recipes are designed to be easily prepared. This helps people to figure out how to cook effectively with the food they purchase from the farm. Such instructions ensure that people are able to use their CSA share of vegetables effectively.

Of the 8 small farms in Massachusetts that we contacted, 4 of them had an online recipe listing of some kind. We rated the demonstrated effectiveness of this strategy as 4 out of 5, because many small farms in Massachusetts have implemented this strategy.

We believe this strategy will assist Midori Farm in both its short-term (3 out 5) and long-term (4 out of 5) goals. It is beneficial in the short-term because it adds additional meaningful content to the farm's website, encouraging people to visit regularly. In the long-term it will help to convince potential new customers that they will be able to prepare their share effectively, which will help Midori Farm to continue to build its customer base and teikei community.

Mr. Kayser already prepares food for himself using the farm's produce. His existing recipes could be posted on the website, making them easily available to all customers. He has informed us that he already provides recipes to interested customers, so adding them to an online list would be a simple expansion of that. We rate this strategy a 3 out of 5 in terms of similarity to existing strategies because of this. The listing would be relatively easy to implement, since recipes can be added whenever time is available rather than necessitating a strict schedule. Customers could be provided with the option to submit recipes through the website, reducing the time and effort required from Mr. Kayser and his volunteers. We rate this strategy a 4 out of 5 in terms of ease of implementation due to the lack of specific time constraints.

Expanding Podcasts

Since the emergence of COVID-19, Mr. Kayser has started to engage more on online platforms. He has recently started conducting podcasts to spread awareness regarding organic farming. He has expressed interest in encouraging his online followers to participate in podcasts by joining a Zoom call to ask additional questions for the guest to answer.

We rated this strategy as 3 out of 5 for demonstrated effectiveness. Podcasts can be popular, but Mr. Kayser focuses each episode on a specific topic in detail, which can be too in depth for a casual audience, while the variety of subjects means that he may have difficulty attracting interested listeners for each specific topic.

This is one way that Mr. Kayser can continue to connect with his online followers, but it is unlikely to attract the audience that Mr. Kayser hopes for. One of the volunteers we interviewed expressed concerns that the podcast was too long and too technical for a novice to follow. Our survey data backed up her concerns. When asked to select all activities they were interested in from a list, only 15% of survey respondents selected participating in podcasts. At the same time, 57% of respondents were interested in harvesting crops, 43% in planting, 60% in Kyoto events, and 86% in outdoor recreational events. These data indicate that Mr. Kayser's audience is not as interested in joining the podcasts as he hoped. However, these data do not indicate that people would not be interested in **listening** to a podcast Mr. Kayser produces. We rated it a 3 out of 5 for effect on Midori Farm's short-term goals because it attracts decent viewership currently, but expanding it seems unlikely to be popular amongst Mr. Kayser's viewers. We also rated it a 3 out of 5 for effect on its long-term goals due to the podcasts being primarily viewed by people already involved with Midori Farm and interested in the subject. The strategy can have long-term success in raising awareness of topics Mr. Kayser cares about, as podcasts are becoming more popular, but it will require Mr. Kayser to stay patient.

We rated this strategy 5 out of 5 for similarity to existing Midori Farm strategies as Mr. Kayser already runs podcasts, such as "Midori Farm Talk: Beer", and this strategy is simply the continuation and expansion of the existing podcasts. Only the idea of inviting audience participation is new. Finally, we rated this strategy 3 out 5 in ease of implementation, as arranging a podcast requires a moderate amount of time and effort.

Individual Online Sales

From online research, we found that online sales of individual products can help farms continue to make sales despite the current restrictions on in person events like farmer's markets. One farm owner describes how the pandemic necessitates an online shopping experience, saying:

As more and more people are working remotely, sheltering in place, and practicing social distancing, we as farmers have a responsibility to shift with these turbulent times to keep our customers fed. With farmers markets and restaurants closing down, our cash flow has to turn to online purchases or our farms won't have the capital to survive either. (Olesen 2020)

This represents both an opportunity and a challenge for smaller farmers: with the international food infrastructure struggling during the pandemic, consumers are shifting toward organic and local options. Organic food sellers globally have experienced a 20-30% rise in sales driven by consumer worries about the current pandemic (Askew, 2020). With restrictions on in-person interaction, online sales are an effective way to capitalize on this shift in consumer behavior, which provides an opportunity for farms that utilize online sales. Because of this trend we rate the demonstrated success of this strategy at 4 out of 5.

We rate the effect on the short-term goal at 5 out of 5 because this would help Mr. Kayser sell the vegetables that he normally offers at farmers markets without the need for in person events. Additionally, it will allow him to easily reach a large audience - anyone near his dropoff areas in Kyoto - with his prepared products, such as hot sauce.

We rate the effect on the long-term goal at 5 out of 5 because individual vegetable or product purchases could allow new customers to select the food that they want, giving them a more approachable introduction to the farm than the larger teikei baskets. People could be more willing to start with a smaller purchase than the large teikei baskets.

We rate the similarity to existing Midori Farm strategies at 3 out of 5 as Midori Farm already sells teikei baskets and prepared food products like hot sauce online, as well as individual vegetables at farmers markets. Integrating this into a unified online store would not be a significant change from the current approach. Mr. Kayser already has the infrastructure in place to deliver teikei baskets in person or to designated drop off points three days a week during the farm season. When the customer orders, Mr. Kayser can give an estimate on the time of delivery. The products can be picked on the day specified in the order, and delivered to the customer on Mr. Kayser's way home from the farm, as he does with his teikei baskets. He also makes products like organic hot sauce for sale as individual units. An online store could utilize all of the existing infrastructure, and streamlining the sales through online payment and inventory tracking would counteract the time spent maintaining the store. Because the net time cost should be approximately zero compared to the current system, we rate the ease of implementation as 5 out of 5.

Educational YouTube Videos

One strategy that has seen success for other farms is short instructional videos. Multiple YouTube channels have found success posting videos in this format on topics related to farming and gardening. Videos should be:

- 1. **Instructional:** Teach something concrete and manageable so that people can walk away from the video with a new skill
- 2. **Aimed toward beginners:** Expect people to be able to follow along with minimal experience, equipment, or available time
- 3. **Short:** People are unlikely to sit through a video which is too long. Videos should be under 30 minutes, ideally 5-15 minutes depending on the subject
- 4. **Informatively titled:** The title should be simple and relevant, describing exactly what will be taught within the video

A number of YouTube channels with significant numbers of subscribers post videos in such a format. One such channel - Gardening at 58 North - is primarily aimed at gardening decorative plants rather than growing plants for food, but the same principles apply. The channel posts videos that are generally under 15 minutes in length, and its instructional videos are practical at a small scale. Example videos include "Basil, How to Grow More Than You Can Eat" and "How To Grow Tomatoes On A Windowsill (Part 1, Sowing Seeds)", both of which teach simple skills to novices and can be done indoors using potted plants, meaning that any viewer can follow along if they choose to (Gardening at 58 North. n.d.). Another channel with over 100,000 subscribers is Dutch Farmer Moreno, which aims to help people to establish their own farms. Its most popular video is a nearly 5 minute clip entitled "How to Plant Garlic From Start to Finish", which has 1.7 million views, while the second most popular has 740 thousand views. This video is the shortest video posted on this channel, and teaches viewers how to grow a common vegetable themselves (Dutch Farmer Moreno. n.d.). Due to the success of multiple channels following this approach, we rated the demonstrated effectiveness 5 out of 5.

Evidence from Midori Farm's YouTube channel backs this approach. The most popular video on the channel is "Planting bunching onions", which has 521 views, over 3 times as many views as the next most popular video and almost 6 times the number of subscribers the channel itself has. The videos are approachable, helping to draw in new viewers to the channel, which allows its message to reach a broader audience. Because of the popularity of existing short videos on the Midori Farm YouTube channel, we rate the effectiveness in achieving short-term goals as 5 out of 5: this strategy will help Mr. Kayser to continue to produce farm content interesting to his online followers and farm visitors. In terms of the long-term goal, we evaluate

the effectiveness of this strategy 3 out of 5. It will benefit Mr. Kayser's long-term goal of raising awareness by helping him to reach a global audience with his message, but it will be difficult to utilize this as a means to sustain the farm's growth. The strategy will synergize well with the existing Midori Farm strategy as Mr. Kayser is already building his YouTube channel, the strategy would merely change the format of the videos he posts. In terms of ease of implementation, however, we rate the strategy only 2 out of 5 as these short videos will require significantly more planning than the current videos, which are longer and less focused.

4. Recommendations and Deliverables

Through SWOT analysis of Midori Farm and research on other farms and small businesses, we formulated a list of recommendations for Mr. Kayser, as well as guidelines and resources that he can use to follow these recommendations. The recommendations and deliverables can be viewed as the opportunities for Midori Farm, and the challenges in implementing them can be viewed as the threats. All recommendations and deliverables are derived from the strategies we found in section 3.2 Objective 3. Through discussion with Mr. Kayser, we are aware that he has limited time, but these recommendations will be worth the time commitment that they require.

4.1 Recommendations for the Future

While the main focus of the project was to improve Midori Farm's online content, we have some recommendations for future, in person improvements that Mr. Kayer can make once his online content is in order. The recommendations are worth noting to Mr. Kasyer, but immediate implementation is not necessary.

4.1.1 Hosting More Events

Mr. Kayser has held events in Kyoto in the past, but volunteers have indicated that they have not been successful; according to volunteers, the events struggled to reach its goal of bringing people to his farm. Previous events have been informal meet and greets instead of a structured activity, which may include meeting Mr. Kayser at a bar in Kyoto and hanging out. We recommend that Mr. Kayser focus on doing more educational workshops in Kyoto. There is interest in this sort of event, as seen in survey responses. Mr. Kayser can have a workshop where he shows attendees how to do basic farming and gardening techniques. Attendees can pay a fee to enter, and Mr. Kayser can provide them with any resource they might need. For example, Mr. Kayser can have a workshop on how to grow a tomato house plant. He can provide the attendees with the required materials, and then go through the steps of planting and caring for the plants. The workshops will allow people in Kyoto to interact with the farm without having to travel there, helping build Mr. Kayser's connection to communities in Kyoto. He can also advertise his farm at the events, enticing more people to visit and volunteer in the future. In conjunction with

the events, he can record them and post them on his YouTube channel, and advertise them on his social media platforms

Mr. Kayser may also benefit from increasing his hiking and barbecuing events. It is clear from our survey that people would be interested in such activities. Mr. Kayser may also be able to have some events in Kyoto such as a hike near Kyoto city instead of his farm. This may entice more people to join him as they would not need to make the hour car ride. Having hikes closer to Kyoto does not showcase Midori Farm like hiking nearby would, but it allows Mr. Kayser to continue to meet more people and build relationships while enjoying the outdoors. We recommend that Mr. Kayser continue to do as many community events as he can, and consider expanding his events to more in Kyoto. Challenges in implementation will come from Mr. Kayser's time constraints. Hosting the events will require logistical planning. Mr. Kayser would benefit from planning events in the farm's off-season - the winter. He can plan out the activities, find hosting space in Kyoto, find volunteers to help with running the event, and other logics long before the event is held, and when he has more free time. It would also be beneficial to reach out to past volunteers who have since moved on from the farm. Returning to the farm would not be necessary, as they can help Mr. Kayser with event planning virtually.

4.1.2 Restaurant Partnership

We recommend that Mr. Kayser does not pursue the restaurant partnership strategy in the short-term. While this strategy will help with connections to restaurants in Kyoto and lead to better advertisement, we feel it does not help the short-term goal of improved online content. When looking at the strategy in more depth, there are a couple more factors for Mr. Kayser to consider. Although Mr. Kayser would benefit from a chef who takes pictures of his food and posts on the chefs social media to advertise his vegetables, the chef may not get as much out of such a relationship. For the relationship to be worth it for both sides, Mr. Kayser would have to provide a significant amount of produce for the chef to prepare for customers at his restaurant. Such amounts would take from the produce of Mr. Kayser's teikei supply. He has communicated with us that he is satisfied with his current supply of teikei customers. The relationship would not be good for his teikei customers, as Mr. Kayser would be giving a majority of his vegetables to the restaurant.

Mr. Kayser can work towards a successful partnership in a couple ways. It would be beneficial to reach out to chefs and gauge their interest in a simple partnership. Such a partnership would include the chef cooking Mr. Kayser's vegetables in his own time and advertising the meals on social media. Even if the chef is not interested in the partnership,

nothing is lost by asking. Mr. Kayser can work towards a more involved partnership in a couple ways. As mentioned in the Eco-Restoration Camp strategy, Mr. Kayser has a number of fields that can be restored. Whenever or not he becomes an ERC, it is still possible to restore these fields on his own. Restoring the fields would give him more room to grow vegetables. With an increase in vegetables, Mr. Kayser can feel more comfortable giving vegetables to the chef in the amounts he would need. Restoring the fields and the following increase in crop growth would require many hours on the farm and more volunteers to help. As Mr. Kayser is already short on volunteers, this sort of expansion would not be recommended until a more permanent flow of volunteers is established. We recommend that Mr. Kayser focus on the online recommendations below, but keep this partnership in mind. There is a lot that needs to be done for it to be worthwhile for both sides, but it is not unrealistic. For future reference, we have provided a list of restaurants in the Kyoto area that may be interested in such a partnership. The following restaurants have had past relationships with organic farmers in Kyoto:

- 1. Oishi So Japan (OISHI SO JAPAN, n.d.)
- 2. Iro-hana cafe shokudo (*Iro-Hana Cafe Shokudo in Sannomiya, Hyogo SAVOR JAPAN*, n.d.)
- 3. Restaurants at Kyoto Yaoichi Honkan (*Kyoto Yaoichi Kyoto Yaoichi / An Incredible One in a Lifetime Experience*, n.d.)

4.1.3 Eco-Restoration Camp

We recommend that Mr. Kayser does not pursue becoming an Eco-Restoration Camp (ERC) in the short-term. Becoming an ERC is something that will greatly help Midori Farm in the future, but it will be very time consuming. Mr. Kayser will have to spend time formulating a plan and increasing infrastructure in order to successfully become an ERC. Mr. Kayser's current infrastructure can support a couple volunteers at a time, but can only sleep two. Some volunteers also stated that cooking food on the farm is not easy. If becoming an ERC does increase his volunteer numbers, he will need to increase the number of volunteers he can support.

Mr. Kayser must consider expansion in a couple ways before becoming an Eco-Restoration Camp can be successful. The first would be to expand his housing. Expansion does not necessarily mean making the clubhouse bigger. Many camps we have looked into offer space to set up tents, which can offer an alternative way for volunteers to stay if they choose. Mr. Kayser will also benefit from expanding the cooking resources at the farm. Expansion of the kitchen will allow him to accommodate more volunteers. The foundation recommends a team to

help with planning, so Mr. Kayser will need to find volunteers to do that. He will need to dedicate more time to the farm, because being an ERC requires constant documentation of what work is being done. Such a time commitment will take away time from farm work. If Mr. Kayser would like to learn even more about ERC and the workings of becoming a camp, we recommend he take their course, found on their website. The course goes into detail about restoring different zones (Natural, Urban, Agricultural), making a business model for camps, and creating a basic restoration plan. The course takes 6 months, and requires 5-10 hours per week. If Mr. Kayser is able to put in the time to take the course, it will be valuable in assessing becoming a camp. The course costs 112,000 Yen, or 1,080 US Dollars. Price is another thing that Mr. Kayser should keep in mind. We recommend that Mr. Kayser first focus on improving online content and finding more volunteers to help him with it. Once the farm's operations have become more stable and infrastructure is increased we believe becoming an ERC will be a valuable route for Mr. Kayser to take.

4.1.4 Food for Work Time

We recommend that Mr. Kayser also keeps this idea in mind. Part of Mr. Kayser's goal is to bring more volunteers to Midori Farm to help him with his operation. This strategy may entice more volunteers, but we do not have enough data to make a strong recommendation on it. Given that Many Hands Organic Farm could not comment on the success of their own program, it is not worth the time on Mr. Kayser's part to implement this.

4.2 Recommendations for Online Content

The following recommendations and deliverables are ones that we make for Mr. Kayser to improve this online content. We have also made some deliverables to accompany the recommendations. The deliverables make his website more accessible to viewers, and allow for increased options. We have also formulated guidelines for Instagram, YouTube, and Facebook for Mr. Kayser to follow.

4.2.1 Expanding Search For Volunteers

Mr. Kayser's lack of help on the farm has led to an inability to work on his online content. We recommend that Mr. Kayser expand his search for volunteers. This will allow him to focus more time on online content, or have a volunteer help him with developing online content. Mr. Kayser should seek out a remote volunteer that can help with his online content without

having to travel to the farm. One of the big issues with attracting volunteers to Midori Farm has been the travel time. Mr. Kayser can recruit a volunteer or two that can help him from their own home, then this will be more appealing to them. He can do this in a couple of ways. He can post another Workaway listing. The listing will have a description different to the farm listing, as the sole job of this volunteer will be to help keep Mr. Kayser's social media updated and help him edit his YouTube videos. Workaway may be a fine choice, but it appears to be more catered to physical work. Mr. Kayser can utilize www.volunteermatch.org and/or catchafire.org. The sites are more catered towards virtual opportunities. The sites will help Mr. Kayser attract more virtual volunteers, who can help him with not only online content, but with planning events. Solving the workload issue will allow Mr. Kayser to focus more on making the farm related content, while the volunteers can work on editing and presenting that material. As it stands right now, Mr. Kayser does both. Such a volunteer will help him improve his online content and attract more people to it. We also recommend that Mr. Kayser find a photographer to build a stockpile of pictures to post on his social media. Even if the volunteer can only stay for a day or two, they will provide Mr. Kayser with high quality pictures to post on his Instagram. Such a strategy will be relatively easy to implement because all Mr. Kayser needs is a profile and a short description. We recommend that this description include:

- 1. What Midori Farm is and why it is important.
- 2. What online content Midori Farm maintains.
- 3. The activities the volunteer will be doing.
- 4. How long the volunteer would work for.

4.2.2 Educational YouTube Videos

We recommend that Mr. Kayser expand his YouTube videos to include more tutorials on simple farming techniques by following the educational YouTube videos strategy that the team created. The strategy will be easy for Mr. Kayser to implement since he already has a YouTube channel and he is very knowledgeable in the topics of farming. If Mr. Kayser is able to make short and introductory educational videos, then he will be able to attract a wider audience of viewers. Mr. Kayser can start with videos on topics he feel he would be able to explain best. For example, Mr. Kayser posted a beer talk on his YouTube channel. The talk went well, but some attendees reported that the talk was too advanced for them to follow. We recommend that these in-depth discussions be supplemented by short videos at a more introductory level. Topics can include, but are not limited to:

- 1. How to grow houseplants/spices(basil, oregano, etc...)
- 2. How to brew beer in your home
- 3. Cooking videos
- 4. How to properly compost
- 5. How to manage waste

He has limited time, but short videos will take less effort to make than the long podcasts. Such videos will help attract a more casual audience to his YouTube channel. His videos will be more broad in topic, which will lead to more views from different communities. Drawing in more viewers will help Mr. Kayser's mission of spreading farming knowledge to as many people as he can reach.

Mr. Kayser can also continue to make more advanced videos as he sees fit. Farmers such as Dutch Farmer Moreno have had success in making more advanced videos as well. Moreno's videos explain more advanced farming methods such as how to sow seeds, how to make a no dig garden bed, etc.... He has been successful with short, succinct videos. His channel also includes monthly updates of his farm. We feel Mr. Kayser can benefit from making videos similar to Gardening at 58 North and Dutch Farmer Moreno. Appendix J provides more detailed guidelines on the format which we have identified as effective, and how these videos should be structured for maximum effect. There will be some challenges in implementation, as making and editing such videos takes more time and effort than unscripted ones. We believe the best course of action would be for Mr. Kayser to plan out videos in the winter months when the farm is closed, and record what videos he can. Any preparation that can be done in the winter months will alleviate the time spent when the farm is open. Video that don't need to be filmed on the farm, such as a video on how to manage your waste, can be recorded at Mr. Kayser's home and uploaded during the winter months.

The podcast that Mr. Kayser does currently fit into this category as well. We don't recommend that Mr. Kayser seek community involvement in the podcasts at the moment. However, we do recommend that Mr. Kayser continues to make podcasts on general farming topics. Podcasts have become very popular in the past 10 years, so it would make sense for Mr. Kayser to take advantage of that. The podcasts that he currently posts are recorded through Zoom, and uploaded on YouTube. Currently the way the recording appears on YouTube is just the active speaker on the screen. Such a layout is not very good for a podcast, because it is nice to see all the speakers at once. We recommend that Mr. Kayser records the Zoom in a gallery view so all speakers are shown. To do this, Mr. Kayser can following these steps:

- 1. Log into Zoom on browser
- 2. Go to settings, then click recording
- 3. Under the "Cloud Recording" section, unselect "Record active speaker with shared screen" and select "Record gallery view with shared screen"

There are different definitions about what a podcast is to us and Mr. Kayser. Mr. Kayser believes that a podcast is more like a panel talk, where people are invited to listen and ask questions. Podcasts involve less outside involvement. Generally, a podcast has a couple hosts. For example, The Steve Dangle Podcast, a podcast about hockey, recorded their podcast in a studio prior to COVID-19. It features three people, Steve Dangle, Adam Wylde, and Jesse Blake (Steve Dangle Podcast, 2020). The studio was closed off to any one but the three. They spent about 2 hours each podcast talking about hockey topics that they had pre-planned for that day. Towards the end, they would have what they call the "press conference." They would take questions from their fans on social media and answer them. They also would have guest speakers on occasionally. Since COVID-19 and social distancing guidelines closed the studio, they still do such a format, but on Zoom (Steve Dangle Podcast, 2020). Mr. Kayser would benefit more from doing such a format, rather than the panel talk format. Given our survey data, it appears that people are not very inclined to join the talks. We recommend Mr. Kayser continue to give talks such as the beer talk, but try to follow the traditional podcast format. He can host the podcast, and invite a guest or two each time to talk about topics that interest him. The guests can be anyone from experts in the field to friends just looking to have a good conversation. We also recommend Mr. Kayser does something similar to the "press conference." He can post on his social media that he is going to record a podcast today, and ask if they have any questions they would like him to address. A couple topics Mr. Kayser could talk about include but are not limited to:

- 1. Monthly Midori Farm updates
- 2. Talks about the types of vegetables he grows
- 3. How he has successfully been vegetarian
- 4. Talks about climate change and other environmental issues

4.2.3 Online Guidelines

We will assist Mr. Kayser by constructing online guidelines to strengthen organization and allow more efficient use of available features from online platforms. Mr. Kayser already has prior experience with using online platforms such as Facebook, Instagram, YouTube, and Midori

Farm's website. However, we discovered that there are multiple features from every platform that Mr. Kayser can use to improve his online presence:

- Advertisement features: Allows Mr. Kayser to pay to promote content to a targeted audience, which can increase the popularity and interaction for Midori Farm's online platforms.
- Organization features: Benefits the online platforms by categorizing content, allowing people to easily search for certain content
- "Live" feature: Allows people to virtually watch and interact with Midori Farm's events such as podcast, updates on community events, etc

The online guidelines in Appendix H, I, and J provide a written explanation of the benefits for using certain features from online platforms and recommendations to consider for online appeal. Alongside the guidelines, we will provide Mr. Kayser with YouTube tutorial videos that we made on how to use the features step by step. We have also created a Linktree shown in Appendix G, which is an online platform that converts multiple links into a singular link that leads to a portal of the other links, for easy access and guidance. The Linktree provides the organization for Mr. Kayser to promote other platforms. With the online guidelines for each online platform and the implementation of Linktree, Mr. Kayser can learn the importance of using available online resources from platforms and start to explore more features and other platforms in the future.

4.2.4 Website Changes

We will assist Mr. Kayser in implementing changes to his website. Appendix K provides instructions on updating the new website features. The first addition is a recipe list per the online recipe listing strategy. Mr. Kayser already cooks using the vegetables his farm produces. When at the farm, Mr. Kayser or his volunteers have to prepare lunch using Midori Farm's limited cooking facilities, so these recipes are inherently simple. Posting recipes as text based instructions, potentially supplemented with pictures if possible, would offer a number of benefits:

- People could learn how to use the less common vegetables in their Teikei share, increasing its value to them
- It would encourage people to visit the site regularly, allowing Mr. Kayser to more easily reach people with event announcements

• It would reassure people who are considering joining the teikei program that they would be able to use their share

We recommend that Mr. Kayser implements a recipe list, and we will add this section to his website. This would provide benefits to Midori Farm while not overly taxing their resources. Additionally, Mr. Kayser could provide an option for users to submit recipes they made with Midori Farm vegetables for approval. This would both reduce the effort required to add new recipes, as well as help Midori Farm to build community. In order to get the word out, he can both inform his new customers when he delivers their produce, and he can post on his Facebook page about this new feature to encourage his existing customers to begin contributing recipes.

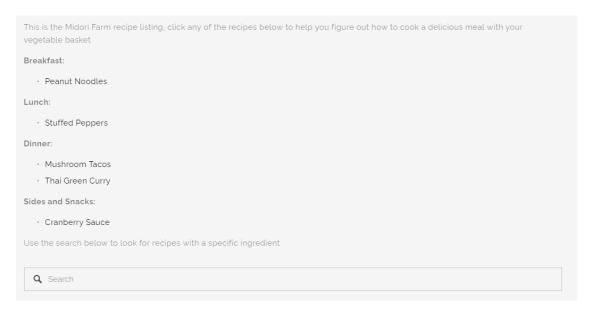


Figure 1: Main recipe listing

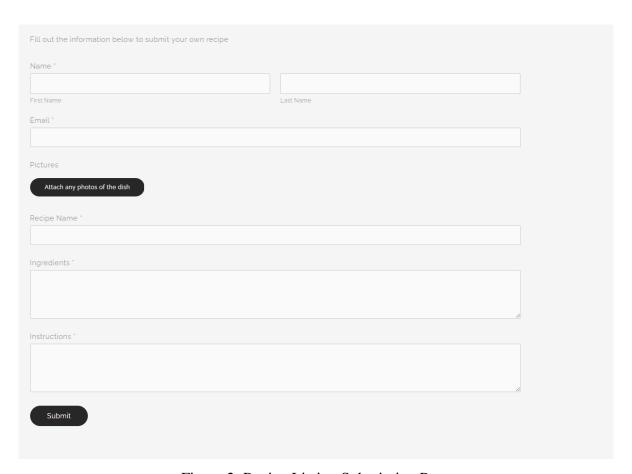


Figure 2: Recipe Listing Submission Page

STUFFED PEPPERS



INGREDIENTS

- · 3 bell peppers
- · 1 tbsp olive oil
- · 2 cloves garlic, minced Used powder
- · 3 spring onions, sliced No idea the conversion rate to price chopper onions
- · ½ tsp chili powde
- · 1 x 400g tins kidney or black beans, drained and rinsed
- · 1 large tomato, diced
- · 1 small tin, approx 150g of sweetcorn, drained and rinsed
- · Salt and pepper, to taste You don't want to be stingy here

INSTRUCTIONS

- 1. Preheat the oven to 180C / 350F.
- 2. Chop the bell peppers in half and remove the seeds. Add to a roasting tin and drizzle with olive oil. Cook for approximately 15-20 minutes until slightly browned and softened but still firm enough to retain it's shape. This takes longer than preheating the oven if you are bad at it
- 3. Meanwhile, add the garlic, onion and a small splash of water to a frying pan. Cook on a medium heat for a minute, then add the chili powder and beans. Add some more water (about a tabelspoon or two) and cook for a few minutes, until the beans are softened and moist. Partially mash them with a fork or masher so you have a chunky bean paste. This might taste a little overpowering at this point, that is ok
- 4. Stir in the chopped tomato, sweetcorn and salt & pepper.
- 5. Spoon the mixture into the pepper halves and return to the oven for another 5-8 minutes, just to warm through.

BACK TO RECIPES

Figure 3: Example page for a specific recipe

The mockup in figures 4 and 5 demonstrates how this recipe list was implemented. Each recipe has its own page with an ingredients list and instruction list, as well as any pictures of the dish. Each recipe's name is visible on the main recipe listing page, where users can click the name to be brought to the individual recipe's information. A search bar below this listing allows

users to enter a specific ingredient - such as an unfamiliar vegetable in their teikei basket - and see a list of recipes which use it. Due to the limitations of Squarespace (the website building and hosting tool used by Midori Farm), this search bar returns results over the entire site. As we are unable to limit the results to only recipes, this will sometimes return extraneous results from elsewhere on the website. At the bottom is a form in which users can enter their own recipes, upload pictures, and email the information to Mr. Kayser, who can easily post the recipe on his website if it matches his standards. Allowing customers to submit recipes will help to build up the list without taking too much time on Mr. Kayser's part, while providing teikei customers a sense of involvement and community.

We added an online store to the Midori Farm website, which allows Mr. Kayser to easily make sales of products like hot sauce, individual vegetables, and teikei baskets online as per the individual online sales strategy. Using the features of Squarespace, Mr. Kayser will be able to enter the products and quantities he wishes to sell, and the website will track inventory and allow customers to select the shipping option they want from Mr. Kayser's current delivery methods - in person pickup, free delivery within a certain area, and a delivery fee for purchases outside this area. New customers will be able to discover the farm's produce and improve the purchasing process over its current email based system. This increased accessibility and sense of professionalism will help to expand the farm's customer base. We believe that the increased automation of this process should save time overall for Mr. Kayser, as payments and delivery schedules can be managed by customers directly on the website, rather than through email exchanges.

CART (2)



← BACK TO STORE



Figure 4: Shop and Item Pages

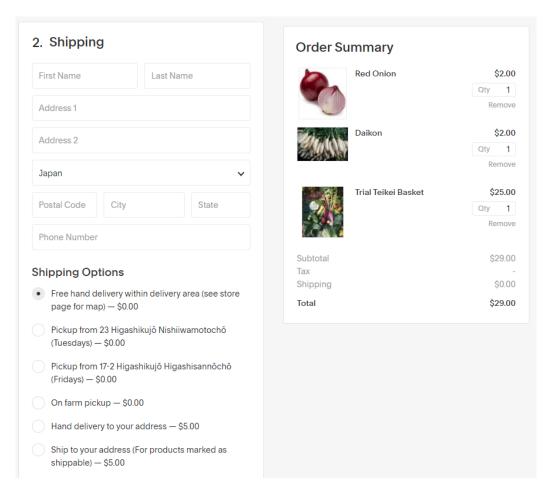


Figure 5: Order Page

Squarespace already includes the necessary features to create an online shop with inventory tracking and secure payment processing. We will create this shop on the Midori Farm website, including the current teikei baskets, his specialty products like hot sauce, and the individual vegetables. We will assist Mr. Kayser in updating this online shop by providing instructions on how to add new products as they become available, adjust inventory, and add new pickup locations for customers to select. Customers will choose whether they want their order delivered (for a fee outside of Mr. Kayser's free delivery location), shipped (for shelf stable products like hot sauce), or if they want to pick it up themselves from one of the designated pickup locations. All this can be done through the website in a single transaction, and Mr. Kayser will only have to schedule a pickup time with the customer.

5. Conclusion

Midori Farm aims to raise awareness of environmental issues such as overapplication of agrochemicals and through community involvement and volunteer opportunities. Mr. Kayser has proven that he has been effective in certain aspects of this goal. By providing the community with volunteering opportunities and community events, Mr. Kayser has been able to spread his mission to many people. However, there is always room for improvement. Mr. Kayser needs to improve the online aspect of Midori Farm. Even before safety measures such as social distancing guidelines forced the world to go online, the rise of the Internet led to an increasing need for online content. Online content can provide a way for businesses to spread their message even when people cannot physically be there. Mr. Kayser can provide more content and a more structured posting schedule to provide improvement to his already existing online content. Through our deliverables and recommendations, Mr. Kayser will be able to expand not only his online content, but think about the broader future of Midori Farm.

Bibliography

- Agius, F. (2006, July 21). The future and benefits of agro tourism. *Times of Malta*. https://timesofmalta.com/articles/view/the-future-and-benefits-of-agro-tourism.46942
- Amedie, J. (n.d.). The Impact of Social Media on Society. In Advanced Writing: Pop Culture Intersection. 2. *Santa Clara University Scholar Commons*. https://scholarcommons.scu.edu/engl_176/2
- Askew, K. (2020, May 6). Organic food's coronavirus boost: 'Health crises have a long-term impact on consumer demand'. FoodNavigator.com. Retrieved November 24, 2020, from https://www.foodnavigator.com/Article/2020/05/06/Organic-food-gets-coronavirus-boost
- Barbieri, C., & Tew, C. (2016). Perceived Impact of Agritourism on Farm Economic Standing, Sales and Profits. In 2010 ttra International Conference, *Travel and Tourism Research Association: Advancing Tourism Research Globally*. 34. ScholarWorks@UMass Amherst. https://scholarworks.umass.edu/ttra/2010/Oral/3
- Barbieri, C., Sotomayor, S., & Aguilar, F. X. (2016). Perceived Benefits of Agritourism: A Comparison between Missouri Metropolitan and NonMetropolitan Residents. In 2011 International Conference, *Travel and Tourism Research Association: Advancing Tourism Research Globally*. 59. ScholarWorks@UMass Amherst. https://scholarworks.umass.edu/ttra/2011/Visual/59
- Camp Altiplano. (n.d.). *Ecosystem Restoration Camps*. Retrieved December 2, 2020, from https://ecosystemrestorationcamps.org/camp-altiplano/
- Camp Mombasa Mangrove Forest. (n.d.). Ecosystem Restoration Camps. Retrieved December 2, 2020, from https://ecosystemrestorationcamps.org/camp-mombasa-mangrove-forest/
- Carleton-Hug, A., & Hug, J. W. (2010). Challenges and opportunities for evaluating environmental education programs. *Evaluation and Program Planning*, 33(2), 159–164. https://doi.org/10.1016/j.evalprogplan.2009.07.005
- Coelho, F. C., Coelho, E. M., & Egerer, M. (2018). Local food: Benefits and failings due to modern agriculture. *Scientia Agricola*, 75(1), 84–94. https://doi.org/10.1590/1678-992x-2015-0439
- Collado, S., Staats, H., & Corraliza, J. A. (2013). Experiencing nature in children's summer camps: Affective, cognitive and behavioural consequences. *Journal of Environmental Psychology*, *33*, 37–44. https://doi.org/10.1016/j.jenvp.2012.08.002

- Contini, C., Romano, C., Boncinelli, F., Scozzafava, G., & Casini, L. (2017). Does 'local' matter in restaurant choice? Results of a discrete choice experiment targeting German and Italian consumers. *Agricultural and Food Economics*, *5*(1), 21. https://doi.org/10.1186/s40100-017-0092-y
- Counihan, C., & Siniscalchi, V. (2013). *Food Activism: Agency, Democracy and Economy*. Bloomsbury Publishing.
- Derouin, R. E., Fritzsche, B. A., & Salas, E. (2005). E-Learning in Organizations. *Journal of Management*, 31(6), 920–940. https://doi.org/10.1177/0149206305279815
- Dutch Farmer Moreno. (n.d.). Videos [YouTube Channel]. YouTube. Retrieved November 24, 2020, from https://www.youtube.com/channel/UCV8i0RAQ3kAxs8xWmB-lK-Q
- Engelmann, J. (2019, September 24). Japan: Car ownership ratio 2019. Retrieved October 05, 2020, from https://www.statista.com/statistics/1027885/japan-share-car-ownership/
- Feagan, R., & Henderson, A. (2008). Devon Acres CSA: Local struggles in a global food system. *Agriculture and Human Values*, 26(3), 203–217. https://doi.org/10.1007/s10460-008-9154-9
- Gardening at 58 North. (n.d.). Videos [YouTube Channel]. YouTube. Retrieved November 24, 2020, from https://www.youtube.com/c/Gardeningat58N
- Google. (n.d.). [Google Maps location of Midori Farm]. Retrieved November 16, 2020, from https://www.google.com/maps/place/Midori+Farm/@35.1671993,135.7058727,115263m/data=!3m1!1e3!4m5!3m4!1s0x6001bf2010ad2bbf:0x51801c2b84762bbc!8m2!3d35.3056491!4d135.8324548
- Gorlinski, G. (2012). The history of agriculture. Rosen Publishing Group.
- Granvik, M., Joosse, S., Hunt, A., & Hallberg, I. (2017). Confusion and Misunderstanding— Interpretations and Definitions of Local Food. *Sustainability (Basel, Switzerland)*, 9(11), 1981-. https://doi.org/10.3390/su9111981
- Hamzah, A., Yassin, S. M., Samah, B. M., D'Silva, J. L., Tiraiyaei, N., Shaffril, H. M., & Uli, J. (2012, August 21). Socio-economic impact potential of agro tourism activities on Desa Wawasan Nelayan community living in Peninsular Malaysia. *African Journal of Agricultural Research*, 7(32), 4581-4588. Retrieved September 20, 2020, from https://academicjournals.org/journal/AJAR/article-abstract/1D61CF533865
- Held, L. (2020, April 02). The Local Food Revolution Goes Online for Now. Retrieved November 03, 2020, from https://www.eater.com/2020/4/2/21203608/farmers-markets-small-farms-offer-online-orders-because-of-coronavirus

- Hinds, J., & Sparks, P. (2008). Engaging with the natural environment: The role of affective connection and identity. *Journal of Environmental Psychology*, 28(2), 109–120. https://doi.org/10.1016/j.jenvp.2007.11.001
- Ionela, G., Constantin, B. M., & Dogaruc, L. (2015). Advantages and Limits for Tourism Development in Rural Area (Case Study Ampoi and Mureú Valleys). *Procedia Economics and Finance*, 32, 1050-1059. https://doi.org/10.1016/S2212-5671(15)01567-1
- <u>Iro-hana cafe shokudo in Sannomiya, Hyogo—SAVOR JAPAN.</u> (n.d.). Retrieved December 10, 2020, from https://savorjapan.com/0006119611/
- Ito, H., Wang, Q., & Yamashita, M. (2014). Potential of Environmental Education through Agriculture to Increase the Adaptability and Resilience of Individuals. *World Environment*, 4(4), 185–198. http://article.sapub.org/10.5923.j.env.20140404.05.html
- Jęczmyk, A., Graja-Zwolińska, S., Uglis, J., & Maćkowiak, M. (2014, January). Research note: Economic benefits of agritourism development in Poland An empirical study. *Tourism Economics. Fast Track*, 5. Retrieved September 20, 2020, from https://www.researchgate.net/publication/263734180 Research note Economic benefits of agritourism development in Poland An empirical study
- *Kyoto Yaoichi Kyoto Yaoichi / An incredible one in a lifetime experience*. (n.d.). Retrieved December 10, 2020, from https://kyotoyaoichi.com/
- Kodama, T. (2017). Environmental Education in Formal Education in Japan. Japanese Journal of Environmental Education, 26(4), 4_21-26. https://doi.org/10.5647/jsoee.26.4_21
- Kondoh, K. (2015). The alternative food movement in japan: Challenges, limits, and resilience of the teikei system. *Agriculture and Human Values*, *32*, 143-153. https://doi.org/10.1007/s10460-014-9539-x
- Lawton, P. H., & La Porte, A. M. (2013). Beyond Traditional Art Education: Transformative Lifelong Learning in Community-Based Settings with Older Adults. *Studies in Art Education*, *54*(4), 310–320. https://doi.org/10.1080/00393541.2013.11518905
- Le Roux, C., & Maila, W. (2004). Issues and challenges regarding environmental education policy implementation. *Africa Education Review*, 1(2), 234–244. https://doi.org/10.1080/18146620408566282
- Lune, H., Berg, B. (2017) Qualitative research methods for the social sciences. Pearson Press
- Ma, X. (2018). Study on Agricultural Products Promotion Strategy of Three-party Linkage Model under the Background of Internet Plus. *IOP Conference Series: Material Science and Engineering*, 439(3). http://dx.doi.org/10.1088/1757-899X/439/3/032033

- Matsubaguchi, R., Son, Y.-A., Kodama, T., & Jongbin, W. (2019). Comparative Study on School-Based Environmental Education in Japan and Korea. Japanese Journal of Environmental Education, 28(4), 60-67. https://doi.org/10.5647/jsoee.28.4_60
- McGreevy, S. R., Kobayashi, M., & Tanaka, K. (2019). Agrarian pathways for the next generation of Japanese farmers. Canadian Journal of Development Studies / Revue Canadienne d'études Du Développement, 40(2), 272–290. https://doi.org/10.1080/02255189.2018.1517642
- Midori Farm. (n.d.). Midori Farm. Retrieved from https://www.midorifarm.net/home-en
- Molinario, E., Lorenzi, C., Bartoccioni, F., Perucchini, P., Bobeth, S., Colléony, A., Diniz, R., Eklund, A., Jaeger, C., Kibbe, A., Richter, I., Ruepert, A., Sloot, D., Udall, A. M., & Bonaiuto, M. (2020). From childhood nature experiences to adult pro-environmental behaviors: An explanatory model of sustainable food consumption. *Environmental Education Research*, 26(8), 1137–1163. https://doi.org/10.1080/13504622.2020.1784851
- Moore, J. L., Dickson-Deane, C., & Galyen, K. (2011). e-Learning, online learning, and distance learning environments: Are they the same? *The Internet and Higher Education*, *14*(2), 129–135. https://doi.org/10.1016/j.iheduc.2010.10.001
- NAWS_Research_Report_13.pdf. (n.d.). Retrieved September 22, 2020, from https://www.dol.gov/sites/dolgov/files/ETA/naws/pdfs/NAWS_Research_Report_13.pdf
- *New Home*. (n.d.). Ecosystem Restoration Camps. Retrieved December 2, 2020, from https://ecosystemrestorationcamps.org
- Nickelsburg, M. (2020, April 16). As local farmers embrace technology, coronavirus crisis could change our relationship to food forever. Retrieved November 03, 2020, from https://www.geekwire.com/2020/local-farmers-embrace-technology-coronavirus-crisis-change-relationship-food-forever/
- Olesen, J. (2020, April). HOW SMALL FARMS CAN SURVIVE THE CORONAVIRUS

 PANDEMIC. Eco Farming Daily. Retrieved November 24, 2020, from

 https://www.ecofarmingdaily.com/how-small-farms-can-survive-the-coronavirus-pandemic/
- OISHI SO JAPAN. (n.d.). OISHI SO JAPAN. Retrieved December 10, 2020, from https://www.oishisojapan.com
- Peterson, B. (2020, September 10). Car Ownership Statistics (2020 Report). Retrieved October 05, 2020, from https://www.valuepenguin.com/auto-insurance/car-ownership-statistics.

- Post, E. Social Media Tools for Farm Product Marketing.pdf. (n.d.). Retrieved November 4, 2020, from http://conklin2017.s3.amazonaws.com/Conklin+Social+Media+Toolkit.pdf
- Pulido, C. M., Redondo-Sama, G., Sordé-Martí, T., & Flecha, R. (2018). Social impact in social media: A new method to evaluate the social impact of research. *PLOS ONE*, *13*(8), e0203117. https://doi.org/10.1371/journal.pone.0203117
- Rath, E. (2015, April 29). New Meanings for Old Vegetables in Kyoto. *An International Journal of Multipurpose Research*, 17(2), 203-223. https://doi.org/10.2752/175174414X13871910531944
- Stanovčić, T., Peković, S., Vukčević, J., & Perović, D. (2018). Going Entrepreneurial: Agrotourism and Rural Development in Northern Montenegro. *Business Systems Research*, 9(1), 107-117. http://dx.doi.org.ezpxy-web-p-u01.wpi.edu/10.2478/bsrj-2018-0009
- Starr, A., Card, A., Benepe, C. *et al.* (2003). Sustaining local agriculture Barriers and opportunities to direct marketing between farms and restaurants in Colorado. *Agriculture and Human Values* 20, 301–321. https://doi.org/10.1023/A:1026169122326
- The Steve Dangle Podcast. (2020, March 22). *Social Distancing Puppies | The Steve Dangle Podcast*. https://www.youtube.com/watch?v=JUIfo4dNiiA
- Storey, A. (2017, April 21). Why You Should be Using Social Media for Your Farm. Upstart University. https://university.upstartfarmers.com/blog/social-media-for-your-farm
- SWOT Analysis: How to Develop a Strategy For Success. (n.d.). Retrieved October 7, 2020, from http://www.mindtools.com/pages/article/newTMC_05.htm
- Watts, Ben. *The influence of social media in agriculture*. (n.d.). Challenge Advisory. Retrieved November 2, 2020, from https://www.challenge.org/knowledgeitems/the-influence-of-social-media-in-agriculture/
- Grubinger, Vern. University of Vermont. (n.d.). Retrieved September 20, 2020, from http://www.uvm.edu/vtvegandberry/factsheets/buylocal.html
- Why Chefs Matter to Farmers. (2012, June 8). https://cuesa.org/article/why-chefs-matter-farmers
- Wittman, H., & Blesh, J. (2017). Food Sovereignty and Fome Zero: Connecting Public Food Procurement Programmes to Sustainable Rural Development in Brazil. *Journal of Agrarian Change*, 17(1), 81–105.
 - https://doi.org/10.1111/joac.12131
- Yamashita, K. (2008, September 30). The Perilous Decline of Japanese Agriculture: Research. Retrieved September 17, 2020, from https://www.tkfd.or.jp/en/research/detail.php?id=5

Appendix

Appendix A: Interview questions for volunteers

Email Sent to Volunteers

Hello!

We are a group of students from Worcester Polytechnic Institute, in Worcester, Massachusetts USA. We are working with Chuck Kayser of Midori Farm to help improve his online offerings. We are looking to interview past volunteers of his farm like yourself and get more insight about his programs. If you are willing to participate in the interview, we would love to set up a time to meet over some sort of video call service (Zoom, Skype, Etc...) and ask you some questions regarding.

Please know that the answers to these interviews will be confidential. Your name will never be used in our report and we are the only ones who will have your responses to our questions. If you would like to be involved, please send us times that you would be available at your earliest convenience. Since we are all working remotely and in different time zones, please include your time zone with the time so we can make sure that works for us. We are in eastern time, which is 5 from Universal Time Coordinated (UTC).

You can reach us at the email gr-midorikb20@wpi.edu

We hope to talk to you soon!

Antonio Ramirez | Chemical Engineering

Atharva Dikshit | Robotics Engineering

Will Engdahl | Robotics Engineering & Mechanical Engineering

Chris Son | Biomedical Engineering & Mechanical Engineering

Midori Farm Project Team

Interview questions

- 1. Tell us about yourself?
- 2. How did you hear about Midori Farm?
- 3. Did you travel to Japan to volunteer at the farm, or do you live in Japan?
 - a. If they live in Japan: "How long does it take you to travel to the farm?"
- 4. What did you do during your time at Midori Farm?
- 5. How long did you stay at Midori Farm?
 - a. If you have left, do you still have contact with the farm?
- 6. What do you think about the activities that Mr. Kayser offers to the general public? Activities like podcasts, sweet potato picking and other workshops
 - a. Are there areas that you think his activities could be improved?
- 7. Have you seen/interacted with any of Midori Farm's social media platforms? Platforms like YouTube, Instagram, and Facebook.
 - a. If yes, which platform they seen/interacted?
 - i. What is your impression on it?
 - ii. Are there any improvements that can be done?
 - b. No, how come?
- 8. Have you volunteered at other farms?
 - a. If so, how do they compare to Midori Farm?
 - b. Do they offer online content that you know of? If so, please describe.
- 9. Are there any suggestions for Midori Farm?

Appendix B: Survey Questions for Tourists

Preamble:

We are a group of students from Worcester Polytechnic Institute in Massachusetts, USA. We are working with Chuck Kayser and Midori Farm in Kyoto, Japan to help improve his programs both in person and online. We are sending this survey to the Midori Farm community as well as the WPI community. We are hoping to gage interest in local farms and gather data on Midori Farm's programs. Your participation in this survey is completely voluntary and you may withdraw at any time. Please remember that your answers will remain confidential. The survey should take ~5 minutes. Thank you for your participation!

If you would like to ask more questions about our project please email us at: gr-MidoriKB20@wpi.edu

Survey Questions

- 1. Have you ever heard of Midori Farm?
 - a. Yes
 - i. Have you ever visited Midori Farm?
 - 1. Yes (takes you to Midori Farm questions)
 - 2. No.
- a. How did you hear about Midori Farm
 - i. Social media
 - ii. Farm's website
 - iii. Reference from a peer
 - iv. Someone who works at the farm
 - v. Advertisement
 - vi. Other
- b. What has stopped you from visiting Midori Farm?
 - i. Live in Japan but farm is too far
 - ii. Live abroad
 - iii. Don't like what is offered
 - iv. Not enough free time
 - v. Other

- c. Would you be interested in any of the following activities that Midori Farm offers? (Select all that apply)
 - i. Online educational workshops
 - ii. Online community events
 - iii. More leisure activities(Hiking, BBQ, etc...)
 - iv. Events in Kyoto (Meetups, workshops, etc...)
 - v. Other
- d. After question c is answered, it will take you to the general farm questions.
- b. No
 - i. Would you be interested in any of the following activities that Midori Farm offers? (select all that apply) (After this question is done, take you to general farm questions)
 - 1. Harvesting crops
 - 2. Seeding and plating
 - 3. Outdoor events(Hikings, BBQ, etc...)
 - 4. Events in Kyoto(Meetups, workshops, etc...)
 - 5. Participating in podcasts

General Farm questions

- 1. Have you ever visited a small / local farm?
 - a. Yes
 - b. No
 - i. What has kept you away from local farms?
 - 1. Too far away
 - 2. Not interested
 - 3. Didn't know about them
 - 4. Cost of visit
 - 5. Other
- 2. How did you hear about the farm that you visited?
 - a. Social Media
 - b. Farm's website
 - c. Reference from a peer
 - d. Someone who works at the farm
 - e. Advertisement
 - f. Other

- 3. Would you visit more farms like the one you visited?
 - a. Yes
 - b. No
 - i. What about your experience made you not want to return / visit others? (Select all that apply)
 - 1. Poor customer service
 - 2. Too far away
 - 3. Didn't like the activities offered
 - 4. Not interesting to me
 - 5. Cost of visit
 - 6. Other
- 4. Have you visited any of the social media that the farm that you visited offers?
 - a. Yes
 - i. What social media platform(s) did you visit? (Select all that apply)
 - 1. Instagram
 - 2. Facebook
 - 3. Twitter
 - 4. YouTube
 - 5. Other
 - ii. What did you like about the farm's social media in general? (select all that apply)
 - 1. Posts were relevant to the farm
 - 2. Posts kept me updated about the farm's activities
 - 3. Doesn't post too much
 - 4. Videos were a good length
 - 5. Videos were useful
 - 6. Nothing
 - 7. Other
 - iii. What didn't you like about the farm's social media in general?
 - 1. Posts didn't relate to the farms activities
 - 2. Posts were too frequent
 - 3. Doesn't post enough
 - 4. Videos were too long
 - 5. Videos were not useful
 - 6. Nothing
 - 7. Other

- b. No
- 5. Have you interacted with the website that the farm you visited offers?
 - a. Yes
 - i. What did you like about the farm's website? (Select all that apply)
 - 1. Ease of use
 - 2. Looks
 - 3. Lots of resources
 - 4. Easy to book visits
 - 5. Easy to buy produce
 - 6. Other
 - b. No
- 6. A non-profit organization (NPO) is one which is not driven by profit, but by dedication to a given cause that is the target of all income beyond what it takes to run the organization. If a farm you visited was a non profit organization, and the cause of this farm was known to you, would you feel more comfortable paying for their services?
 - a. Yes
 - b. No
 - c. Unsure

Midori Farm questions

- 1. How did you hear about Midori Farm?
 - a. Social Media
 - b. Farm's website
 - c. Reference from a peer
 - d. Someone who works at the farm
 - e. Advertisement
 - f. Other
- 2. What activities did you engage in? (select all that apply)
 - a. Community events
 - b. Seeding and planting
 - c. Preparing the beds
 - d. Weeding
 - e. Watering
 - f. Trellising
 - g. General maintenance
- 3. Was this the first time you engaged in activities like this?
 - a. Yes
 - b. No

- 4. The activities were explained to me in an efficient and understandable way
 - a. Strongly agree
 - b. Agree
 - c. Somewhat agree
 - d. Neither agree nor disagree
 - e. Somewhat disagree
 - f. Disagree
 - g. Strongly disagree
- 5. Please elaborate on the previous answer if you would like
- 6. I learned something from the activities I participated in
 - a. Strongly agree
 - b. Agree
 - c. Somewhat agree
 - d. Neither agree nor disagree
 - e. Somewhat disagree
 - f. Disagree
 - g. Strongly disagree
- 7. Please elaborate on the previous answer if you would like
- 8. I was able to connect with people while participating in the activities
 - a. Strongly agree
 - b. Agree
 - c. Somewhat agree
 - d. Neither agree nor disagree
 - e. Somewhat disagree
 - f. Disagree
 - g. Strongly disagree
- 9. Please elaborate on the previous answer if you would like
- 10. Have you interacted with Midori Farm's social media?
 - a. Yes
 - i. What social media platform(s) did you visit? (Select all that apply)
 - 1. Instagram
 - 2. Facebook
 - 3. Twitter
 - 4. YouTube
 - 5. Other

- ii. What did you like about Midori Farm's social media in general? (select all that apply)
 - 1. Posts were relevant to the farm
 - 2. Posts kept me updated about the farm's activities
 - 3. Doesn't post too much
 - 4. Videos were a good length
 - 5. Videos were useful
 - 6. Nothing
 - 7. Other
- iii. What didn't you like about Midori Farm's social media in general?
 - 1. Posts didn't relate to the farms activities
 - 2. Posts were too frequent
 - 3. Doesn't post enough
 - 4. Videos were too long
 - 5. Videos were not useful
 - 6. Nothing
 - 7. Other
- b. No
- 11. Have you interacted with Midori Farm's online activities?
 - a. Yes
 - i. The online event I participated in was easy to follow
 - 1. Strongly agree
 - 2. Agree
 - 3. Somewhat agree
 - 4. Neither agree nor disagree
 - 5. Somewhat disagree
 - 6. Disagree
 - 7. Strongly disagree
 - ii. The speaker was easy to understand
 - 1. Strongly agree
 - 2. Agree
 - 3. Somewhat agree
 - 4. Neither agree nor disagree
 - 5. Somewhat disagree
 - 6. Disagree
 - 7. Strongly disagree

- iii. I was able to interact and ask questions
 - 1. Strongly agree
 - 2. Agree
 - 3. Somewhat agree
 - 4. Neither agree nor disagree
 - 5. Somewhat disagree
 - 6. Disagree
 - 7. Strongly disagree
- iv. The service (Zoom, Skype, etc...) was set up in a user friendly way
 - 1. Strongly agree
 - 2. Agree
 - 3. Somewhat agree
 - 4. Neither agree nor disagree
 - 5. Somewhat disagree
 - 6. Disagree
 - 7. Strongly disagree
- v. If you would like to elaborate on any of the previous answers above, please do so here.
- b. No
- 12. Are there any suggestions you would have for Midori Farm to improve any of their services?
- 13. Would you like to be entered to in a raffle to win a small prize
 - a. Yes
 - i. Please enter your email address
 - b. No

Appendix C: Interview Questions for Local Farmers in Massachusetts

Email Sent to Farmers

Hello!

We are a group of students from Worcester Polytechnic Institute in Worcester, Massachusetts. We are working with Chuck Kayser of Organic Midori Farm located in Kyoto, Japan to help improve his online offerings and raise awareness of agricultural issues. We are looking to interview local Massachusetts farms and see how your farm is structured and what it has to offer to the public. If you are willing to participate in the interview, we would love to set up a time to talk with you over some sort of video call service (Zoom, Skype, Etc...) and ask questions about your farm.

Please know that the answers to these interviews will be confidential. Your name will never be used in our report and we are the only ones who will have your responses to our questions. If you would like to be involved, please send us times that you would be available at your earliest convenience.

You can reach us at the email $\underline{\text{gr-midorikb20@wpi.edu}}$

We hope to talk to you soon!

Antonio Ramirez | Chemical Engineering

Atharva Dikshit | Robotics Engineering

Will Engdahl | Robotics Engineering & Mechanical Engineering

Chris Son | Biomedical Engineering & Mechanical Engineering

Midori Farm Project Team

Interview questions

- 1. We understand from your website that your farm [provides A,B,C activities, if they have something similar to an eco restoration camp, ask specifically about that program]. We have a couple questions about them:
 - a. What made you decide to implement these activities?
 - b. Who are you targeting for these activities (Example: Children, young couples, etc)
 - c. What have the results been for these activities?
 - d. Are any of these activities currently run online?
 - i. Have you seen the same engagement?
 - e. Is there anything you would like to improve about the activities you offer?
- 2. Are you a non-profit organization (If this information is one their website, then we can reference it and ask the same questions)
 - a. If yes, what made you decide to become one?
 - b. If no, have you looked into it at all?
 - i. If yes, why did you decide not to become one?
- 3. How has social distancing and stay at home orders changed the way you deal with your day to day operations?
- 4. Are you trying to increase your online presence?
 - a. If yes, did COVID-19 have anything to do with it?
 - i. What is the primary social media platform that you use for your establishment?
 - 1. How come?
 - b. If not, how come?

Appendix D: List of Local Farms in Worcester Area

Farm Names	Website	Social Media	Farm Location
Many Hands Organic Farm	https://mhof.net/	Facebook: https://www.facebook.c om/manyhandsorganicfa rm	411 Sheldon Rd, Barre, MA 01005
Stillman Farm	https://stillmansfarm.com/	Facebook: https://www.facebook.c om/stillmansfarm Instagram: https://www.instagram.c om/stillmansfarm/ Twitter: https://twitter.com/stillm ansfarm YouTube:	1205 Barre Rd, New Braintree, MA 01531
		https://www.youtube.co m/user/Stillmansfarm	
Long Life Farm	https://www.longlifef arm.com/	Facebook: https://www.facebook.c om/Long-Life-Farm- 324381250928256 Instagram: https://www.instagram.c om/longlifefarm/	205 Winter St Hopkinton, MA 01748

Natick Community Organic Farm	https://www.natickfarm.org/	Instagram: https://www.instagram.c om/natickfarm/ Facebook: https://www.facebook.c om/natickfarm/ Twitter: https://twitter.com/natic kfarm?lang=en	117 Eliot Street, Natick MA 01760
Tougas Farms	http://tougasfamilyfar m.com/about-us/	Facebook: https://www.facebook .com/tougasfarm/	234 Ball St, Northborough, MA 01532
Heaven's Harvest Farm	www.heavensharvestf arm.com	Facebook: https://www.facebook.c om/HeavensHarvestFar m/	965 Oakham Road New Braintree, MA 01531
The Farm at Walden Woods	https://www.walden.o rg/property/the-farm- at-walden-woods/	Instagram: https://www.instagram.c om/thewaldenwoodsproj ect/ Twitter: https://twitter.com/The WaldenWoods Facebook: https://www.facebook.c om/TheWaldenWoo dsProject	44 Baker Farm Rd Lincoln, MA 01773

Nourse Farms	https://www.noursefa	Facebook:	41 River Road
	rms.com	https://www.facebook.c	Whately, MA
		om/noursefarms	01093
		Instagram:	
		https://www.instagram.c	
		om/noursefarms/	

Appendix E: SWOT Table

Strengths	Weaknesses
 Structured programs that are enjoyed by the customer Ideal location that gives the farm a relaxing environment Social media enjoyed by current viewers Online programs have started out well Opportunities	 Not enough volunteers leads to heavy workload for Mr. Kayser Poor connection with Japanese community Social media is uninviting to a newer, more casual audience Distance from Kyoto makes attracting tourists difficult
 Events in Kyoto More hiking and barbeque events Increased structure on social media Educational YouTube videos 	 Time commitments to implement ideas Social distancing guidelines may inhibit in person ideas
Chef partnership	

Appendix F: Strategy Quantification Table

Table of strategies, rated from 1 (worst) through 5 (best) in each category

	Eco-Restoration	Expanding Podcasts	Online recipe listing	Chef partnership	Food for work	Individual online sales	Educational YouTube videos	Increased outdoor activities
Demonstrated effectiveness	4	3	4	4	1	4	5	4
Effect on short-term goals	1	3	3	2	1	5	5	1
Effect on long-term goals	5	1	4	5	2	5	3	4
Similarities to existing Midori strategies	2	5	3	1	1	3	5	5
Ease of implementation	1	3	4	2	3	5	2	3
Total	13	15	18	14	8	22	20	17

Appendix G: Midori Farm Linktree

Link Chart:

Linktree is an online platform that allows multiple links to be organized in a single portal. A master link to the portal provides easy access and guidance to each separate site. The link can be used in various online platforms to benefit the promotion of other platforms such as YouTube, Instagram, and Facebook:

- Instagram Placing the link under "websites" when editing a profile.
- YouTube Placing the link in the description of every video for viewers.
- Facebook Adding the link in the description of Midori Farm's home page

Midori Farm Linktree	https://linktr.ee/MidoriFarm
	Below are the links that are used in the Midori Farm Linktree
Midori Farm Website	https://www.midorifarm.net/home-en
YouTube Channel	https://www.youtube.com/channel/UC5rrkXIfTr03EN_9 NTDHMqg
Facebook	https://www.facebook.com/Midori-Farm- 172244163300336
Instagram	https://www.instagram.com/midorifarm/

Appendix H: Instagram Guidelines

The Instagram guidelines teach how to use the features of Instagram to establish a strong presence on that platform. This guideline will consist of videos on how to use some of the offered features such as posting and saving stories, going live, and promoting posts features. Alongside the videos, there will be written guidelines that will aid in creating a professional content and appearance. The Instagram features serve to assist the Midori Farm's Instagram account to become more accessible to other online platforms and be interactive, allowing to gain more interest of new followers. This guideline will provide the explanation on how to use it and the benefits that are offered from the Instagram features. Some of the guidelines listed below will only be applicable on mobile smartphones/devices (that have Instagram in the application store).

How to post a Picture or Video on Instagram from a Desktop, using Google Chrome:

Importance: (This guide can be done on desktop only)

The reasoning for this guideline is to provide other methods of uploading pictures and videos to Instagram. Users may prefer using the desktop over mobile devices, because it allows easy access to upload photos and videos directly from the desktop. The benefit of posting pictures and videos through a desktop allows the user to edit videos and pictures on a larger screen and on developed software that is made for editing.

Link to the tutorial video: https://www.youtube.com/watch?v=zxi-tQSjaJM

How to Structure a Homepage:

Importance: (This guide can be done on both desktop and mobile smartphone/devices)

1. Profile

When placing a profile picture, first think if the picture will capture the users' attention. Placing a logo as the profile picture makes it easier for the profile to be found in the Instagram search engine. Using pictures of people or yourself may seem too personal and viewers may think that it is a person's account rather than Midori Farm's official one. Having the logo of the farm as the profile picture benefits the promotion of the establishment and can help viewers recognize the logo from other online platforms.

2. Account Name

The account name is for people to use when searching a profile. Having the name of the farm or establishment will help identify the Instagram account. Be aware of making a common account name such as Midori Farm as it may already be taken by another user. As a solution, rethink the naming so that it is unique, but people are easily able to search in Instagram. For example:

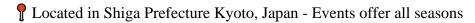
"ManyHandsOrganicFarm" - Too long

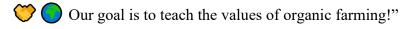
"MidoriFarm" - Short and easy to remember

3. Description

The description displays the farm's name and a summary of the farm's operations and mission. The description summarizes the farm or establishment to provide the viewers a quick background on the account. Using emojis also enhances the appearance of an account. For example:

"Organic Midori Farm





How to Promote more Viewers through Content:





Note: Pictures both taken from Midori Farm's official Instagram page

Importance: (This guide can be done only on Mobile/smartphone devices)

This guide explains how to set up an Instagram account into "professional" settings that will teach how to analyze post interactions and create promotions. When posting, think of the viewers; Are they going to like it? Feel comfortable? Be engaged? The post on the left displays Midori Farm receiving a grant to support their community events. The post on the right displays insects found on Midori Farm. Many viewers may have different thoughts towards these posts. However, Instagram allows the user to see analysis on each post, which can provide the user information on how many likes, shares, and saves posts have that are popular and unpopular. Instagram's analysis feature assists the user in seeing the trend of content that viewers take interest in and can be used as promotion through Instagram's promoting feature. The feature advertises the user's chosen content that allows the user to target an audience (gender, age group, etc), location, and content. The promoting feature requires a payment that has a built in calculator to provide the rates of advertisement.

Link to how to see trends in your post on Instagram tutorial video: https://www.youtube.com/watch?v=hKvaoIzzb2c

Link to how to promote your post on Instagram tutorial video: https://www.youtube.com/watch?v=6fgVDzQN7b4

How to Post/Save Stories and go Live on Instagram:

Importance: (This guide can be done only on mobile smartphone/devices)

This guide is to provide the steps on making Instagram stories, a temporary post on Instagram, which can be used to share short-term events or quick updates on the user's day. Instagram stories have the feature to be categorized under the description of the profile. This benefits the organization of posts on Instagram and provides viewers to interact. The Instagram live feature allows the user to broadcast live from their mobile smartphone/device and be able to interact with viewers such as answering questions or showing viewers the event or activity at hand.

Link to the post/saving stories on Instagram tutorial video: https://www.youtube.com/watch?v=pEWuhaDxz_8

Link to how to go live on Instagram tutorial video: https://www.youtube.com/watch?v=Yj7k46mtmQo

Appendix I: YouTube Channel Guidelines

The YouTube guidelines teach how to use some of the features on YouTube to establish a stronger channel. These guidelines will consist of tutorial videos on how to use some of the features such as creating a home video for subscribes and nonsubscribers, playlists, going live, and advertising. Alongside the tutorial videos will be written out explanations on how these features can benefit the channel to become well organized, easy accessibility, and appealing. All of the guidelines listed below are applicable on both desktop and mobile smartphone/device (by downloading YouTube Studio in the application store).

Adding Introductory Videos for Subscribers and non Subscribers:

Importance:

Having a home page introductory video to non subscribers provides a welcoming feeling that gives necessary background information on the establishment or individual. The home video provides a visual aspect for the "About" section on the YouTube channel. YouTube also allows home page videos for current subscribers to watch which can be videos on recent events or any video that has been uploaded to the channel. The home video for subscribers is a video of the channel's owner choosing what can be the latest video or some sort of welcoming video to look forward to.

Link to the tutorial video: https://www.youtube.com/watch?v=-_2YiTXHeOU&feature=youtu.be

How to Create a YouTube Playlist:

Importance:

Creating a YouTube playlist allows the user to organize and categorize videos. For example: Midori Farm's YouTube channel has multiple videos on a "Day in a life of a volunteer", a playlist would be appropriate for viewers to easily find all the videos that pertain to the category, volunteers.

Link to the tutorial video: https://youtu.be/sg4Emi33qO0

How to Live Stream on YouTube:

Importance:

The YouTube Live feature allows the user to broadcast live on either desktop or mobile smartphone/device via webcam or screen sharing, which can be beneficial for events that are online such as podcasts, fundraising, entertainment, etc. The feature allows the user to view the audience's comments and questions and offers the experience of virtual interactions. There are useful sections in the YouTube Live feature that can assist providing other methods of online interactions such as adding a donation link or links to other online platforms.

Link to the tutorial video: https://youtu.be/aInUXJT6_Nc

How to advertise your YouTube channel using Google ads:

Importance:

Using YouTube's Advertising feature allows the user to promote videos such as the introductory video for non subscribers to random or targeted audiences. Being able to advertise your Youtube content means that people using Google search engine will be able to see banners of your content on the site they are one (cookies). Youtube Advertising also means the videos chosen by the user act as commercials for non subscribers that see it while watching other videos on Youtube. This can increase Midori Farm's YouTube channel popularity and attract potential volunteers who may want to work on the farm. Youtube Advertising features advertise the user's chosen content that allows the user to target an audience (gender, age group, etc), location, and content. The advertising feature requires a payment that has a built in calculator to provide the rates of budget versus amount of days of advertisement.

Link to the tutorial video: https://youtu.be/RpN8vAFrJHw

Appendix J: YouTube Video Guidelines

The YouTube video guideline teaches how to structure videos to establish more organization in creating content. This guideline will provide a mock timeline on how videos are structured and tables that will provide organization to brainstorming content such as how to videos, community events, day in a life, and etc. The guidelines can act as a checklist.

Below are lists of existing content on Midori Farm Channel and explanation on structuring:

• Community events

O Videos that pertain to events online or in-person need to only capture the highlights of the event. Having an hour or more video on the full event may not capture many views, because of the time to watch it and the availability people have. It is best to have the recording of the whole video to refer to when editing the most important parts of the events.

Meet volunteers videos

• Videos about volunteers or people on the farm in general can be expanded to a more broad theme, such as "A day in a life:_____". This provides viewers what it is like being a volunteer, manager, or a visitor, and it can be anyone that is relevant to the farm.

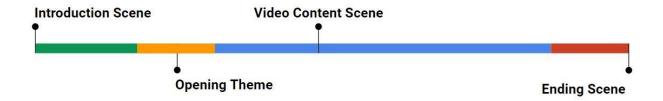
How to videos

 Videos that teach and allow the viewers to learn from the how to videos provides the online interaction and offering that Midori Farm wants. These videos should be short and provide enough information that allows all various skill levels of viewers to do so.

Daily activities on the farm

• Videos about any other content that are not listed in the guideline. These videos are generally short as well, similarly to the "how to" videos. The structure for these videos are more flexible, because you can have highlights to cover the content or you can have a planned out schedule of what to do in the video. Both options work for this theme content.

Midori Farm Video Structure



Note: The length of the color bars are only a visual representation

For every YouTube video that is going through editing and later becoming a published video on the channel, here are some steps to make sure you have a proper video structure.

- 1. Introduction Getting the viewers'/viewer's attention is key, but also making a comfortable
 - Introduction is important as well.
- 2. Opening theme The opening theme can be a video that can be used as a clip in every video, this will alert viewers that the video content is about to start soon.
- 3. Video Content Refer to the tables below for what content you are doing.
- 4. Ending Scene When recording the video, you can plan out to have a script that allows you say the same thing as an ending scene in every video, but the visual of you saying so is different, making it more thoughtful for the viewers to hear and see.

YouTube Details: Description, links, etc.

Every video published to the YouTube channel should have some description about the video's content such as getting to participate in events or learning more about Midori Farm. The description for the video also allows the user to post a written summary on what the content was or provide viewers links to connect with other platforms, surveys, or even to other resources that makes viewers feel part of the Midori Farm community.

Midori Farm Opening Theme

The opening theme of Midori Farm's channel should be something uplifting, because the channel is about organic farming and what it is like. Here are some points to that a opening theme song should consist:

- Logo of the establishment
- An uplifting song
- Some type of transition into the video content

Video Structure: Community Events & Day in a life

	Ideas:
Introduction Scene	
(estimated time: 1-2 minutes)	
Opening Theme	
(estimated time: 5-10 seconds)	
Video Content Scene	
(estimated time:4-6 minutes)	
Ending Scene	
(estimated time: 2-3 minutes)	
(estimated video time: 10 minutes)	

Video Structure: How to... & Daily activities on the farm

	Ideas:
Introduction Scene	
(estimated time: 1 minutes)	
Opening Theme	
(estimated time: 5-10 seconds)	
Video Content Scene	
(estimated time:2-4 minutes)	
Ending Scene	
(estimated time: 30 seconds)	
(estimated video time: 5-6 minutes)	

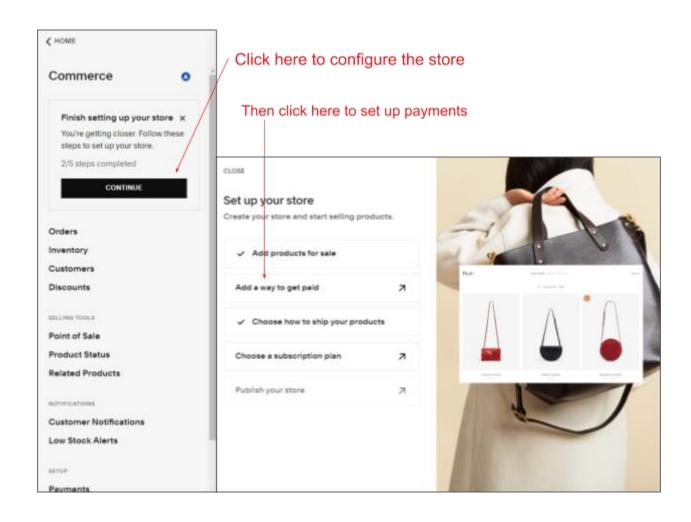
Appendix K: Website Maintenance

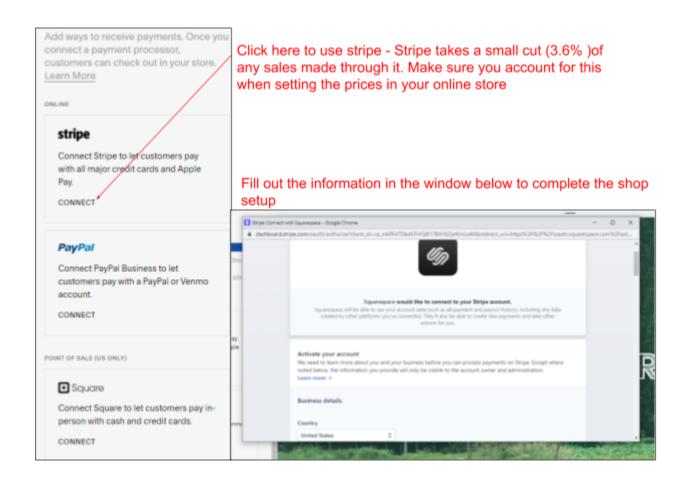
The following information details how to setup and maintain the new areas of the website

Shop Setup

First, you need to set up the payment processing. This only needs to be done once.

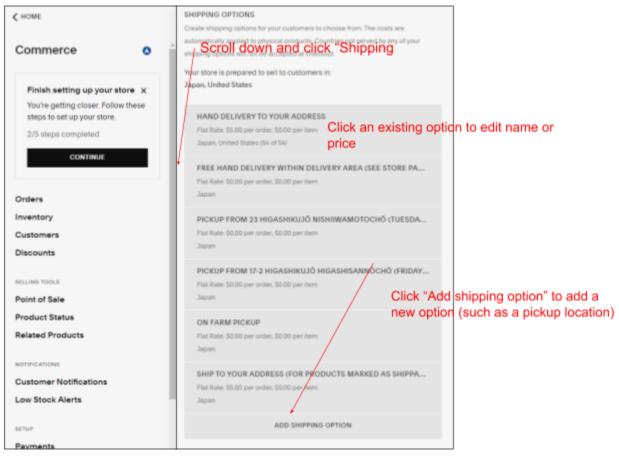


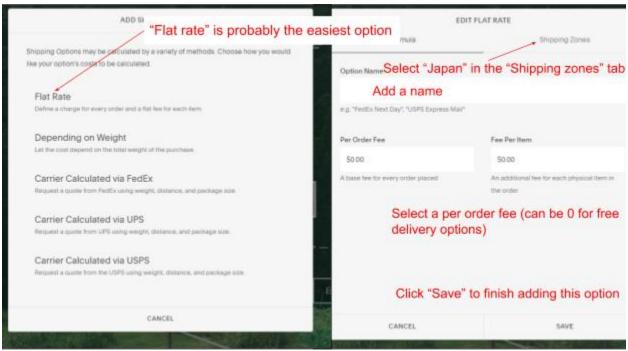




Adding Delivery Locations



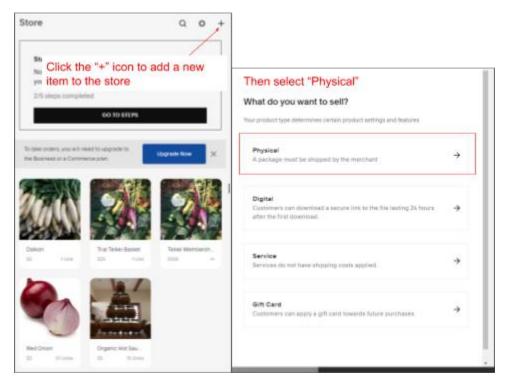


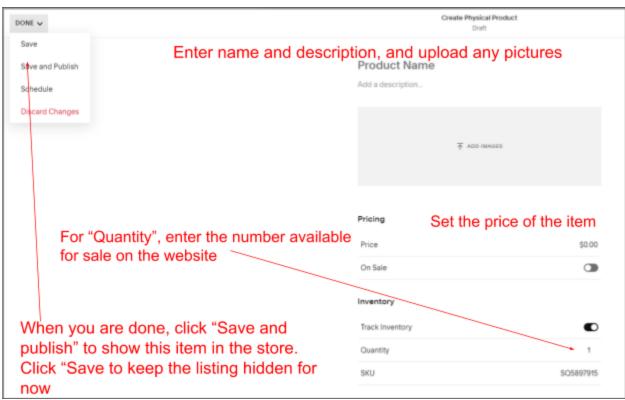


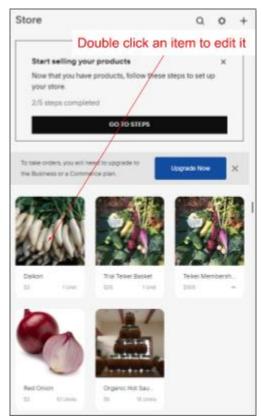
Managing Shop Items





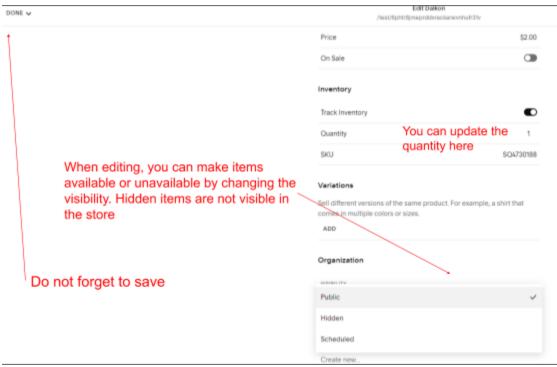






Editing an item allows you to:

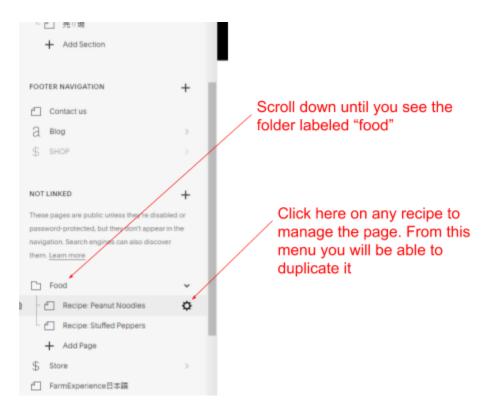
- Change the name or description
- Add additional photos
- Change the available inventory for the item
- Change whether the item is for sale at this time

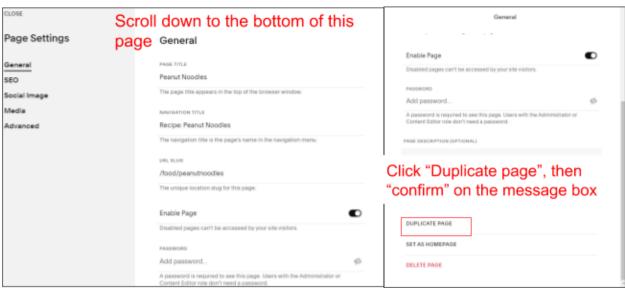


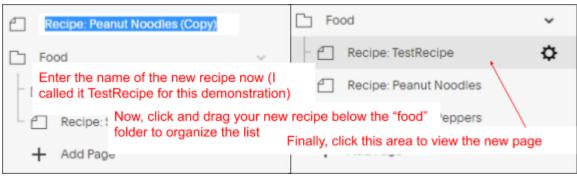
Adding Recipes

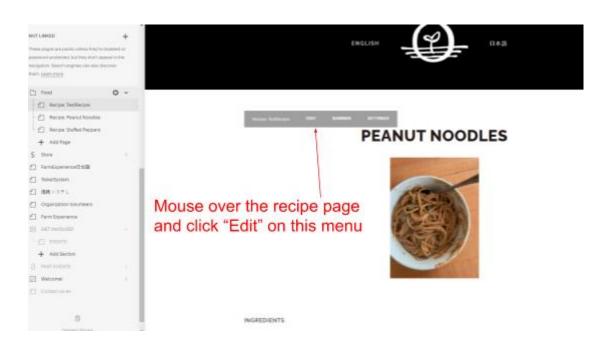
First, you have to create a page for the new recipe. The easiest way is to duplicate an existing recipe page.



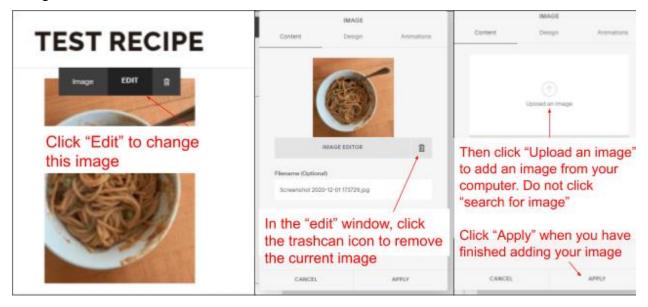




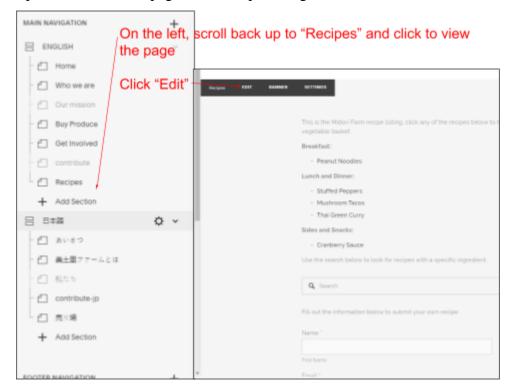


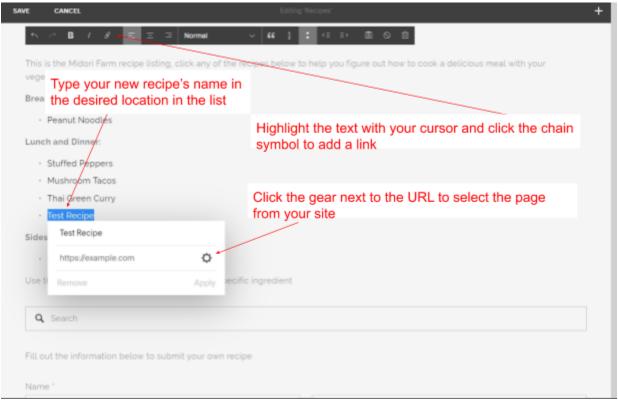


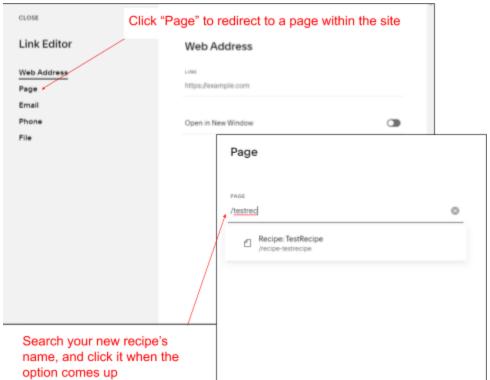
You are now in edit mode, and you can change the title, ingredients, and instructions to match the new recipe. Make sure to click "Save" in the upper left corner of the screen to save your changes



The final step is to add the new page to the recipe listing







Make sure you click "Save" in the upper left of this window, the "Apply" to generate the link, and finally "Save" again to save the page.