

Hawai'i Agritourism

Examining how Agritourism can be Responsibly Implemented to Support Small Farmers and Ecological and Cultural Preservation in the Hawaiian Islands







Swette Center for Sustainable Food Systems, Arizona State University April 2023
This publication is a Capstone Report by the Graduate Certificate in Food Policy and Sustainability Leadership class of 2021-2023.
Suggested Citation: Swette Center for Sustainable Food Systems. <i>Hawai'i Agritourism: Examining how</i>

Agritourism can be Responsibly Implemented to Support Small Farmers and Ecological and Cultural Preservation in the Hawaiian Islands. April, 2023. (Swette Center, 2023)

Authors

John Gifford

Writer & Photographer Self-employed

Abigail Martone-Richards

Director of Design Operations WeWork

Mary Mik

Registered Dietitian Nutritionist Self-employed at private practice

Jason Pena

Senior Sourcing Manager Chewy.com

Allison Perkins

Student Researcher Swette Center for Sustainable Food Systems Arizona State University

Sharla Strong

Special Projects Coordinator Arizona State University

Client Partner

County of Hawai'i Research and Development

www.hawaiicounty.gov

Acknowledgements

We are grateful to the County of Hawai'i for giving us the opportunity to conduct this research and provide recommendations that have the potential to enhance the agritourism industry across the county and state and in doing so, to help improve the quality of life for local residents.

We are thankful as well to Carly Wyman, Senior Researcher at the Swette Center, for her guidance throughout the project. Her support included providing interview contacts and advising on literature reviews and report content. In addition, Carly provided a great deal of support in the final editing stages of this report including additional research, copyediting and proofreading. We are thankful to Kathleen Merrigan, Executive Director of the Swette Center for Sustainable Food Systems for advising and guiding us on this important project. We would also like to thank Nick Benard, Graduate Student Research Assistant at the Swette Center, for assisting in the final formatting of this report.

We are also thankful to GoFarm Hawai'i and Pomai Weigert, agritourism consultant for GoFarm, for providing initial insight at the origins of this report. Their webinar produced on August 4, 2020 titled "Agri-Tourism Webinar—Compliance & Planning" was a source of much of the data for understanding agritourism policies across the counties of Hawai'i and was indispensable (GoFarm Hawaii, 2020). A link to this webinar can be found in the references section of this report.

Advisors

Carly Wyman

Senior Research Specialist Swette Center for Sustainable Food Systems Arizona State University

Dr. Kathleen A. Merrigan

Executive Director Swette Center for Sustainable Food Systems Arizona State University

Table of Contents

Introduction	10
Research Questions & Study Design	11
Talk Story	12
Background	14
What is Agritourism?	14
Agritourism in the United States	15
Agritourism in Hawaiʻi	18
Methodology	27
Primary Data	27
Secondary Data	33
Agritourism Policy	34
Overview	34
Agritourism Policy in the United States	34
Agritourism Policy in Hawaiʻi	39
Summary	54
Toward a Regenerative Tourism Sector: Agritourism's Role in Sustainability	56
Economic Sustainability	59
Environmental Sustainability	60
Sustainability of Labor	61
Summary	64
Kānaka Maoli Agriculture	65
Overview	65
Tourism and Native Cultures	68
Consultation with Indigenous People	71
Restoring Hawaiian Agriculture through Agritourism	76
Who has access to Agricultural Land?	78
Case Study: Agritourism in Support of Kānaka Maoli Agriculture	80
Summary	85
Rural Culture	87
Summary	92

Lessons from Abroad	92
Italian Agritourism	92
Agritourism Across the Pacific	100
Summary	102
Recommendations & Conclusion	103
Short-Term Recommendations	103
Medium to Long-Term Recommendations	104
Kānaka Maoli Policy Recommendations	108
References	111
Appendix	122
Appendix A: Interview Documentation Example	122
Appendix B: Excerpt from the Qualitative Data Analysis Framework	125
Appendix C: Kaua'i County Zoning Ordinance Excerpt	127
Appendix D: Honolulu's Land Use Ordinance Master Table	129
Appendix E: Permitted Uses by Zoning District	130
Appendix F: Additional Literature on Agritourism in other Island Communities	131
Appendix G: Keywords and Language	133
Appendix H: The US Government Relationship with Native Hawaiian Communit	ties 134

List of Figures and Tables

Table 1: Examples of Agritourism Activities	14
Table 2: Interviewees	28
Table 3: Advice from one farm on hiring work traders	63
Table 4: Recommendations for improving consultation with Indigenous people	74
Table 5: Excerpt from report analysis	125
Table 6: List of agencies and organizations that serve Hawaiian people	134
Figure 1: Map of agritourism hot spots and cold spots	16
Figure 2: Hawai'i's highest valued agricultural commodities	19
Figure 3: Graph showing the number of Domestic Passengers visiting Hawai'i	20
Figure 4: Graph showing the number of International Passengers visiting Hawai'i	20
Figure 5: Real value of agricultural sales in Hawai'i deflated using the consumer price index for all items in urban Hawai'i	21
Figure 6: Size of Farms using Agritourism in Hawaiʻi	24
Figure 7: Plantation worker prop at Dole Plantation	26
Figure 8: Research Design	27
Figure 9: Breakdown of the types of professionals that made up the interview pool	30
Figure 10: Number of Agritourism Operators located in each of the four counties	30
Figure 11: Gender of the farmers in our interview pool	31
Figure 12: Size of Farms of interviewees	31
Figure 13: Types of Agritourism Operations in which interviewees were participating	32
Figure 14: Analysis of Value-Added Products	32
Figure 15: Agritourism laws across the United States	35
Figure 16: How States Regulate Agritourism	36
Figure 17: Analysis of the Types of Agritourism Laws by State	38
Figure 18: HFUU member survey	62
Figure 19: Ahupua'a cultural resource management system	67
Figure 20: Top concerns for residents saying Hawai'i tourism creates more problems than benefits	77
Figure 21: Number and Size of Farms in Hawaiʻi by Race and Acreage	78
Figure 22: Number of Acres Operated by Race in Hawaiʻi	79
Figure 23: Example of a certificate outlining an agritourism operators' sustainability rating	99

Executive Summary

More than 10 million visitors traveled to Hawai'i in 2019, placing an enormous strain on a food system already burdened by a disproportionate reliance on imported food. Though economically beneficial, tourism has come at a cost to Hawai'i's local culture and fragile island ecosystem.

Local farms are confronting challenges such as access to labor, high cost of inputs, and access to land. To provide additional ways for farmers to diversify their income, increase consumption of locally produced food, and connect farmers to local consumers, agritourism may be one solution. But in a place with such a robust tourism infrastructure, how can it be responsibly implemented and utilized in a way that benefits local farmers, residents, the environment, and rural and Native Hawaiian culture?

This report endeavors to answer this question through a comprehensive examination of agritourism in the islands as it exists today, and by providing recommendations for agritourism in Hawai'i going forward. The recommendations outlined in these pages are the result of this team's study into existing academic research surrounding the industry and practice of agritourism, as well as a persistent and focused inquiry with agritourism practitioners and other stakeholders throughout the Hawaiian Islands. The report includes a background on the industry of agritourism, and the findings of our research into policy, sustainability, and culture. Over the course of 17 interviews with farmers, tour guides, government officials, and agritourism consultants, we ventured to understand the challenges facing agritourism today in Hawai'i, environmental pressures, the unique challenge of the COVID-19 pandemic, and how existing state and county policies impact farmers and agritourism. To better situate our understanding of agritourism in the global context, we then explore agritourism efforts in different countries to see what strategies are successful and where difficulties arise.

The report culminates in several recommendations, both short- and long-term, offered in the spirit of, 1) enhancing the viability of Hawai'i's agritourism, 2) supporting small-scale agricultural producers, and 3) fostering greater ecological and cultural sensitivity in the islands. Among the recommendations are a number of short, medium, and long-term initiatives. As a brief overview, some of these recommendations range from making information and resources more accessible, to adding additional state agritourism liaisons, to aiding farmers with grant writing to help them navigate proposals and secure necessary funding. Another recommendation is for policy makers to conduct a survey of existing agritourism areas to understand the potential for growth and what steps would need to be taken to conserve natural resources or fragile ecosystems if agritourism is expanded in different areas of Hawai'i. Lastly, we make several recommendations

specifically to support Native Hawaiians—the Kānaka Maoli Community—and to protect their unique culture and lands. This involves greater education of local government officials of the Kānaka Maoli culture, inviting the Kānaka Maoli to participate and contribute to state planning and regulatory developments, and policy considerations to ensure the Kānaka Maoli's unique role in Hawaiian agriculture is not overlooked or undervalued.

Introduction

Tourism is one of the largest economic drivers in the state of Hawai'i, accounting for about 17% of the state's GDP (HTA, 2020). In 2019, nearly 10 million tourists visited the islands, about 7 times as many visitors as there are residents (HTA, 2020). Though the number of visitors decreased significantly since the COVID-19 pandemic, in 2023 tourism is once again on the rise. These millions of tourists are negatively impacting the islands' built and natural landscapes, resulting in "overcrowding, traffic congestion, deteriorating conditions at parks and trails and visitor encroachment in Hawai'i neighborhoods" (HTA, 2020, p. 10). In addition, tourism is resource intensive. In a 2013 study of resource use by the tourism industry on Hawai'i Island, tourism was found to account for nearly 22% of energy use on the island and 45% of water consumption (Saito, 2013). Tourism is perceived by residents as having a negative effect on sustaining Hawai'i's natural resources and Native Hawaiian culture and language (HTA, 2021b). Additionally, despite the economic advantages associated with tourism, many residents have mixed perceptions of this industry and practice, noting that they value environmental protection over the economic benefits of tourism (Liu & Var, 1986).

Recognizing these challenges, the Hawai'i Tourism Authority (HTA), a legislatively mandated organization, has set four strategic pillars to guide Hawai'i tourism:

HTA's Strategic Pillars Guiding Hawai'i Tourism

- 1) Respect for natural and cultural resources
- 2) Support Native Hawaiian culture and community,
- 3) Ensure that tourism and communities enrich each other
- 4) Leadership in brand marketing to enhance Hawai'i's globally competitive brand (HTA, 2020)

This report aims to contribute towards the development of tourism that moves towards the first three of these goals.

Hawai'i is also a net importer of the majority of its consumable food sources, importing between 85-90 percent. However, this is not due to a lack of suitable agricultural lands. Sugar and pineapple plantations dominated Hawai'i agriculture for over one hundred years, a period which has only recently come to a close. While leaders in the islands recognize the need to diversify agriculture to contribute to increased food self-sufficiency, Hawai'i has yet to develop such a robust system.

Some 66% of Hawai'i farms are less than nine acres in size (NASS, 2017). These small-scale farmers face some of the nation's highest production costs for land, labor,

energy, and agriculture inputs. Most of these producers report no income from farming activities, and 80% of those that do report earnings, make less than \$25,000 per year (NASS, 2017). Many farmers, therefore, must seek additional income off-farm to help make ends meet.

One strategy to address these needs of Hawai'i's small-scale farmers is agritourism. This is a way to capitalize on the state's robust tourism sector while providing producers with additional income to complement their baseline agricultural activities. While definitions of agritourism vary, the HTA broadly defines it as "tourism related to experiencing and appreciating agriculture products, settings and lifestyles" (HTA, 2021a). Such activities include farm tours, value-added product sales, event hosting, farm-to-table experiences, volunteer opportunities, and others.

Research Questions & Study Design

Though the above examples demonstrate some of agritourism's benefits, farmers interested in implementing an agritourism project often struggle to understand the state-and county-level regulations and permitting needs for establishing such operations. Though state-level agritourism policy exists, many of the details are left for counties to work out. Hawai'i agritourism policy varies significantly from county to county. Consequently, farmers find it difficult and confusing to navigate these regulations.

This study includes a review of both the state- and county-level policies across the islands to understand the current landscape farmers must navigate. Additionally, we explore how agritourism can be responsibly implemented to support small-scale agricultural producers and ecological and cultural preservation.

The research team collected data on farmers across the islands who are successfully practicing agritourism. While conducting this research, we considered the following:

- What are some of the best practices of existing agritourism operations?
- What are the negative impacts of tourism, including agritourism, on the local culture and environment?
- How can policy help mitigate these impacts?

We also explored existing agritourism models around the world, including a case study of Italy, which has one of the world's oldest and most developed agritourism sectors. In looking at alternative agritourism models, some of the questions we explored included:

- What can be learned from the Italian model in terms of protecting and sustaining rural ways of life, economies, and cultures?
- What other models of agritourism exist in the Pacific region that have had beneficial impacts for local food systems and indigenous communities?

Talk Story

Hawaiian culture permeates daily life in the islands, from the names of places to the businesses that adopt Hawaiian culture, to the conversations with locals where it is commonplace to hear words in the Native Hawaiian language 'Ōlelo Hawai'i, English, and Pidgin, a multicultural language unique to Hawai'i. A common phrase that we learned during our research is "talk story," which is a style of talking and intentional relationship building that involves slowing down and getting to know another person. The common practice of introducing yourself in mainstream culture of the U.S. continent encourages the speaker to be brief, so as to be polite. However, the culture in Hawai'i has maintained the practice of talking story and reflects the importance of taking time to know others, build deep connections, and facilitate the sharing of culture and stories.

To introduce ourselves as authors, we are a group of researchers studying sustainable food systems as graduate students at Arizona State University. We came to study food systems from different backgrounds and professions, but were united in this project goal of learning about agritourism in Hawai'i and making recommendations on how to best serve the needs of farmers, local residents, Native Hawaiian peoples, and rural communities.

None of the authors of this report are descendants of Hawaiian peoples and we do not seek to represent the interests of any Indigenous, Aboriginal, or native peoples. One goal of this report is to emphasize solidarity with Indigenous Rights movements, inform non-Hawaiian peoples and settlers in Hawai'i, bring context to the current barriers for Hawaiian people and ongoing colonial presence within the Hawaiian archipelago, and how these historical and current factors continue to shape modern agriculture in Hawai'i.

Lastly, to highlight one example of historic events that still impacts modern life in Hawai'i, we would like to clarify some terminology in this report. A report issued by the Office of Native Hawaiian Relations explained some of complications around catch-all terms like "Hawaiian":

Early use of the term 'Hawaiian' referred to the people of Hawai'i and 'Native Hawaiian' refers to the indigenous people of Hawai'i, many of whom self-identify as Kānaka 'Ōiwi ('native people' or literally 'people of the ancestral bone') or Kānaka Maoli ('real people') or as part of the Lāhui ('Nation'). (Office of the Secretary, 2020, p. A-1).

We have chosen to refer to peoples of Aboriginal Native Hawaiian descent by the preferred term of Kānaka Maoli in this study.

Background

What is Agritourism?

Agritourism, or agriculture-related tourism, is a practice that helps farmers and ranchers generate revenue from recreational or educational activities, such as farm tours or "pick-your-own" experiences. It can provide jobs in rural areas, which benefits local economies, and can help preserve agricultural heritage. Given the economic realities of agriculture today, many small and mid-size farms, as well as newer operations, are exploring agritourism as a strategy to remain competitive.

Individual states, counties, and municipalities may adopt more specific definitions of agritourism as a means of regulating the types of activities associated with this form of tourism. Such definitions often come with the understanding that while agritourism is used to diversify farm income by generating revenue during the off-season, and perhaps even as a means of educating the public about local foods and/or rural culture, agritourism, like any form of tourism, can be detrimental to the environment if not carefully managed.

Agritourism may also be referred to as "agri-tourism," "agrotourism," "farm tourism," "agricultural tourism," "agritainment," "rural tourism," or be interrelated with "ecotourism" (The National Agricultural Law Center, n.d.).

Diversity of Agritourism Operations

Agricultural producers may consider integrating agritourism into their business models for many different reasons and with various goals in mind. These include:

- Business
 - Generate additional profits for the farm or ranch
 - Promote a specific farm product
 - Increase local food markets (farmers markets, food hubs)
- Education
 - Cultural education
 - Promote farming, growing your own, rural lifestyle
 - Preserving agricultural history, such as plantation museums
- Community building
 - Provide outdoor recreation for the local community
 - Agriculture festivals
 - Large events such as weddings and festivals

Depending on the type of agricultural practice and unique environmental qualities, what qualifies as an agritourism activity can vary. Examples of agritourism activities include but are not limited to the examples in the chart below:

Table 1: Examples of Agritourism Activities (Agricultural Marketing Resource Center, 2022).

Type	Description	
U-Picks	U-pick farms give customers a hands-on farm experience by inviting them to pick products from the field to purchase and take home. Common types of products offered at u-pick farms include fruits, vegetables, pumpkins, flowers, and Christmas trees.	
On-Farm Markets	On-farm markets give customers the opportunity to purchase produce and/or products on the farm property. Common types of farm markets include farm stands (outdoor booth on the farm) and farm stores (enclosed store on the farm).	
Pumpkin Patches	Farms that grow and sell pumpkins. On-farm pumpkin patches often sell their pumpkins as a u-pick and/or through an on-farm market.	
Corn Mazes	A maze cut out in a cornfield that customers can navigate through.	
Vineyards and Wineries	Farms and businesses engaged in growing grapes for wine and/or wine making. Many wineries provide onfarm entertainment including, but not limited to, winetastings, wine-trails, music, and on-farm dinners.	
Floriculture Farms	A flower farm that invites visitors to see or experience the flower crop in the field. Floriculture farms may host events and workshops, provide a flower u-pick, or offer photography opportunities.	
Demonstration Farms	A working farm that invites visitors onto the property to see or experience the farm. Examples of demonstration farms include, but are not limited to, dairies, conservation farms, and cattle ranches.	
Christmas Tree Farm	A farm that invites customers to pick or buy Christmas trees on the farm.	
Farm Stays	Farm stays invite visitors to stay on a farm property.	
Farm Tours	A farm that engages with visitors by giving them tours of the farm.	
Farm Camps	An educational opportunity for children to experience a farm and engage in agricultural practices.	
Farm-to-Table Dining	On-farm dining experience, often including a specialty chef, farm fresh food, and entertainment.	
Equine Agritourism	Opportunities for visitors to interact with horses on the farm. Types of equine agritourism can include trail riding, horseback riding lessons, dude ranches, horse camps, boarding facilities, and equine therapy farms.	
Fee and Leased Pond Fishing	Arrangements through which landowners allow visitors to fish their ponds for a fee	
Hunting Leases	Arrangements through which landowners allow hunting on their properties for a fee.	

Agritourism in the United States

An increasing number of farmers, ranchers, and food producers have added agritourism activities as a means of diversifying income and engaging with the public in recent years (Whitt et al., 2019). Research has been conducted over the last 25 years to understand why agritourism has skyrocketed and what the impact has been. Certainly, there is a

correlation with the increasing challenges of running a farm that has beset many farmers, especially those running midsize or smaller operations (Wang et al., 2022). For many, diversifying into agritourism was simply a means to increase farm revenue and stay competitive. For others, allowing visitors to participate in various on-farm activities provides educational opportunities that are vital to increasing awareness of food production, sustainability, and community (Barbieri & Tew, 2012; Wang et al., 2022).

Based on USDA data, revenue from agritourism increased significantly between 2002 and 2017 by more than threefold (Whitt et al., 2019). While still accounting for a small percentage of overall farm income (5.6%), this trend is expected to continue. In a 2008 report published by the Western Agricultural Economics Association (WAEA), the authors note several trends, including general market demand for more varied outdoor recreational activities and increases in discretionary income (Carpio et al., 2008). At the time, over 30% of the population in the United States visited farms at least once a year and indicated an increased interest in rural life, which has also been observed in other developed countries (Carpio et al., 2008).

Women are generally more likely to start agritourism activities, as are older operators versus younger (Whitt et al., 2019). Additionally, establishments that produce food for human consumption and have value-added products are more likely to implement agritourism operations, one reason being that the added retail often results in word-of-mouth marketing from visitors (Whitt et al., 2019). Another noticeable trend is the phenomenon of "hot spots," which are identified in various parts of the country. Essentially, certain regions have significant clusters of agritourism operators. Conversely, there are also areas known as "cold spots" featuring almost no agritourism operations. Figure 1 below provides a visual of these clusters.

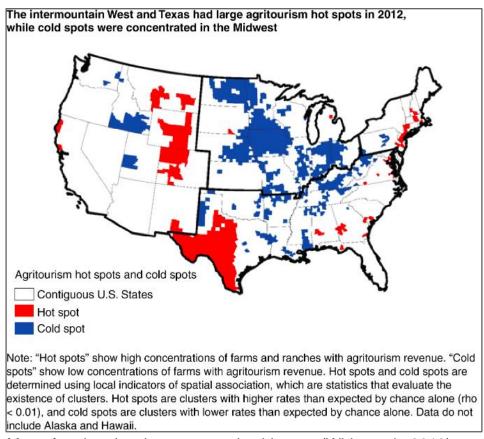


Figure 1: Map of agritourism hot spots and cold spots (Whitt et al., 2019).

While many operators report benefits associated with investing in and managing agritourism activities as part of their day-to-day operations, there are challenges to overcome. In a 2022 study, farmers across the US were surveyed to better understand the challenges facing agritourism operators (Wang et al., 2022). Challenges identified included: limited access to resources and e-connectivity, which still plagues many rural areas, as well as issues of regulation and liability. For many operators around the country, regulatory issues from permitting to zoning significantly impede their ability to run agritourism activities. Additional administrative issues complicate things further, from confusing websites and resources to a feeling that county and state officials do not have an in-depth knowledge of the associated regulations, making it harder for operators to navigate the system (Wang et al., 2022).

Agritourism in Hawai'i

History of Agriculture in Hawai'i

Agriculture in Hawai'i has undergone many changes from pre-contact Kānaka Maoli agriculture, to post-contact plantation agriculture when the landscape and biodiversity in Hawai'i dramatically changed. Plantation agriculture mainly consisted of sugar and pineapple plantations and relied heavily on immigrant labor (Schmitz, 2010). During WWI and WWII plantation workers were barred from being hired in any other type of employment other than agricultural labor, leading to strikes following WWII and contributing to the closing of domestic plantations. The decline of plantations and canneries started around the 1960s and led to plantation closures beginning in the 1980s and continuing throughout the 1990s (Schmitz, 2010). From a highpoint of 27 sugar mills in operation, the last running sugar mill—Maui's Pu'unene sugar mill built by the Hawaiian Commercial & Sugar Co. —shuttered it's operations in 2016 (Keany, 2016). Since then, American branded companies such as Dole, have chosen to outsource their agricultural production rather than maintain domestically produced products (Schmitz, 2010). Instead, corporations have created new plantations in developing countries where they can take advantage of lower labor standards and pay less for labor outside of the U.S. Though some diversified agriculture is beginning to emerge in the wake of these plantation closures, many large tracts of fallow agricultural land have still not opened to local food production. Schmitz (2010) notes that this is due to landowners holding onto these sizable parcels of uncultivated land, which only increases the pressure and pricing on the small amount of land that is available to smaller operators looking to go into agricultural production. They expand upon this, noting:

Plantation agriculture had been a central force in shaping Hawai'i's modern political and economic landscape but by statehood in 1959, military spending had risen to become the largest contributor to the local economy. Furthermore, during the 1960s, as American expendable income grew and air travel became increasingly affordable, the intrigue of visiting America's newest state made tourism Hawai'i's second largest economic engine (Schmitz, 2010, p. 37).

Within a generation, the economy in Hawai'i shifted from plantation agriculture to a booming tourism industry, with a workforce centered around service.

Export agriculture has been a primary focus for plantation agriculture in Hawai'i and continues today, despite the decline of the sugar, rice and other industries. Rather than being dietary staples, however, Hawai'i has found a successful trade in specialty produce, both within the nation and worldwide. (Ag Resources, 2013).

While the top value crops produced in Hawai'i in terms of value of production are listed below in Figure 2., other important crops today include a range of exotic fruits, as well as fresh cut flowers (Ag Resources, 2013).

Commodity	Value of Production in Dollars
Macadamias	62,730,000
Coffee	61,947,000
Papayas	8,460,000
Avocados	1,217,000

Figure 2: Hawai'i's highest valued agricultural commodities. Data source: National Agricultural Statistics Service, 2021

"Grown in Hawai'i" and "Made in Hawai'i" labels promote quality American produced exports and locally conscious domestic consumers (Ag Resources, 2013). Some farms and businesses promoting locally produced products are using this branding to demonstrate the quality of their products and increase their sales.

The popularity of agritourism in Hawai'i, though a relatively new industry, can be attributed to many factors, including Hawai'i's thriving tourism industry and the challenges facing the state's farmers, especially since agriculture has been declining in Hawai'i since the mid-1990s (Yeh, 2015).

Despite a sharp decline in tourism due to the COVID-19 pandemic, reports published by Hawai'i's Department of Business Economic Development & Tourism show that travel to the islands is once again on the rise (Department of Business, Economic Development & Tourism, 2022). Domestic tourism has fully recovered, with domestic passenger counts reaching pre-pandemic levels, but international tourism has yet to reach the baseline levels achieved pre-pandemic. Figures 3 and 4 below show the numbers of domestic passengers versus international passengers from 2019 (pre-pandemic) through March 2020, when Hawai'i's Safe Travel program expired, which had limited tourism by restricting the number of domestic and international travelers during the COVID-19 pandemic.

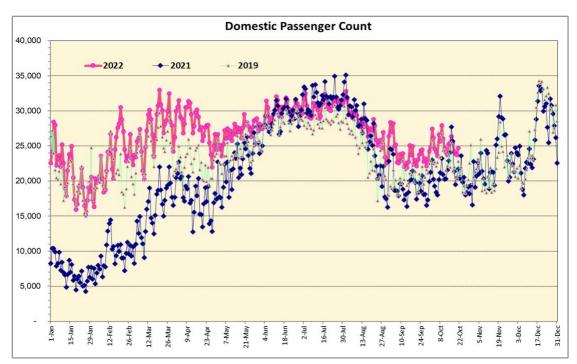


Figure 3: Graph showing the number of Domestic Passengers visiting Hawai'i from 2019-2022. Source: Department of Business, Economic Development & Tourism, 2022.

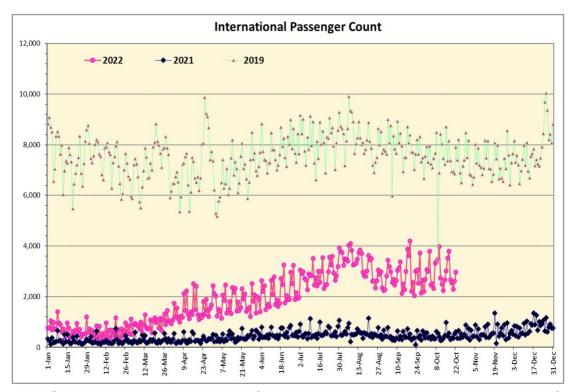


Figure 4: Graph showing the number of International Passengers visiting Hawai'i from 2019-2022. Source: Department of Business, Economic Development & Tourism, 2022.

Hawai'i's agriculture industry has seen a sharp decline over the last 30 years. Figure 5 below visualizes this decline from 1982-2017 across small, midsize, and large farms.

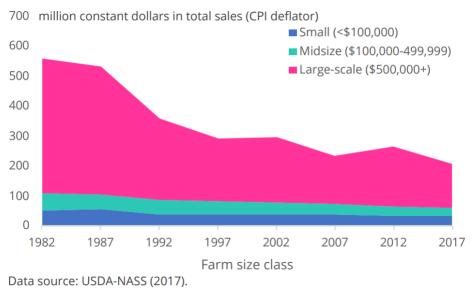


Figure 5: Real value of agricultural sales in Hawai'i deflated using the consumer price index for all items in urban Hawai'i. Source: Rehkamp, et al., 2021.

The decline of agriculture in parallel to the rise in tourism has led to several problems, including an overreliance on tourism, excessive importation of food from the US Continent and other countries, high unemployment, and a vulnerable food production system (Rehkamp et al., 2021). Many of these problems were uncovered and exacerbated by the COVID-19 pandemic and have revitalized efforts to increase agriculture and build resilience across Hawai'i, including supporting existing farmers and bringing fallow land back into production.

With tourism on the rise again, many farmers have seen an opportunity to diversify their income streams through agritourism. But challenges for small and medium scale farmers have existed for decades, as they face increased competition from industrial-scale farming operations both domestically and overseas, as well as not being positioned to absorb rising operational costs like these larger competitors (Yeh, 2015). To give some scale to this issue, the USDA categorizes well over 90% of the farms in Hawai'i as small farms (USDA, 2021). Because of the preponderance of small farmers practicing agritourism, we chose to focus on small farmers in this study. For this reason, we chose to target farms of 200 acres or less for our interviews. The majority of our interviewees were practicing more than one form of agritourism, with the vision to incorporate educational programs, farm to table events, farm tours, and more.

Thirty-four percent of Hawai'i's primary producers are female, however 50% of the agritourism farmers in our interview pool were female (DBEDT, 2020). Our sample is therefore in line with the broader national trend of female farmers being more likely to venture into agritourism (see Figure 11 in the methodology section). As with overall agritourism trends in America, Hawai'i agricultural producers with value-added products also viewed agritourism as a favorable way to expand their business operations. Our report data aligns here, with nearly 85% of our interview pool having value-added products (see Figure 14 in the methodology section).

While some farmers interviewed during the course of this project embraced the opportunities associated with agritourism, some mentioned that the decision to adopt agritourism was not their first choice but rather something they felt they had to do in order to make ends meet. As one farmer in Maui County stated, at first, "we were very much anti-bringing people to the farm but...[agritourism] very much supports the business. Even if we planted out this whole farm with the highest value crop that we can figure out, it's still going to be really rough" (Farmer A. in Maui County, personal communication, July 29, 2022), August Over time, their approach softened towards having visitors on the farm, but it wasn't part of the original business plan. This sentiment is shared by many farmers in Hawai'i, but many have found that agritourism has had a positive impact.

Farmland and the Benefits Agritourism may Offer

Ag Resources produced by the Hawai'i Department of Agriculture notes that:

...agriculture also plays a major role in preserving Hawaii's precious green space. As urban sprawl encroaches onto rural areas, Hawaii agriculture keeps our islands lush and vibrant.

Hawaii's leading industry, tourism, also depends on agriculture. Each year, millions of visitors from around the globe travel to our state with the great expectation of viewing spectacular landscapes of green vegetation. Trends in the travel industry also show an increasing interest in eco-tourism, farm tours and cultural experiences; attractions that are all agriculturally based (Ag Resources, 2013, p. 2).

Agritourism in Hawai'i has much to offer local residents, communities, and tourists, and when utilized by small farms it can be a tool to diversify farm income, promote farm products to consumers and increase farm product income via value-added product sales.

For many farmers in Hawaii, agritourism and farm tours are an important educational aspect that intersects with many other forms of direct sales. Some farmers who prefer tours to other forms of DTC [Direct to Consumer] marketing have said that it is like 'bringing the farmers market home to the farm' (Azizi Fardkhales, 2019, p. 201).

While producing food for the local community is important to farmers, educating the public about agriculture is another important driver for why some choose to adopt agritourism (Yu & Spencer, 2022). Others feel pressure to implement agritourism and cater primarily to tourists because they generate more income and keep their farm businesses viable (Farmer A., personal communication, July 29, 2022). Agritourism can also be a means of "place-making" in farm tourism, empowering farmers to be able to perpetuate their cultural practices while bringing economic, sociocultural and environmental benefits to farm visitors and the community (Yu & Spencer, 2022).

Despite high levels of tourism in the islands, our interviews with farmers revealed that the market segment of tourists who are most likely to engage in agritourism are a niche market who may be considered "foodies" or those who are willing to pay higher prices for unique or private experiences. By providing fewer and higher-cost farm tours, farms have the opportunity to cater to private and experiential education, rather than churning out many small-fee tourists.

As of 2017, 294 farms in Hawai'i reported income from farm-related agricultural tourism and recreational services. Based on this count, only 4% of farms in Hawai'i are receiving some income through agritourism or other agriculture-related recreation. As Figure 6 below shows, the majority of these 294 farms (172 in number, or 58%) are 1-9 acres in size, indicating that agritourism in the islands is still primarily the endeavor of small farmers.

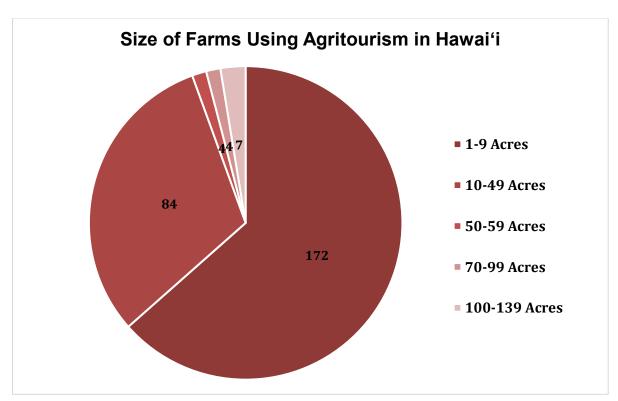


Figure 6: Size of Farms using Agritourism in Hawaii. Data Source: NASS, 2017.

Agritourism Narrative Themes

Understanding that agritourism and tourism in general have been less than responsibly implemented in Hawai'i in the past, this report aims to contribute to the development of a responsible, regenerative, and culturally sensitive agritourism sector for the Hawaiian Islands moving forward.

Narratives are an important aspect to the marketing of agritourism businesses. Such narratives serve to share history and bring context to the people, places, and products of a business. Schmitz (2010) examined how farm businesses seek to evoke a narrative of an idealized agrarian heritage in the tourist experience on their Hawai'i plantations and farms. Idealized Eurocentric agrarian landscapes, colonial nostalgia, romanticized Hawaiian history, and curated agricultural experiences are common marketing strategies in agritourism operations. These narratives have served to erase the uncomfortable realities present in Hawai'i agriculture, such as plantation agriculture, agricultural labor, diversion of waterways for irrigation, chemical pesticide use, and ongoing inequities for Kānaka Maoli peoples in their homelands.

Dole Plantation and Ali'i Kula Lavender are the two primary agritourism ventures that are highlighted in Schmitz's report examining agritourism in the islands, and are contrasted in their portrayal of agriculture in Hawai'i:

Since narratives can affect the way people construct meaning about their surroundings these two sites can be used to analyze the broader context under which Hawai'i's lands continue to be colonized through the physical arrangements of agriculture and tourism. These case studies are examined within a political context which understands Hawai'i to be a colonized place where an ideological struggle continues to be waged through land narrative. By understanding the extent to which agritourism operations accommodate narratives of an idealized agrarian heritage we can begin to determine in what ways these sites can be managed in a culturally and historically appropriate manner (Schmitz, 2010, p. 17).

Photos from Dole plantation speak a thousand words in the representation of the people who for generations labored on the plantations in Hawai'i (see Figure 7). Meanwhile, Hawai'i is no longer a primary Dole agricultural production site:

The same landowners that dominated Hawai'i agriculture during the plantation era remain in positions of power and the system of labor exploitation has merely been exported to other regions of the world where they have not yet been outlawed (Schmitz, 2010, p. 87).

Schmitz documented the representation of plantation labor at Dole farm in 2009. This aesthetic of workers is common throughout plantation representations, but is receiving due criticism for its dehumanization and mockery of the realities of workers on plantations that still exist around the world today:

The representation of plantation workers as happy ghosts of the past perpetuates the illusion that this landscape is not the result of the constant tending efforts of a multitude of contemporary workers (Schmitz, 2010, p. 89).

Attracting agricultural labor is one of the leading challenges for farms in Hawai'i. As



agritourism operations begin to form their own narrative around food and agriculture, including the stories of the people who produce the food increases the transparency and makes the visitor experience more personal. The narrative can also increase public awareness of the labor challenges within our food system. Educating the public about the intense labor that farming requires is a way to increase the public's value for food.

Figure 7: Plantation worker prop at Dole Plantation, photo by J. Schmitz 2009. (Schmitz, 2010, p. 81.)

Methodology

Research Design and Framework

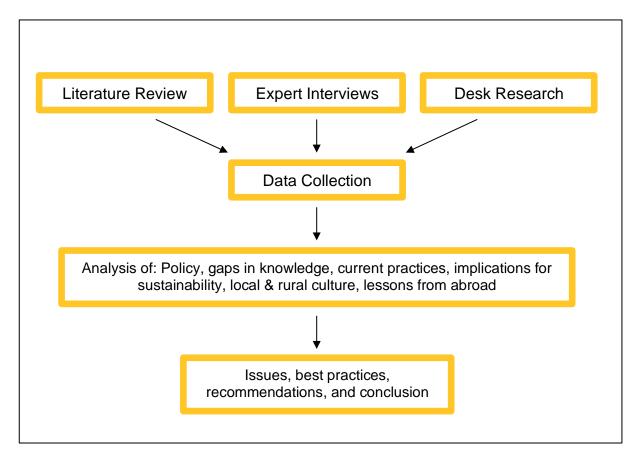


Figure 8: Research Design

IRB Process

The research team submitted an application to the Arizona State University Institutional Review Board (IRB) which outlined specific interview and confidentiality protocols for the study. The IRB determined that the protocol is considered exempt pursuant to Federal Regulations 45CFR46 (2) Tests, surveys, interviews, or observation on 6/8/2022. The IRB number for this project is STUDY00016073: Agritourism in Hawai'i.

Primary Data

Interviews

The primary data source for this study was interviews of farmers with agritourism operations, county officials, professionals with agritourism operations (i.e. food tours),

and others. Zoom video conferencing software was used to conduct virtual interviews and each interview was scheduled for approximately one hour. The research team provided modest \$20 Amazon gift cards to farmer interviewees as compensation for their time.

The 17 interviews conducted followed the Interview Worksheet Template (Appendix A) and consisted of a curated list of questions. For each interview, one researcher acted as the lead interviewer while a second served as notetaker. A table listing interviewees can be found below.

Table 2: Interviewees

Alias or Name	Location/Affiliation	Industry/Expertise
Farmer A	Maui County	Farmer
Farmer B	Kaua'i County	Farmer
Farmer C	Hawai'i County	Farmer / Tour operator
Farmer D	Hawai'i County	Farmer / Apiarist
Farmer E	Hawaiʻi County	Farmers (husband & wife team)
Farmer F	Maui County	Farmer / Ranch Operator
Farmer G	Honolulu County	Farmer / Educator
Farmer H	Kauai County	Farmer / Agritourism Operator
Farmer I	Hawaiʻi County	Farmer
Farmer J	Hawaiʻi County	Farmer
Farmer K	Honolulu County	Farmer
		Outreach and Education
Ecotour Operator	Hawaiʻi County	Coordinator
Food Tour Operator	Kauaʻi County	Food Tours
	Hawai'i County Research &	
Frecia Cevallos	Development Tourism Specialist	Government Official
	Former FAO Senior	International Agritourism, Affiliated
Nadia El-Hage Scialabba	Environment Officer	Faculty of ASU Swette Center
Laurien "Lala" Nuss	Statewide, Conscious Concepts	Regenerative Tourism Consultant
Pomai Weigert	Go Farm Hawaiʻi	Agritourism Consultant

This interviewee list does not capture the extensive efforts that went into scheduling interviews, especially with farmers. The team compiled a list of 82 potential contacts and reached out to 75 directly (91% outreach total). Of the 82 contacts, 70 were farmers and/or agritourism operators (85%) and the remaining 12 were leaders and experts in agritourism or a related field. We were able to successfully schedule interviews with 4 leaders/experts. Of the 70 farmer and agritourism operator contacts, 13 interviews were scheduled, representing a 19% success rate. This was a challenge for the team, as we expected to have far more interviews scheduled, but does provide insight into the busy lives of farmers and how difficult it can be for them to set aside additional time.

Kānaka Maoli (Native Hawaiian) Representation

During our research, we reached out to 16 various Native Hawaiian owned, -operated, or -serving agriculture-related organizations. Two of these organizations participated in our study via interview. Some organizations did not participate due to scheduling conflicts. In many cases, we received no response after reaching out. This represents a 13% response rate from Native Hawaiian organizations (as opposed to a 20% response rate from non-Hawaiian organizations). Part of what may account for this difference in response could be attributable to the following:

- Historic mistrust of academia and other institutions of power due to past exploitation
- Lack of time or resources to commit to an interview
- Lack of interest due to the way that the interview topic was framed
- Organizational focus on education and supporting local communities, rather than on hosting visitors from elsewhere
- As a highly relationship-based community, Kānaka Maoli may be less willing to speak with outside organizations with which they have no personal connection

Kānaka Maoli agritourism organizations tended to have more of an educational focus in their missions, with 36% of them being non-profit organizations. On the other hand, the non-native agritourism operations that we reached out to were majority for-profit, with only 7% being non-profits.

Data Analysis - Quantitative Data

Quantitative data was primarily used to better understand our interview pool and how they compared to the demographics of agritourism operators across the US. Figures 9-14 below detail the demographics of the operators we spoke with.

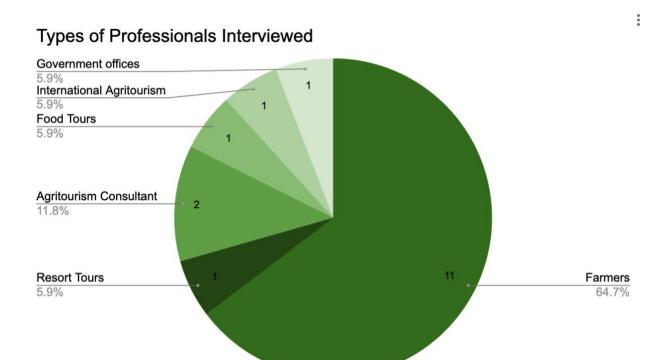


Figure 9: Breakdown of the types of professionals that made up the interview pool.

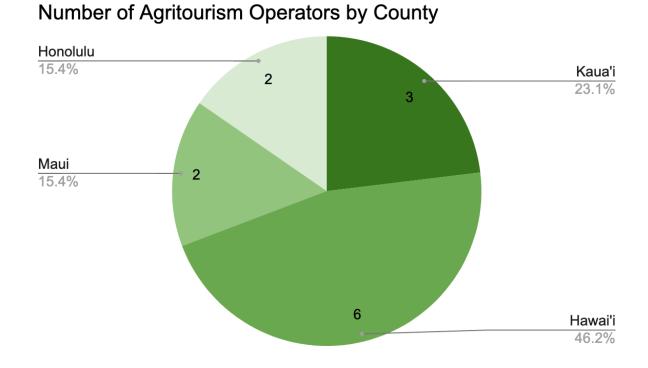


Figure 10: Number of Agritourism Operators located in each of the four counties.

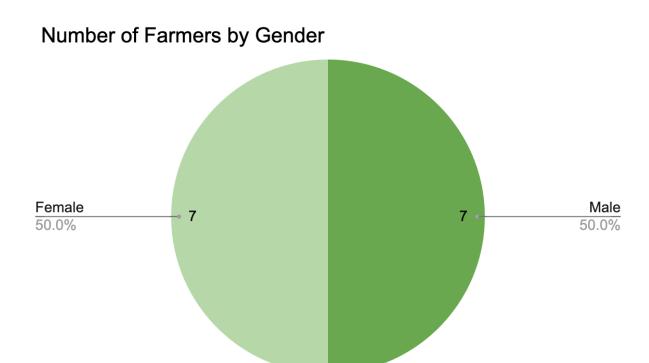


Figure 11: Gender of the farmers in our interview pool (one interview was conducted with a husband and wife which we included in the data set).

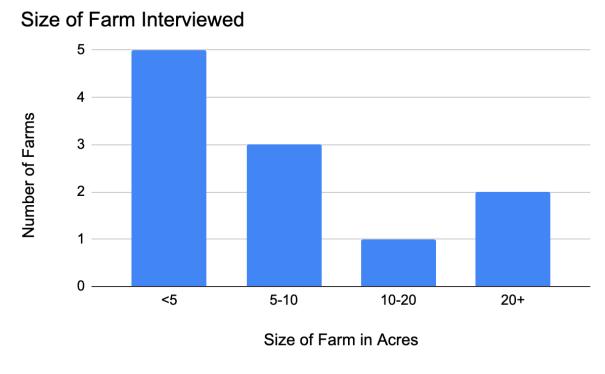
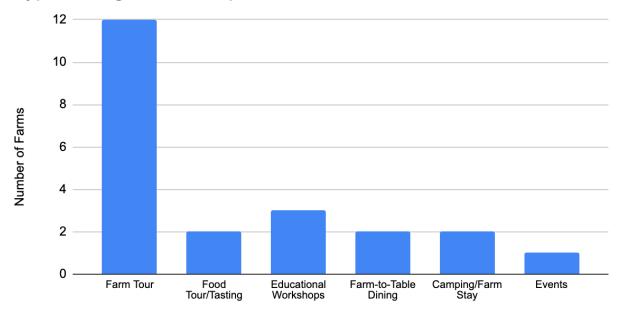


Figure 12: Size of Farms of interviewees.

Types of Agritourism Operations



Agritourism Type (Some farms include multiple categories)

Figure 13: Types of Agritourism Operations in which interviewees were participating.

Number of Farmers with Value Add Products

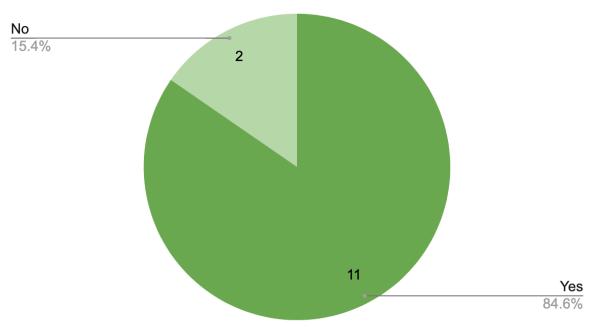


Figure 14: Analysis of Value-Added Products.

Data Analysis - Qualitative Data

Analysis of the interview data was a multi-step process that included identifying common themes and building an excel spreadsheet to compile data. After reviewing the themes, the research team grouped the interview data by 3 main categories: policy, culture, and sustainability. Appendix B includes an excerpt of the qualitative data analysis framework.

Secondary Data

The research team made every effort to use the most recent data available by completing literature reviews on agritourism-related subjects, including federal agritourism policy, sustainability, agritourism models from around the world, and the preservation of local and rural culture. County websites and state statutes were also used to collect data on current policies and gaps in local knowledge. Additionally, the team gleaned supplemental secondary data as needed from publicly available websites, such as United States Department of Agriculture (USDA) National Agricultural Statistics Service (NASS).

Agritourism Policy

Overview

As of today, there is no comprehensive definition of agritourism that can be broadly applied across all states (The National Agricultural Law Center, n.d.). While there are some major federal statutes that inform most of the existing agritourism policy in the US, it has been left up to the states to decide how agritourism operations are regulated. While it could be argued that this approach makes sense, given the impact that agritourism policy has on existing regulations around land use, agriculture, zoning and other major areas, many still feel that federal oversight could be beneficial to farmers. Towards this end, in January 2022, a bi-partisan bill was introduced in the US House of Representatives to create an Office of Agritourism at USDA to oversee and support agritourism businesses and advocate for and provide resources to those looking to add agritourism to their existing agricultural operations (Congresswoman Jennifer Wexton, 2022). The bill was referred to the House Committee on Agriculture where it died and it remains to be seen if it will be re-introduced in the 118th congress. In the meantime, farmers in each state must look to their state and county for current regulations on agritourism.

A state's approach to agritourism has a significant impact on operators, as does each county's administration. In most states, the successful implementation of agritourism operations requires an understanding of land use and zoning laws which often determine whether permits are required, as well as additional measures like having liability insurance, increased parking and facilities for guests, just to name a few (The National Agricultural Law Center, n.d.). More than half of states, including Hawai'i, have statutes that directly address agritourism, and there is pending legislation in others. However, with no federal oversight, many of the efforts to address agritourism challenges from a policy perspective feel disjointed (Vegetable Grower News, 2022).

Agritourism Policy in the United States

The National Agricultural Law Center (NALC) is a leading source of information about state agritourism policy. They provide the major statutes and extensive resources for those looking to understand existing policy from a legal standpoint. While there are no comprehensive federal policies around agritourism, the NALC lists the major federal statutes that have laid the groundwork for state regulation of agritourism. These include the Animal Welfare Act (AWA), the Americans with Disabilities Act (ADA), and a compilation of consistent state statutes around recreation and equine activity. These, along with land use, zoning, and other regulatory statutes, heavily inform the creation of additional agritourism policy in most states.

The AWA, originally passed in 1966 and amended as recently as 2019, laid the groundwork for ensuring animals in human care are treated humanely. It prohibits the use of animals for certain activities such as testing, entertainment, fighting, etc. (National Agricultural Library, n.d.). While farm animals are largely exempt from the law, the NALC notes that "an agritourism operator who uses animals for exhibition purposes should be aware of the potential application of the AWA" (n.d.). The same goes for the ADA, which protects the interests of those with disabilities and ensures their safety in various environments. The ADA was passed in 1990 and has been updated frequently to expand protection (ADA National Network, n.d.). While this Act may not be on the radar of most agritourism operators, it must be understood to ensure the safety of visitors with disabilities.

While the AWA and the ADA are important, most states base their laws on existing regulation around agricultural land use and other secondary laws. According to a 2021 report published by the Vermont Law Center, 39 US states have some sort of regulation around agritourism but only eight of these states have specific laws regulating agritourism operations. The remaining states draw their regulations from secondary laws which range from agricultural land use, to zoning, to civil liability. The following figure shows a map of the United States and a state-by-state look at where agritourism laws are in place.

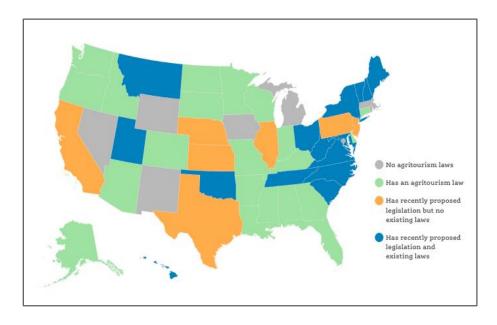


Figure 15: Agritourism laws across the United States. Source: Vermont Law Center, 2021.

As seen above, over 75% of states have existing agricultural laws (green) and some with existing laws have recently proposed legislation (blue). The six states in orange are awaiting proposed legislation to pass, leaving only five states that have yet to propose legislation around agritourism. It's clear that the patchwork of state agritourism law nearly makes up an entire blanket of national regulation, but it is missing cohesiveness on a national level. The approach by each state varies in many respects even though there are some shared commonalities. Figure 16 below identifies the types of laws states are using to regulate agritourism:

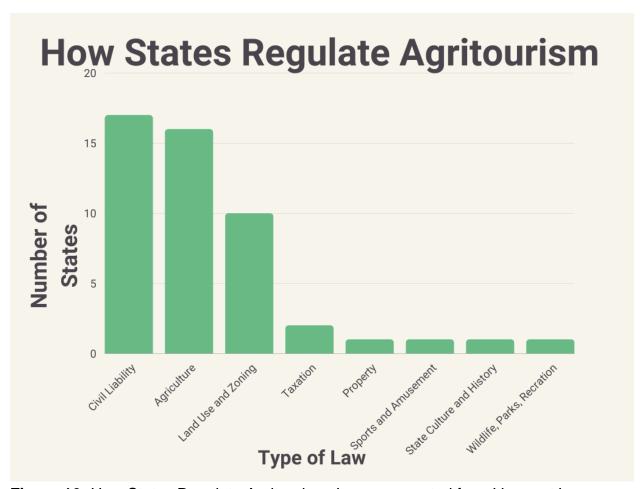


Figure 16: How States Regulate Agritourism. Image recreated from Vermont Law Center, 2021.

This figure above clearly shows that the most common laws used to regulate agritourism are civil liability (34%), agriculture (32%), and land use and zoning (20%). Civil liability laws help to protect operators who clearly outline risks to visitors by acknowledging that "agritourism activities can present inherent risks arising from the conduct of a participant or dangers presented by farm premises, equipment, or animals" (Vermont Law Center, 2021). Several states use this premise as the basis to limit

liability for operators while also providing guidance on appropriate responsibilities that operators must take to ensure the safety of visitors.

For other states, agricultural laws are used to regulate agritourism. In these cases, agritourism is defined as an activity that is closely related to agriculture, such as pickyour-own operations and participating in various farming practices. As there are no Federal regulations, these laws can vary widely by state and sometimes have conflicting definitions by state. For example, Alaska will only consider activities that do not involve a monetary exchange to be agritourism, while Georgia requires monetary compensation for an activity to meet the requirements of agritourism (Vermont Law Center, 2021). Other states have particular requirements for landowners that wish to have certain agricultural activities listed as agritourism in order for the landowner to then access agritourism liability statutes. Nebraska is one of these states, where agritourism activities can range from "pick-your-own" produce, to canoeing, to visiting archaeological sites, but landowners must post warning signs with specific legal language if they want to be protected by the state's limited liability laws (Aiken, 2015). Lastly, for some states, such as Hawai'i, land use and zoning laws are used to regulate agritourism. Existing land use laws in the states dictate whether an activity is considered agritourism for land that is zoned as agricultural. These include events like weddings and retail operations (Vermont Law Center, 2021). The figure below from the Vermont Law Center provides a breakdown of the laws used to regulate agritourism across the states.

COMPARATIVE ANALYSIS BY STATE			
Civil Liability Laws	Agricultural Laws	Land use and Zoning Laws	■ Introduced Legislation in 2019-2020
Alabama	•000	Missouri	•000
Alaska	••00	Montana	•00•
Arizona	0	Nebraska	000
Arkansas	000	New Hampshire	0000
California	000	New Jersey	000
Colorado	•000	New York	•••
Connecticut	000	North Carolina	•00•
Delaware	00•0	Ohio	$\bigcirc \bullet \bullet \bullet$
Florida	000	Oklahoma	000
Georgia	•••	Oregon	•0•0
Hawaii	00	Pennsylvania	000•
Idaho	•000	South Carolina	000
Illinois	000	South Dakota	•000
Indiana	•000	Tennessee	000
Kansas	000	Texas	000
Kentucky	000	Utah	•00•
Louisiana	•000	Vermont	0000
Maine	000	Virginia	000
Maryland	00	Washington	•000
Minnesota	•000	West Virginia	0000
Mississippi	0000	Wisconsin	•000

Figure 17: Analysis of the Types of Agritourism Laws by State (Vermont Law Center, 2021).

For operators looking to adopt and implement agritourism operations, understanding how their state regulates these activities is important. This will dictate not only what types of activities are permissible but also the presence of regulations that require compliance. For example, if a state governs agritourism primarily through land use and

zoning laws, some operations will require permits and this process can vary on the local level

Agritourism Policy in Hawai'i

Like many states, Hawai'i has its own definition of agritourism, which is taken from Hawai'i's State Land Use Law (Chapter 205 of the Hawai'i Revised Statutes). §205-2 states:

Agricultural tourism refers to activities conducted on a working farm, or a farming operation for the enjoyment, education, or involvement of visitors provided that the activity is accessory and secondary to the principal agricultural use and does not interfere with surrounding farm operations. This applies only to counties that have adopted ordinances regulating agricultural tourism. Agricultural tourism activities include overnight accommodations of twenty-one days or less for anyone to stay within a county. Allowance of overnight accommodations shall only apply to a county made up of at least three islands and adopted ordinances regulating agritourism, and it must coexist with a bonafide agricultural activity. Agricultural tourism also includes a roadside stand that is not an enclosed structure, owned and operated by a producer for the display and sale of agricultural products grown in Hawai'i and value-added products that were produced using agricultural products grown in Hawai'i.

Hawai'i's land use laws, first enacted in 1961, have played a major role in regulating agritourism operations in all four of the state's counties. In addition to the land use laws defined in Chapter 205, Hawai'i's zoning regulations can be found in §205-5 of the revised statutes. Getting started with agritourism in Hawai'i requires an understanding of the applicable laws and county regulations. As previously mentioned, Hawai'i governs agritourism primarily by land use and zoning laws but there are differences in the application for each county that can make it difficult for farmers to get started or to expand existing operations.

Land Use Laws in Volume 4, Chapter 205 of the Hawai'i Revised Statutes

→ HRS §205-2 outlines four major land use districts: urban, rural, agricultural, and conservation. These four different districts are administered by the state's Land Use Commission, which work to regulate and manage the different types of districts. Depending on how a district is categorized impacts the applicable laws and jurisdictions. For example, the State Department of Agriculture oversees agricultural districts, while conservation districts fall under the purview of the

State Department of Land and Natural Resources (Land Use Commission, 2023).

Within this section, there are a number of permitted uses defined for agricultural districts, outlined below:

Policy Excerpt 1: Permitted Uses for Agricultural Districts

- Crop cultivation, bioenergy crops, orchards, forage and forestry
- 2. Farming activities related to animal husbandry and game and fish propagation
- 3. Aquaculture
- 4. Wind generated energy production
- 5. Biofuel production
- 6. Solar energy facilities
- 7. Agricultural services
- 8. Wind machines and wind farm
- 9. Small-scale scientific and environmental data collection
- 10. Agricultural parks
- 11. Agricultural tourism conducted on a working farm, as accessory to the primary agricultural use
- 12. Agritourism activities, including overnight accommodation for 21 days or less
- 13. Open area recreational facilities
- 14. Geothermal resources exploration and resources development
- 15. Agricultural-based commercial operations
- 16. Hydroelectric facilities
- → HRS §205-4.5 Additional uses for agricultural districts are found in §205-4.5, which further restricts permitted uses in agricultural districts with the soil productivity rating class A or B. The statute states that "within the agricultural district, all lands with soil classified by the land study bureau's detailed land classification as overall (master) productivity rating class A or B shall be restricted to the following permitted uses." To determine whether the agricultural land has a soil productivity rating class A or B, the land study bureau's detailed land classification can be consulted at the following link:

 https://www.arcgis.com/apps/mapviewer/index.html?webmap=4969f48660d44aa 4aed76e93386ce3bd (Hawaii LSB Land Class Locator, n.d.).

Policy Excerpt 2: Additional Permitted Uses of Agricultural Lands HRS§205-4.51

- 1. Crop cultivation, bioenergy crops, orchards, forage and forestry
- 2. Game and fish propagation
- 3. Raising of livestock, including poultry, bees, fish, or other animal or aquatic life
- 4. Farm dwellings, employee housing, farm buildings, or activities or uses related to farming and animal husbandry
- 5. Public institutions and buildings that are necessary for agricultural practices
- 6. *Public and private open area types of recreational uses
- 7. Public, private, and quasi-public utility lines and roadways, transformer stations, etc.
- 8. Retention, restoration, rehabilitation, or improvement of buildings or sites of historic or scenic interest
- 9. Agricultural-based commercial operation
- 10. Buildings and uses (mills, storage, processing facilities, biogas, etc.)
- 11. *Agricultural parks
- 12. Plantation community subdivisions (employee housing, community buildings, etc.)
- 13. *Agricultural tourism conducted on a working farm, as accessory to the primary agricultural use
- 14. *Agritourism activities, including overnight accommodation for 21 days or less
- 15. Wind energy facilities
- 16. Biofuel processing facilities
- 17. Agricultural-energy facilities
- 18. Construction and operation of wireless communication antennas
- 19. *Agricultural education programs conducted on a farming operation
- 20. Solar energy facilities that do not occupy more than ten percent of the acreage of the parcel, or twenty acres of land
- 21. Solar energy facilities on lands for which a special use permit is granted
- 22. Geothermal resources exploration and geothermal resources development
- 23. Hydroelectric facilities

-

¹ Asterisks indicate permitted uses connected to agritourism.

The permitted uses in §205-4.5 generally align and expand on the permitted uses found in §205-2, but it could cause some confusion for those wanting to identify what primary and accessory activities are permitted. For agritourism, the permitted uses outlined in numbers 13 and 14 are significant in terms of regulation from a state and county perspective. Also important is number 19, which allows for agricultural education programs, which are often included in agritourism operations. Below, the specific definitions for Agricultural Tourism, §205-4.5(13) and Agritourism Activities, §205-4.5(14) are further defined:

Policy Excerpt 3: Agricultural Tourism and Agritourism Activities

13. Agricultural Tourism

Agricultural tourism conducted on a working farm, or a farming operation as defined in section 165-2*, for the enjoyment, education, or involvement of visitors; provided that the agricultural tourism activity is accessory and secondary to the principal agricultural use and does not interfere with surrounding farm operations; and provided further that this paragraph shall apply only to a county that has adopted ordinances regulating agricultural tourism under section 205-5.

14. Agricultural Activities

Agricultural tourism activities, including overnight accommodations of 21 days or less, for any one stay within a county; provided that this paragraph shall apply only to a county that includes at least three islands and has adopted ordinances regulating agricultural tourism activities pursuant to section 205-5; provided further that the agricultural tourism activities coexist with a bona fide agricultural activity. For the purposes of this paragraph, "bona fide agricultural activity" means a farming operation as defined in section 165-2*.

*As noted in both sections, Hawai'i state statute 165-2 defines a farming operation as "a commercial agricultural, silvicultural, or aquacultural facility or pursuit conducted, in whole or in part, including the care and production of livestock and livestock products, poultry and poultry products, apiary products, and plant and animal production for nonfood uses; the planting, cultivating, harvesting, and processing of crops; and the farming or ranching of any plant or animal species in a controlled salt, brackish, or freshwater environment."

While there are other factors at play, these two definitions of tourism activities related to agricultural land use are of great import to farmers looking to add agritourism activities

to their daily operations. While some farmers do not have more than one accessory use (i.e. agritourism activity like farm tours or educational workshops), there are many that do (46% of our interviewees had more than one agritourism activity) and this often triggers a permitting process, depending on the county and agricultural zone type, which can often be a complex and lengthy process to obtain.

Lastly, while the land use laws in §205 are not explicit in governing employee housing, we learned that the practice of treating employee housing as a secondary / accessory use posed a barrier to many farmers. Labor challenges were prevalent when we talked to small farmers and many of them were interested in or had experience hosting workers and/or WWOOFers (the WWOOF program allows participants to work on farms around the world, often in exchange for room and board). §205-4.5(7) notes that farm dwellings are allowed in agricultural districts, stating "farm dwellings, employee housing, farm buildings, or activities or uses related to farming and animal husbandry. 'Farm dwelling', as used in this paragraph, means a single-family dwelling located on and accessory to a farm, including clusters of single-family farm dwellings permitted within agricultural parks developed by the State, or where agricultural activity provides income to the family occupying the dwelling."

The other restriction when it comes to housing and agritourism is on short-term rentals, which are currently not allowed in any county on agricultural land². Across the state, there are efforts to curb tourism and increase housing for the local population by restricting who can operate short-term rentals. While not always relevant to agritourism, these restrictions have been problematic for some farmers who are looking to host laborers short-term or host tourists.

Zoning Laws

→ HRS §205-5 The other main type of law governing agritourism is the zoning laws found in HRS §205-5. The law states that:

Within agricultural districts, uses compatible with the activities described in section 205-2 as determined by the commission shall be permitted; provided that accessory agricultural uses and services described in sections 205-2 and 205-4.5 may be further defined by each county by zoning ordinance. Each county shall adopt ordinances setting forth procedures and requirements, including provisions for enforcement,

_

² Though state level regulation technically allows this for any county made up of three islands or more, Maui County being the only county which would apply, Maui has not yet adopted county level ordinances that would allow for these types of rentals.

penalties, and administrative oversight, for the review and permitting of agricultural tourism uses and activities as an accessory use on a working farm, or farming operation.

Based on this, operators must ensure that applicable permits are acquired per county regulations and this process looks different in each county. Each county expands on the state's zoning laws by enacting ordinances that can impact agricultural activities in a variety of ways. §205-5 notes the following county level ordinances that may impact agricultural activity allowances, including agritourism, but the individual counties may have additional ones:

Policy Excerpt 4: Additional ordinances to consider when implementing an agritourism activity, may trigger a permitting process

- 1. Requirements for access to a farm, including road width, road surface, and parking
- 2. Requirements and restrictions for accessory facilities connected with the farming operation, including gift shops and restaurants
 - 3. Activities that may be offered by the farming operation for visitors
 - 4. Days and hours of operation and
- 5. Automatic termination of the accessory use upon the cessation of the farming operation.

Chapter 205-5 also notes that "each county may require an environmental assessment under Chapter 343 as a condition to any agricultural tourism use and activity." This Chapter, known as the Environmental Impact Statements, is important for all agritourism operators to know. For many counties, this is the first place to start to ensure that additional activities are allowed. As noted in section 343-1, "the purpose of this chapter [is] to establish a system of environmental review which will ensure that environmental concerns are given appropriate consideration in decision making along with economic and technical considerations." This assessment may look different in each county, but the general goal is to ensure that activities within agricultural districts do not negatively impact the environment or the local community.

Chapter 205 forms the basis for agritourism regulation in Hawai'i but each county has additional guidelines that will impact farmers and dictate what activities are acceptable and which require special permits or simply will not be allowed. In addition to these basic land use permits, other permits may be required depending on the agritourism operation. Operators should be aware that they must also be in compliance with quality standards set by the Department of Health and the Environmental Health Administration

(Chapter 343 of the Hawai'i Revised Statutes). Additionally, operators looking to sell food must be aware of the state codes and guidelines in place to ensure the health and safety of the public (Yeh, 2015).

Civil Liability Laws

As noted above, many states govern agritourism largely by drawing from existing civil liability laws. Hawai'i does not do this, instead using land use and zoning laws to draft relevant policy for agritourism operators. The Vermont Law Center (2021) reports that "liability protections and the definition of agritourism are closely connected, as immunity from liability applies only to those activities that fall within the state's definitions" (Vermont Law Center, 2021, p. 6). Without limited liability protections for farmers, liability becomes the sole responsibility of farmers in Hawai'i, and this burden is challenging for many small farmers. As one farmer noted:

"We have a lot of liability insurance but that comes at a cost and insurance costs are going up and up. We've had the wherewithal to cover that. If I was a startup business or a small farmer, welcoming people onto my property, the cost of liability insurance would be really, really challenging and it's going up every single year. It becomes a barrier of entry to a lot of people who want to welcome tourists onto their property"

-Farmer H. and agritourism operator in Kaua'i County

As Figure 17 shows, there are 17 states in the United States that use civil liability laws to regulate agritourism by protecting operators. States like North Carolina limit liability for operators in the event of injury or death as long as warning signs were posted. Texas does the same, but it also requires operators to have visitors sign a waiver (Vermont Law Center, 2021). These practices are easy to implement and can ease the burden of having to figure out appropriate liability protection for operators.

Maui County

Maui County is unique in that it is the only county that contains more than three islands, which is significant in regards to the state statutes. As stated above, HRS §205-4.5 specifically states that "agricultural tourism activities, including overnight accommodations of twenty-one days or less, for any one stay within a county; provided that this paragraph shall apply only to a **county that includes at least three islands and has adopted**



ordinances regulating agricultural tourism activities pursuant to section 205-5; provided further that the agricultural tourism activities coexist with a bona fide agricultural activity." Essentially, "the zoning regulations give Maui Island more leeway in the allowable uses" (Yeh, 2015, p. 29). However, Maui has not adopted an ordinance that would allow these short-term stays. There have been attempts to pass regulation that would allow it but so far it has not yet been ushered in. This is largely related to the fact that over-tourism has become a major topic of concern for Maui residents, with a current freeze on any and all additional short-term rentals.

→ County Revised Statute 19 Maui County's zoning laws are further governed by County Revised Statute 19, which defines the districts in the county and outlines permitted property uses (Maui County Code, 2023).

In the last few years, Maui County underwent a project to convert the physical zoning maps to a digital format to allow users to more easily identify their district type (GoFarm Hawaii, 2020). The county's land use and zoning regulations are overseen by the Planning Department, which has three divisions: 1) the Current Division which regulates land use and administers land use permits, 2) the Zoning and Enforcement Division which enforces zoning code, violations, building permit review and 3) the Long Range Division which is responsible for maintaining community plans, the Maui Island Plan, and relevant geographical information.

Maui's permitted land uses are outlined in the county laws and the following uses in agricultural districts are allowed without a permit, although registration is required:

- Agriculture
- Agricultural land conservation
- Agricultural parks
- Animal and livestock raising

In addition to these primary uses, Maui recognizes accessory uses that don't require a permit if the principal agricultural activity has been established. **Operators are allowed two accessory activities before additional permits are required** (GoFarm Hawaii, 2020). Examples of accessory uses include:

Policy Excerpt 6: Accessory Uses

- Having a maximum of 2 commercial agricultural structures per lot
- Storage
- Processing of agricultural products
- Small scale animal keeping
- Open land recreation and non-commercial camping
- Animal hospitals
- Farm stands
- Farmers markets that are less than 3000 square feet and operate during daylight hours
- Agricultural retail structures that are less than 1000 square feet

If there are more than two accessory uses or if the activity is outside of the permissible uses, operators must apply for a Special Use Permit. This requires an application and goes before the County Planning Commission for approval. The application requires the user to outline a site plan, parking plan, traffic assessment, and other variables in order to obtain approval (GoFarm Hawaii, 2020). Examples of uses that may require a special permit include commercial camping or if there are more than two agricultural structures, or if a structure is bigger than the allowable square footage. In order to successfully submit an application to the Planning Commission, it's recommended that the farm operator work with a county planner who can help with the application process and provide guidance when necessary.

Lastly, Maui County also employs Conditional Use Permits for special cases that do not comply with the county laws or the special use permits. These permits must obtain the highest level of review in the county, which varies by size of the property. If the property

is less than 15 acres, the county council is the final approving authority but if it is larger than 15 acres, the permit must be approved by the state land use commission (GoFarm Hawaii, 2020). The permitting process includes additional assessments on visitor safety and noise levels. An example of an activity requiring a conditional use permit is weddings or large events.

While Maui County has a relatively robust set of agritourism regulations, it has not always been easy for farmers in the county to navigate local bureaucracy. When asked about their experience working with the county when starting agritourism operations, a Maui farmer said, "Everything was missing. I couldn't make sense of it [...] so I wrote to someone at the planning department but it took them awhile [...] for them to assure me we were good to go. Even getting that answer that we didn't need to get any special permits kind of took a while. It was very confusing" (Farmer A, personal communication, July 29, 2022). Another farmer in the county noted, "I sometimes have the impression that the administration is pretty weak. Sometimes it takes a long time to get a decision" (Farmer F. In Maui County, personal communication, August 9, 2022). These criticisms were echoed through the counties by other farmers, suggesting that while the regulations themselves can be clear, the process of finding and understanding ordinances, applying for permits and getting support can be challenging.

An important development for Maui County was the recent establishment of a County Department of Agriculture. Voters approved the charter in November 2020 and the Department commenced operations in 2022 (Maui Now, 2022). Their mission includes developing a sustainable agricultural system for Maui, boosting food security by increasing access to locally grown food and implementing programs to diversify and expand sustainable agricultural practices (County of Maui, n.d.). The passage of the charter was a hotly contested issue among farmers, with some fearing additional regulations that could impact their business. However, others remain optimistic that a Department of Agriculture could help agritourism operations by addressing current policy roadblocks and lending support in key areas, like marketing and grant writing for farmers. The County Department of Agriculture could be an appropriate venue for supporting farmers in navigating policy around agritourism operations.

Another recent development for Maui was the passing of Resolution 21-18 - Expressing Support for Sustainable Tourism, Emphasizing Quality over Quantity (Council of the County of Maui, 2021). This resolution was passed partly in response to Maui County exceeding its visitor capacity (approximately one-third of the island population) from 2013-2018. Noting that the island's resources are strained with increased tourism and that island destinations have fragile ecosystems, the Maui County council resolved to approach tourism with sustainability in mind and make efforts to curb future tourism.

This could have an impact on agritourism operators if there is less tourism from the US continent or elsewhere, but it also could present opportunities to engage with and offer unique experiences to residents.

Kaua'i County

→ Chapter 8 of the Comprehensive
Zoning Ordinance (CZO) Agritourism
policy in Kaua'i County is governed by
Chapter 8 of the Comprehensive Zoning
Ordinance (CZO) that was adopted in
1971 and amended as recently as 2012
(County of Kaua'i, n.d.).



Like Maui, Kaua'i county has zoning maps to help identify county districts and associated land uses. Additionally, Table 8-2.4, the Table of

Uses (see Appendix C), can be found in the CZO and identifies the permitted uses and the activities requiring permits for each zone. While Chapter 205 of the state revised statutes provides the basis for agritourism regulation, Kaua'i County's approach to agritourism is a bit stricter than the other counties. One reason for this is "because there is a large number of zoning classes and permits required for specific locations and designated areas" (Yeh, 2015, p. 30).

The planning department for Kaua'i has several types of land use permits and agritourism operations seeking permitting are evaluated by the planning commission during public hearings. Operators must apply for different zoning permits or special use permits depending on the activity they are trying to get approved. Speaking of the permitting process in Kaua'i, a county planner said that, "depending on the operation and its potential impacts to the surrounding properties, many of these projects are carefully scrutinized, especially if the project displaces agriculturally zoned parcels" (GoFarm Hawaii, 2020). Kaua'i is especially sensitive to permissible uses in agricultural districts and ensuring that alternative activities are not displacing agricultural activities in the county.

To that end, the county of Kaua'i has a reputation for being quite strict in terms of granting permits for agritourism operators. Historically, applications for things like weddings and large events are not usually successful as these activities are typically seen as quite disruptive and do not meet the criteria for permissible land uses (GoFarm Hawaii, 2020). Additionally, many aspects of agritourism operations are heavily

scrutinized, including the sales of value-added products, to make sure that they are produced locally and not imported from elsewhere. However, activities like farm tours and educational workshops are usually well-received and if the activity is permissible at the state level, additional permits are not typically required (GoFarm Hawaii, 2020).

"We have entitlements on our property...that were not secured by us, but by previous owners and we simply have just extended them. Those entitlements that are granted through the County of Kaua'i allow for late-night events, allow us to do events seven days a week, we can do really big events, we can do farm tours, we can have a restaurant, we have processing facilities, but that's highly unusual. I wish it was easier for farmers to allow commercial activities on their farms"

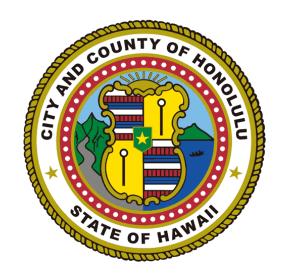
-Farmer H. and agritourism operator in Kaua'i County

Kaua'i County's approach to agritourism is interesting in terms of how it prioritizes the impact of agritourism activities on the local community. However, critics have pointed out that this approach has been harmful to farmers, especially small-scale operators who are trying to find additional ways to increase revenue (GoFarm Hawaii, 2020). In order to change the regulations, county leaders must be convinced that there is value in changing things and supporting Kaua'i's small-scale farmers.

Honolulu County

→ Land Use Ordinances in Chapter 21 of the Revised Ordinances of Honolulu

Like Maui and Kaua'i, Honolulu County agritourism is regulated by the Revised State Statutes with further governance coming from the Land Use Ordinances found in Chapter 21 of the Revised Ordinances of Honolulu (County of Honolulu, n.d.). Depending on the activity, a special use permit may or may not be required. Many of the permissible uses align with other counties and include activities like day camps, farm tours, and farm stands. But activities like weddings and commercial camping require permits (GoFarm Hawaii, 2020).



Chapter 21 also includes zoning regulations for Honolulu County and Article 3 identifies each zone and the permissible uses within each. Additionally, Article 3 includes a Master Use Table (see Appendix D) which identifies an array of agricultural activities and what permits are required for each.

Based on the activity in a particular zoning district, there may or may not be a permit required. For instance, agribusiness operations in agricultural districts 1 and 2 may be required to obtain a Conditional Use Permit but are considered minor and do not require a public hearing (GoFarm Hawaii, 2020). For any activity marked P or P/u, those denote activities that are typically permitted in a particular district and do not require additional permits. Additional articles in the Land Use Ordinances that are important for operators include Article 2, which outlines the permitting process, Article 5 which has specific use standards, and Article 10 which has applicable definitions.

Like Kaua'i County, Honolulu County seeks to protect the use of agricultural land and promote products that are locally grown. Article 5, the Specific Use Standards, outlines permissible uses for agribusiness activities when it comes to the sale of value-added products. There is a space limit of 500 square feet or less for operators to sell additional products and these products must be predominantly agricultural products grown in Hawai'i. Additionally, at least 50% of the property must be dedicated to agricultural activities.

While Honolulu is not known to be as strict as Kaua'i in terms of limiting agritourism operations, there are improvements that could be made to make it easier for agritourism operators in the county to navigate relevant resources. Farmers that we spoke to in the county alluded to confusion when it came to finding land use and zoning ordinances and understanding allowable uses in ag districts. One farmer in particular noted that without an extensive network of farmers in the county to get advice from, they wouldn't have been able to understand the requirements for agritourism operators and how to get assistance from the county (Farmer G. in Honolulu County, personal communication, August 16, 2022).

Hawai'i County

Like the other counties, Hawai'i County adheres to the statewide regulations found in the Hawai'i revised state statutes but has additional ordinances governing agritourism operations in Chapter 25 of its County Code.

→ County Code Chapter 25 This ordinance is known as the Zoning Code and it defines permissible land uses within each zoning district. §25-1-5



defines agricultural tourism, stating "Agricultural tourism" means visitor-related commercial activities or periodic special events designed to promote agricultural activities conducted on a working farm, ranch, or agricultural products processing facility" (County of Hawaiʻi, n.d.)

However, as an affiliate of the county noted in a 2020 agritourism webinar hosted by GoFarm Hawaii, "[the definition] does not include ag-based commercial operations. It has not been amended to include that."

As stated in the Zoning Code, as long as the permitted agritourism activity is considered secondary to the primary agricultural operation, many activities do not require additional permits. However, should the activity not conform to the guidelines in Chapter 25, applicable permits will need to be acquired (GoFarm Hawaii, 2020). Similar to Kaua'i County, Chapter 25 includes a master table (see Appendix E) that outlines the permitted uses by zoning districts, although it doesn't identify if additional permits are required.

Another important element of Chapter 25 is found in Article 3 (Section 25-3-1), the Establishment of Zoning Districts. There are 17 total districts which range from Single Family Residential Districts (RS) to Agricultural Districts (A) to Resort-Hotel Districts (V). These districts are noted in the applicable zoning laws and are important for agritourism operators to understand in order to properly comply with additional zoning laws. Chapter 25-4-15 also outlines other important regulations that govern activities that operators must be aware of. These are summarized below:

Policy Excerpt 7: Additional Regulations

- Primary agricultural activities must have a minimum of \$10,000 in gross sales that does not include income from secondary agricultural activities
- Agritourism can only occur between the hours of 8am and 6pm
- Agritourism activity cannot exceed annual visitors of 30,000
- Visitor and employee parking and other vehicle activities must be located off-street
- Total area of spaces used for agritourism cannot exceed 1,000 square feet
- Gross revenues of agritourism cannot exceed revenues from primary agricultural activity
- Selling agricultural products grown on Hawai'i is permissible as
 part of the agritourism activity and the sales of non-agricultural
 items is permissible if they are promotional to the agritourism activity
 and are included in the gross revenues of the agritourism activity
- Unless a special use permit is obtained, agritourism activities
 like weddings, events and overnight accommodations are prohibited
- Annual events that promote agriculture and are not-for-profit are permitted in certain districts

These regulations are unique in their specificity and can make it difficult for some agritourism operators, especially small ones. For example, for some small farmers operating on very small parcels of land in agriculturally-zoned districts, reaching the \$10,000 in gross sales as described above even from principal agricultural use might be difficult. Additionally, the regulation restricting agritourism between the hours of 8am and 6pm significantly limits those without special permits to operate beyond those hours. Some of the farmers we spoke to noted the challenges that came with these restrictions, with one noting the high barriers he faced in obtaining a Special Use Permit when trying to plan a festival on his farm (Farmer I. in Hawai'i County, personal communication, August 6, 2022).

In addition to these regulations, Hawai'i County also encourages farmers looking to venture into agritourism to review a guidebook, <u>Agribusiness Guidebook</u>: <u>Starting an Agri-Tourism Operation</u>, that was published in partnership with the Hawai'i Tourism Authority, Go Farm Hawai'i, and other organizations (County of Hawai'i, 2021). The guidebook is linked on the county website as a primary resource for agritourism operators. However, some farmers have pointed out that complying with all of the expectations is unrealistic for farmers, especially small ones.

"We have some kind of 11-page document and we're supposed to like, check every box, but you need a lot of money to do all the stuff on their checklist. And honestly, I add things as I feel like I probably should...and I have a hard enough time just doing what I'm doing. Most people who are doing agtourism would concur with that on the Big Island"

-Farmer D. and apiarist in Hawaii County

Farmers in Hawai'i County certainly are keen on expanding agritourism operations but the current policy is quite restrictive for some operators, and the permitting process is daunting for many.

Summary

While there has been progress to streamline the process for farmers looking to diversify and add agritourism operations, there is a lot of work to be done to make it easier for farmers to venture into agritourism or expand existing operations. This sentiment was echoed during the interviews we conducted with farmers in all four counties. Comments ranged from confusion around where to find resources to the constricting nature of the land use laws and that farmers should be allowed to more easily conduct a variety of activities on their properties. Many also feel that state and county leaders do not yet understand the importance of agritourism and how beneficial it can be to operators. This, they believe, is reflected in the regulations.

"I wish they would help farmers who are trying to launch [agritourism] especially since there's so much talk...about diversifying our visitor economy. And then they talk about agriculture and...a lot is missed and I feel like agritourism is one of those things. It's not just about opening your gates...there's a lot more you have to do to set up your farm for something like that and I don't know if the higher ups realize that"

-Farmer A. in Maui County

HRS §205-4.5 and §205-5, the state level statutes governing agritourism in the islands, are housed within the land use zoning code. However, what these statutes lack that other states often have, is clear liability protections for farmers welcoming visitors to

their farms. Including such liability protection may be one means for more adequately protecting small farmers.

It's also important to note that the state revised statutes have gradually become more permissive in terms of agriculture and agritourism, but the counties have not quite caught up with these changes (GoFarmHawaii, 2020). Additionally, the current policies often appear to be skewed in favor of large farms rather than small ones, as it takes a lot of resources to obtain permits that would allow farmers to expand agritourism activities.

Toward a Regenerative Tourism Sector: Agritourism's Role in Sustainability

To quantify how important tourism is as a source of private capital for Hawai'i, we can look at the \$17B generated in visitor spending in 2019, which contributed \$2.07B to the state through tax revenue (Andrade, et al., 2021,). However, mass tourism has had detrimental effects on the environment and local culture over time. One report noted that "over the years, overcrowding in many areas of Hawai'i has led to increasing concern about 'over-tourism' and the impact that increasing visitor arrivals can have on Hawai'i's natural resources, infrastructure, and quality of life for residents" (Andrade, et al. 2021, p.4). If responsibly implemented, agritourism could be one means of making tourism more sustainable, through the use of best practices, environmental education, and a sensitivity to Hawai'i's cultural traditions which emphasize living in harmony with the land and sea that provide foods and support the way of life in the islands. The Hawaiian Islands are home to a rare type of biodiversity that should be preserved, and responsible, sustainable agritourism may be able to help with this vision. If some of the economic benefits of this sector can be redirected toward local agriculture and its producers, there is potential to benefit residents and visitors alike.

Barbieri (2013) found "that agritourism has the capacity to produce economic, sociocultural, and environmental benefits to society", including economically at the individual farm level. However, they note that "further knowledge is needed on the sociocultural and environmental impacts of agriculture on the farm, especially as little effort has been invested in distinguishing sustainable from unsustainable forms of agritourism" (p.257).

Sustainable or even regenerative agritourism is therefore not an easy concept to define. However, we can borrow concepts from the sustainable tourism movement. The United Nations World Tourism Organization (UNWTO) defines sustainable tourism by the following three principles:

Sustainable tourism should:

- 1. Make optimal use of environmental resources that constitute a key element in tourism development, maintaining essential ecological processes and helping to conserve natural heritage and biodiversity.
- 2. Respect the socio-cultural authenticity of host communities, conserve their built and living cultural heritage and traditional values, and contribute to inter-cultural understanding and tolerance.
- 3. Ensure viable, long-term economic operations, providing socioeconomic benefits to all stakeholders that are fairly distributed, including stable employment and income-earning opportunities and social services to host communities, and contributing to poverty alleviation.

-United Nations World Tourism Organization, unwto.org/sustainable-development

Nadia El-Hage Scialabba, former Senior Environment Officer at the Food and Agriculture Organization (FAO) of the United Nations and Swette Center Senior Fellow, shared with us the importance of honoring and protecting culture as setting "sustainable tourism" apart from conventional mass tourism models.

Sustainable tourism is more culture oriented. You are going [to the tourism destination] because you don't want to change the environment and make all of the infrastructure to make it look beautiful. You want to visit the place because its wild, you want to eat like people eat, and you want to appreciate their culture and their habits. So it's a different set of values. And I would say that sustainable tourism combined with agritourism could be a good combination. (N. Scialabba, personal communication, July 17, 2022).

These principles should be centered as the agritourism industry continues to develop in the Hawaiian islands.

The regenerative tourism movement can also inform our understanding of agritourism. This is an emerging and developing field of practice that has been gaining traction in just the past few years, especially since the COVID-19 pandemic. One working definition of this type of tourism was outlined by researchers in 2022:

"Regenerative tourism is a transformational approach that aims to fulfil the potential of tourism places to flourish and create net positive effects through increasing the regenerative capacity of human societies and ecosystems. Derived from the ecological worldview, it weaves Indigenous and Western science perspectives and knowledges. Tourism systems are regarded as inseparable from nature and obligated to respect Earth's principles and laws. In addition, regenerative tourism approaches evolve and vary across places over the long term, thereby harmonizing practices with the regeneration of nested living systems"

-Bellato et al., 2022, p. 9.

Bellato et al. also took a first attempt at defining the principles of this type of tourism based on a review of the literature in 2022:

Proposed Principles of Regenerative Tourism:

- 1. Draw from an ecological worldview
- 2. Use living systems thinking
- 3. Discover the unique potential of a regenerative tourism place
- 4. Leverage the capability of tourism living systems to catalyse transformations
- Adopt healing approaches that promote cultural revival, returning lands, and privileging of the perspectives, knowledges and practices of indigenous and marginalised peoples
 - -Bellato et al., 2022, p. 12.

This type of thinking around tourism differs significantly from both mass tourism and sustainable tourism approaches. It is argued that where sustainable tourism ultimately retains top-down approaches to tourism strategies, viewing tourism as an industry, regenerative tourism is inherently co-creative and adaptive with the communities in which the tourism takes place (Bellato et al., 2022). In addition, where "sustainable tourism strives to minimise social-ecological damage," regenerative tourism seeks to leave behind *net-positive* effects on social-ecological systems (Bellato et al., 2022, p.10). One should take note, however, that these concepts of "sustainable" and "regenerative" tourism do not have hard and fast definitions, and the intentions behind them may vary depending on the source. For example, the UNWTO's concept of sustainable tourism has several provisions that Bellato describes as meeting their criteria for regenerative tourism.

A 2021 study found that Kaua'i residents were more likely to view foreign tourists favorably when such tourists were engaging in behaviors perceived as 'regenerative,' such as 'improving our social, economic and environmental conditions' or 'enhancing our natural and cultural environment' (Zaman et al., 2022, p. 12). This points to a need for defining and measuring the environmental, social and economic impacts—both positive and negative—of supposed "regenerative tourism" activities on the local community. Though residents may perceive tourists more favorably, without a means for measuring such impact, it will remain unknown as to whether the activity is truly "regenerative." Responsible agritourism approaches could be a means of achieving a net positive impact, though responsible ways of measuring this impact are still needed.

Economic Sustainability

A representative from the organization GoFarm Hawai'i observed that in many respects, Hawai'i is further along in terms of defining and regulating agritourism, stating:

"Hawai'i has the ability to be a world leader in agritourism education but needs financing and increased human capital" -Pomai Weigert

Nearly half of the farmers interviewed for this study operate on holdings smaller than five acres in size (see Figure 12). We found that the size of a farm is a key factor in determining the various opportunities and barriers a farmer faces. "A lot of farmers end up having to wear a lot of hats and cannot focus on growing their business" (Farmer D. and apiarist in Hawai'i County, personal communication, August 5, 2022). This is a feeling shared by many of those we interviewed.

"Small farmers have it tougher than large farmers because there are more restrictions and it can be harder to get the County to listen and approve something a small farmer is trying to do"
-Farmer I. in Hawai'i County

In order to be economically sustainable, small-scale farmers are often compelled to consider agritourism, even if they don't want to. "Even selling the highest cash crops and value-added goods does not provide enough income for farmers," one stakeholder noted (Farmer A. in Maui County, personal communication, July 29, 2022). Another observed that "the more a farmer can accomplish on their own farm, the better chance they have at being economically sustainable" (Farmer I. In Hawai'i County, personal communication, August 6, 2022).

These challenges are amplified with today's rising costs for fertilizer, equipment, and labor.

Environmental Sustainability

Andrade et al. (2021) explored the value that Hawai'i visitors place on sustainability. They surveyed travelers from the continental US during the COVID-19 pandemic to measure both the amount that visitors were willing to pay for authentic Hawaiian cultural experiences and how much they were willing to pay for sustainable practices. They found:

U.S. visitors were[...]supportive of paying additional fees for activities or experiences to support sustainable tourism in Hawai'i, including paying more for locally grown food, indicating that they would be willing to increase their restaurant/hotel food bill in order to support Hawai'i's local farming industry. (Andrade et al., 2021, p. 1).

As this survey suggests, there is demand for such experiences and agritourism operators can capitalize on this as a means of benefitting both their farm's economic and environmental bottom lines.

Our interviews with farmers revealed some insight into implementing agritourism responsibly and sustainably. These themes are explored below.

Education of Visitors

All of the farmers that we spoke with felt it was important to educate their visitors around one or more of the following themes:

- Sustainable farming and natural resource management practices, including soil building, permaculture, agroforestry, and traditional Kānaka Maoli practices
- Socio-political history of Hawai'i
- Kānaka Maoli culture
- Agricultural history of Hawai'i

Many producers expressed the desire to provide authentic experiences to visitors, providing a deeper context of the socio-ecological landscape of the islands than typical mass tourism opportunities would otherwise provide. This exchange of knowledge and focus on sustainable farming techniques is a major benefit derived from agritourism activities when it comes to creating educated tourists. The added benefit of information coming directly from farmers cuts out the middle man, allowing for real and frank conversations.

However, it was also often noted that the brevety of the tours and the expectation for entertainment value often limit the depth of information that can realistically be shared with tourists. Therefore, the educational value of such experiences is somewhat limited.

Invasive and Agricultural Pest Control

The spread of agricultural pests is one sustainability concern of bringing visitors onto farms, especially in high numbers. One coffee farm that we spoke with noted that with the introduction of a new fungus coffee leaf rust, they have implemented the practice of having guests spray their shoes with hydrosol solution before and after participation in the farm tour in order to slow or prevent the spread of spores (August 22, 2022). This farm hosts anywhere from 250-400 visitors per day, all potential vectors for the spread of pests. This is one best practice that farmers looking to implement agritourism may want to adopt. The spread of little fire ants (LFA), as well as other pests is also of concern and increased traffic on farms from high levels of visitors could have a detrimental effect on the spread of such pests.

For one traditional Native Hawaiian fishpond (loko i'a) caretaker that hosts tourists, the impact of their presence has actually been significant in terms of invasive species *control*. The pond offers guests the opportunity to fish out their own invasive tilapia to have cooked up for them on site (Ecotour Operator in Hawai'i County, personal communication, July 22, 2022).

Sustainability of Labor

Previously, the plantation era brought immigrants from around the globe to supply the agricultural workforce necessary to support the sugar and pineapple export economy (Schmitz, 2010). Since the fall of the plantation era, finding agricultural laborers has proven to be a challenge for farms in Hawai'i and many have turned to recruiting tourists who volunteer on farms in exchange for lodging and agricultural labor. In a 2018 survey of members of the Hawai'i Farmers Union United (HFUU), labor was described as one of the most pressing challenges for farms.



Figure 18: HFUU member survey (Azizi, 2018). "Among the top farmer needs were labor (skilled, part-time, marketing, weeding, living on-farm); transportation- truck, refrigeration; and production- equipment, tractor, wash station, certified kitchen, value-added production" (Azizi, 2018).

Worldwide Opportunities on Organic Farms (WWOOF)

A 2021 *Honolulu Civil Beat* article noted that labor shortages across the islands may pose the greatest challenge to Hawai'i's post-COVID recovery (Yerton, 2021). Many are leaving the state, which compounds these problems. Hawai'i's population, which has been falling since 2017, declined by nearly 9,000 in 2020. "It is likely that the precipitous job losses and high cost of living in Hawai'i have incentivized some unemployed workers without strong family ties in the islands to relocate" (Yerton, 2021, para. 15).

As a solution, many farmers have turned to a program known as Worldwide Opportunities on Organic Farms (WWOOF), "a worldwide movement to link visitors (WWOOFers) with organic farmers, promote a cultural and educational exchange, and build a global community conscious of ecological farming and sustainability practices" (Federation of WWOOF Organizations, 2022). Many of the interviewees from this study participate in the WWOOF program, with several citing it as necessary to their success

as a business. Such work trade programs have been recognized in the literature as an important form of "volunteer tourism," helping to fill the gap in labor shortages and helping farmers make ends meet financially (Ord & Amer, 2010; Terry, 2014; Yamamoto & Engelsted, 2014). This form of "agritourism" is a vital strategy for many of Hawai'i's small-scale farmers.

One Hawai'i-Island based farm is an example of an agritourism operation that relies on WWOOFERS. The operators noted that attracting workers to their remote farm can be difficult, but they have found that the program is most effective when the job description they promote to attract potential volunteer workers is full, accurate, and complete. The operators have a specific description and interview process they follow to ensure they attract candidates who are a good fit for their operation. Their advice to other agritourism operators on hiring qualified work traders is summarized below in Table 3.

"The [WWOOF program] has been a great program for us. I don't think we'd be here if it wasn't for them."

-Farmer E. in Hawai'i County

Table 3: Advice from one farm on hiring work traders

Hiring Advice	Description
Create a Clear Job Description	In the job posting, provide a clear and extensive description of the farm, the operations and expectations of applicants. Be blunt – make sure applicants are aware of what tasks they will be asked to perform, what they need to bring, what conditions they will be working in and anything else relevant to their experience.
Don't Advertise on Free Websites like Craigslist	Avoid posting job opportunities on sites like craigslist. Instead, sites like https://wwoof.net/ are great because participants need to pay in order to find work opportunities, which shows they are already invested.
Use Video Conferencing Technology to Screen Applicants	When interviewing applicants, don't do phone interviews and instead use a video conferencing platform like Zoom or Facetime. Having a face-to-

	face experience allows both parties to get a feel for each other.
Ask for References	While not all applicants need to have extensive farming experience, asking for references is a great way to gauge work ethic, attitude and other qualities that make for a great work trader.

Summary

Considering Hawai'i's heavy reliance on both tourism and imported foods, both the food and economic systems are vulnerable to interruption due to natural disasters and more. Sustainable and/or regenerative agritourism may be one means of bolstering both the local food and economic systems. Studies have found support for "sustainable" and "regenerative" experiences, both on the part of Hawai'i residents as well as tourists. However, as yet there is no established means of measuring how sustainable or regenerative a given tourist impact is. Establishing a means of measuring such impact will be an important step in ensuring the development of a regnerative agritourism movement.

Small farmers, economically strapped and wanting to diversify their income streams, struggle to implement diversified agritourism activities on their farms. Such farmers are already wearing many hats and can often not afford the additional financial and time burden associated with obtaining permits and communicating with their respective counties.

Existing agritourism operations emphasize sustainable practices in their discussions with visitors, including around the socio-political and environmental history of Hawai'i. This type of education of visitors could foster a more aware and respectful tourist population. However, the spread of invasive agricultural pests is a real challenge that must be responsibly addressed as farms welcome visitors.

Finally, labor presents a sustainability challenge to agriculture in Hawai'i. With Hawai'i's agricultural sector highly dependent on labor-in-exchange-for-housing and WWOOFing, without agritourism farmstays, farms may be hosting short-term workers below county short-term lodging limits. Agritourism supplying the agricultural workforce in Hawai'i becomes a concern when it is dependent on it.

Kānaka Maoli Agriculture

This chapter explores the intersection between agritourism, environmental sustainability, and preserving Kānaka Maoli culture.

Overview

Pre-western contact Hawai'i supported the largest and most densely settled population of any Polynesian island group with communities throughout all the main islands and especially in areas where intensive agriculture and fishing was practiced (Kirch, 1985). "Hawaiian agricultural production systems were some of most intensive in the Pacific Islands, materializing in built landscapes spread across both dryland (rainfed) and wetland (irrigated) settings" (Quintus & Lincoln, 2020, p. 53). Hawaiian people practiced intensive agriculture that minimally affected native habitats and added to the abundance that sustained 100% of the local population using less than 15% of the total land area (Gon et al., 2018). Western contact disrupted traditional land use and sustainable cultural practices were replaced with Western models of land tenure, extractive economy, and agriculture. Today, 50% of the native habitat has been lost, while self-sufficiency of Hawai'i's food system is precariously low, with 15% or less of food being produced locally (Cook Lauer, 2018; Gon et al., 2018).

Today, the Kānaka Maoli community seeks to restore the 'āina momona (productive lands) of ancient times through:

- Study of pre-contact agriculture
- Assessment of biological and ecological changes in Hawaiian social-ecological systems
- Planned efforts to increase self-sufficiency and reduce importation
- Restoration of traditional agricultural practices within their ancestral homelands (Gon et al., 2018)

Barriers to these goals include:

- Current tourism-based economy
- Introduction of invasive species that modify existing habitats
- Agricultural pests limiting traditional agriculture
- Climate changes that make historic agricultural lands suboptimal (Gon et al., 2018)

Cultural Crops

Kānaka Maoli people have traditionally cultivated a number of tropical root, tuber, and tree crops, the most important being taro (kalo, Colocasia esculenta) and sweet potato

('uala, Ipomoea batatas). For centuries, Kānaka Maoli farmers grew kalo (taro) wherever rainfall was adequate, but especially in pond fields watered by ditches that tapped permanent streams. Prior to western influence, the Kānaka Maoli people's irrigated valley lands ranked among the most productive agricultural ecosystems anywhere in Oceania. (Kirch,1985)

In addition, with highly skilled fishing techniques and sustainable harvesting, the ocean provided an abundance of seafood in pre-contact Hawai'i. They harvested and managed foods within intertidal waters, such as molluscs, sea urchins, and seaweeds which were managed and harvested along rocky headlands and bays.

No other Polynesians exceeded the Hawaiians in their marine production, for only in Hawai'i was true aquaculture developed, with the construction of large fishponds to impound and raise several species such as mullet (Mugil syphilis) and milkfish (chanos chanos). These ponds, of which there were several hundred, were under the control of the chiefly class" (Kirch, 1985, p.3).

Today, over 40 of these fishponds are actively being restored and stewarded, and are acting as sites for education and cultural revitalization (KUA, n.d.).

Gon et al. (2018) examined the geospatial footprint of human-transformed areas across the pre-contact Kānaka Maoli archipelago and the post-contact impact of Western land tenure and the authors have some insight as to the barriers to re-establishing such productivity once again: "...enhance biosecurity, and diversify agriculture, without further degrading native habitats, and recapture a reciprocal Hawaiian human-nature relationship" (Gon et al., 2018, p. 1).

An important feature of Kānaka Maoli agriculture is the Ahupua'a cultural resource management system.

Ahupua'a (singular and plural) means a land division in Hawai'i usually extending from the uplands to the sea which traditionally was, and in some cases remains, self-sustaining or whose occupants were or are permitted a right to gather and access for subsistence, cultural, or religious purposes. In contemporary times, ahupua'a is also considered a cultural resource management principle" (Office of the Secretary, 2020, p. 6).

Today, although ahupua'a have been neglected in favor of American land division methods, the cultural values and practices are still applied by Kānaka Maoli people on the land today.

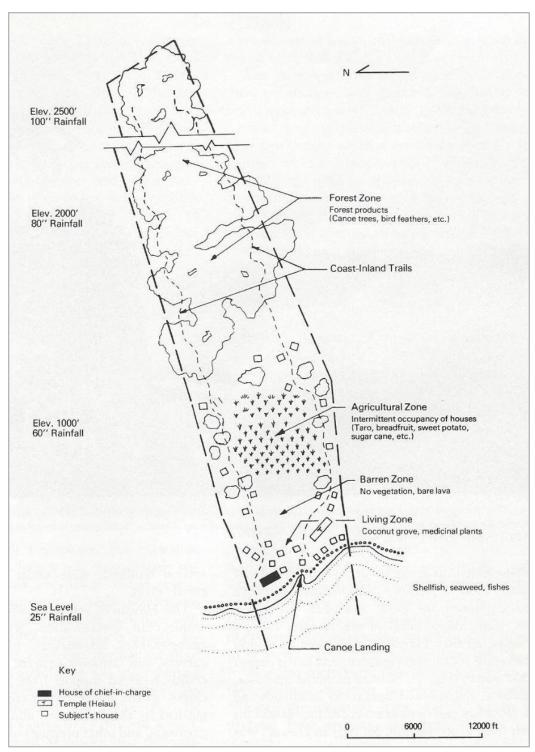


Figure 19: Ahupua'a cultural resource management system. (Apple, 1965, as cited in Kirch, 1985, p.4)

The foreign land management system that has replaced the Ahupua'a system in Hawai'i uses straight borders that do not follow natural land formation contours. Watersheds are managed as tiny allotments, not as a whole system or as if the allotments are connected at all. Supporting efforts by Kānaka Maoli people to enhance land through ahupua'a would contribute to the recommendation by Gon et al. (2018) to "recapture the reciprocal Hawaiian human-nature relationship" (Gon et al., 2018, p. 1).

Hawai'i has a rich self-sustaining agricultural heritage that many producers, activists, and cultural practitioners are trying to revitalize and restore across the islands. This section of our report endeavors to ask, what is the role, if any, that agritourism can play in supporting this restoration?

Recognizing that tourism has traditionally been an impediment to restoration of productive Kānaka Maoli agro-ecological scapes, we examined some of the literature around the effect of tourism on Indigenous peoples around the globe.

Tourism and Native Cultures

Johnston (2003) covers many important ethical, legal and moral concerns around the impacts of tourism on Indigenous peoples around the world. Some of the primary themes discussed include:

- Human rights
- Ethics in business
- Self-determination
- Property rights
- Interpretation of history
 - Including cultural appropriation: "'Authentic' offerings of culture rarely involve the prior informed consent of the targeted Indigenous community. Where consent is said to exist, it has normally been obtained outside the customary protocol of the Indigenous people concerned and is thus misleading to visitors and 'hosts' alike" (Johnston, 2003, p. 118).
- Culturally sensitive places and information
- Supporting Indigenous peoples' access to land and resources

Cultural experiences are a cornerstone of the tourism industry and the essential ingredient of branding. While cultural experiences and education may be provided as a part of a tourism venture, engagement with these offerings is limited:

Only about 5% of tourists seek out explicitly educational travel opportunities. Of this market segment, it is a small fraction that wants more than a surface interpretation of local experiences and perspectives. Most tourists, therefore, would remain unaware of whether they are within the traditional territory of

indigenous people or the situation of the 'real' host people, even if their holiday includes an explicit cultural component. (Johnston, 2003, p. 117).

Johnston (2003) describes the paradox of what tourists claim to value or how they perceive their consumption, versus how they consistently return to mainstream consumption of vacation packages. Interestingly, Hawai'i is the noted example of generic tour packages that are not sustainable and where military occupation is a central issue of Indigenous rights for Kānaka Maoli people:

Although 60–70 per cent of developed country residents... typically profess a willingness to pay more for 'sustainable' products, most will only selectively change their spending habits. Tourism, marketed as escapism, is an area where such pledges are highly inconsistent. So-called ecotourists will normally take a short 'ecotourism' excursion within a larger mainstream holiday. Alternatively, they will buy a costly safari that supports local parks and conservation initiatives for one holiday, and then for the next trip book a generic tour package to a hotspot such as Hawai'i, where indigenous land rights and related issues are contentious. For most tourists, the desire for prestige or adventure is more of a factor in purchasing patterns than altruism. (Johnston, 2003, p. 118)

The brevity of tourist encounters with Indigenous culture and people leaves Indigenous people vulnerable to cultural appropriation and cultural misunderstandings. Overindulgence by enthusiastic tourists has soured relationships with Indigenous communities where cultural protocols are not understood or respected. Non-Indigenous people also may appropriate practices, materials, stories or knowledge to utilize in tourism presentations:

Much of this knowledge, such as the use of medicinal plants, is considered sacred, and therefore has traditionally been subject to regulation by the Elders. However, now that indigenous knowledge is of value on the international market, owing to the interest of New Age followers, thrill seekers, and pharmacology researchers and investors, it is possible in some Indigenous communities for tourists to purchase curative treatments or guided forest tours (Proctor, 2001). While this type of tourism product often tells of a break in protocol between generations or families in a community, in some cases the Elders are fully involved and believe that this knowledge can be shared on respectful terms" (Johnston, 2003, p. 124).

Outsiders who do not understand protocols are unaware of how Elders can be easily pressured or manipulated into giving away their time, knowledge, art and resources. This perceived generosity is easily exploited.

Along with the UN Convention on Biological Diversity (CBD), a set of principles called the Berlin Declaration on Sustainable Tourism was signed in 1997 by multilateral agencies like the Secretariat of the CBD, the UN Environment Programme and the Global Environment Facility, plus 18 country signatories of the CBD (Johnston, 2003).

Through this declaration, international leaders agreed that tourism should be restricted and, where necessary, prevented, in ecologically and culturally sensitive areas. While this statement brought visibility to the culture loss triggered by tourism there is still no accepted definition of what constitutes culturally sustainable tourism. Nor is there significant support within government or industry for indigenous peoples, especially those with authority and perspective from the community level, to take a lead in developing appropriate criteria. Instead, indigenous communities face an immense burden of proof in registering an area as 'sensitive'. (Johnston, 2003, p. 126, emphasis added)

In recent decades, Indigenous communities have been leading cultural revitalization within their communities, connecting with other Indigenous people around the world, and pushing for recognition of rights and political power. The tourism industry has been making Important strides to respect Indigenous communities, however Johnston (2003) identifies important questions that have yet to be reckoned with:

How can Indigenous peoples protect themselves against displacement, industry profiteering and exploitation? What policy is needed to facilitate Indigenous communities in developing their own tourism business concepts? What incentives are required for industry to enter into respectful partnerships with Indigenous peoples? Who will determine the accepted thresholds for cultural erosion, or what constitutes a 'culturally sensitive' area, as per the Berlin Declaration? Questions like these must be tackled if indigenous communities are ever to remove the product label attached to them by the tourism industry (Johnston, 2003, p. 128).

One of the challenges for Indigenous people is that they are unique communities and may have different protocols from other peoples and, both indigenous and non-Indigenous groups. Indigenous communities may view their communities as independent or separate from other Indigenous communities. However, the legal

policies and procedures are managed at the national and international level, and dictate policy on *all* Indigenous communities.

Much of the current networking among indigenous peoples is aimed at creating a synergy between what is needed at the community level and legal developments or other relevant happenings nationally and internationally. Communities have to learn how to design protocols which combine their own customary law with international legal and moral doctrine that would support it. In this way, protocols developed at the community level can be strengthened in order to withstand tests from outside interests who are politically and legally shrewd (Johnston, 2003, p. 130).

Policy recommendations drawn from this publication include the following:

- Developing Indigenous community safeguards for traditional resource rights
- Developing effective mediating tools
- Developing indicators and early warning systems which address cultural sustainability (Johnston, 2003)

For indigenous peoples to articulate their part of this equation, and build successful partnerships with outside interests, the topic of indigenous rights cannot remain a taboo subject. Self-review of tourism projects, according to their own values and knowledge, is necessary to provide technical parameters for innovation. Partnerships built on this foundation, and carried forward through the personal commitment of leadership on both sides, can lead to new prospects for indigenous communities seeking to maintain their cultural identity and peoplehood while pursuing a tourism economy (Johnston, 2003, p. 132).

Consultation with Indigenous People

Note: For this section of the report, we will be referring to Kānaka Maoli as Native Hawaiian to reduce confusion, as Native Hawaiian is in the name of some of the organizations and resources.

When it comes to implementing an agritourism operation, individuals, businesses, organizations, or government agencies may all wish to consult with Native Hawaiians within their local area to understand how their operations may impact cultural sites, protocols, and more. There may be federal or state requirements for consultation with Native Hawaiian organizations and a formal process for specific types of consultation, especially when it is in reference to Native American Graves Protection and Repatriation Act (NAGPRA), places of historic or cultural significance or cultural artifacts. Official representatives for Native Hawaiian groups may be engaged by local

or state government agencies and these relationships follow a formal protocol. There are instances in which Native Hawaiian consultation may be needed in regard to activity on private property, such as human remains during farming activity or excavation. An agritourism operation may want to incorporate Hawaiian culture or history into their operation and hiring a cultural consultant can help guide appropriate use and representation of Native Hawaiian people. Questions from the general public regarding consultation with Native Hawaiian communities may be directed to the Office of Hawaiian Affairs (OHA), however it is also appropriate to seek further consultation from local Hawaiian leaders and representatives.

Prior to contacting any Native Hawaiian community organization, it is respectful to first educate oneself about the local history and the organization. It will also be helpful and respectful for tourists to educate themselves with common Hawaiian language, phrases, and history by learning through online resources and books by Native Hawaiian authors. Many Native Hawaiian organizations are nonprofit and have limited staffing to respond to inquiries. The more that visitors can teach themselves and come prepared with educated questions, the easier it will be for the organization to respond to these questions.

One of the major challenges of consultation is that many institutions and government agencies will only engage with tribal governments or organizations that represent Indigenous or Aboriginal people if they are mandated to do so. However, developing ongoing consultation with Native Hawaiian communities helps to educate staff before problems arise and also provides Hawaiian agencies and organizations more time to respond. There are many well-meaning people who are unaware of Indigenous rights or interests. By engaging in regular consultation, government agencies and organizations can prevent harm to Native Hawaiian communities and improve communication. It is easy for an unaware, well-meaning citizen or government employee to skip a checkbox to consult Indigenous people. "Companies that do attempt to practice an ethic of reciprocity with indigenous communities are usually unsure of how to approach partnership building or structure an enduring cross-cultural business relationship" (Singh et al., 2003, p. 117). Some may simply skip the consultation step, so that they may disregard and trespass on Indigenous rights, in order to carry out their own wishes. Accountability for institutions and government agencies is severely lacking when it comes to consultation, and policymakers must not only listen but act on recommendations from Indigenous and Aboriginal communities.

Secretary Deb Haaland, the first Native American Secretary of the U.S. Department of the Interior (DOI), announced on October 18th, 2022, that the DOI will be requiring formal consultation with the Native Hawaiian Community (Office of Native Hawaiian

Relations, 2022). New policies and procedures are being drafted and input from the Native Hawaiian Community began in late 2022. As the federal government is in active policy development, it is crucial that the Native Hawaiian Community engage in these policy meetings to document their input in the record. The new policy and procedures will update the Department's Departmental Manual (DM).

The DOI's draft consultation policy and procedures seek to:

- Bolster the Department's consultation efforts to encourage early, robust, interactive, pre-decisional, informative and transparent consultation
- Require that Department staff undergo training before participating in consultation
- Establish the Secretary's bi-annual meetings with Native Hawaiian Community leaders
- Clarify that the Department's decision-makers must invite Native Hawaiian
 Community leaders to engage in consultation and
- Require a record of consultation. (Office of Native Hawaiian Relations, 2022)

Further resources, including the proposed DM chapters, can be found in Appendix F of this report.

What consultation looks like may change in future years, and new government guidance may be developed to better serve Native Hawaiian people. In recent years, the Department of the Interior (DOI) has hosted listening sessions to improve consultation with Tribal governments, a status which Kānaka Maoli do not have, though there are some Hawaiian groups pushing to establish recognition similar to Tribal Government recognition and government-to-government relations. Below is a summary of some of the suggestions developed by the DOI:

Table 4: Recommendations for improving consultation with Indigenous people. The following is a high-level summary of 2009 Tribal input on what is necessary for consultation to be "meaningful" to Tribal Governments (United States Department of the Interior, 2021). https://www.doi.gov/sites/doi.gov/files/framing-paper-consultation-with-tribes.pdf

Consultation Recommendations	
1. The Meaning of "Consultation.	"Consultation" must be a two-way dialogue and opportunity for joint decision-making on a nation-to-nation level, that is more than a procedural or "check the box" exercise.
2. The "Substantial Direct Effects" That Should Trigger Consultation.	Tribes should have the opportunity to say whether an action requires consultation and agencies should be aware that Tribes may be affected not just by on-reservation actions, but also by funding and personnel decisions related to Federal Indian programs and off-reservation actions.
3. When Consultation Should Be Initiated.	Consultation should be initiated as early as possible.
4. When Notices of Consultation Should be Given.	Notice should be sent sufficiently in advance of a consultation session to allow time for Tribes to review and develop recommendations.
5. What Notices of Consultation Should Contain.	Notice should include all the necessary background information on the topic to be consulted on and the consultation plan.
6. How Notices of Consultation Should Be Distributed.	The form of notice should include Tribal leader letters and several methods of distribution based on an up-to-date database of Tribal leaders.
7. Who Should Participate in Consultation.	Consultation should include both Federal and Tribal representatives with expertise in the matter to be discussed and representatives with the authority to make decisions.
8. What Form Consultation Should Take.	Agencies should increase accessibility to and affordability of consultations by holding in-person consultations in Indian Country and geographical

	regions accessible to Tribes, in conjunction with other events Tribes will attend, and offering other technological ways of participating.
9. How Interior Should Follow-Through on Consultations.	Agencies should create a feedback loop and accountability system to ensure Tribes' concerns are addressed.
10. Coordinating Consultation Within and Across Interior.	Agencies should improve coordination and consistency in their approaches to consultation.

Local government agencies have a direct impact on Native Hawaiian citizens and developing meaningful consultation around agritourism, as well as other topics, will build trust and increase the ability for agencies to address gaps and disparities for Native Hawaiian people.

Other Consultation Resources

- Office of Hawaiian Affairs: https://www.oha.org/about/what-we-do/
- CNHA, Council for Native Hawaiian Advancement https://www.hawaiiancouncil.org/
- Honua Consulting: https://www.honuaconsulting.com/
- Hawaii Tourism Authority: https://www.hawaiitourismauthority.org/what-we-do/hta-programs/hawaiian-culture/
- The Maemae Toolkit: https://www.hawaiitourismauthority.org/what-we-do/tools-resources/maemae-toolkit/
- Hawaiian Language: https://www.gohawaii.com/hawaiian-culture/hawaiian-language-guide

Outreach to Hawaiian Stakeholders

Outreach is a sorely underfunded and sometimes discouraged activity for government agencies. While outreach can be a challenge, it is absolutely critical for moving the needle on the needs for the Native Hawaiian community. Native Hawaiian organizations are an important start in contacting stakeholders, however, they are not always the individuals who will be the most influential or invested in policy changes. Native Hawaiian organizations, government agencies, or officials, may agree to proposals presented to them. However, it is important to know that these organizations do not represent all stakeholders, especially at the local level, or for a specific site.

Stakeholders for a local site may not live locally, so effective outreach will include cultivating social networks, maintaining and expanding relationships over time. Public officials can be instrumental in relationship building, but including a succession plan is critical to long-term trust with stakeholders.

Restoring Hawaiian Agriculture through Agritourism

There are many different organizations, businesses and individuals who are working to restore Kānaka Maoli agriculture and seeking ways to finance their work. These communities are seeking ways to purchase and restore the environmental health of their homelands and provide housing and employment within their communities. The work that Kānaka Maoli people are doing is truly inspiring and we recommend that visitors and citizens of Hawai'i donate, visit, volunteer, and support Kānaka Maoliowned and operated agritourism operations.

Tourism is often viewed to be at odds with agriculture because so much prime agricultural land has been overtaken by development and sprawl. The Hawai'i Tourism Authority conducts surveys of Hawai'i residents to measure the impact of tourism. In the 2022 survey findings, for those residents who felt that Hawai'i tourism creates more problems than benefits, their primary concerns included overcrowding, damage to the environment, higher costs of living, traffic and no respect for culture/tradition/'āina (land) and more (Department of Business, Economic Development & Tourism, 2022, p. 8).

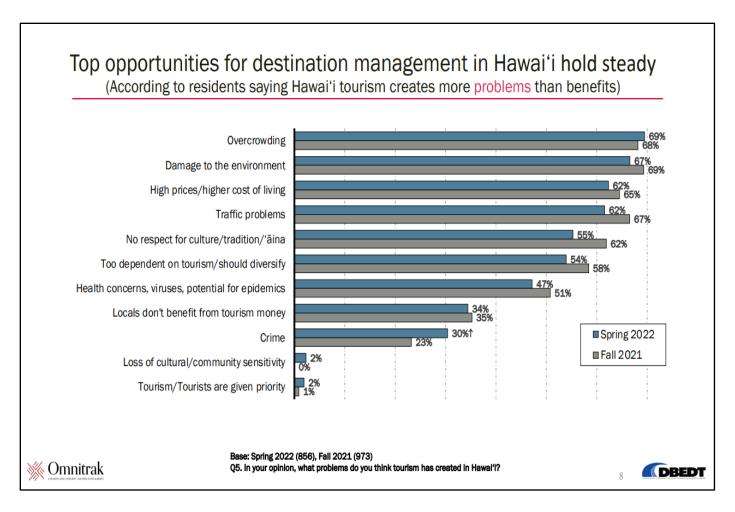


Figure 20: Top concerns for residents saying Hawai'i tourism creates more problems than benefits. Source: Department of Business, Economic Development & Tourism, 2022, p. 8.

Tourists and newcomers to Hawai'i may not be aware of the pressures their presence has on Kānaka Maoli residents and communities. However, there are many Kānaka Maoli people who are employed by the tourism industry and who are working to push the tourism industry to become more sustainable and give back to the local communities. Agritourism offers the opportunity for farmers to increase their customer base and diversify their income through engagement with more and new consumers. Agritourism also has the opportunity to market to local residents, rather than tourists. Agritourism offers farmers a way for local residents to buy local, learn about their local foods and support their local community.

Who has access to Agricultural Land?

Some 66% of Hawai'i farms are less than nine acres in size (National Agricultural Statistics Service, 2017). In a state where small farms are the norm, agritourism offers an opportunity to farmers who are seeking to diversify.

For Kānaka Maoli farmers, access to land continues to be a challenge and the large majority of farmland is predominantly in non-Kānaka Maoli ownership.

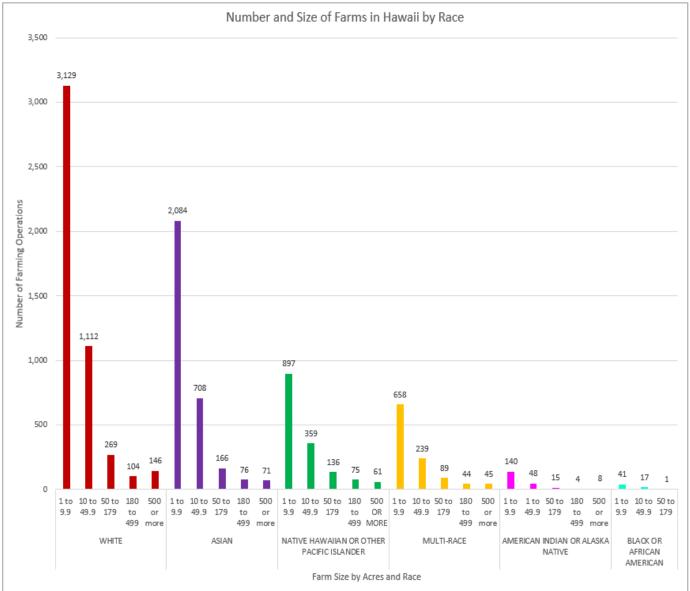


Figure 21: Number and Size of Farms in Hawai'i by Race and Acreage. Data from NASS 2017 Census of Agriculture. Note: Each demographic includes this race alone or in combination with other races.

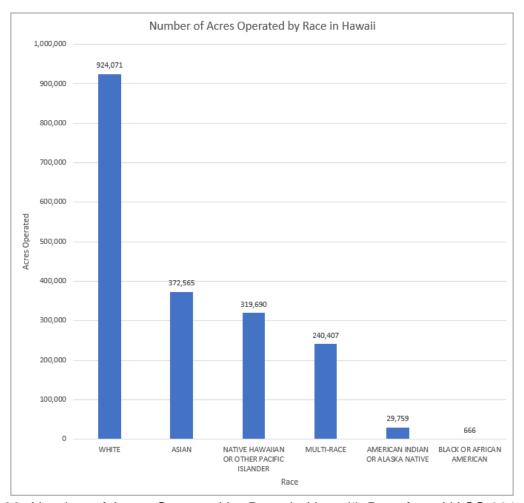


Figure 22: Number of Acres Operated by Race in Hawai'i. Data from NASS 2017 Census of Agriculture. Note: Each demographic includes this race alone or in combination with other races.

The displacement of Kānaka Maoli people from their agricultural land is still felt today, as many Kānaka Maoli people cannot afford the premium prices of land and real estate alike. Indeed, as Figures 21 and 22 above show, much of the agricultural land in Hawai'i is owned and managed by non-Kānaka Maoli people. The pain of not being able to live in your homeland is compounded when Kānaka Maoli people are economically forced to move to the U.S. continent for financial security and opportunity, without the promise of being able to afford to come back.

Because of the contentious relationship to tourism, Kānaka Maoli people may feel opposed to any correlation between tourism and agriculture. It is understandable that tourism on agricultural land could be viewed as a foothold for more tourism, poised to

develop more agricultural land. This is a real threat, especially since past land use policies have made it possible to develop more private estates and vacation rentals, almost exclusively for the benefit of non-Kānaka Maoli people.

With this acknowledgement about the place that tourism holds on the land and economy, there are some potential benefits to Kānaka Maoli people and communities when it comes to agritourism. Agritourism for Kānaka Maoli farms could include:

- Farm Tours
- Kānaka Maoli agricultural education
- Apprenticeship and training programs
- Cultural classes: weaving, etc.
- Voluntourism

Agritourism policy could be beneficial to Kānaka Maoli communities by serving visitors from the local community, thereby localizing their "tourism." In this way, agritourism could be a tool for expanding access to Kānaka Maoli cultural foods and employment opportunities.

Case Study: Agritourism in Support of Kānaka Maoli Agriculture

We had the privilege of speaking with a young Kānaka Maoli farmer who has chosen to incorporate agritourism into her operations. She shared her story of learning to farm, the challenges she has faced, and her service to her heritage, her community, and the land. Her passion for Indigenous agriculture and the importance of what she is doing for her community was palpable. We would like to share some poignant excerpts from this interview:

"What I envision our farm tours to be is talking about the history of Hawai'i through its food heritage. Starting from the first Polynesian voyagers who came here and then what happened [...] it's hard to cover the full story. But that was a big point that we were trying to get across [on our farm tours] and the history of agriculture in Hawai'i and how that's affected land, power, politics, all of those things. The third part is what we're trying to do based on all of the things that we've learned, good and bad, and how we are trying to farm for the future."

"Another thing about the farming, the agritourism side of things is... both my husband and I grew up here. We're very much rooted here and our families for generations. And so when I think about bringing people on the farm, what we've been doing so far is what I love. We would like to see this place be is a place for our local kids, our local community. I think that's part of [...] growing a resilient food system, is not just me the farmer and then like entertaining visitors who then go away [...] ideally, we would grow food here but also grow this appreciation for food [...] among the people who live here. And so [...] my heart gets tugged I guess. I even get emotional about it. Sometimes it feels with agritourism—are we opening up the farm to the right people? But at the end of the day, again when we look at the business side of things we need to keep the farm around to help anybody, you know? And so that's kind of a really big struggle for us is realizing that the money that we need to run the farm is mostly in the tourist industry. So how do we balance? I know it's not all or nothing, so right now we're just trying to find that balance of life. You know attracting a certain market, but also serving a different market as well at the same time. I'll just kind of say that before anything else. So really the same thing, the same messages, would be shared whether it's a local school group or it's a group from a hotel."

"I don't feel like I'm an expert in a lot of the nitty gritty of farming, but I've lived here and I understand the history of this place and my personal family history is very much aligned with some of these things that I would be talking about on the farm tour. For example, I mean just being a Hawaiian you know, those are my Polynesian ancestors who came on those first canoes. I also have my Chinese heritage. And so when the Chinese came to work on the sugar plantations [...] my ancestor [...] was one of the first 5 sugar masters to come to Hawai'i from China. We're gonna be talking about that—what the sugar industry did to Hawai'i (Farmer A. in Maui County, personal communication, July 29, 2022).

The excerpt above demonstrates several themes that may be found in other Kānaka Maoli agritourism operations across the islands:

- The tension between protecting culture and 'āina ("land" or "that which feeds") and needing money for the farm to survive
- The desire to have tours be educational, to leave the visitor with a deeper connection to the place of Hawaiii than they had before
- The desire to make money serving the local Kānaka Maoli community, rather than spending the majority of the time serving tourists

Finding your Why

Being a farmer is tough. Ask any farmer and they will tell you. Being a Kānaka Maoli farmer and doing Indigenous agriculture comes with additional cultural value of *kuleana* and responsibility to care for the land.

"When we arrived here it was completely overgrown and we couldn't even walk the entire property...And so we didn't know what was underneath all of these invasive grasses and trees and as we started to clear it, underneath all of that were lo'i kalo. these terraces for growing kalo [...] Which was a surprise because it was a beautiful, wonderful, like more than you could have ever imagined surprise. But at the same time it's like 'duh', because this place that we are is steeped in Hawaiian agricultural history. So it was a surprise for our modern brains to wrap our head around but when you look at the history of this place, this area was once [site-specific identifying information deleted to retain anonymity] [...] And at that time, like when we bought this place, we didn't know what kind of farmers we were gonna be. We were like 'are we gonna grow tomatoes?' We were looking at whatever the highest value crop, like saffron is supposed to sell for a lot, right? Wasabi! You know we were like coming from this like how are we gonna make the farm business work. And when we cleared the area and saw and were reminded of the history of this place, it was a no brainer. Like we gotta do this, we gotta bring back Hawaiian agriculture to this area" (Farmer A. in Maui County, personal communication, July 29, 2022).

This quote shows the Indigenous values that inform Kānaka Maoli farming – a desire to follow ancestral ways, practices and what the land is telling the farmer, rather than imposing market ideas upon the landscape on what can be extracted or make the most profit. This shows the inherent tension that may exist for some Kānaka Maoli farmers wishing to implement a successful, both economically and ecologically, farm operation.

Indigenous agriculture also faces unique challenges because important staple crops, like kalo (taro in English) are not considered "high-value" crops. As farms build out business plans, the overwhelming majority of advice is to choose the highest-value crop. This advice is reflective of how the American economy and mainstream culture values food.

"We were getting involved with all these classes and things like that and everybody was saying don't do it. Because there's little value in these products [kalo, breadfruit, and other cultural crops] [...] and they were right and they were wrong, you know. We were actively being advised not to do it and then when we saw it we were like too bad, we gotta figure it out. That's what we've been trying to do. We've been trying to figure out how to plant and sort of set up our farm and the business to prove them wrong I guess [...] another important thing to note I think with my personal journey, because when we started farming I wasn't set out to be a Hawaiian farmer or to focus on this indigenous style agriculture. It was really the land that sort of slapped me on the back of the head and said 'wake up' you know? And now I realized what a blessing that was because farming is so dang hard, it's so tough, that I don't know if I would still be doing it, you know, if it was just tomatoes. If I didn't have this like deep personal connection and sort of like, a big, really big 'Why'. You know? And so I think that that is something that's really important because farming is gonna like, just kick you on your butt, a lot..."

"To me, the goal is not just to [...] put seeds in the ground, harvest and get the food out. It's really to use that process to get more than just food out. Yeah, for me culture is the way that I know how to do that" (Farmer A. in Maui County, personal communication, July 29, 2022).

In the quote above, the Kānaka Maoli farmer describes receiving advice discouraging the choice to grow cultural foods. This story speaks to the culture of mainstream agriculture that values profit over all other considerations. What is the "value" of kalo? For Indigenous people, kalo farming is more than growing food. They are growing

culture. They are healing the land. They are educating their youth and community. How do you calculate the value of that harvest?

Kānaka Maoli cultural agriculture utilizes many native and canoe plants and cultural foods that are well-adapted Polynesian crops that aboriginal ancestors grew for over a thousand years on the islands. Subsequently, as a Kānaka Maoli farmer, the desire to practice cultural agriculture is choosing the most sustainable agricultural method. This young farmer used knowledge from her culture to be able to identify how the land was reacting to their farming and ultimately working with cultural crops was the best choice from an environmental standpoint, because the crops easily grew in the habitat. Gon et al. (2018) remind us that "[p]re-contact Hawai'i stands as a quintessential sustainable example of a large human population that practiced intensive agriculture, yet minimally displaced the native habitat that was the foundation of its vitality and development. This example of human sustainability in a finite (but extremely rich) high island setting was achieved because of a Hawaiian [Kānaka Maoli] worldview that regarded nature as familial and ancestral, sacred and of immense value" (Gon et al., 2018, p. 13).

The weight of sharing and protecting culture

"I am currently taking another class series on *la'au lapa'au*, which is [...] Hawaiian plant medicine. That's something that we are wanting to share through our farm, right? Not just like "oh here's a coconut tree" and "look at how beautiful the coconut tree is" But like, oh what can these different plants, these native plants—what is their value, right? Going back to when people earlier were saying these things have no value, just really showing their value. And medicinal, medicinally they have so much value and learning about that. But it's also kind of this thing where in the *la'au lapa'au* circle is like—Hawaiians have given so much. Whether it's knowledge, aloha, space for outsiders, and that's been taken advantage of, right? And so at what point do you sort of pull back on sharing that? That's another big sort of overall sentiment and part of that residue that a lot of Native folks come with. For many, many years we've been sharing and not always having the best results from that openness" (Farmer A. in Maui County, personal communication, July 29, 2022).

The cultivation of culture is a labor of love, a passion, a calling. The current economic barriers for Kānaka Maoli agriculture are borne by the communities and individual Indigenous people who refuse to give up on their culture. Agritourism can serve as one means to help support the continued economic viability of such operations, however,

there are inherent tensions in this as the sharing of culture has also been disrespected and exploited in the past. There are ways to make it easier for Kānaka Maoli people to restore their foodways and we hope that this research can contribute to easing their way.

Improving Kānaka Maoli Growers' Economic Well-Being

A 2020 report examined successful Kānaka Maoli agricultural organizations and ways to support 'āina (land)-based practices and the people who are farmers and growers (Mello et al., 2020). Western-based methodology and the Kānaka Maoli methodological framework of *Mā'awe Pono* were both used to focus on agricultural abundance and enhance the cultural competence of how the research was conducted. Reciprocal relationships, including the gift economy of cultural practices was shown to be central to the well-being of culture, physical health, economics and the environment (Mello et al., 2020).

One policy recommendation from the report addressed the potential for agritourism to generate revenue to apply towards purchasing land to perpetuate 'āina-based practices. They noted that "[t]he showcasing of practices associated with culturally produced foods, whether it is producing related products or growing it, is a resource for attracting tourists" (Mello et al., 2020, p. 66). However, they also noted that there remains a need for future research examining "the value of Native Hawaiian [Kānaka Maoli] social enterprises offering travel experiences rooted in place-based education premised on mo'olelo (stories of place, people, and deities)" (Mello et al., 2020, p.66).

Summary

As one of the most productive and sustainable model systems known to history, the traditional Kānaka Maoli ahupua'a land management system that existed pre-Western contact is an inspiration to many groups today. Agritourism may have a role to play in revitalizing such land management principles. However, recognizing the global historical exploitation and appropriation of native cultures by conventional tourism models, much consideration should be given to meaningful engagement with Kānaka Maoli people when designing responsible agritourism operations.

Aligning with the regenerative tourism movement, an important part of the way forward lies in Kānaka Maoli groups establishing what an appropriate protocol would look like in terms of agritourism. This protocol should align with international legal doctrine on indigenous rights, though with specifications for Hawai'i. On the other side, agricultural and agritourism policy makers would benefit greatly from initiating consultation with Kānaka Maoli farmers to provide the support they need to perpetuate

their culturally and environmentally important agricultural practices and crops. The federal government is currently in process of establishing what consultations with Native Hawaiians should look like, given that they do not currently have Tribal Government status.

Agritourism offers an opportunity for Kānaka Maoli to benefit from a leading economic sector, however, beyond acknowledging the extractive history of tourism on Kānaka Maoli culture, there must be economic supports and protections so that Kānaka Maoli culture is not further exploited or does not become dependent on tourism.

Our interview with one Kānaka Maoli farmer revealed some of the inherent cultural tensions between tourism and agriculture – the desire to honor ancestral practices and benefit Kānaka Maoli peoples on the one hand, and the need to remain economically viable on the other. When the land is your ancestor, the "value" of that land goes well beyond economic value. This tension is not easily resolved for Kānaka Maoli farmers.

However, there are potential economic benefits from agritourism that could ultimately serve to support Kānaka Maoli people, organizations, farmers, and land management principles. Policy recommendations related to the Kānaka Maoli community can be found in the recommendations chapter at the end of this report.

Rural Culture

How does agritourism impact rural life and culture? We endeavored to answer this question by first exploring issues currently impacting Hawai'i, then looking at cultures around the world that are experiencing similar issues, and finally by identifying ways other countries have addressed these issues and ways that similar solutions could potentially benefit Hawai'i.

Housing: An Issue that Impacts all Farmers

One issue for Hawai'i's producers and rural communities that lies at the intersection of tourism and agriculture relates to availability and affordability of housing. In a 2018 Membership Survey produced by the Hawai'i Farmers Union United, members were asked to rate their priorities of various focus areas. The strongest theme emerging was concerned with *Living on Farms* (Azizi, 2018, p. 16). Many farmers may gain access to farmland, but the distance between their home and their farm can be a stressful and limiting factor in their business, as described by survey respondents:

Comment 1- Whether you own your land or lease it, the cost of starting and running a farm while paying Hawai'i rent prices for an additional living space is prohibitive and crippling to the average young beginning farmer.

Comment 2- Farm worker housing, legalizing farming on ag lands and housing. Need housing that is not so costly, such as current permitting and building code fees.

Comment 3- The intersection of the high cost of housing and zoning laws limiting the ability to provide housing for farmers and their laborers creates a huge hurdle for me to plan a functioning farm plan. Perhaps a survey of how many workers are required per acre of existing farms organized by size and what is allowed by zoning would highlight that the formula should be modified to both limit abuse and encourage people to live where they are working.

Comment 4- Farming is very hands on and requires an intense time commitment. Living on my farm gives me the opportunity to offer more time and dedication than having to travel to my farm day and night (Azizi, 2018, p. 16).

While farmers struggle to afford housing, Hawai'i's housing prices and land, meanwhile, are marketed as an escape to paradise, where privileged people can live in luxury while reaping the benefits of agricultural tax breaks. Tourism and vacation rentals have driven long-term rental prices so high that many local residents struggle to find housing, let

alone farmland. Agricultural land in Hawai'i goes to the highest bidder who may not have an interest in food production or agriculture. As housing is a need for food producers, allowance for housing on agricultural land has been manipulated by those who use the housing allowance to build private estates with large mansions. Therefore, land that is zoned for agricultural purposes becomes landscaping with a tax credit, rather than making any substantial contribution to local food production. In "The Price of Living in 'Paradise' Is Higher Than Ever" published in The New York Times, Croley (2021) reports that:

Oceanfront property in particular in Hawaii is experiencing a surge in sales and prices, with bungalows and luxury dwellings fetching over \$5 million. At the private Hokuli'a community, one-acre lots start at \$7.5 million [...]Residents of Hokuli'a [...] enjoy the advantage of an agriculture easement on their properties, which allows them to introduce organic farming with tax credits from the state. Ms. Nicholson said these credits could reduce property taxes to \$200 per year, "leading to plenty of mango trees surrounding the properties inside the community [...]'People have resorted to looking for vacant land so that they can build what they want,' she said. 'They can customize however they want. So now we're starting to see the market roll into land sales as well as homes' (Croley, 2021, p. 4).

This excerpt speaks to the strong incentives that exist for the creation of "gentlemen farms," which ultimately reduce the accessibility of agricultural land for producers as luxury homeowners meet bare-minimum standards to receive agricultural tax breaks. This points to the need to redefine zoning policy in agricultural and rural areas to better serve the needs of producers, including having the ability to house agricultural workers.

Farmworker housing is a vital need for farmers, however, allowance for farmworker housing on agricultural land provides a backdoor for landowners to create vacation rentals, which may or may not support the agricultural operation. In these instances, landowners may create housing under the appearance that it is for seasonal farmworkers, but actually use that housing for more lucrative short-term tourism rentals to skirt state zoning policies. Unfortunately, farmworker housing, without enforcement, ultimately contributes to more tourism, rather than providing long-term housing for local workers and residents.

Preserving Local Traditions through Agritourism

Despite such challenges, opportunities exist for agritourism operations to support the preservation of rural culture. In their 2020 article, Palmi and Lezzi point out that agritourism provides for the "recovery of authenticity and tradition that generate public

value" (Palmi & Lezzi, 2020, p. 2). "Returning to origins and authenticity reveals values, practices, and skills connected to specific and local traditions that can contribute to the development and support of unique or distinct products or services, acquiring a strong identity trait" (Palmi & Lezzi, 2020, p. 3). The researchers refer to this philosophy as the "recombinant perspective" (Palmi & Lezzi, 2020, p. 3).

What drives this movement is the public's desire for original, authentic experiences, thus laying the groundwork for what these researchers see as innovation through tradition. Because tradition is unique to a specific society, it is difficult to be replicated by other competitors, and still more so with any degree of authenticity (Palmi & Lezzi, 2020). With a unique history and culture, the Hawaiian Islands have much to offer visitors in the way of an authentic and specific experiences. A Kona coffee producer on Hawai'i Island explained that the farm gives 12 complimentary, and as many as four private tours to guests each day. He illustrated this desire from the public for such experience when he stressed the importance of offering an authentic experience to guests. "I can't stress enough that it has to be authentic and properly intentioned [...] I think that's the main thing that if you're honest about what you're doing and you're transparent about it, people [tourists] will naturally go 'wow, that was a very real experience'" (Farmer C. and tour operator in Hawai'i County, personal communication, August 2, 2022).

Consequently, operations using traditional approaches can also innovate by incorporating into their offerings their own unique brand of culture. It is the rediscovery of "traditional assets and their ensuing recombination with complementary resources" that is significant. (Palmi & Lezzi, 2020, p. 16). For agritourism, this could take any number of forms, such as combining traditional recipes with culturally relevant architecture, or modern art with local agriculture practices. The tradition is already present in these seemingly disparate elements. The innovation is in their pairing.

Such innovation was also apparent in our interview with Farmer C. Introducing visitors to the farm's coffee-producing process presents an opportunity to share its sustainable practices. For example, he explained that the farm composts everything it can, from green waste to coffee skins. Also, water from the coffee-washing process is reused, which is significant for an operation considered a "dry farm" for the fact that its mature trees are not irrigated. "Processing coffee uses water and [our farm] tries to recapture and clean this water, and reuse it elsewhere on the property" (Farmer C. and tour operator in Hawai'i County, personal communication, August 2, 2022). Agriculture practices such as these help make food (or, in this case, coffee) production more sustainable, which supports the long-term viability of rural economies and culture.

Highlighting such practices is a means of providing authentic experience to curious visitors.

One study in Greece examined how agritourism can support the adaptive reuse of abandoned buildings as a way of honoring an area's cultural heritage. The sustainable development of the remote Greek island of Kythera was examined based on the preservation of its cultural assets (Vythoulka et al., 2021). Perhaps echoing Palmi and Lezzi's "recombinant perspective" outlined above, the Vythoulka et al. study found that utilizing abandoned buildings in one of Kythera's traditional settlements could support agritourism while honoring the island's unique culture. Thus, "the adaptive reuse of Kythera's cultural assets in this framework could set local heritage as a pillar of the island's sustainable development" (Vythoulka, et al., 2021, p. 7).

Agricultural assets and histories associated with Hawai'i's unique and diverse cultures may offer similar opportunities for preservation and economic sustainability for agritourism operators.

Another study assessing the sustainability of US agritourism farms compared to those engaged in other entrepreneurial ventures, found that agriculture-related tourism "is more successful in increasing farm profits, creating jobs and conserving the natural and cultural heritage" (Barbieri, 2013, p. 252). Part of this cultural heritage is agriculture itself. The study noted that agritourism farms contribute "significantly more to the preservation of American agricultural heritage than other entrepreneurial farms," including those engaged in "nontraditional agriculture" such as raising bison or organic production (Barbieri, 2013, p. 258). Among the study's agritourism respondents, a majority (63%) reported restoring and/or preserving historic buildings, equipment, and other agriculture artifacts. The author explains this is a significant finding that agritourism operators should capitalize on, perhaps by advertising themselves and their operations as "stewards of the American agricultural heritage" (Barbieri, 2013, p. 265).

Our research suggests that cultural authenticity and the celebration of local traditions and assets present a strong opportunity for Hawai'i's agritourism sector. Innovation with regard to how these traditions are presented to the public, and also how they're paired with other culturally relevant assets, may be key to ensuring their appeal to travelers. One way might involve pairing art or food with landscape—and in the case of Hawai'i, the sea, or perhaps traditional fishponds (*loko i'a*)—climate, or local agricultural practices. The innovation inherent in creative and original pairing and presentation of such seemingly disparate elements presents a promising opportunity for Hawai'i agritourism and those willing to celebrate and share the elements that make their local culture, agriculture, and/or ecology, unique.

Our interview with an ecotour operator with a specialty in natural resources at a Hawai'i County resort, for example, revealed that the resort's fishponds—an element of traditional Kānaka Maoli culture that they share with guests—presents an additional opportunity to teach visitors about local ecology. Guests are invited to take part in a fishing derby aimed at removing non-native tilapia from these waters. This allows the resort to educate guests about invasive species and their impact on the local environment. She shared these visitor interactions are having an overall "positive" effect on the fishponds because more tilapia are being removed (Ecotour Operator in Hawai'i County, personal communication, July 22, 2022).

Sharing with visitors the lands that provide for food and a way of life may be one way to help preserve them while also benefiting personal and local economies. But we believe good governance is essential in order to avoid undermining the rural cultures that agritourism is intended to help preserve. This might involve limiting the number of tourists in specific areas (particularly at culturally and environmentally sensitive sites), observing "rest days" in which these areas are closed to tourism, or assessing special fees that could provide for the maintenance and management of such sites. An ecoutour operator in Hawai'i County was one individual we interviewed who was in favor of assessing special fees on visitors because we "need to do something to protect resources" (Ecotour Operator in Hawai'i County, personal communication, July 22, 2022).

Culturally relevant architecture presents another opportunity for agritourism. Introducing travelers to those dwellings and other built environments that are culturally significant can make architecture a pillar of local heritage. And much the same may be said for local agricultural practices themselves. In identifying these practices and sharing them with visitors, an agritourism operation becomes part of the area's cultural fabric that helps preserve its history. Our interview with an resort ecotour operator in Hawai'i County, for example, illustrated how introducing visitors to the resort's traditional fishponds is a way of educating them about the local environment and Kānaka Maoli culture. She said the key takeaway for visitors is that they leave feeling "connected to the pond and the bigger picture that we are all together" (Ecotour Operator in Hawai'i County, personal communication, 22 July 2022). Thus, an environmentally sensitive agricultural (or in this case, ecotourism) operation is not only respectful of the natural world, but also of Hawai'i's traditional and rural cultures. We believe this sensitivity toward Hawai'i's environment and rural cultures is a fundamental and essential philosophy for any potential agritourism operation in the islands.

Summary

The interplay between agriculture, tourism, and rural communities and culture is a complex one. Current zoning regulations are often exploited for either luxury housing with minimal agricultural production leading for the benefit of agricultural tax breaks, while farmers are also struggling to find affordable housing for themselves and their workers. Policy to address these dual challenges is urgently needed, perhaps through zoning regulations changes and stricter definitions of housing use, as well as strengthened enforcement mechanisms.

Despite such challenges, producers looking to responsibly implement tourism ventures on their farms can prioritize offering authentic and unique experiences to visitors. Well-intentioned agritourism operators can therefore support continued growth of their sustainable practices through highlighting such practices. Recognizing visitors' desires for authentic experiences and pairing real cultural experiences in new ways can be a means to generating economic abundance without compromising rural communities' ways of life.

Lessons from Abroad

In an effort to place Hawai'i's current agritourism efforts in a larger frame, we explored different regions of the world that had successfully implemented their own agritourism programs. Here, we explore what gave rise to these programs, the challenges they have encountered, and lessons that can inform Hawai'i's own agritourism policies.

Italian Agritourism

Introduction and Initiation of Agritourism

Italy is host to a rich culture around supporting artisanal and small-scale food producers and farm operations. This history contributed to the birth and popularization of agritourism worldwide. We examined the Italian model of agritourism to draw lessons and best practices that may be applied in the context of the Hawaiian Islands.

Historically, Italy produces a variety of agricultural products that are associated with various regions of the country, and it is considered one of the European Union's largest agricultural producers and food processors (International Trade Administration, 2021). Italian fish production, mainly from the Mediterranean and Black Seas, is a growing industry, having doubled between 1960 and 2000 (Encyclopedia Britannica, Inc., n.d.). In addition, Italy is currently the world's largest exporter of olive oil, and all regions of the country produce wine (Encyclopedia Britannica, Inc., n.d.).

With the variety and abundance of agricultural operations, Italian farming lodges, or "agriturismos," grew in popularity in the 1970s (Moore, 2020). Agritourismos became a conduit for drawing tourists away from city life and into the countryside to experience agriculture and food production firsthand (—Agriturismo Italia, n.d.). They have also enabled people to learn the story of their food through hands-on educational experiences and brought attention—and therefore economic abundance—to agricultural businesses, a sector that had rarely garnered the general population's attention and interest before (Agriturismo Italia, n.d.).

In one example, remote mountainous regions in Italy have focused on food to attract tourists and promote local farmers and producers. These rural Italian communities use food and wine to create authentic experiences for travelers. Whether it be a small mountainous town that feels lost in time or a specific food harvested and eaten only in a limited seasonal time frame, these experiences and foods allow local businesses to highlight the unique traditions and foods of their region, while charging a premium to support their local economy (Duglio et al., 2022).

The Slow Food Movement: A Global Turning Point

While food and food products are essential to Italy's economy, the intentionality and care interwoven in the country's food culture are also of utmost importance. In 1986, when a McDonald's opened by the historic Piazza de Spagna in Rome, Italian journalist Carlo Petrini grew worried that this would be the start of fast food overtaking the beauty and intentionality behind local culinary traditions. He organized a protest against this potential proliferation by which protestors brought bowls of pasta, stating, "we don't want fast food, we want slow food!" (Slow Food International, 2019) This idea of "slow food" was represented by the bowls of pasta, symbolizing preserving taste, supporting small growers and producers, and protecting the environment (Slow Food DC, 2018). December 1989 marks the founding of the Slow Food movement when delegates from 15 countries endorsed the Slow Food manifesto written by founding member Folco Portinari in Paris (Slow Food USA, 2022):

The Slow Food Manifesto

Our century, which began and has developed under the insignia of industrial civilization, first invented the machine and then took it as its life model.

We are enslaved by speed and have all succumbed to the same insidious virus: Fast Life, which disrupts our habits, pervades the privacy of our homes and forces us to eat Fast Foods.

To be worthy of the name, Homo Sapiens should rid ourselves of speed before it reduces us to a species in danger of extinction.

A firm defense of quiet material pleasure is the only way to oppose the universal folly of Fast Life.

May suitable doses of guaranteed sensual pleasure and slow, long-lasting enjoyment preserve us from the contagion of the multitude who mistake frenzy for efficiency.

Our defense should begin at the table with Slow Food.

Let us rediscover the flavors and savors of regional cooking and banish the degrading effects of Fast Food.

In the name of productivity, Fast Life has changed our way of being and threatens our environment and our landscapes. So Slow Food is now the only truly progressive answer.

That is what real culture is all about: developing taste rather than demeaning it. And what better way to set about this than an international exchange of experiences, knowledge, projects?

In 1990, the first Osterie d'Italia guide was published. This significant publication was the first by the Slow Food Publishing House that described Italian cuisine and gastronomy. Osterie d'Italia is considered a milestone in the Slow Food movement because it became a reference for many cultural and gourmet food communities. Furthermore, its reference in *The Gambero Rosso*, a highly regarded Italian magazine, further contributed to its popularity and, thus, the principles and practices of Slow Food (Isabel, 2016). Ultimately, the popularization of the Slow Food movement served as an opportunity to showcase how to preserve and nurture Italy's agriculture heritage.

Adopting principles similar to the Slow Food movement could safeguard Hawai'i communities' agricultural and food traditions as well.

In 1996, Slow Food announced the Ark of Taste project. The project's goal was to identify small-scale, quality food products meaningful to communities' cultures, histories, and traditions and call attention to the jarring realization that they could disappear in a few generations due to industrialization, climate change, changing consumption behaviors and patterns, migration, and conflict (Slow Food Foundation for Biodiversity, 2021). Ultimately, it aimed to inspire people to take action to preserve these foods, practices, and communities.

The first iteration of the Terra Madre network was held in 2004 concurrently with Salon del Gusto. The world event had over 5,000 attendees from 130 countries and enabled the principles and practices of Slow Food to spread to African, Latin American, and Asian countries—areas it had not reached before. Today, the Terra Madre network event is held biannually to unite "food producers, fishers, breeders, chefs, academics, young people, NGOs and representatives of local communities who are working to establish a system of good, clean and fair food from the grassroots level" (Slow Food International, 2020). Even during the COVID-19 pandemic, Terra Madre was held digitally to continue the sense of community through food (Slow Food USA, n.d.).

Legislation

With such resounding movement in the food and agriculture sectors, Italy's most recent national agritourism law, passed in 2006, outlines the country's core values for the sector. The law (Agriturismo.it, n.d.) aims to:

- 1. Safeguard, classify, and promote the specific resources of each territory
- 2. Favor the maintenance of human activities in rural areas
- 3. Encourage multi-functionality in agriculture and the diversification of farm incomes
- 4. Promote initiatives by farmers for the conservation of soil, land and environment through increased farm incomes and improvements in the quality of life
- Recover the rural architectural heritage by protecting the features of the landscape
- 6. Support and promote typical local products, high quality products, and related food and wine traditions
- 7. Promote rural culture and education in nutrition
- 8. Encourage the development of agriculture and forestry

Of note, Italy's national legislation expressly allows for farmers to host overnight guests, the income of which is considered agricultural income, given that the host's primary activity is farming in terms of hours worked (Broccardo et al. 2017; Giaccio et. al, 2018). This supports farmers in diversifying their income streams, while protecting agricultural lands to remain primarily for agricultural production.

With this centralized understanding of Italian agritourism, the variables and outcomes that make each agritourism operation unique could be more easily measured. For example, Lupi, et. al (2017) identified that landscape, environmental variables, a farm's specialization, and farmer characteristics all affect the type of agritourism operation from which a farmer can operate and profit. They suggest that optimizing these factors supports rural development by increasing employment (specifically since young farmers are more interested in agritourism) and protecting the landscape (i.e., farms with agritourism operations tend to have more sustainable farming techniques that positively impact biodiversity and natural resources). Also, they project that agritourism may help prevent the depopulation of rural areas as it encourages younger generations to consider a new perspective on farming. This is also of import in Hawai'i, as an aging farming population looks to find ways to encourage the next generation of young people to pursue agriculture.

At the September 2022 Hawai'i Agriculture Conference hosted by the Hawai'i Agricultural Foundation, farm succession was an important topic of discussion (Agricultural Leadership Foundation of Hawai'i, 2022). As the average age of farmers in Hawai'i (60.1 years old as of the 2017 agricultural census) increases, finding ways to inspire and incorporate the next generation into farming operations is of great importance (USDA NASS, 2017). Agritourism ventures may be one way to incorporate the next generation of farmers into existing farm operations.

In an interview with Laurien Baird Hokuli'i "Lala" Nuss—the founder of "Conscious Concepts"—a sustainability and community-focused consulting and project management program in the Hawaiian Islands, she explained that the priority group for teaching the connection between agriculture protocols and cultural values should be "newer folk'" to the industry (L. Nuss, personal communication, August 28, 2022). This would serve to encourage the perpetuation of the unique cultures of the Hawaiian Islands, bringing in newcomer producers into the islands and encouraging an ethic of honoring place through agritourism.

As of 2017, Hawai'i ranked the third highest in percentage of new and beginning farmers (those who have operated a farm for less than 10 years) of all states—32%—just behind Georgia and Maine at 33% (United States Department of Agriculture, n.d. a).

Nuss describes these beginning farmers as a captive audience. However, before diving into an agritourism operation, she suggests new farmers create community-based wellness and business plans, similar to a B-corporation model versus the individual-focused model the continental US tends to have. Such social-impact driven business models can help to ensure that agritourism operations serve a regenerative, rather than extractive, purpose. Another key consideration by Nuss: individuals must consider if their operation is driving up the cost of living in Hawai'i, overall regenerative in the economy, and *pono* (meaning "righteous" or "good"). Unlike Italy's existing legislation, Nuss suggests that legislation to help support agritourism ventures in Hawai'i should consider seniority, as seniority plays a major role in Kānaka Maoli culture (L. Nuss, personal communication, August 28, 2022).

Best practices

As of 2014, Fagioli et al. (2014) found that farms in Italy were generating insufficient income. They therefore encourage "pluriactivity," meaning incorporating a variety of experiences and offerings for visitors in agritourism ventures. However, it is key for policy developers to consider the previously stated characteristics (i.e., landscape, environmental variables, a farm's specialization, and farmer characteristics) to direct efforts correctly (Broccardo et al., 2017), rather than assume all communities require the same care and support for agritourism ventures to thrive.

The list below illustrates a framework for farmers to choose their ideal type of agritourism venture based on the business's target market (Ciervo, 2013). Elements in consideration may include:

- Tourist values (e.g., well-being, culture, environment, spirituality)
- Socio-economic status of tourists
- Time in which the operation is open and running (e.g., seasons, weekends)
- Ranges of available resources (e.g., basic services, like cell phone service and running water in bathrooms to luxury services like swimming pools

While these are important characteristics to consider in agritourism business development, a constant, underlying element of agritourism is environmental benefit. "Environmental benefit" could include increasing biodiversity and safeguarding the landscape.

One case study of an operation capitalizing on promoting organic agriculture practices is an incentive program created by Italian organic agriculture firm, *Raggio Verde*. The firm is just outside of the historical center of the town of Cisternino and has five hectares

(12.35 acres) of olive groves that produce organic olive oil shipped internationally (Ciervo, 2013). The firm has an incentive program in which customers who purchase at least 180–200 liters, or (about 47.55–52.83 gallons), of olive oil each year for three years are entered in to spend a free week at the farm as a thank you for supporting the firm's organic, ecologically-focused business venture. Rural communities interested in moving forward with agritourism may use this case study as an example of loyalty programs that could benefit both the producer and consumer and encourage a continued relationship long after the visitor has returned home.

Italy's agritourism sector prioritizes bringing individuals to observe and participate in agriculture without being extractive to the land and the culture (N. El-Hage Scialabba, personal communication, July 17, 2022). Hawai'i should adopt a similar outlook on agritourism, looking for guidance on sustainable and regenerative tourism, as discussed previously. In other words, farmers don't have to make their operations like "Disneyland" (N. El-Hage Scialabba, personal communication, July 17, 2022). Instead, tourists can experience what life is like as a Hawai'i resident and "eat and experience like a local" (N. El-Hage Scialabba, personal communication, July 17, 2022). Utilizing agritourism in such a way allows local residents to both accomplish the work and own the narrative of their unique place, rather than outsiders coming in to be employed and tell a different version of the story of a place.

In our interview with Nadia El-Hage Scialabba, she shared that a demand exists for quality products and experiences overall among Italy's agritourists. This realization helped to inform the development of a system of "daisies," similar to star ratings for a hotel. These daisies represented an agritourism operation's sustainability ranking (e.g., type of sewage system, solar panels, etc.). Tourists who wanted to support sustainable operations could filter their Italian agritourism searches by the number of daisies. On the farm operation's side, they received a certificate that outlined the requirement of certain ranking.



Figure 23: Example of a certificate outlining an agritourism operators' sustainability rating. Image Source: Altaura e Monte Ceva, 2015.

Similar voluntary certification schemes exist in various forms across Italy's diverse regions (Fabio, 2015). Half of Italy's 20 regions have already established their own region-specific rating systems to classify agritourism operations based on criteria that suit the culture and priorities of their communities and ecologies (Fabio, 2015). For organic agritourism operations, an Italian organic certification body classifies operations from one to five "suns," representing their commitment to 5 criteria: "protection of environment, ecological management, promotion of local culture, organic food and sustainable transportation" (Fabio, 2015, p.323). Such region-specific classification

systems are a good way to hold agritourism operations accountable to things such as environmental, cultural, and tourism goals that are specific to the community in which they operate. Similar systems could be established on the county or island levels in the Hawaiian Islands.

EI-Hage Scialabba noted that the growth, in part, of Italian agritourism has been due to consumer demand for quality, and purity of the product is in high demand (N. Scialabba, personal communication, July 17, 2022). Therefore, regulation through certification may be one means of ensuring both quality experiences for visitors, while sustaining and celebrating the unique regionality of the places in which such experiences take place.

Agritourism Across the Pacific

In addition to the case study of Italy, we researched additional agritourism models in the Pacific region, including Fiji, a small village in Vietnam, the Solomon Islands, Northern Thailand, and Costa Rica. These regions were selected due to their similarities to Hawai'i's climate, geographical features such as mountains, significant cultural heritage, and food systems.

These regions focus on utilizing agritourism to both promote tourism and provide a source of revenue for impoverished rural areas. Multiple case studies on these regions have referenced the importance of preserving the local culture, land, historic and religious sites, but also outline the struggle to earn revenue from tourist activity.

Best practices among Fiji and Tra Que Vegetable Village in Vietnam include the focus on a single unit farm or structure to direct tourists to engage in farming or shopping experiences. In one example, Fiji has focused efforts on what they have termed a "living museum" for tourists to visit and learn about farming. The museum is host to a large garden that showcases local crops, plants, and other food sources in addition to acting like a seed bank for known and newly discovered indigenous plants (Dolgin, 2008). Tra Que Vegetable Village plans to build and operate a check-in facility with exhibits of local farming tools, crops, and cultural practices to attract visitors in hopes that their visit is longer. They encourage tourists to participate in local farming activities such as carrying water on their shoulders (Van Trung & Tharu, 2021). By directing tourists to centralized areas, such as agricultural exhibits or perhaps on-farm farmers' markets, it may help to limit negative environmental impacts while still gleaning the benefits of increased revenues for farmers.

In the Solomon Islands, positive benefits for small farmers have arisen through holding annual festivals exhibiting indigenous foods such as yams and bananas. The farmers collaborate with hotels, resorts, and restaurants to showcase the local foods and attract

tourists to the festival grounds (Lynthia, 2019). Similar festivals highlighting Hawai'i's agricultural crops already exist in the islands, such as the Kona Coffee Cultural Festival, which has been an annual event since 1970 (Festival Highlights, 2023). However, as the website notes:

It all started with a group of businesspeople on the island, from the hotels, airlines and the industry, to put together a festival to honor Kona coffee during the slower November tourism season [...] It also corresponds with coffee harvest time (Festival Highlights, 2023).

In other words, rather than intending to primarily benefit local small farmers, the initial intention of the festival was to stimulate tourism during an otherwise slow tourist season. Current festival sponsors include the Hawai'i Tourism Authority and Alaska Airlines, highlighting the importance of the festival to the tourism industry (Festival Highlights, 2023). This points to the need to ensure that such agritourism festivals are well-intentioned, not only stimulating economic gains for the tourism industry, but also for the small farmers on whom the festival is predicated.

Northern Thailand agritourism businesses have put an emphasis on farm stores, safety during farm tours, and unique on-farm accommodations (Chaiphan, 2016). However, they have been most successful from showcasing the traditional farming and food production methods of the area. These small farmers collaborate with the cruise ship industry to ensure a steady flow of tourists to their facilities (Chaiphan, 2016). This speaks not only to the benefit of highlighting the authentic practices of the area, but also to collaborating with the tourism industry to generate interest and a regular flow of tourists to the farm. Such collaboration helps to ease the burden on farmers, who would otherwise have to take time away from their production to market their farm experiences.

In Micronesia, marketing campaigns like "Go Local" have proven successful in generating interest in local food movements (Natuman, 2017). This pro-local campaign promotes food diversity and economic growth for small farmers in addition to urging the tourism industry to participate. Social media has shown to have a strong influence on tourists' activities, which is why successful regions utilize a social media strategy to bring revenue to rural areas (Natuman, 2017).

Finally, lessons can also be drawn from Costa Rica. As the concept of "ecotourism" flourished there in the 80's and 90's, the boundaries distinguishing this type of travel from general tourism blurred due to a lack of governance. This allowed for a surge in greenwashing from many conventional tourism operators who presented their businesses as environmentally friendly in order to capitalize on the popularity of

ecotourism. The many excesses associated with large-scale commercial tourism posed a challenge for legitimate ecotourism operators as well as the natural environment itself—a challenge that continues today and one that demands strong governance to effectively manage (Jones & Spadafora, 2017). The same greenwashing and misrepresentations could happen with Hawai'i agritourism if the industry isn't governed and regulated.

Summary

Italy helped to shaped agritourism as we know it. Through the Slow Food movement, the country has been able to codify Italian culinary and agricultural traditions. Such codification has been a means of protecting and perpetuating these traditions. The Italian agritourism legislation has been a means to clearly define the aims to ensure that agritourism activities are in support of rural communities and agriculture, rather than acting solely as a means to prioritize tourism for monetary gain. The case of Italy has shown that responsible agritourism business models prioritize the cultural and ecological health of the regions in which they operate. Taken in the context of Hawai'i, this implies a respect and honoring of both traditional Kānaka Maoli traditions and protocol, as our interview with Nuss revealed, as well as the many diverse cultures that make up Hawai'i today.

Finally, Italy has pioneered regionally-based agritourism certification schemes. This allows for place-based standards that suit the communities in which the agritourism activities are taking place. Similar standards could benefit Hawai'i's diverse communities through regulating and rating agritourism operations based on local community and stakeholder desires.

In other agritourism models across the Pacific region, some best practices have emerged. Working to build centralized museums or exhibits of agricultural implements and practices has been successful in some areas, as well as leveraging the reach of the tourism industry to help direct tourists to such attractions. Agricultural festivals are an important means of stimulating interest in local agriculture, but must be responsibly implemented to ensure that farmers benefit from such festivals. Government-funded marketing campaigns have also been an important piece of stimulating demand for local food and agriculture among visitors in Micronesia. Finally, the case of Costa Rica's ecotourism industry points to the need for adequate regulation and governance structures to prevent tourism operators from misrepresenting their sustainable practices.

Recommendations & Conclusion

Based on our findings, we believe there are strategies that can be implemented to support operators in conducting agritourism on their properties while adhering to existing land use and zoning laws, ensuring that both farmers and visitors benefit from agritourism, all while respecting the unique culture of the Kānaka Maoli people. We've organized the following recommendations into short-term and long-term, the former being "low-hanging fruit" that could be implemented relatively easily and the latter requiring more time and resources.

Short-Term Recommendations

→Enhance Access to Existing Resources for Agritourism Operators

Providing the personnel and resources to help agricultural producers navigate state and county regulations presents an opportunity for the future of agritourism in Hawaii.

<u>Update Hawai'i County's Website for Agritourism Operators</u>

Currently, the county website has a "Resources" tab that includes a "Zoning & Land Use" section. It would be helpful to have a specific resource for agritourism operators that links to the various applicable state and county regulations and provides a step-by-step guide that walks them through the regulations, permitting process, and other factors they should consider before starting their agritourism operation.

Review Third-Party Resources and Make them Accessible

There are existing agritourism resources available that the county could help promote to farmers, like the Agritourism Guidebook that is currently on the HTA website. Cross-promotion of these materials is important but as some farmers noted, it can be costly to implement all of the recommendations from these resources. With small farmers in mind, the County could help to not only make these resources available, but also identify what should be prioritized and how to implement the recommendations in a cost-effective way.

Support Marketing Efforts

"It's kind of more wealthy, more *Better Homes* and *Gardens* style farms [that get promoted] it's not the [people] who grew up here and decided to start farming. There is the social side of that that should be paid attention to" (Farmer A. in Maui County, personal communication, July 29, 2022).

Agritourism is becoming a significant economic driver and there are mutual benefits to promoting local businesses through the county, yet marketing remains one of the biggest challenges to small farmers' agritourism businesses. Maintaining an online directory of agritourism operators and working with local tourism departments could help with promotion of such operations. Social media spotlights or coverage of farms could help spread the word to tourists who may be interested in visiting farms. Ensuring that Native Hawaiian farmers are part of such marketing stories is important. In addition, partnering with the hotel, restaurant, cruise ship, and tour guide businesses could be a means for directing tourists to the local producers and suppliers. Finally, new marketing techniques should be considered to bring greater awareness of unique local and regional foods. Kona coffee has succeeded in marketing it's unique regionality, and similar campaigns could be undertaken for other crops. For example, marketing "volcanic breadfruit" or "tropical mountain taro" could support the marketing of these important cultural crops.

Promote Best Practices for Hiring Qualified Workers

Difficulties in hiring qualified laborers, either locally or through work trader programs like WWOOF, are prevalent. Issues with attracting and retaining skilled labor is a major issue we heard both in our interviews and from the HFUU. Our interview with one grower revealed some best practices (Table 3) when it comes to hiring qualified workers that the county might consider promoting to farmers statewide.

Medium to Long-Term Recommendations

→ Hawai'i as an Agritourism Leader

There have been more efforts to adjust the mass tourism model to not only be more sustainable but also to preserve local culture. In many ways, Hawai'i is still recovering from the damaging effects of colonization and a purely capitalistic approach to drawing visitors from all over the world. With tourism on the rise again after the COVID-19

pandemic, there is a real opportunity to make meaningful adjustments that would impact traditional tourism and agritourism operations.

Integrate Agritourism into County Planning

- Planning committees focused on improving and increasing agritourism should consider the sustainable use of natural resources, vulnerability of the land over time, effects of increased transportation on the region, and how to encourage smaller-footprint travel such as bicycling, and total capacity of the region by limiting the number of visitors per day.
- Studies should take place to analyze the vicinity of tourist
 accommodations relative to the agricultural destinations in addition to
 proper disposal and control of pollution and waste. It will be important to
 gather data on the types of products and services made by locals, their
 available capacity, the presence of traditional farming systems, cultural
 practices, historic or significant sites to visit, necessary road
 improvements to areas where farming practices can be experienced, and
 the resource availability to the suppliers (farmers) where focus will be from
 tourists.

Policy Updates

- Consider lowering or removing the restriction in Hawai'i County that
 primary agricultural activities yield a minimum of \$10,000. While this may
 not be an issue for some, many small farmers are operating with very few
 acres, and many must also rely on supplemental off-farm employment.
 Allowing these operators to add secondary activities like farm tours or
 selling value-added products could benefit farmers financially.
- In relevant counties, consider expanding the area that is allowed for commercial agricultural structures to be greater than 1,000 square feet.
 This may allow for additional activities, such as events, retail, and dining, that could help operators diversify income streams.
- Include liability protections for operators whose activities fall under the
 allowable agritourism activities. Thirty-four percent of US states govern
 agritourism via civil liabilities law, supporting farmers through both liability
 protections as well as guidance on appropriate responsibilities that
 operators must take to ensure the safety of visitors (Vermont Law Center,
 2021). The cost of liability insurance may be prohibitively high for many
 operators and such amended legislation could help to ease this burden.
- As housing is an identified need for farmers in Hawai'i, we recommend zoning research on housing on agricultural land for both a primary residence and for agricultural workers (Azizi, 2018). Labor is one of the top barriers for agriculture in Hawai'i and housing would improve the ability

to attract and retain skilled workers (Mello et al., 2020). Research should focus on how to prevent exploitation of housing development for non-agricultural purposes. Counties and farmers would also benefit from improving the information available online for housing building permits.

Ease Funding Challenges for Farmers

Consider how the County of Hawai'i could make it easier for operators who are trying to add agritourism activities to supplement their income:

- Provide additional funding to small- and mid-size agritourism operators. A
 number of farmers we spoke to mentioned that it is extremely difficult to
 find ways to hold farm tours and conduct other activities because their
 primary activity (farming) takes up so much time. Accessible funding could
 help farmers hire a tour operator to hold tours for them or assist with
 marketing or other activities related to their agritourism operations.
- Support farmers with grant writing. Multiple farmers brought this up as a barrier to being able to get additional funding. Workshops or in-person support would be ideal, but finding ways to connect farmers to funding would be helpful.

→Establish a full-time agritourism liaison position for each county

Agritourism, like ecotourism, can help provide for a more educated and culturally and environmentally sensitive visitor to the islands. But what exactly is agritourism and what is it not? How do farmers and ranchers market their operations to visitors? How do producers apply for grants to help jumpstart their agritourism operations? What forms and limits of insurance and liability coverage are required of agritourism operators? And what are best practices that producers can adopt in growing their own agritourism operations? These are just a few of the questions that a state- or county-sponsored agritourism liaison can answer in making their rounds throughout their territories. In doing so, they promote the practice of agritourism while helping small-scale agricultural producers be more competitive in today's marketplace. With the benefit of such support, farmers and ranchers can augment their primary income from agricultural production with revenues from sharing their land and operations with visitors.

Pomai Weigert, an agritourism consultant with GoFarm Hawai'i whom we interviewed, shared that farmers frequently come to her with agritourism-related questions. As perhaps the state's best agritourism resource, she fields most of the questions but admits that "we don't have enough of me" (P. Weigert, personal communication, June 20, 2022). One of the most important things she helps farmers with is permitting. "Navigating the permitting process is a big one," she told us (P. Weigert, personal communication, 20 June 2022). Advice is given on a case-by-case basis because

permitting requirements vary by county. Having a specialist for each county could help tremendously.

We envision the agritourism liaisons as field-based operators who offer specific advice for the unique needs of each agricultural producer, understanding that what works for one may not necessarily work for another, but also that there is a pathway to success for everyone. In carrying out their duties, the agritourism liaisons would build rapport with the farmers in their respective counties, which should help aid in the adoption of best practices as well as specific state and/or county requirements.

Finally, we believe agritourism liaisons are vital not only for their contributions to small-scale agricultural production across the islands, but also for helping protect Kānaka Maoli agricultural lands. This comes at a time when the loss of agricultural property due to development is most acute and shows no signs of slowing. And while many small-scale producers may operate with self-sufficiency in mind rather than commercial production, these growers, too, help preserve the cultural side of agriculture by working their lands and keeping them viable for food production and thus safe from the specter of development. The agritourism liaisons would contribute to this noble ideal through their work in sharing best practices, providing access to resources, and generally encouraging producers to maintain the health and viability of their agricultural holdings.

→Governance Model

While a robust agritourism infrastructure can provide myriad benefits, one of the challenges lies in standardization and quality control. In the absence of effective governance, this can become a liability for the industry. We believe a strong governance model is necessary for establishing and maintaining standards that keep agritourism productive and sustainable. Hawai'i can look to the Italian model of creating certification schemes to rate agritourism operations on things such as sustainability and ecological impact, as well as social and cultural values. These certification schemes can vary based on the county to suit the specific needs and values of the community. Agritourism operations should be carefully vetted and held to specific standards in order to ensure the industry's integrity and continued viability.

Measurable standards are an important piece of such certification schemes. Though residents may be in support of regenerative tourism, without a means of measuring the impacts of tourist experiences, such practices will be "sustainable" or "regenerative" in name only.

→Visitor-impact Fee

Our research suggests that many residents of Hawai'i support a visitor-impact fee or other tax that those visiting the islands would be required to pay in order to visit. With

more than 10 million people having visited these islands in 2019, even a nominal visitorimpact fee would result in a significant revenue stream, which the state could use to maintain and preserve its lands and other natural assets, including through supporting agritourism governance.

The idea for such a fee appears to be gaining traction. According to an August 8, 2022 article in *Honolulu Civil Beat*, the Nature Conservancy of Hawai'i is advocating for a visitor-impact fee to "better protect the state's natural resources" (Honore, 2022, p. 1). The article suggests there is support for a fee of up to \$50 per visitor, although a measure to create such a fee died in the Hawai'i House of Representatives after passing the Senate during the 2022 legislative session.

One supporter speculated that such a fee could raise an additional \$350 million annually for the state, assuming a \$50 fee and seven million annual visitors. Regardless of the exact amount, our research team strongly supports an impact or use fee for all visitors to Hawai'i.

Kānaka Maoli Policy Recommendations

→State, County and Local Government Employee Training

State, county and local government employees may or may not be from Hawai'i, however, all employees would benefit from education on the history and culture of Kānaka Maoli people. Learning about Kānaka Maoli people would bring important context to the policies that currently exist, the historic and ongoing barriers for Kānaka Maoli people in accessing ancestral lands, protection of their religious freedom, and ongoing contention with the U.S. military occupation in Hawai'i.

Training materials may be readily available, however, contracting with Kānaka Maoli organizations and leaders would ensure accuracy and improve curation of material for the specific audience of state, county and local government employees.

Contract with Kānaka Maoli organizations and local cultural leaders to:

- Develop Kānaka Maoli history and culture training.
- Develop cultural competency training.
- Implement Kānaka Maoli history and culture training and cultural competency training for all state and county employees.

→ Consultation with Kānaka Maoli Community

The U.S. Department of the Interior (DOI), recently announced that they will be requiring formal consultation with the Kānaka Maoli Community (Office of Native Hawaiian Relations, 2022). New policies and procedures are being drafted and input from the

Kānaka Maoli Community began in late 2022. As the federal government is in active policy development, it is crucial that the Kānaka Maoli Community engage in these policy meetings to document their input in the record.

While consultation is taking place at the federal level, state and local government agencies have a direct impact on Kānaka Maoli citizens. Developing meaningful consultation around zoning and agriculture policy, as well as other policy issues, will build trust and increase the ability for agencies to address gaps and disparities for Kānaka Maoli people.

We recommend that State, County and local government agencies:

- Organize and conduct stakeholder meetings with Native Hawaiian Organizations and local Kānaka Maoli cultural leaders.
- Conduct outreach to Native Hawaiian Organizations to develop strategies to increase Kānaka Maoli land and home ownership.

→ Agritourism Policy for Kānaka Maoli farmers and crops

Agritourism offers an avenue for Kānaka Maoli farmers to make their operations more financially viable by offering cultural educational experiences to their community. Income generated by cultural education can be one aspect of a farm business that supplements the income that is generated from the cultural food products grown on the farm. In addition, educational experiences are an important method for passing on traditions to the next generation and contributes to the Kānaka Maoli cultural value of reciprocity.

Educational experiences about Kānaka Maoli agriculture is an income stream that would fall under the definition of agritourism in the Hawai'i State Revised Statute. However, education may be an essential component of a Kānaka Maoli farm if the agricultural product that they produce is not a "high-value" crop by mainstream agriculture and economic measures. This is especially troubling because in Hawai'i's State Revised Statute a farm's "principal use" is measured by the level of income derived from the activity and agritourism is required to be a "secondary use." This creates a problem for Kānaka Maoli farmers who may be penalized for making more income from educational agritourism than their agricultural product. Instead, the definition of principle use could be altered to be modeled after Italian agritourism legislation which is based on hours worked by the farmer rather than on income derived.

Due to the under-valuation of traditional Kānaka Maoli crops, agricultural tourism activity can be an important support for keeping Kānaka Maoli farms financially viable. One possibility is that Kānaka Maoli cultural farming be considered a "principal use" without

the requirement that their agricultural product income meet 50% or more of their gross sales. This will ensure that Kānaka Maoli farmers are not penalized or discouraged from utilizing agricultural tourism to support their cultural farming operations.

The Hawai'i State Revised Statute must be reflected at the County level and there may be further restrictions that occur at the County level, such as below:

Hawai'i County Code §25-4-15. Agricultural tourism.

- (d) Agricultural tourism operations shall comply with the following regulations:
- (1) The agricultural activity or agricultural products processing facility must have a minimum of \$10,000 in verifiable gross sales, exclusive of any income from agricultural tourism activities or any other non-agricultural activities, for the year preceding the commencement of the agricultural tourism activity or, in the case of a new agricultural activity or agricultural products processing facility, provide evidence to the director's satisfaction that sufficient investment has been made in the planting of crops, acquisition of livestock, or construction of agricultural products processing facilities, that the agricultural activity or agricultural processing facility will achieve the minimum required gross sales;

The way this policy is written, it is possible that Kānaka Maoli farmers may appeal to the director to approve their cultural agriculture operation, however this leaves the policy at the discretion and amiability of the director. In addition, it may be a challenge for a small farm to attain \$10,000 in gross sales, especially if their agricultural product is a cultural food that is unconventional and does not have the same economic/market support to rely on. Kānaka Maoli farmers who are growing cultural crops could be supported through exemption from the \$10,000 gross sales requirement. We recommend outreach and consultation with Kānaka Maoli farmers to determine perameters that will guide the director in making a determination on the requirements for Kānaka Maoli crop exceptions.

References

- ADA National Network, *Timeline of the Americans with Disabilities Act.* (n.d.). ADA National Network. Information, Guidance, and Training on the Americans with Disabilities Act. https://adata.org/ada-timeline
- Ag Resources. (2013, January 31). *How Important is Agriculture Today?* Department of Agriculture, State of Hawaii. https://hdoa.hawaii.gov/blog/ag-resources/how-important-is-agriculture-today/
- Agricultural Leadership Foundation of Hawaiʻi (2022). *Conference Schedule*. Retrieved February 15, 2023 from https://www.hiagconference.org/schedule2022.html
- Agricultural Marketing Resource Center. Agritourism. (2022). Agricultural Marketing Resource Center. https://www.agmrc.org/commodities-products/agritourism
- Agriturismo.it (n.d.). *Legge e Norme Nazionali Agriturismo*. Retrieved October 17, 2022 from https://www.agriturismo.it/it/extra/legge-nazionale-agriturismo-45
- Agriturismo Italia. (n.d.). An Original Way of Experiencing the Countryside. Retrieved October 17, 2022 from http://www.agriturismoitalia.gov.it/flex/cm/pages/ServeBLOB.php/L/EN/IDPagina/6
- Aiken, D. J. (2015). 2015 Nebraska Agritourism Liability Statute. University of Nebraska—- Lincoln.

 https://extension.unl.edu/statewide/centralsandhills/Agri%20Tourism%20Insurance.pdf
- Altaura e Monte Ceva. (2015). *Agriturismi Bio-ecologici Standard AIAB "Il Filo d'Erba."*Altaura e Monte Ceva. http://www.agriturismobioecologico.it/bioecologico.php
- Andrade, Gabriella, Holly Itoga, Cathrine Linnes, Jerome Agrusa, and Joseph Lema. (2021). The Economic Sustainability of Culture in Hawai'i: Tourists' Willingness to Pay for Hawaiian Cultural Experiences. *Journal of Risk and Financial Management.* 14(9), 420. https://doi.org/10.3390/jrfm14090420
- Azizi, S. (2018). Hawaii Farmers Union United (HFUU) 2018 Membership Survey Report. *Hawaii Farmers Union United*. (pp. 1–23). https://hfuuhi.org/

- Azizi Fardkhales, S. (2019). Food Security and Self-Sufficiency: Voicing the Realities of Hawai'i's Small Farmers Who Produce Food for Local Consumption [ProQuest Dissertations Publishing]. https://search.proquest.com/docview/2381618194?pq-origsite=primo
- Barbieri, C. (2013). Assessing the sustainability of agritourism in the US: A comparison between agritourism and other farm entrepreneurial ventures. *Journal of Sustainable Tourism*, *21*(2), 252–270. https://doi.org/10.1080/09669582.2012.685174
- Barbieri, C. & Tew, C. (2012). The perceived benefits of agritourism: The provider's perspective. *Tourism Management*, 33(1), 215–224. https://doi.org/10.1016/j.tourman.2011.02.005
- Bellato, L., Frantzeskaki, N., & Nygaard, C. A. (2022). Regenerative tourism: A conceptual framework leveraging theory and practice. *Tourism Geographies*, 1–21. https://doi.org/10.1080/14616688.2022.2044376
- Broccardo, L., Culasso, F., & Truant, E. (2017). *Unlocking value creation using an agritourism business model.* 9(9):1618. https://doi.org/10.3390/su9091618
- Carpio, C. E., Wohlgenant, M. K., & Boonsaeng, T. (2008). The Demand for Agritourism in the United States. *Journal of Agricultural and Resource Economics*, 33(2), 254–269. https://www-jstor-org.ezproxy1.lib.asu.edu/stable/41220626
- Chaiphan, N. (2016). The Study of Agro-tourism in Northern Thailand: Key Success factors and the Future of the Industry. 15.

 http://ethesisarchive.library.tu.ac.th/thesis/2016/TU_2016_5802040104_5979_46
 https://ethesisarchive.library.tu.ac.th/thesis/2016/TU_2016_5802040104_5979_46
- Ciervo, M. (2013). Agritourism in Italy and the local impact referring to Itria Valley. The organic firm""Raggio Verd"" and its Ecological Agritourism Project.

 https://sciendo.com/article/10.2478/euco-2013-0021
- Cook Lauer, N. (2018, November 19). Hawaii Leaders Push to Double Food Production by 2020. *U.S. News & World Report*. https://www.usnews.com/news/best-states/articles/2018-11-19/where-does-hawaii-get-its-food
- Congresswoman Jennifer Wexton. (2022). Press Release: Wexton Introduces
 Bipartisan Bill to Support Virginia Agritourism Businesses. *U.S. Representative*

- Jennifer Wexton.
- https://wexton.house.gov/news/documentsingle.aspx?DocumentID=648
- Council of the County of Maui. (2021). Expressing Support for Sustainable Tourism, Emphasizing Quality Over Quantity, Maui County, Resolution 21-18. https://www.mauicounty.gov/DocumentCenter/View/125760/Reso-21-018
- County of Hawai'i. (n.d.). Chapter 25—Zoning Code, County of Hawaii. Retrieved October 24, 2022, from https://www.hawaiicounty.gov/home/showpublisheddocument?id=302520
- County of Hawai'i. (2021, March 10). 2021 AgriBusiness Guidebook: Starting an Agri-Tourism Operation [Press Release]. https://www.hawaiicounty.gov/Home/Components/News/News/2793/
- County of Honolulu (n.d.) Chapter 21, Land Use Ordinance, County of Honolulu.

 Retrieved October 22, 2022. from https://www.honolulu.gov/ocs/roh/193-site-ocs-cat/975-roh-chapter-21.html
- County of Kaua'i. (n.d.). Chapter 8 COMPREHENSIVE ZONING ORDINANCE, County of Kaua'i. Retrieved on October 24, 2022.

 https://library.qcode.us/lib/kauai_county_hi/pub/county_code/item/title_iv-chapter_8
- County of Maui (n.d.). *Department of Agriculture*. Retrieved October 25, 2022 from https://www.mauicounty.gov/2473/Department-of-Agriculture
- Croley, M. (2021, November 4). The Price of Living in 'Paradise' Is Higher Than Ever. The New York Times. https://www.nytimes.com/2021/11/04/realestate/hawaii-housing-prices-pandemic.html
- Department of Business, Economic Development & Tourism. COVID-19 & Hawaii's Economy. (2022). Department of Business, Economic Development & Tourism. Research & Economic Analysis. https://dbedt.hawaii.gov/economic/covid19/
- Department of the Interior. (2021). Consultation at Interior on Improving Consultation.

 Retrieved October 19, 2022 from https://www.doi.gov/sites/doi.gov/files/framing-paper-consultation-with-tribes.pdf

- Dolgin, R. (2008). Beach Fales: Sustainable Eco-Tourism and Cultural Preservation in Samoa. University of Vermont: School for International Training.

 https://digitalcollections.sit.edu/isp_collection/61/
- Duglio, S. Bonnadonna A., & Letey M. (2022). The Contribution of Local Food Products in Fostering Tourism for Marginal Mountain Areas: An Exploratory Study on Northwestern Italian Alps. *Mountain Research and Development*, vol. 42, no. 1, 2022, pp. R1–10. https://pubag.nal.usda.gov/catalog/7728460
- Encyclopedia Britannica, Inc. (n.d.). *Agriculture, Forestry, and Fishing*. Retrieved October 17, 2022. From https://www.britannica.com/place/ltaly/Agriculture-forestry-and-fishing
- Fabio, M. (2015). Agritourism for Rural Development in Italy, Evolution, Situation and Perspectives. *The XIV International Academic Congress "Fundamental and Appllied Studies in the Modern World," Papers and Commentaries, Volume II*, 315-331.
- Fagioli, F. F., Diotallevi, F., & Ciani, A. (2014). Strengthening the sustainability of rural areas: The role of rural tourism and agritourism. Italian Review of Agricultural Economics. https://doi.org/10.13128/REA-16920
- Federation of WWOOF Organizations. (2022). *About WWOOF.* Retrieved on September 15, 2022. https://wwoof.net/fowo/
- Festival Highlights. (2023). Kona Coffee Cultural Festival. Retrieved February 16, 2023 from https://konacoffeefest.com/#
- Giaccio, V., Giannelli, A., & Mastronardi, L. (2018). Explaining determinants of Agritourism income: evidence from Italy. *Tourism Review*, *73*(2), 216–229. https://doi.org/10.1108/TR-05-2017-0089
- GoFarm Hawaii. (2020). 08/04/2020 Agri-Tourism Webinar—Compliance & Planning. [Video]. YouTube. https://www.youtube.com/watch?v=QbpRYmGahdM
- Gon, S., Tom, S., & Woodside, U. (2018). 'Āina Momona, Honua Au Loli—Productive Lands, Changing World: Using the Hawaiian Footprint to Inform Biocultural Restoration and Future Sustainability in Hawai'i. *Sustainability*, 10(10), 3420-. https://doi.org/10.3390/su10103420

- Hawai'i County Planning Department. Permitted Uses by Zoning District. (n.d.). *Hawai'i County Planning Department.*https://www.planning.hawaiicounty.gov/home/showpublisheddocument/301481/637203338523370000
- Hawaii LSB Land Class Locator. (n.d.). Retrieved February 18, 2023 from https://www.arcgis.com/apps/mapviewer/index.html?webmap=4969f48660d44aa4aed76e93386ce3bd%20
- Hawai'i Revised Statutes—Chapter 205, *Chapter 205-Land Use Commission*. Retrieved October 23, 2022, from https://www.capitol.hawaii.gov/hrscurrent/vol04_ch0201-0257/hrs0205/hrs_0205-.htm
- Hawai'i Tourism Authority (HTA). (2020). Strategic Plan 2020-2025. https://www.hawaiitourismauthority.org/media/4286/hta-strategic-plan-2020-2025.pdf
- Hawai'i Tourism Authority (HTA). (2021a). *Agritourism*. https://www.hawaiitourismauthority.org/what-we-do/hta-programs/community-enrichment/agritourism/
- Hawai'i Tourism Authority (HTA). (2021b). *HTA Resident Sentiment Survey 2021 Highlights*. https://www.hawaiitourismauthority.org/media/7436/hta-resident-sentiment-spring-2021-board-presentation-062421-final.pdf
- Honore, M. (2022, August 8). Here's What Climate Advocates Hope To See In Hawai'i's Next Governor. *Honolulu Civil Beat.*

https://www.civilbeat.org/2022/08/heres-what-climate-advocates-hope-to-see-in-hawaiis-next-governor/

- International Trade Administration. (2021, October 29). *Italy County Commercial Guide Agricultural Sector*. https://www.trade.gov/country-commercial-guides/italy-agricultural-sector
- Isabel, L. B. (2016, February 25). *Publication of the first edition of the "Osterie d'Italia Guide"*. http://www.transitsocialinnovation.eu/sii/ctp/publication-of-the-first-edition-of-the-osterie-dritalia-guide
- Johnston, Alison M. (2003). Self-determination: Exercising Indigenous Rights in Tourism. In Singh, S., Timothy, D. J., & Dowling, R. K. (Eds.). *Tourism in*

- destination communities (pp. 115-134). CABI Publishing. https://doi.org/10.1079/9780851996110.0000
- Jones, G., & Spadafora, A. (2017). Creating Ecotourism in Costa Rica, 1970–2000. *Enterprise & Society*, 18(1), 146–183. https://doi.org/10.1017/eso.2016.50
- Keany, M. (2016, December 21). The End of an Era: Hawai'i's Last Sugar Mill Closes Forever. *Honolulu Magazine*. https://www.honolulumagazine.com/the-end-of-an-era-hawaiis-last-sugar-mill-closes-forever/
- Kirch, P. V. (1985). Feathered gods and fishhooks: An introduction to Hawaiian archaeology and prehistory. University of Hawaii Press.
- Kua 'Āina 'Ulu 'Auamo (KUA). (n.d.). *Hui Mālama Loko I'a*. Accessed on October 11, 2022 at https://kuahawaii.org/huimalamalokoia/
- Land Use Commision. (2023). State Land Use Districts. State of Hawai'i Land Use Commission | Komikina Hoʻohana ʻĀina. https://luc.hawaii.gov/about/state-land-use-districts/
- Liu, J.C. and Var, Turgur. (1986). Resident attitudes toward tourism impacts in Hawaii. Annals of Tourism Research. Volume 13, Issue 2. pp 193-214. https://doi.org/10.1016/0160-7383(86)90037-X. https://www.sciencedirect.com/science/article/pii/016073838690037X
- Lupi, C., Giaccio, V., Mastronardi, L., Giannelli, A., & Scardera, A. (2017). Exploring the features of agritourism and its contribution to rural development in Italy. *Land Use Policy*, *64*, 383–390. https://doi.org/10.1016/j.landusepol.2017.03.002
- Lynthia, Simata Ella. Exploring Agritourism as Sustainable Development for Solomon Islands. Diss. Ritsumeikan Asia Pacific University, 2019.
- Maui County Code. (2023, January 18). Title 19—ZONING | Code of Ordinances.

 County of Maui, HI. Retrieved October 24, 2022, from

 https://library.municode.com/hi/county_of_maui/codes/code_of_ordinances?node_ld=TIT19ZO
- Maui Now. (2022, July 4). *Maui County establishes its own Department of Agriculture*. https://mauinow.com/2022/07/04/maui-county-establishes-its-own-department-of-agriculture/

- Mello, C., Azizi, S., & Kama, S.-L. (2020). Spatial and Relational Representations of Economic Well-being and the Kahumana Farm Hub, Wai'anae, Hawai'i. *Human Organization*, 79(1), 57–68. https://doi.org/10.17730/0018-7259.79.1.57
- Moore, D. (2020). *An introduction to agritourism: A power tool for storytelling and revenue generation*. AIANTA. https://www.aianta.org/an-introduction-to-agritourism-a-power-tool-for-storytelling-and-revenue-generation/
- The National Agricultural Law Center. (n.d.). Agritourism—An Overview. *The National Agricultural Law Center*. https://nationalaglawcenter.org/overview/agritourism/
- National Agricultural Library. (n.d.). *Animal Welfare Act Timeline*. United States Department of Agriculture. Retrieved on October 25, 2022 from https://www.nal.usda.gov/collections/exhibits/awahistory/list

Chapter 1 State Level/Hawaii/st15 1 0007 0008.pdf

- National Agricultural Statistics Service. (2017). *Agricultural Census. Income from Farm Related Sources: 2017 and 2012* [Fact sheet]. United States Department of Agriculture.

 https://www.nass.usda.gov/Publications/AgCensus/2017/Full_Report/Volume_1,
- National Agricultural Statistics Service. (2021). USDA/NASS 2021 State Agriculture

 Overview for Hawaii. *United States Department of Agriculture*.

 https://www.nass.usda.gov/Quick_Stats/Ag_Overview/stateOverview.php?state=HAWAII
- Natuman, J. (2017, November 24). Vanuatu Looks To Develop Agritourism Industry. Retrieved from vanuatu-looks-develop-agritourism-industry.com:

 http://www.pireport.org/articles/2017/04/04/vanuatu-looks-develop-agritourismindustry
- Office of Native Hawaiian Relations. (2022, October 18). Interior Department
 Announces Development of First-Ever Consultation Policy with Native Hawaiian
 Community. U.S. Department of the Interior.
 https://www.doi.gov/pressreleases/interior-department-announces-development-first-ever-consultation-policy-native
- Office of the Secretary, Office of Native Hawaiian Relations. (2020, October 22). Standard Operating Procedure for Consultation with the Native Hawaiian

- Community. United States Department of the Interior. https://doi.gov/sites/doi.gov/files/20201022-consultation-appendices-sop-onhr_0.pdf
- Ord, C., & Amer, J. (2010). Contribution of Volunteer Tourism to Organic Farms: An analysis of the WWOOF exchange in Canada. *Unpublished master's thesis, University of the Balearic Islands, Palma de Mallorca, Spain*. Retrieved January 17, 2023 from https://ecoclub.com/education/articles/502-volunteer-tourism-organic-farms
- Palmi, P., & Lezzi, G. E. (2020). How Authenticity and Tradition Shift into Sustainability and Innovation: Evidence from Italian Agritourism. *International Journal of Environmental Research and Public Health*, *17*(15), 5389. https://doi.org/10.3390/ijerph17155389
- Proctor. (2001). Tourism Opens New Doors, Creates New Challenges, for Traditional Healers in Peru. *Cultural Survival Quarterly*, 24(4), 14–16.
- Quintus, S., & Lincoln, N. K. (2020). Integrating Local and Regional in Pre-Contact Hawaiian Agriculture at Kahuku, Hawaiii Island. *Environmental Archaeology*, 25(1), 53–68. https://doi.org/10.1080/14614103.2018.1497833
- Rehkamp, S., Robers, M. J., & MacDonald, J. M. (2021). The Agricultural Economic Landscape in Hawai'i and the Potential for Future Economic Viability [UHERO Briefs]. UHERO, The Economic Research Organization at the University of Hawai'i. https://uhero.hawaii.edu/wp-content/uploads/2021/06/AgriculturalEconomicLandscapeInHawaii.pdf
- Saito, O. (2013). Resource use and Waste Generation by the Tourism Industry on the Big Island of Hawaii.

 https://onlinelibrary.wiley.com/doi/full/10.1111/jiec.12007?casa_token=8V8Ge_H_8MysAAAA%3Aki193uu0vBvb_9-Q2kyuMTkJx5x4F2Vx3DNVEikBUxpbDDhoaCA9R9FwU2cFUPk0zaNxZ18EL2Y_S5J8S
- Schmitz, J. M. (2010). *Rural dreamscapes: Representations of heritage in Hawai`i's agritourism landscapes* [ProQuest Dissertations Publishing]. https://search.proquest.com/docview/734133982?pq-origsite=primo

- Slow Food DC. (2018, September 20). *The origins of slow food or how to start a global movement with pasta*. https://www.slowfooddc.org/blog/the-origins-of-slow-food-or-how-to-start-a-global-movement-with-pasta
- Slow Food Foundation for Biodiversity. (n.d.). *Ark of Taste*. Retrieved October 19, 2022 from https://www.fondazioneslowfood.com/en/what-we-do/the-ark-of-taste/
- Slow Food International. (2019, May 16). *Our History About Us.* https://www.slowfood.com/about-us/our-history/
- Slow Food International. (2020, March 3). *Terra Madre Network*. https://www.slowfood.com/our-network/terra-madre-network/
- Slow Food USA. (n.d.). *Terra Madre 2020*. Retrieved on October 17, 2022. https://slowfoodusa.org/gatherings/terra-madre/
- Slow Food USA. (2022, June 6). Sign the Manifesto. https://slowfoodusa.org/manifesto/
- Terry, W. (2014). Solving labor problems and building capacity in sustainable agriculture through volunteer tourism. *Annals of Tourism Research*, *49*, 94–107. https://doi.org/10.1016/J.ANNALS.2014.09.001
- United States Department of Agriculture. (n.d. a). 2017 Census of Agriculture Highlights
 Farm Producers. Retrieved on October 25, 2022 from

 https://www.nass.usda.gov/Publications/Highlights/2019/2017Census_Farm_Producers.pdf
- United States Department of Agriculture. (n.d. b). *Beginning farmers and ranchers*. Retrieved October 23, 2022 from https://www.farmers.gov/your-business/beginning-farmers
- United States Department of Agriculture National Agricultural Statistics Service (2017).

 Quick Stats. Retrieved on February 15, 2023 from

 https://quickstats.nass.usda.gov/results/1DA41CF2-CD51-396E-8AD4-FC1C94B59171
- United States Department of Agriculture National Agricultural Statistics Service. (2021, February 8). Family-owned farms account for 93% of Hawaii farms, according to the 2017 Census of Agriculture Typology Report. USDA News Release.

- https://www.nass.usda.gov/Statistics_by_State/Hawaii/Publications/Press_Releases/2021/typology.pdf
- United States Department of the Interior. (2021). Consultation at Interior on Improving Consultation. [Fact Sheet]. https://www.doi.gov/priorities/tribal-consultation/consultation-interior-improving-consultation
- Van Trung, H., & Tharu, D. (2021). Exploitation and Preservation Agricultural Way of Life For Agro- Tourism Development, A Case Study at Tra Que Village, Quang Nam Province, Vietnam. World Journal of Humanities and Social Science.
- Vegetable Grower News. (2022). Office of Agritourism at USDA proposed in new legislation. Vegetable Growers News.

 https://vegetablegrowersnews.com/news/office-of-agritourism-at-usda-proposed-in-new-legislation/
- Vermont Law Center. Defining and Regulating Agritourism: Trends in State Agritourism Legislation 2019-2020. (2021). Vermont Law Center for Agriculture & Food Systems. https://www.vermontlaw.edu/sites/default/files/2021-04/Defining-and-Regulating-Agritourism.pdf
- Vythoulka, A., Delegou, E. T., Caradimas, C., & Moropoulou, A. (2021). Protection and Revealing of Traditional Settlements and Cultural Assets, as a Tool for Sustainable Development: The Case of Kythera Island in Greece. *Land*, *10*(12), 1324. https://doi.org/10.3390/land10121324
- Wang, W., Hollas, C., Chase, L., Conner, D., & Kolodinsky, J. (2022). Challenges for the agritourism sector in the United States: Regional comparisons of access. *Journal of Agriculture, Food Systems, and Community Development*, 11(4), Article 4. https://doi.org/10.5304/jafscd.2022.114.003
- Whitt, C., Low, S., & Van Sandt, A. (2019). Agritourism Allows Farms To Diversify and Has Potential Benefits for Rural Communities. *Economic Research Service, U.S. Department of Agriculture*. <a href="https://www.ers.usda.gov/amber-waves/2019/november/agritourism-allows-farms-to-diversify-and-has-potential-benefits-for-rural-communities/#:~:text=Agritourism%20helps%20U.S.%20farmers%20and,a%20st rategy%20to%20remain%20competitive.
- Yamamoto, D., & Engelsted, A. K. (2014). World Wide Opportunities on Organic Farms

- (WWOOF) in the United States: Locations and motivations of volunteer tourism host farms. *Journal of Sustainable Tourism*, *22*(6), 964–982. https://doi.org/10.1080/09669582.2014.894519
- Yeh, J. (2015). *Agritourism Guidebook: Hawai'i County*. College of Tropical Agriculture and Human Resources, University of Hawai'i at Mānoa. https://www.ctahr.hawaii.edu/oc/freepubs/pdf/ET-15.pdf
- Yerton, S. (2021). Hawaii Has A Lot of Unemployed People. But Companies Still Can't Find Help. *Honolulu Civil Beat*. https://www.civilbeat.org/2021/05/hawaii-has-a-lot-of-unemployed-people-but-companies-still-cant-find-help/
- Yu, Wen and Spencer, Daniel M. (2022, January 24) Place-making impelled by farm tourism on a tropical island. *Tourism Geographies*. DOI: 10.1080/14616688.2022.2027512. Retrieved from https://www.tandfonline.com/doi/abs/10.1080/14616688.2022.2027512
- Zaman, U., Aktan, M., Agrusa, J., & Khwaja, M. G. (2022). Linking Regenerative Travel and Residents' Support for Tourism Development in Kaua'i Island (Hawaii): Moderating-Mediating Effects of Travel-Shaming and Foreign Tourist Attractiveness. *Journal of Travel Research*. https://doi.org/10.1177/00472875221098934

Appendix

Appendix A: Interview Documentation Example

Examples of documentation used to prepare for and aggregate data from interviews.

Interview Worksheet Template

Interviewee:	
Lead Interviewer:	
Other Attendees:	
Date:	

Are you okay with us recording this interview for accuracy in quotations or statistical analysis?

- 1. Background / Introductory questions
- 2. We hear a lot about the vulnerabilities of Hawaii's food system, from the reliance on imports to the challenges associated with tourism. In your experience what are some of the biggest opportunities for Hawaii's agritourism that aren't being fully utilized?
- 3. How greatly does the sea, fish/fishing, and/or aquaculture figure into Hawaii's agritourism infrastructure? What opportunities do you see within this sector?
- 4. With agritourism being a new concept for many farmers, what is the best way for getting farmers comfortable to make the shift?
- 5. Hawaii has many 'āina based foods that people may not be familiar with or interested in, but these crops are accustomed to the local environment and a part of the culture. Do you believe agritourism can help bring life to these foods that have lost their demand (popularity)?
- 6. Have farmers come to you for help in regard to agritourism and if so how often and what are the key areas you help them with?
- 7. What policies do you wish were in place that would make running an agritourism business easier? Are there policies in place that make things more difficult?
- 8. How do you feel about the current resources available to those wanting to start and operate an agritourism business? Are there any obvious resources missing?
- 9. On a scale from 1–10 (1: not at all a concern, 10: the most concerning), how much is liability a concern for you (e.g., tourists coming to your business and potentially being harmed onsite)?
- 10. What do you hope that visitors/customers of Hawai'i agritourism take away from their experience?

- 11. Can you give us an idea of the various kinds of agritourism operations in Hawai'i and what they are comprised of? Examples: tours, tastings, hosting overnight guests, value-added product sales.
- 12. What motivates farmers to implement such operations?
- 13. In your experience, what percentage of time do producers spend on their agritourism operations?
 - a. What part takes the most time?
- 14. What are your current labor requirements for your agritourism operations? Do producers have the help they need?

For each interview, the research team customized a copy of the Interview Worksheet Template that was relevant for each interviewee.

Keywords (topics)
Farm tours are most common agritourism activity
Polynesian food history-traditional crops important to locals
Cultural experiences, healing activities, fishing attract tourists
Teaching/story telling is culturally significant
Restrictive Lodging regs for farmers and laborers
Financial need of tourists spending and govt funding to keep small farmers going
Small farmers want to attract more locals, school field trips
Difficult to navigate govt regs via websites and lack of people
Best County for agritourism policy and support is Maui
Agritourism lacks focus from govt officials
County regs not small farmer friendly, permit timeline too long
Labor shortage, tight regs
Lack of Marketing skillset among most small businesses
Need govt liaison to small farmers for agritourism
Grant writing support needed for small businesses
It is culturally natural to farm organically
Tourists are seeking out real culture, eat and drink with locals
Transportation challenges in rural areas for laborers and tour operators
Regenerative ag and agroforestry are culturally important

Sense of Place embedded into culture
Protect lands from overconsumption/foot traffic quickly
Tourism tax supported by most businesses
Tour operating businesses need cultural training
Locals struggle to meet cost of living with current wages
Covid travel restrictions allowed land and water to clear
Grow more food on Islands/less import reliance
Farm land is too expensive

As part of the qualitative data analysis, keywords were compiled from each interview to help the team find relevant themes.

Appendix B: Excerpt from the Qualitative Data Analysis Framework

 Table 5: Excerpt from report analysis

Alias	Culture	Sustainability	Labor
Farmer A. in Maui County	who gets to tell the history of Hawaii and how to integrate an authentic experience with tourism	less of a focus on just making money and instead trying to honor the history, tell a story and impact the local community. Deep connection to the land	In order to be economically sustainable, small farmers are almost obligated to look into agritourism, even if they don't want to. Even selling the highest cash crops and value-added goods does not provide enough income
Farmer I. in Hawaiʻi County	There is already a great culture of sustainable and regenerative ag in Hawaii	Larger policy restrictions are not always helpful to farmers (i.e. you can't export certain food to the mainland)	
Farmer D. and apiarist in Hawai'i County	Farming can impact community development and farmers can play a huge role in preserving local culture	Beekeeping (pollinators) is huge for sustainability and important for people to know about	Difficult to find locals who want to work - transportation can be a challenge among other obstacles
Farmer F. and rancher in Maui County	There are certain things that tourists from other countries or from the mainland won't get but locals will so it has changed their overall model. They have tried to make sure the local voice is leading the conversation		Minimum requirement for wwoofers is 6 months which is really difficult to find.
Farmer B. in Kauaʻi County	Give people a local experience that doesn't degrade the land		
Farmer H. in Kauaʻi County	They point people toward other organizations like Waipā or Mālama Kaua'i.		

	They don't want to tell other people's stories and want to tell their own story and what they know		
Farmer K. in Honolulu County	Connecting people with the earth and explaining what the ancient Polynesian use to practice such as healing practices. Noni - a Polynesian food, medicinal, health tonic They offer shots with their guests		
Farmer G. in Honolulu County	Sense of place; canoe garden of local foods; neighbors are important; face to face meetings over food trump all other ways of learning old and new ways of farming; the island is a living organism that you treat with respect; farm to school program	use resources available, give back to the land, regenerative ag is important; teaching kids that food comes from land	

Appendix C: Kaua'i County Zoning Ordinance Excerpt

Excerpt from Table 8-2.4 Table of Uses from Chapter 8 of the Comprehensive Zoning Ordinance of Kaua'i County showing permitted uses in agricultural zones.

			ZOI	NING	DIST	RICT					
		Reside	ntial		Comm	nercial	Indu	strial			
Sec.	USE	R-1 to R-6	R-10 to R- 20	RR	CN	CG	٦	IG	AG	0	UNV
8- 2.4(q)(1)	Accessory structures and uses								P ³		
8- 2.4(q)(2)	Agriculture, Diversified and Specialized; and Nurseries								Р		
8- 2.4(q)(3)	Agriculture retail stand								P ⁴		
8- 2.4(q)(4)	Aquaculture								Р		
8- 2.4(q)(5)	Diversified agriculture								Р		
8- 2.4(q)(6)	Farm Dwelling								Р		
8- 2.4(q)(7)	Food processing and packaging of agriculture products								P ⁵		
8- 2.4(q)(8)	Forestry								Р		
8- 2.4(q)(9)	Historic sites								Р		
8- 2.4(q)(10)	Intensive agriculture								Р		
8- 2.4(q)(11)	Livestock and grazing								Р		
8- 2.4(q)(12)	Orchards								Р		
8- 2.4(q)(13)	Outdoor recreation								Р		
8- 2.4(q)(14)	Pet keeping and raising, except as provided in Sec. 8- 2.4(r)(12)								Р		
8- 2.4(q)(15)	Piggery, except as provided in Sec. 8 2.4(r)(13)								Р		
8- 2.4(q)(16)	Poultry Raising, except as provided in Sec. 8 2.4(r)(14)								Р		
8- 2.4(q)(17)	Public parks and monuments								Р		

³ P = Permitted Use or Structure (Zoning Permit may be required)

⁴ Only produce raised or grown on the property and/or associated farm or value-added goods derived primarily from produce or livestock raised on the subject property and/or associated farm. ⁵ Same restrictions as footnote 4.

8- 2.4(q)(18)	Resource management				Р	
8- 2.4(q)(19)	Single family attached and detached dwellings				Р	
8- 2.4(q)(20)	Solar energy facilities placed within land with soil classified by the State of Hawai'i Land Study Bureau's detailed land classification as overall (master) productivity rating B, C, D, or E; those facilities placed within land with soil classified as overall productivity rating class B and C shall not occupy more than ten percent (10%) of the acreage of the parcel, or twenty (20) acres of land, whichever is less				Р	
8- 2.4(q)(21)	Undeveloped campgrounds				Р	
8- 2.4(q)(22)	Warehousing, storage, and packing of plant products				Р	
8- 2.4(q)(23)	Wildlife management				Р	
8- 2.4(r)(1)	Animal hospitals				U ⁶	

⁶ U = Use Permit Required

Appendix D: Honolulu's Land Use Ordinance Master Table

<u>Master Use Table</u> from Chapter 21, Article 3 of Honolulu's Land Use Ordinance. (Chapter 21, 2022).

USES								ZONING	ZONING DISTRICTS	RICTS		H	H	╟	H	1	-			
Transition Communication Commu	re defined in Article	7-d	I-9V	VG-2			R-3.5		7-V									7-1	£-I	I-XMI
rr Cm Cm Cm																				
Tr. C.	cs		Cm	Cm																
Transition	s processing, minor		P/c	P/c													P/c	P/c		P/c
A	ts processing, major		၁	၁		\vdash	\vdash											P/c		
P P P P P P P P P P	ocessing																	ы	а	
Pic		Ь	Ь		۵.															
C C C C C B/c	llection, storage and ultural products to markets		P/c	P/c													P/c	4		
P/c P/c <td></td> <td>၁</td> <td>၁</td> <td>၁</td> <td></td> <td>\vdash</td> <td></td> <td>P/c</td> <td></td> <td></td>		၁	၁	၁		\vdash												P/c		
P P P P P P P P P P		P/c	P/c	P/c														P/c		
P P		Ь	Ь		۵.															
Ac Ac<		Ь	Ь	Ь																
Ac A			Ь	Ь																
and P/c	ccessory		Ac		Αc															
r and P/c P/c P/c P	f machinery used in ction		P/c	P/c													۵.	۵.		а
rand P/c P/c P			P/c	P/c														Ь		
	seed, feed, fertilizer and intial to agricultural		P/c	P/c													<u>a</u>	Д		

Appendix E: Permitted Uses by Zoning District

<u>Permitted Uses by Zoning District</u>, developed by Hawai'i County's Planning Department (County of Hawai'i Planning Department, n.d.).

Hawai'i County Planning Department
PERMITTED USES BY ZONING DISTRICT*

			Ī	ľ	Ī	Ī	Ī	Ī	ı				Ī	ľ		Ì	
		RS	8	RM	RCX	RA	FA	4	IA	>	CN	99	ઠ	MCX	M	MG	0
NSES	DEFINITION	Single-Family Residential	Double- Family Residential	Multiple- Family C Residential	Residential- Commercial Mixed-Use	Residential & Agricultural	Family Agricultural	Agricultural	Intensive Agricultural	Resort - Hotel	Neighborhood Commercial	General	Village Commercial	Industrial - Commercial Mixed	Limited Industrial	General	Open
AGRICULTURE, ANIMALS																	
Agricultural parks.								×	×								
Agricultural products processing																	
Agricultural products processing	yes (major, minor)							×	×							×	
 -Agricultural products processing, minor, provided that the site or buildings used for such processing, shall be located at least seventy-five feet from any street bounding the building site. 	yes					×	*										
-Agricultural products processing, minor.	sak													×	×		
Agricultural tourism.	sek					Accessory u	Accessory use to ag activities & ag processing facilities; U or S	vities & ag p U or S	rocessing		` `	ccessory use	to agricultur	Accessory use to agricultural processing facilities	gfacilities		
Animal hospitals.						×	×	×							х	×	
Animal quarantine stations.															х	×	
Animal sales, stock, and feed yards.																×	
Aquaculture.	yes					х	×	×	×						×	х	×
Areas with over thirty percent slope, in guilles, and where rough terrain discourages intensive agricultural uses, the director may approve any other uses which are narmitized in the RR ER or A district									×								
Botanical gardens, nurseries and greenhouses, seed farms, plant experimental stations, arboretums, floricul-ture, and similar uses dealing with the growing of plants.						*	×	×									
Crop production.	sak	×	×	×	×	×	*	×	×		×	×	×				Γ
Fertilizer manufacturing plants.																×	
Fertilizer yards utilizing only manure and soil, for commercial use.								×									
Forestry.								×	×								×
Game and fish propagation.							×	×									
Greenhouses, plant nurseries.															×	×	
Growing of plants provided such growth does not impair a view intended to be preserved in the O district.																	×
Guest ranches.	yes					s		s									

Appendix F: Additional Literature on Agritourism in other Island Communities

Hawai'i is both an "island economy," a colonial economy and is currently the only island state of the United States of America. There are many other island communities that may experience similar economic conditions, such as islands and countries in the Caribbean, and islands and some mainland communities of Alaska because of their geographic isolation from the lower 48 states. Island economies have unique conditions, benefits and challenges, and many also are working to address sustainability, overtourism, colonization, food security and more. This report will not go into depth on this topic and we recommend that readers who would like to explore this topic further look at other publications, such as:

Caribbean literature selections:

<u>Feeding island dreams: exploring the relationship between food security and agritourism in the Caribbean.</u>

Thomas, A., Moore, A., & Edwards, M. (2018). Feeding island dreams: Exploring the relationship between food security and agritourism in the Caribbean. *Island Studies Journal*, *13*(2), 145–162. https://doi.org/10.24043/isj.66

Rural Tourism Development: Tackling a Culture of Local Nonparticipation in a Postslavery Society.

Nicely, A., & Sydnor, S. (2015). Rural Tourism Development: Tackling a Culture of Local Nonparticipation in a Postslavery Society. *Journal of Travel Research*, *54*(6), 717–729. https://doi.org/10.1177/0047287514535846

Selling Anthropocene space: situated adventures in sustainable tourism.

Moore, A. (2019). Selling Anthropocene space: Situated adventures in sustainable tourism. *Journal of Sustainable Tourism*, *27*(4), 436–451. https://doi.org/10.1080/09669582.2018.1477783

South America literature selections:

Can rural tourism stimulate biodiversity conservation and influence farmer's management decisions?

Weyland, F., Colacci, P., Cardoni, A., & Estavillo, C. (2021). Can rural tourism stimulate biodiversity conservation and influence farmer's management decisions? *Journal for Nature Conservation*, *64*, 126071-. https://doi.org/10.1016/j.jnc.2021.126071

<u>Coffee Tourism in Chiapas: Recasting Colonial Narratives for Contemporary Markets.</u>

Lyon, S. (2013). Coffee Tourism in Chiapas: Recasting Colonial Narratives for Contemporary Markets. *Culture, Agriculture, Food and the Environment*, *35*(2), 125–139. https://doi.org/10.1111/cuag.12016

Reconciling rural development and ecological restoration: Strategies and policy recommendations for the Brazilian Atlantic Forest

Alves-Pinto, H. N., Latawiec, A. E., Strassburg, B. B., Barros, F. S., Sansevero, J. B., Iribarrem, A., Crouzeilles, R., Lemgruber, L., C Rangel, M., & Silva, A. C. (2017). Reconciling rural development and ecological restoration: Strategies and policy recommendations for the Brazilian Atlantic Forest. *Land Use Policy*, 60, 419–426. https://doi.org/10.1016/j.landusepol.2016.08.004

Australia literature selection

<u>Environmental</u>, <u>cultural</u>, <u>economic and socio-community sustainability: a framework for sustainable tourism in resort destinations.</u>

Richins, H. (2008). Environmental, cultural, economic and socio-community sustainability: A framework for sustainable tourism in resort destinations. *Environment, Development and Sustainability*, *11*(4), 785–800. https://doi.org/10.1007/s10668-008-9143-6

Asia literature selection

Sustainable tourism and harmonious culture: a case study of cultic model at village tourism.

Astawa, I. P., Triyuni, N. N., & Santosa, I. D. M. C. (2018). Sustainable tourism and harmonious culture: A case study of cultic model at village tourism. *Journal of Physics. Conference Series*, 953(1), 12057-. https://doi.org/10.1088/1742-6596/953/1/012057

Philippines literature selection

Between food and spectacle: The complex reconfigurations of rural production in agritourism.

Montefrio, M. J. F., & Sin, H. L. (2021). Between food and spectacle: The complex reconfigurations of rural production in agritourism. *Geoforum*, *126*, 383–393. https://doi.org/10.1016/j.geoforum.2021.09.008

Appendix G: Keywords and Language

Ahupua'a - ancient land division system and cultural resource management system developed by Kānaka Maoli people

'Āina - land

'Ōlelo Hawai'i - the Kānaka Maoli, also known as Native Hawaiian, language

Kalo - culturally important food featured in the Kānaka Maoli creation story and a staple crop for Kānaka Maoli people. Common Name: Taro. Scientific name: Colocasia esculenta.

Kānaka Maoli - prefered term for Aboriginal Native Hawaiian person or people

Kuleana - responsibilty; privilege

La'au lapa'au - traditional medical practice of Kānaka Maoli people

Lāhui - Nation, community, to gather together

Moku - island

'Uala - sweet potato plant, culturally important staple crop to Kānaka Maoli people. Scientific name: Ipomoea batatas

Appendix H: The US Government Relationship with Native Hawaiian Communities

The United States of America's policies are very similar in their treatment and relationship to Indigenous, Aboriginal, and native people, but there are marked differences in how that policy is applied, especially when it comes to the Hawaiian Kingdom and Native Hawaiian people. This history is important, especially as it relates to Indigenous people exercising rights and freedom within their homelands. Today, many Native American/American Indian or Alaska Native tribal governments exercise self-governance. However, the political status of the Hawaiian Kingdom and Native Hawaiian people, like all tribal governments, is distinct from other Indigenous people within US borders. Today, various Hawaiian Peoples and organizations are continuing to push for the US to recognize Native Hawaiian rights.

Table 6: List of agencies and organizations that serve Hawaiian people.

A short list	of agencies and organizations that serve Hawaiian peoples
<u>Hawaiʻi</u>	Office of Hawaiian Affairs (OHA) is a semi-autonomous state agency responsible for improving the wellbeing of all Native Hawaiians (regardless of blood quantum). https://www.oha.org/about/
<u>Federal</u>	Office of Native Hawaiian Relations, U.S. Department of the Interior The Office discharges the Secretary's responsibilities for matters related to Native Hawaiians and serves as a conduit for the Department's field activities in Hawai'i. The mission of the Office is to serve as a liaison with the Native Hawaiian Community and work with the Department and its bureaus on issues affecting Hawai'i. https://www.doi.gov/hawaiian/aboutus
	Native Hawaiian Organization Notification List The Department of the Interior maintains a list of Native Hawaiian Organizations. This list is an important reference if you are a Federal or State agency, a private entity complying with consultation requirements pursuant to Federal law, or a Federally listed Native Hawaiian Organization, you may contact the Office of Native Hawaiian Relations to obtain an Excel version of the List. Please be sure to check periodically for updates. Instructions for how organizations may sign up for notification is located on the following website: https://www.doi.gov/hawaiian/faqs

	Current Native Hawaiian Organization Notification List: https://www.doi.gov/hawaiian/NHOL
Other	Native Hawaiian Chamber of Commerce Headquartered in Kapolei, CNHA is a Native Community Development Financial Institution (CDFI) certified by the U.S. Treasury department and a HUD-Certified Housing Counseling agency. They provide access to capital, financial education and individualized financial counseling services with a focus on low and moderate-income families. CNHA serves as a National Intermediary, providing grants and loans targeting underserved communities in Hawai'i. https://www.nativehawaiianchamberofcommerce.org/
	Council for Native Hawaiian Advancement The Council for Native Hawaiian Advancement (CNHA) is a member-based 501(c)3 non-profit organization with a mission to enhance the cultural, economic, political, and community development of Native Hawaiians. https://www.hawaiiancouncil.org/about-us/

Native Hawaiian Organization Notification List, continually updated by the DOI, can be utilized for agritourism operations, state or local agencies, or other agritourism stakeholders wishing to alert Native Hawaiian organizations of their plans and obtain input. Native Hawaiian organizations and groups may not be listed, so it is important to do local networking to understand who the stakeholders or appropriate cultural representatives are in your local area. Also note that there may be more than one Hawaiian group who has an ancestral tie or interest on an island or on a particular piece of land.

Proposed DM Chapters

<u>Proposed 513 DM 1 - Department of the Interior Policy on Consultation with the Native</u> <u>Hawaiian Community</u>

Proposed 513 DM 2 - Procedures for Consultation with the Native Hawaiian Community

Related Resources

DOI's Departmental Manual - https://www.doi.gov/elips
ONHR's Standard Operating Procedures for Consultation with the Native Hawaiian
Community

About the Authors

John Gifford

John Gifford is a writer of essays and literary nonfiction whose work explores our relationship as humans with the natural world. He's the author of seven books, including *Red Dirt Country, Where East Meets West*, and *Pecan America*, a volume of immersion reporting on the industry, ecology, and culture of America's indigenous tree nut. His essays have appeared in *American Forests*, *Big Sky Journal*, *Harvard Divinity Bulletin*, *Southwest Review*, the *Atlantic*, and have been cited in *The Best American Essays* and *The Best American Sports Writing*. He lives in Oklahoma City.

Abigail Martone-Richards

Abigail Martone- Richards is originally from Long Island, NY, Abigail now resides in Jersey City, NJ where she works with her local Farmer's Market on food accessibility initiatives, specifically focused on increasing SNAP users at the market. Abigail is passionate about fighting food and nutrition insecurity in her area and connecting urban residents with fresh, sustainably-grown food. Abigail comes from a large family of New England farmers and is looking forward to learning more about sustainable agriculture. Abigail holds a B.A. from Belmont University in Nashville, TN and is the Director of Design Operations at WeWork.

Mary Mik

Mary Mik is a Registered Dietitian Nutritionist who graduated from Syracuse University and completed her dietetic internship at the University of Massachusetts, Amherst. She worked for Slow Food: Denver as an instructor where she taught elementary and middle school students the story of their food through hands-on cooking activities. Through Arizona State University's Sustainable Food Systems certificate program, Mary aims to connect food, human health, and environmental health in her future career. Mary currently lives in Lone Tree, Colorado.

Jason Peña

Jason is a senior sourcing manager for a large CPG company. His position is to ensure that the products his company requires for its customers are cost competitive and sustainably sourced. Jason achieves this through Request For Proposal and New Product Development activities as well as attending Food conventions where new startups and other companies discuss their opportunities for recycling, upcycling, waste reduction, land resource management and certified minority owned businesses. Jason has a strong passion to develop a robust strategic sustainable sourcing platform for his company's customers and to promote a healthier planet. Jason resides in Missouri with

his wife and two daughters. He enjoys traveling and experiencing new culinary craftsmanship.

Allison Perkins

Allison Perkins has an Associate's degree in Sustainable Food Systems from Rio Salado Community College. She worked in the Garden at Rio for almost 4 years becoming head gardener during her time where she produced food for the café on campus. She was lucky enough to maintain her position throughout the pandemic and increase saved seeds for the college by 25 percent. In December of 2020, Allison received her bachelor's in sustainability, with emphasis on sustainable urban dynamics and a minor in urban planning through Arizona State University. Her biggest goal is to motivate others about sustainability with the knowledge she acquired from her learnings. She practices what she has learned so far, one major practice being composting. It has been 6 years since the last time she wasted food scraps at her house, and she now has an unlimited supply of compost for her garden. Raising her seven-year-old son, currently expecting her second, while attending Arizona State University is her biggest challenge but also her biggest inspiration. Being a mother has helped her practice patience and creativity which in the end loops back around to her focus on sustainability.

Sharla Strong

Sharla Strong is an enrolled tribal member of the Confederated Tribes of Siletz Indians and is the Special Projects Coordinator for the Swette Center for Sustainable Food Systems at ASU. After graduating with her Bachelor's Degree from Marymount Manhattan College in New York City, she worked in Theater, Documentary, Corporate Communications and Longform News at MSNBC. Sharla returned home to Oregon in 2009 to start the Healthy Traditions project, which seeks to improve the health of Siletz tribal families through educational activities, which promote the use of traditional foods through hunting, gathering, gardening and cooking, food preservation and protecting our natural resources. This work included building a community-based program, working with youth and elders, and coordinating with outside agencies and food systems partners in the Western Oregon region. Sharla also worked as the Youth Development Director in the Siletz Behavioral Health Program integrating her work with traditional foods into experiential education and leadership activities for tribal youth. Sharla continues to teach, promote and advocate for Indigenous Food Systems both as a Siletz Tribal Member within the Siletz community and in her work with the Swette Center for Sustainable Food Systems.





Contact for more information:

Swette Center for Sustainable Food Systems Email: foodsystems@asu.edu | Website: foodsystems.asu.edu

Swette Center for Sustainable Food Systems is a unit of ASU School of Sustainability