

Sustaining New England's iconic tourism landscapes: An exploratory study to examine perceptions of value from farmers and fishermen

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Abstract

Tourism generates billions of dollars in New England. Maine and Vermont rely heavily on the iconic imagery of lobstering and dairy farming to attract visitors to their states. The collapse of either industry would not only deal a direct economic and cultural blow to their respective states but be compounded by their impact on the tourism industry. How do these industries work in symbiosis

with tourism? From the biological world, symbiosis is the close interaction of two different species in a mutually beneficial or parasitic relationship. To what extent do these primary sector industries benefit from tourism and how might the benefits of tourism be more effectively shared with farmers and fishermen? Using in-depth interviews, this exploratory study captures perceptions of tourism's value to farmers in Vermont and fishermen in Maine as a place to start this important conversation. While tourists consume less than 10% of the bounty from Vermont dairy farmers and Maine lobstermen, producers capture a variety of other benefits from tourism, including such economic benefits as the opportunity to promote their company or industry brand, attract new customers, generate supplemental income, and create employment

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opportunities, along with non-economic benefits such as the opportunity to provide authentic experiences, create great places, showcase their conservation efforts, and highlight their family's pride and heritage. Public policy could redistribute the benefits of tourism to facilitate a more mutually beneficial symbiosis, including direct subsidies to producers, preservation of working landscapes, marketing and branding activities, and investment in cooperative infrastructure.

Keywords

Tourism, Agritourism, Aquatourism, Public Goods, New England, Maine, Vermont, Lobster, Dairy, Multifunctionality

Introduction

Tourism plays a significant role in the economy of New England, where the states of Maine and Vermont are both popular destinations. In 2019, 36 million people visited Maine, spending US\$6.5 billion, which generated 9.6% of the state's GDP and 18.7% of employment (Maine Department of Labor [Maine DOL], 2020; Maine Office of Tourism [Maine MOT], 2020; U.S. Department of Commerce, Bureau of Economic Analysis [U.S. DOC BEA], 2020). During the same period in Vermont, 13 million visitors spent US\$3 billion, generating 8.6% of the state's GDP (U.S. DOC BEA, 2020) and 10% of employment (Vermont Department of Labor [Vermont DOL], n.d.; Vermont Department of Tourism and Marketing [Vermont DTM], n.d.).

Tourism in both states derives enormous value from agriculture and fishing. These natural resource-based industries create the iconic landscapes visitors long to see, including red barns surrounded by sugar maples nestled among rolling fields full of grazing cows, and picturesque harbors where lobster boats float alongside docks on which traps are stacked next to shingled shacks hung with buoys. Wood-planked dairy barns and cows grazing in pastures are vacationers' images most associated with Vermont (Werneke, 2010), driving tourism to the state (KarenKarp&Partners, 2020). In Maine, 62% of visitors are motivated by culinary interests, with 57% reporting that they ate lobster and other local seafood (MOT, 2020).

While Maine and Vermont's tourism heavily

depends on the iconic imagery of dairy farming and lobstering, these industries are under constant pressure from global economic forces that threaten their continued viability. In 2017, 6,808 farms in Vermont generated US\$781 million in sales, with milk accounting for 65% of the state's total agricultural value (U.S. Department of Agriculture National Agricultural Statistics Service [USDA NASS], n.d.). At US\$2.2 billion per year, dairy's impact on the state economy is significant, generating US\$3 million per day in circulating cash and between 6,000 and 7,000 jobs (Vermont Milk Commission, 2019). The number of dairy farms, however, has plummeted from 4,017 in 1969 to 636 in 2020 (Hoffer, 2021) as farmers nationwide face a crisis of low prices caused by chronic overproduction and consolidation (Howard, 2021; Muirhead, 2014; Rathke, 2021; Vermont Milk Commission, 2019). Dairies with fewer than 200 cows are disappearing, while those with more than 500 are increasing (Heintz, 2018; Hoffer, 2021; Vermont Sustainable Jobs Fund, 2021). The disappearance of small dairy farms as the sector consolidates into industrialized operations threatens to undermine Vermont's iconic pastoral imagery—"green rolling hills populated with livestock and picturesque dairy barns" that, according to a recent marketing study, "drives much of the state's tourism activity and public perception" (KarenKarp&Partners, 2020, p. 2; Werneke, 2010).

The lobster industry faces equally dire challenges. In 2020, 5,773 Maine lobstermen harvested 97.9 million pounds of lobster worth US\$412 million (Maine Department of Marine Resources [Maine DMR], 2022a), which accounted for 79% of the market value of all fisheries (Maine DMR, 2022b). Some scientists have called Maine's dependence on lobster a "gilded trap" unlikely to withstand a precipitous decline caused by environmental, economic, or political turbulence (Steneck et al., 2011). In fact, Maine is currently experiencing all three events at the same time. In 2018, China, which represented a growing middle-class market for lobster, enacted a retaliatory tariff that caused exports to plummet by 50% (Walcott, 2020). Federal regulations designed to protect the endangered right whale species have added to the cost of lobstering and, along some parts of the

coast, shut down fishing altogether during migration season (Routhier & LeClaire, 2021). Development pressure threatens water access as wealthy homeowners vie for waterfront properties (Carey, 2021). In addition, lobstermen are protesting offshore wind developments (Carrigan, 2021) and large-scale aquaculture (Hoey, 2021). The greatest long-term threat to the industry, however, is climate change. Since 2004, the Gulf of Maine has been warming faster than 99% of the world's oceans (Pershing et al., 2015). Warming water is associated with a disease that affects the hardness of the lobster shell as well as with an overall migration of the species north (Albeck-Ripka, 2018).

Although the iconic imagery of farming and fishing contributes to a lucrative tourism industry, producers themselves struggle to capture the value of their own cultural labor. Unlike dinners and hotel rooms, scenery cannot be provided only to paying customers and withheld from those who do not pay, a central challenge faced by individual farmers and fishermen (Baldock et al., 2011; Batie, 2003; Harvey, 2019; Mathews, 2012). This paper explores the need to alter the symbiosis between tourism and the primary sectors in favor of a mutually beneficial relationship, rather than a parasitic one.

Literature Review

Farmers and fishermen in New England do not earn much money from tourists. In Vermont, 13 million visitors spent approximately US\$745 million on food in 2019, with an estimated 11%, or US\$82 million, on dairy (Vermont DTM, n.d.). This represents 6.3% of the dairy industry's US\$1.3 billion in sales (Vermont Dairy Promotion Council, 2015). In Maine, 26% of the state's 36 million visitors ate lobster during their trip, spending approximately US\$45 million; this represents 9.3% of the industry's total catch and 2.6% of tourists' food expenditures (Maine DMR, 2020; MOT, 2020). Thus, less than 10% of the market value of dairy and lobster is consumed by tourists. Consumption of these products represents 2.7% of Vermont's US\$3 billion tourism industry and less than 1% of Maine's US\$6.5 billion tourism industry.

The very presence of tourists undermines the authenticity of rural landscapes. Enjoyment of the positive externalities created by farming and fishing

invariably subjects producers to the "tourist gaze," which organizes landscapes around what visitors expect to see, sometimes blinding them to the poverty endemic in rural life (Urry, 1990). At its most benign, the tourist gaze interrupts work, leading to incessant distractions from visitors who pepper producers with questions. In one Maine town of fewer than 5,000 people with 79 commercial wharves, visitors often block roadways and driveways to photograph working fishermen, leading neighbors to complain to producers "simply for existing" (Grindle, 2017, p. 27). At worst, the tourist gaze can romanticize rural areas, imposing classist demands that producers exist to serve the tourist economy and that activities be staged for their benefit (Urry, 1995). Thus, the tourist gaze has the potential to drive the fundamental restructuring of the landscape away from production and toward entertainment, contributing to a parasitic relationship.

Dairy farming in Vermont and lobstering in Maine provide services for which producers are not compensated. In the case of farming, these public goods can include the conservation of natural resources; provision of habitat for biodiversity; rural business activity and economic development; and maintenance of culturally valuable landscapes and architecture (Cooper et al., 2009; Jervell & Jolly, 2003; Mander et al., 2007; Olsson & Rønningen, 1999; Organization for Economic Co-operation and Development [OECD], 2001; Otte et al., 2007). In the United States, these positive externalities are accepted as unintended side effects generated automatically, without producers or public agencies deciding to allocate resources to them (Aznar et al., 2007). European policy, on the other hand, has long recognized the necessity of spending public money for public goods (PMPG), devoting significant subsidies to rural producers in exchange for the noncommodity benefits they provide (Baldock et al., 2011; Cooper et al., 2009; Harvey, 2019; Stolze et al., 2016). This characteristic of agriculture to produce not only food and fiber, but also an array of environmental, cultural, and rural development benefits is referred to as multifunctionality. Pressure to defend the subsidization of multifunctionality before the World Trade Organization has

generated a compelling case that its crucial benefits (e.g., flood control in the case of rice paddies) are inextricably tied to agriculture, constitute public goods, and cannot be produced separately from agriculture (Norwegian Ministry of Agriculture, 2002). This rational defense of multifunctionality could be used to make the case, for example, that Vermont should subsidize its working farms because they provide nontrade benefits that cannot be separated from their production value, e.g., regenerative pastures for dairy farming have a scenic value that supports tourism. Furthermore, tourists are willing to pay to preserve these landscapes (Yadev et al., 2013). While much of the rationale for the European Union's subsidization of multifunctionality rests on the generation of environmental externalities, Italy has supported agriculture's role in the tourism industry (Giaccio et al., 2018; Porcaro, 2009) where, in contrast to Vermont, agritourism is one of the major sources of income for farmers (Santucci, 2013).

The case for multifunctionality can also be applied to fisheries (Vaughan et al., 2021). Lobstering in Maine is particularly important for its cultural heritage value (Billings, 2014; Galdauskas, 2008; Lewis, 1997, 2010; Nash, 2021). It is not only the eating of lobster, but also the sight of lobster traps stacked on a dock and fishing boats floating nearby that are an essential part of the coastal experience (Billings, 2014; Lewis, 2010). Besides providing food that is largely exported, lobstering supports business activity in rural areas, such as boat repair, fuel, and ice (Grindle, 2017), which helps keep small towns alive.

What value do farmers and fishermen in New England place on tourism? Do they recognize their role in attracting tourism to their state? Most of what is known about what producers think of tourism comes from the literature on agritourism. Tew and Barbieri (2012) conducted a survey of 164 farms in Missouri that provided agritourism opportunities, describing 16 distinct motivators in four dimensions: (1) increasing farm profitability, (2) generating market opportunities, (3) enhancing family connections, and (4) pursuing personal interests. The strongest motivators were economic. Indeed, for small farms, agritourism is positively correlated with profitability (Schilling et al., 2014).

Non-economic reasons are also powerful motivators. Quella et al. (2021) conducted semi-structured interviews with 23 farmers and ranchers in five states, finding that agritourism provides many non-financial benefits, including quality of life, customer engagement, consumer education, and community and industry leadership. Some of these take priority over financial goals (Quella et al., 2021).

The current study builds on previous research by assessing the views of agritourism practitioners alongside those of nonpractitioners and shining a light on agritourism in relation to fisheries, an emerging field called "aquatourism." Agriculture and fisheries in Maine and Vermont are heavily dependent on singular commodities under constant pressure from global economic forces. While these cultural landscapes attract tourists to New England, it appears that tourism directly returns less than 10% of the market value of dairy and lobstering back into these primary sectors. The disappearance of dairy farming in Vermont and lobstering in Maine, however, would have a catastrophic impact on the broader tourism industry in each state. How can farmers and fishermen capture more tourism dollars to sustain their viability? How else can tourism add value to these industries without detracting from production—their primary purpose—and the authenticity they contribute to rural character? This research starts the conversation around these complex questions by looking at how tourism mutually benefits agriculture and fisheries from the perspective of producers, and also suggests ways they can work in a less parasitic relationship within and outside of traditional agritourism development.

Applied Research Methods

Research Question

Producers who sustain New England's iconic landscapes capture a very small percentage of direct tourism expenditures in Maine and Vermont. From the perspective of those farming and fishing, in what other ways might tourism benefit producers? How might producers benefit more?

Interview Strategy

A case study approach was chosen to capture both a breadth and depth of perspectives on tourism.

Case studies play a critical role in generating context-dependent knowledge, particularly when used to describe the dynamic actions of individual actors. The same case can also generate information at different levels of analysis, e.g., the firm and the industry (Flyvbjerg, 2006). This approach is particularly appropriate during the early stages of research or to provide “freshness in perspective” to a well-researched topic (Eisenhardt, 1989, p. 548). Theory-building research ideally begins with no theories and no hypotheses to test, which helps mitigate interviewer bias.

The research team began with the goal of generating knowledge about two different cases: farming in Vermont and fishing in Maine. Initial interviews were conducted with six professionals representing government, academia, and associations to illuminate background research and selectively identify producers for interviews. Invitations were emailed to an initial list of eight producers and two producer-led organizations. To recruit additional subjects, a snowball sampling technique was used whereby producers were asked to recommend others. Recruitment continued for a period of six months until a balanced distribution of responses between states was reached, and the attainment of new insights was exhausted.

Semi-structured interviews were scheduled for 30–40 minutes via phone, Zoom, or in-person. Each subject was emailed a consent form and list of questions in advance. The interviews, which ranged in length from 25 to 75 minutes, consisted of nine open-ended questions. The interviewer was given “freedom to digress” to follow emerging themes (Lune & Berg, 2017).

Responses from a total of 17 people were collected, including seven farmers and one industry professional in Vermont and eight fishermen and one industry professional in Maine. To protect confidentiality, no names are reported in this article. Twelve respondents were women, and five, men. By industry, five were part of the dairy sector, five in lobstering, three in aquaculture, two in diversified agriculture, and one in fiber.

Of the 17 respondents, five did not consider themselves to be practitioners of agritourism or aquatourism. Of the 12 who did, practitioners participated in varying degrees, including direct sales;

hospitality through food carts, pop-ups, restaurants, and lodging; education, including tours, farm stays, workshops, and retreats; entertainment, such as concerts; recreation, such as access to trails; and coordination and participation in culinary trails.

Analytic Strategy

The research team employed the principles of grounded theory to identify patterns and themes from the interviews (Glaser & Strauss, 1968):

1. Each interview was captured by detailed notes.
2. An inductive approach was used to open-code responses to each question, identifying themes within and across interviews.
3. Axial coding was used to connect latent meanings with broader themes, e.g., *regenerative agriculture* and *biodiversity* are examples of *environmental sustainability*.
4. A conceptual framework was developed, *Economic and Non-Economic Benefits*, with subcategories under each.
5. Interviews were selectively coded for a third time according to the conceptual framework, encompassing both manifest and latent themes expressed in response to any question, e.g., *a family-friendly atmosphere* is created through *Place-making*.
6. Only one instance of a theme expressed by a respondent was tallied.
7. Only themes expressed by at least one-third of producers were included.
8. Results were analyzed within and across cases.

Results

As shown in Figure 1, a variety of economic and non-economic themes emerged from the interviews. The top economic benefit from tourism was the opportunity to offer direct sales, while the top non-economic benefit was the opportunity to provide consumer education. Other economic benefits mentioned by interviewees included the opportunity to promote their company or industry brand, attract new customers, generate supplemental income, and create employment opportunities. Other non-economic benefits included the opportunity to

provide authentic experiences, create great places, showcase their conservation efforts, and highlight their family's pride and heritage.

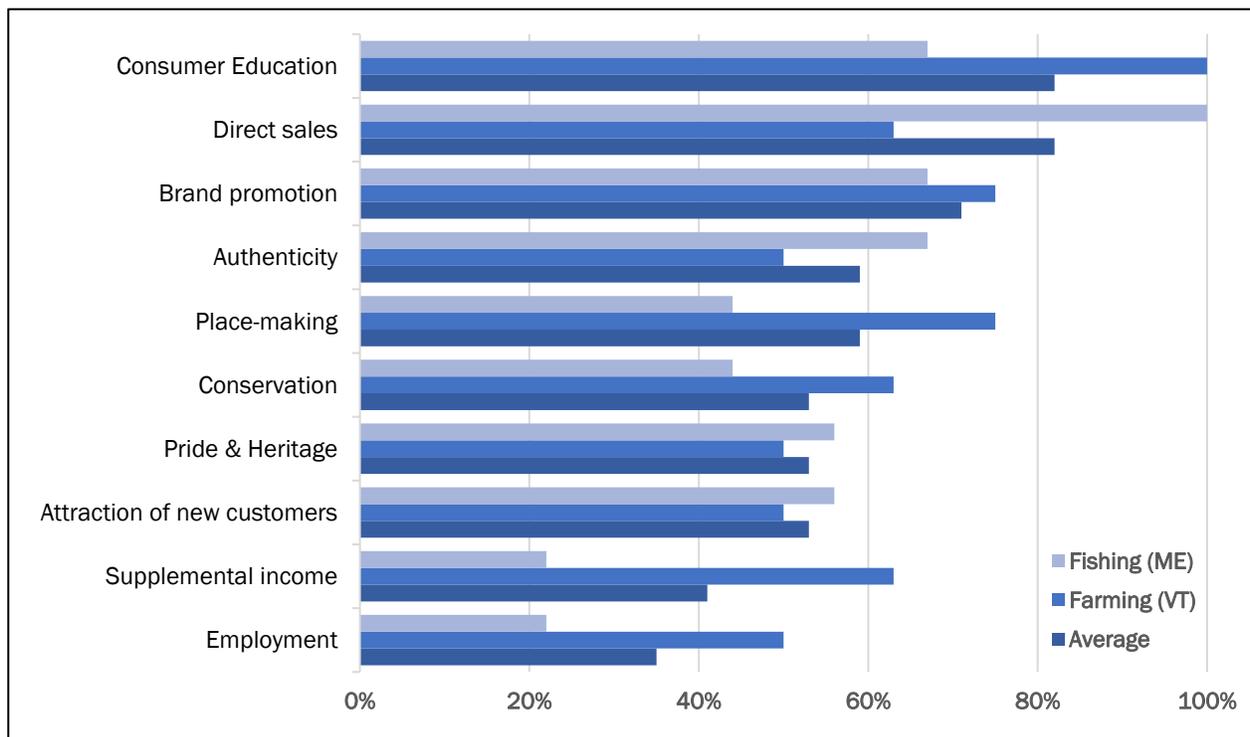
Economic Benefits of Tourism

Direct sales. Five of eight Vermont producers and all nine Maine producers cited the opportunity to provide direct sales as an important benefit of tourism. Terms used to describe this theme included *financial input, direct-to-consumer, income, margin, and cash*, along with mentions of specific sales channels. The primary sales channel for farmers was the farmstand, whereas fishermen sold off the dock or from their own restaurants, food carts, e-commerce platforms, roadside coolers, or homes. While some respondents maintained website, Facebook, and Instagram pages, others advertised with just a phone number in a local directory. One Maine oyster farmer who did not advertise confessed that, "We do sell direct-to-consumers, mostly to locals and out-of-towners who have a second, third, or fourth home here. They find us on the web. We have a farm stand in our garage on a self-serve honor system. ... People love it." For many

producers, direct sales take out the middleman, offering them a higher margin that is a critical component of their business model. For example, one Vermont dairy farmer who derived 95% of revenue from wholesale described how they were able to capture a premium for selling retail ground beef from bulls culled from the herd, which helped them stabilize their income. "Otherwise, you don't get much for those cows," they remarked. "But we can feed our family and friends with food they appreciate. The [retail] business has grown every year. Plus, when tourists come to the store, they can feed chickens and see the cows." For fishermen, being in a tourist-friendly area translated to a bump in sales price during the high season of summer. Another benefit of tourism was the opportunity to feature local farm and fishery products besides their own, through either a farmstand or foodservice channel.

Brand promotion. Six of eight Vermont producers and six of nine Maine producers cited the opportunity for brand promotion as an important benefit associated with tourism. Terms to describe

Figure 1. Economic and Non-Economic Benefits of Tourism Cited by Producers



this theme included *reputation, image, and best in the world*. Some producers ascribed the benefits of brand promotion directly to their own business. For example, one Vermont farmer stated that their consumer-education efforts helped brand the farm, driving direct sales. Other farmers who did not offer direct sales still recognized that tourism facilitated sales in their industry. “We didn’t get many direct sales from the tourists at [local resort],” explained one Vermont dairy farmer. “But we gained support for [national dairy brand] and that resulted in increased milk sales for [them]. We’ve traveled to events around the country with them and we want to be good stewards of the brand.” Other producers recognized that the economic benefits of brand promotion extended to a variety of products in their industry. “Tourists want to support small local businesses,” stated one Maine lobsterman. “They want to eat seafood from Maine—mostly lobster but the reputation extends to other species, like crabs, oysters, and fresh fish.”

Attraction of new customers. Although many producers depend on a regular local market, tourism attracts new consumers who not only buy direct but eagerly attend special events. “We depend on repeat local residents, especially with raw milk,” explained one Vermont dairy farmer. “That said, we can offer only so many cheesemaking workshops to local residents. So, visitors, especially second homeowners, come to our workshops and bring us weekend traffic.” Four of eight Vermont producers and five of nine Maine producers cited the importance of tourism in generating a new audience of consumers to buy their products and services. Due to cultural differences, visitors add vitality to special events. “During the high season, 20% to 30% of the people who come here are from out of town. It’s fun to meet people from away. This is not *Yankee* magazine. We are funky and authentic,” explained another Vermont farmer. “People driving this part of the state will make a wrong turn and end up here. We blow their minds with a genuine experience. With the lambs in the field, it’s a real community, and they connect with that brand.” These special events play an important role for producers, attracting visitors from out of town, introducing newcomers to the community,

and serving as the gateway to direct sales. While distance imposes a significant constraint on retaining tourists as regular customers, special events contribute to the culture of a community, influencing whether visitors return on vacation or purchase a second home in the area. The latter, however, contributes to development pressure, which was cited by producers as the greatest negative impact of tourism. “People come to Maine for vacation. Tourism augments the industry. But then people buy real estate because they like it here and that threatens the industry,” explained one Maine oyster farmer. “With the working waterfront, there is always going to be that threat. We bought our house 20 years ago, and no local has moved in since then. But five or six out-of-staters have.”

Supplemental income. Five of eight Vermont producers and two of nine Maine producers cited the importance of agritourism in generating supplemental income. Supplemental refers to income from channels beyond direct-to-consumer, such as guided tours, lodging and meals, and fees from recreation and special events. Technology platforms like Yonder and Airbnb Experiences have enabled producers to monetize an activity, such as a tour, that they used to give away for free. What starts out as an experiment can quickly turn into an essential driver of their business model. “1984 was the really bad year for dairy,” recalled one Vermont farmer. “At first, we did it to get us through the downturn, but there has never been a year when the income wasn’t critical to the season. . . . The cows can pay for the cows but someone has to pay for the family. For us, agritourism has been the family living component.” The amount of supplemental income generated by agritourism varied wildly between respondents, ranging from 5% to 50% of sales. Some indicated that the pendulum has swung too far in the direction of agritourism. “People will push boundaries, send their kids out to the field, go into barns without permission,” explained one Vermont dairy farmer who decided to cut back on special events. “At one time, we were hosting a potluck once a week. We also had concerts that would draw 20–30 right into our living room. With all of that activity, people started to look at us as a public space without boundaries.”

Maintaining clear boundaries between public access and private living or commercial production spaces was paramount to producers practicing agritourism successfully and sustainably and harkens back to the warnings of Urry.

Employment. Four of eight Vermont producers and two of nine Maine producers described the importance of tourism in generating seasonal or year-round employment for locals. “If it wasn’t for tourism, I couldn’t be a farmer. My husband is in the construction industry, building houses for second homeowners. I can’t make enough from farming to support my family,” lamented one Vermont dairy farmer. “Without tourism, I would not be farming.” Other producers found such demand for their agritourism enterprises that they were able to hire workers to manage or implement them. “During the high season, we host a weekly pizza night that draws about 100 people, with music and craft beer. We’ll have 14 workers on the farm,” described another Vermont farmer. “Between pizza night and the store, we anchor the town. Farms are places where community happens.” For some producers, their “go-to” source for workers was family and friends, possibly because these jobs were seasonal or part-time. In other cases, producers desired an ambassador they trusted who reflected their values. Others were deliberate about growing their enterprise the way any small business might aspire. “We want to keep growing, but we need to find the right balance,” stated one Maine oyster farmer. “What is the right level? So, you can still know everyone, but keep that startup energy.”

Non-Economic Benefits of Tourism

Consumer education. All eight Vermont producers and six of nine Maine producers described the personal satisfaction they receive from educating customers. Terms used included *teach*, *engage*, *higher purpose*, *feedback*, *childlike wonder*, and *lightbulb moment*. While some were describing this connection as a regular outcome of their agritourism enterprise, others received personal satisfaction from an incidental encounter that they wanted to make more predictable and purposeful. For the most part, the establishment of a personal connection served as the driver for a more expansive agenda, whether

hidden or explicit. “I get the personal satisfaction of touching people’s lives. We create these emotionally powerful experiences that we hope will change their behavior later—eat local, choose organic, don’t use pesticides. It’s like a domino effect of human behavior,” explained one Vermont farmer. Indeed, most were explicit about wanting to change consumption patterns, using terms like *mindset*, *choice*, and *behavior*. By changing hearts and minds, if only one person at a time, they believed that the benefits would accrue not only to their industry but for the betterment of the environment. “We want visitors to understand that the Maine oyster is as elite as the lobster and why Maine has the best oysters in the world. We also want them to understand aquaculture as a whole, to turn to the water and learn how we grow the sustainable seafood that’s important to the planet,” declared one Maine oyster farmer. “If you look at it on a micro-scale—one pound of beef versus one pound of farm-raised salmon, fish is more sustainable. But the bivalve is the most sustainable protein on the planet because it also improves water quality.” In this way, producers leveraged their personal satisfaction in educating consumers to the level of a mission, especially when they perceived that the public does not have accurate information. “My big goal ... is to talk to people. People have come up to [me] and said, they can’t believe I’m a fisherman: I must hate the environment. Others have said, ‘How do you sleep at night?’ There’s so much [negative] propaganda out there,” lamented one Maine lobsterman. Removing the veil of mystique around lobstering might help change public policy. Such a campaign was coined by one respondent as, “Save a lobsterman.”

Authenticity. The desire to educate consumers is deeply connected to authenticity. “We are the opportunity to engage people and teach them where their food comes from. People have the desire to connect and engage with something that’s authentic,” declared a Vermont dairy farmer. “Sometimes, our visitors tell us that they gave the kids a choice between Disney World or the farm. Obviously, the ones that came chose the farm. There are no crowds and no 45-minute wait lines.” Four of eight Vermont producers and six of nine Maine

producers described the opportunity to engage visitors in an authentic experience as a valued benefit of tourism. Terms used to describe this theme included *real*, *reality*, *experience*, and *genuine*. Some producers described authentic interactions with customers as part of scheduled agritourism activities. “We wouldn’t be open if we didn’t have tourism. Seafood does not have a long shelf life: you have to move it. ... There’s no smoke and mirrors. We think it’s important to be authentic and true to who you are. It’s classic and picturesque,” explained the wife of one lobsterman, who operated a trap-to-table restaurant. “When he’s lobstering, my husband is tired, and he is dirty. It’s so far removed from the reality where people are traveling from. I always make it a point to ask where my customers are coming from. Virtually all of them work 9-to-5 in big metropolitan areas. They ask, ‘How long have you been out? You haul traps with your hands?’ Lobstering is so far removed geographically and culturally from what they do.” Similar to brand promotion, the authenticity associated with direct interaction with farmers and fishermen was considered by respondents to be part of the genuine brand attraction of Maine and Vermont.

Place-making. Six of eight Vermont producers and four of nine Maine producers described the quality of place they were trying to build through agritourism. Terms used to describe this theme included *family-friendly* and *kid-friendly* along with *bond*, *mission*, and *anchor*. The mix of tourists with locals adds an intangible vitality to special events. “There are three overlapping spheres. True locals. True tourists. Then there’s the middle group, who have some connection and have chosen to make Maine their home. We need to keep all three of those spheres,” explained one Maine oyster farmer, who recognized their goal as engagement and not entertainment. “We really want the community aspect so that we get people coming back year after year for a cocktail hour on Saturday night or to learn how to make a lobster roll. ... It’s not super templated. It’s not a corporate structure but collaborative by design.” Other producers described the importance of tourism in improving the physical quality of place in their villages and downtowns. “It used to be deserted down here. The waterfront was more

industrial, with several chicken processing plants. Now people will come down for a walk with their dogs and it’s more of a destination,” described one Maine lobsterman.

Pride and heritage. Four of eight Vermont producers and five of nine Maine producers described how tourism enabled them to share their pride in sustaining the heritage of their family. Terms used to describe this theme included *proud*, *privileged*, *pioneer*, *passion*, and *honor*, along with the generations of family members before them. For the latter, pride was grounded in the heritage of their background. “My great grandfather was a sword fisherman. My grandfather was a lobsterman. My father was a lobsterman. My son is probably going to be a lobsterman. So that’s five generations,” explained one Maine lobsterman. “People will ask, ‘How do you get to be a lobsterman?’” For some, pride was simply the act of being observed, whereas others described the pride associated with visitor interaction. “There is a couple from New York City who live up the road. They started with pizza night, then the CSA, and now they shop every day at the store. Their baby was born on the last CSA pickup of the year. On their way home from the hospital, they stopped by the farm and picked up their share. We got to meet the baby,” recalled one farmer. “So, we are ‘their farm.’ That is truly an honor. We supply their whole diet.” For this Vermont farmer, the emotional connection generated by community engagement provided validation during times of chaos.

Conservation. Five of eight Vermont producers and four of nine Maine producers described the opportunity to showcase their efforts to protect the environment as an important benefit of tourism. Terms used to describe conservation practices included *preservation*, *sustainability*, *biodiversity*, *regenerative agriculture*, *stewardship*, *climate change*, and *lushness*, along with concern for rural working landscapes and the elimination of pollution. This environmental ethic is part consumer education and part conservationist. “The intangible [benefit] is creating a positive experience for visitors with a livestock and dairy farm. ... A lot of people have a negative view of livestock because they contribute to climate

change,” explained one Vermont dairy farmer, “but our farm embodies the tenants of regenerative agriculture. We sequester carbon, which has beneficial impacts for people down the watershed.” Although many respondents enjoyed connecting with customers, their ultimate goal was not only to change behavior but to model the change they wanted to see in the world, where regenerative agriculture is the new organic. “You see it in the biodiversity of the species and the lushness of the grass and the way the wildlife has come back,” described one Vermont dairy farmer. “We see it especially in the pastureland and the return of clovers, which has gone bonkers.” For these and other farmers, the desire to educate is ultimately rooted in a conservation ethic. “We are trying to set an example of how to farm in a way that preserves the environment,” explained another Vermont dairy farmer.

This conservation ethic is also strong on the waterfront, where it manifests itself as a zero-tolerance policy on pollution. “All the lobstermen are into preserving the land and very much against pollution of the ocean from plastics and oil,” described one Maine lobsterman. “The wharf down here is really good. If there is even a small drop of oil, they are ready with Dawn [dish detergent] to clean it up. We work really hard to preserve the environment.” While many fishermen welcomed the opportunity to demonstrate by example, they were vocal about the negative impact of some parts of the tourism industry on their ability to earn a living, e.g., cruise ships dumping raw sewage and megayachts cutting through their fishing lines.

Discussion

Given their vulnerable markets and fragile landscapes, exploring how agriculture and fisheries might capture more of the tourism sector’s rising prosperity is important. Producers interviewed indicated that tourism can benefit farmers and fishermen in a variety of ways that are not well-reflected in sales data—ways that might be further supported in order to develop a more positive symbiosis between these industries.

The cultural landscapes sustained by agriculture and fisheries are positive externalities that form the basis of the Vermont and Maine experiences. Producers recognize that they are the subject

of the tourist gaze, driving tourism to rural working landscapes even if they are not directly engaged in agritourism or aquatourism. “Lobstering is a huge interest for a lot of visitors. They want to try it and taste it, especially the softshell lobster. They come for the experience of eating seafood at restaurants and seafood shacks on the water where they can enjoy a nice view,” explained one Maine lobsterman. “They stop in the parking lot and take pictures of the fishing boats. They always want to come over and talk to me.” While the tourist gaze risks the loss of authenticity, those interviewed recognized it as an opportunity for engagement and consumer education.

Besides attracting tourism, producers perceive that they form the bedrock that keeps towns and villages alive for locals and visitors alike, especially in times of crisis like the COVID-19 pandemic. These perceptions were mostly discussed within a positive framework and described as a source of pride, within limits. “We are that literal postcard with the rolling hills dotted with pastures. Although we have seen breakdowns in the local food system during COVID, it’s the dairy economy that built the agricultural railroad. We are the working capital for Vermont farms,” declared one Vermont dairy farmer. “Dairy keeps the feed stores in business and the fire department staffed. This is all part of a rural resiliency that’s taken a lot of hits.”

However, whether measured by GDP, jobs, or wages, revenue from tourism in Maine and Vermont greatly exceeds that from agriculture and fisheries. Moreover, producers do not directly capture a share of the rising prosperity of tourism unless they fundamentally reorient their business model toward agritourism and aquatourism, which is not a viable option or desire for many. Without a mechanism beyond agritourism to monetize these positive externalities, other solutions are needed.

State Subsidies for Farming and Fishing

One solution is a subsidy to maintain working rural landscapes. However, a state subsidy has not been done on a significant scale before. In fact, only one respondent called for a direct subsidy of tourism dollars to producers. “A portion of tourism dollars should be returned to farmers to maintain Vermont,” suggested one farmer. “Vermont should

say, ‘Here is your set lump sum from the state as a maintenance for tourism.’ ‘We believe in our local food system, we love our farms,’ but it’s just talk. There is no financial or economic infrastructure behind it.”

Another option is to incentivize modernization. An emerging example is the North Atlantic right whale situation, which was raised by most of the lobstermen interviewed. Scientists estimate that there are fewer than 350 right whales left (National Oceanic and Atmospheric Administration, 2022); the species has been decimated by ship strikes and rope entanglements in the U.S. and Canada. On August 31, 2021, the National Marine Fisheries Service enacted a seasonal closure from lobstering of a 950-square-mile area in the Gulf of Maine, which was upheld by the U.S. Supreme Court. While public relations were not enough to override federal policy, it has spurred Maine lawmakers to action, with consideration of a US\$30 million fund, partly derived from tourism revenue, to help lobstermen invest in ropeless traps (LaClaire, 2022). If funded, this program would represent a direct subsidy to producers, which would be a marked change from Maine’s track record of providing indirect subsidies through actions like land protection.

Land Conservation for Agriculture and Fisheries

While producers enjoyed opportunities to showcase their conservation efforts, they also recognized that tourism generated development pressure that negatively affected their industry. “We have to pay for parking, and we have to pay for the berthing,” noted one lobsterman. “These are traditional Maine occupations, but we are getting priced out.” Indeed, over 70% of respondents described how competition for real estate was a real threat to their business. These challenges have only intensified during the pandemic, with an estimated one-third of Maine real estate listings swallowed up by homebuyers from out of state (Landry, 2021). Competition is robust for waterfront and farmland alike. “Today I saw more plates from out-of-state than Vermont. People are buying up all of the houses and all of the land. Farms and land trusts can’t compete with them,” described one dairy farmer. “You have to draw lines and prioritize the viability

of small farms.” Some producers faced a paradox: with tight production margins, they relied on pluriactivity, such as employment in the residential construction sector, to provide a second income. Yet these new homeowners might fragment parcels of land needed for pasture or object to the noises and odors inherent to farming operations.

One method of preserving land is the purchase of development rights to provide permanent protection. Since 2008, the Land for Maine’s Future Program has invested millions of dollars to permanently protect 29 waterfront properties totaling 44 acres, including wharves and piers that provide access to the water for working fishermen, along with space for fishing-related co-ops. Increasingly, such projects are occurring through nonstate players. In 2021, the Gulf of Maine Research Institute (GMRI) purchased Union Wharf in Portland for US\$12.35 million. Built in 1793, the wharf is described as a “firewall” between the tourism-focused Eastern waterfront and the industrial-focused Central zone. While not the highest bid, GMRI’s was chosen because of its vision to sustain the working waterfront, including a commitment to provide wharf space for fishing vessels and their suppliers, with costs for maintenance and improvements underwritten by tenants on the upper floors engaged in the “blue economy” (Woodard, 2021) —“the sustainable use of ocean resources for economic growth, improved livelihoods, and jobs while preserving the health of ocean ecosystem (United Nations, n.d., para. 1).

Beyond states and nonprofits, another way to raise revenue is by actually charging visitors for the positive externalities provided by farmers and fishermen. For example, this fee could be tacked onto a lodging charge. Research demonstrates that visitors are willing to pay a modest sum for these positive externalities if there were a mechanism to compel their contribution (Yadav et al., 2013). Such a funding mechanism also benefits those not involved in agritourism or aquatourism.

Marketing and Branding

When asked how the tourism industry could support them, practitioners of agritourism and aquatourism desired more state and industry support for marketing and branding. For example, the

Maine Aquaculture Association and the Vermont Cheese Council both sponsor culinary trails that list over 50 sites that welcome the public for tours, direct sales, samples, and meals. These trails not only drive visitation to individual farms; they extend the benefits of brand promotion to places and regions, such as the Damariscotta River in Maine, known as the “Napa Valley” of oysters. “Having so many options through the Maine Oyster Trail keeps more people interested in oysters. Although we are all competitors, it will raise all boats,” explained one Maine oyster farmer. “Someday, it could be like wine country, where the *terroir* supports a certain flavor profile.”

Trails not only showcase the industry but reinforce each state’s brand. “Vermont benefits from having a national ethos built around fresh air and clean water,” explained one Vermont dairy farmer. “It’s rolling hills with little villages, along with that community feeling.” On an annual basis, over 20,000 unique visitors explore the Vermont Cheese Trail website, which exposes the brand to a global audience even in the absence of visitation. In fact, not a single cheesemaker closed during the pandemic, with those that sold online faring the best. This example offers some evidence that the benefits of culinary trails accrue even to producers who are not open to the public and do not participate in agritourism directly. To achieve broader economic impact, state tourism dollars should invest in technology platforms that make it easier for visitors to discover these experiences and plan their itineraries around them, along with increasing marketing efforts to facilitate the purchase of New England products once they return home as a way of reliving their vacation experience. In addition, digital directories could highlight where to buy the products of working farms and waterfronts, whether or not they participate in direct sales.

Cooperative Infrastructure

Of the practitioners interviewed, 60% were making plans to increase their aquatourism and agritourism ventures. Despite this enthusiasm, offering tours does not make economic sense for every producer. “I’ve got 800 traps. Every day, I haul 200 to 300 of them,” explained one Maine lobsterman. “I get up at 4 AM, on the boat by 5, then I get back by 3

PM. Then it’s bait and fuel after that.” Besides a schedule that places them away from shore for a good part of the day, fishermen are limited legally in their capacity to transport visitors. Whereas ambitious farmers could give tours to 50 people at a time, most fishermen hold a “6 pack” license that limits them to six people on their boat at a time. Fewer than 10 of Maine’s 4,500 lobstermen offer tours by boat. Another challenge is a physical layout that precludes engagement. “I work out of the town dock. It’s a really busy, intimidating environment for a tourist. Not a good time to communicate,” explained one Maine lobsterman, continuing “They aren’t really allowed on the dock.” The mystique of the lobstermen might even be reinforced by the absence of engagement; they leave in the early morning hours when tourists are sleeping, they operate from industrial wharves that do not permit visitors, and they rarely offer tours to the public. Unless working waterfronts are positioned within view of the public gaze, interaction might be limited to a telescopic lens from a ferry boat.

Potential solutions include the creation of tourist infrastructure that benefits producers but does not make them create a new venture. This model is already at work in Maine’s oyster industry, where tour operators who are not producers themselves run boat and kayak tours that stop at selected oyster farms for a spirited talk with a fisherman and a sampling of fresh oysters. Thus, the tour operator assumes the risk while the producer benefits from a flat fee for their time, retail price for their oysters, and the opportunity to sell both swag and oysters-to-go. This model is similar in spirit to a foodie tour where the operator stops at various restaurants, paying retail price for samples they make available to a large group of people.

On a microscale, this model has been deployed by boat operators who provide a demonstration of lobstering using an educational license and/or led by a retired producer. How might this scenario be applied to working lobstermen? Perhaps a tour operator could narrate from a separate boat, at a safe distance, conducting an interview during an appropriate pause in harvesting. Another model might apply the demonstration approach on a boat owned in common with producers or create a safe place on a working dock where direct sales and/or

consumer education can be offered. While lobster pounds have traditionally served this role, these places rarely offer the opportunity for direct interaction with fishermen. Another option could involve work in exchange for education, such as “fisherman for a day,” where tourists voluntarily do chores during an overnight lodging stay. Another concept that might be expanded is pick-your-own operations, where visitors pay to harvest product. Although such a model might require training, a higher charge, akin to a charter fishing expedition, could make the investment worth it.

Conclusions

The perceived quality of productive landscapes drives tourism to working waterfronts and rural areas in New England. While producers recognize that they play an important role in shaping and sustaining these iconic landscapes, farmers and fishermen do not appear to receive much in the way of direct monetary benefit from tourism. Tourists purchase less than 10% of the bounty from working landscapes, accounting for less than 4% of tourism’s total revenue. In-depth interviews with producers in Maine and Vermont reveal that there is potential for a mutually beneficial relationship between tourism, agriculture, and fisheries that leans toward symbiosis. To accomplish this goal,

public policy could redistribute the benefits of tourism to include direct subsidies to producers, preservation of working landscapes, marketing and branding activities, and investment in cooperative infrastructure. As a next step, a descriptive survey could be distributed to a larger set of farmers and fishermen through their industry associations to test the viability of these policy recommendations.

Additionally, this exploratory study builds on the work of Tew and Barbieri (2012) and Quella et al. (2021) by validating that fishermen participate in aquatourism for many of the same reasons that farmers participate in agritourism, while also introducing new motivations, such as the desire to promote the brand, authenticity, and conservation practices of their industry and state. This study is one of the pioneers to use an expanded definition of aquatourism, which has traditionally referred to such watersports as sailing and diving, to include educational, hospitality, and recreational experiences led by working fishermen. Aquatourism activities led by working fishermen in this study included direct sales on the dock and farmstand as well as through e-commerce platforms; food-service through catering, restaurants, food carts, and pop-ups; special events, such as tastings, festivals, and workshops; and boat tours with product samplings.



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