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Eco-Friendly yet Unsustainable:
The Impact of Eco-Tourism on the Sustainable Development of Martha's Vineyard

By
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Submitted in partial fulfillment of the requirements for Graduation *summa cum laude*
and
for Graduation with Highest Honors from the Department of Communications
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Abstract

This thesis examines the ecotourism industry on Martha's Vineyard to determine its impact on the sustainable development of the Massachusetts island. As the tourism industry continues to grow, so to will tourism's carbon footprint. With increasing awareness of current and future carbon emission problems, tourism businesses are increasingly shifting to a more environmentally conscious approach known as ecotourism. The island of Martha's Vineyard has championed ecotourism efforts to boost its economy while combatting environmental issues. Yet tourism can also have a negative impact on local communities and the environment. This case analysis of Martha's Vineyard reveals that the industry has both a positive and negative effect on the environment and economy of the island. Definitions of Ecotourism and Sustainable Development are provided, and a brief overview of the history and topography of Martha's Vineyard is shared for context. Key aspects of the ecotourism industry on Martha's Vineyard are examined, including transportation, accommodation, services, agriculture, food, and awareness. The analysis produces five key areas of focus for the island to prioritize truly sustainable development through ecotourism: adopt a preservation mindset; limit tourists and lift locals; focus on the local economy; collaborate; promote ecotourism efforts.

In the spirit of promoting ecotourism efforts, the final portion of this research examines the role of visual rhetoric in shaping public awareness of environmental concerns and ecotourism offerings. For the creative portion of the thesis, I have created a piece of visual rhetoric in the form of a video. The short video aims to capture the beauty of the natural environment of Martha's Vineyard and shed light on a complex ecotourism economy's effort to thrive. The goal is to raise a level of awareness that forces us to acknowledge the harmful realities of tourism; and connects us to the unique opportunity this industry has, to be a catalyst for change.

The tourism industry can be defined by its ability to get people where they want to go. When most people think of tourism, they often think of flights and hotels, yet this vast industry comprises many more activities. Travel arrangements include both transportation and lodging, but also services, construction, agriculture, food and beverages, and goods. These activities combine to form a carbon footprint that grows bigger every day. Therefore, global tourism can also be defined by its impact on the environment—it's effect on the very world we wish to see when we choose to travel. Today, "Tourism is responsible for roughly 8% of the world's carbon emissions" (Carbon Footprint of Tourism). U.S. travelers top the list of contributors to this footprint. As this industry continues to grow, with the aim of making travel increasingly available to all, so too will tourism's carbon footprint. The world cannot afford for this expansion to be at the cost of our environment. With increasing awareness of current and future carbon emission problems, many tourism businesses have shifted to a more environmentally conscious approach known as ecotourism. One unique community in the U.S. has championed ecotourism efforts to boost its economy while combatting environmental issues.

Martha's Vineyard is an island located south of Cape Cod in Massachusetts. What was once a quiet, rural community has been transformed by the tourism industry, which today brings some 200,000 people across on the ferry boats each summer. While the island has drastically changed over the last fifty years, it remains a unique community that takes pride in its environment, from preserved lands, to wildlife, to the abundance of environmentally conscious local businesses. The Vineyard's community has taken drastic measures to ensure that the tourism industry which boosts the local economy does not simultaneously destroy the natural beauty, leading to the development of what is today an abundant eco-tourism industry. The island's local businesses and preservation societies work tirelessly to preserve natural

environments and encourage awareness and conservation across all segments of the population, from the locals to the tourists.

As the tourism industry on island continues to thrive and grow, so too does the cost of living. Issues of income inequality, inflow and outflow of workers, and full and part time employment are also disrupting this small island economy, making it increasingly hard for locals to live and work in the place their families have called home for generations. This paper examines the impact of eco-tourism on Martha's Vineyard, assessing factors that both help *and* hinder the sustainable development of the local community. Ultimately, the eco-tourism industry on Martha's Vineyard has had a complex impact on the sustainable development of the community—both positively and negatively affecting the environment and economy of the island. The efforts of this island to embrace eco-tourism and overcome the negative effects of the industry have implications for other communities who are navigating the same challenges.

Ecotourism is defined as, “responsible travel to natural areas that conserves the environment, sustains the well-being of the local people, and involves interpretation and education” (What is Ecotourism?). This definition can be broken down into three distinct components: conservation, communities, and interpretation. A unique and important principle of ecotourism is that it protects the natural world by providing economic incentives to do so. Local communities can be empowered by this economic growth, equipped with employment and development opportunities. Ecotourism does all of this while promoting environmental awareness among people who participate the industry, fostering increased appreciation for the planet (What is Ecotourism?). If implemented effectively, ecotourism has a positive chain reaction, generating financial benefit for conservation and delivering experiences that have the power to open and change people's minds. Like many things that begin with good intentions, it's

essential to keep these principles in mind as economies grow to ensure truly sustainable development.

Sustainable development is defined by the International Institute for Sustainable Development as, “development that meets the needs of the present, without compromising the ability of future generations to meet their own needs” (Sustainable Development). While ecotourism is focused on immediate economic incentive and conservationism, sustainable development addresses the needs of the present with an eye always on the future. The concept of sustainable development can therefore provide another window to understand the effectiveness of ecotourism. It’s vital that we not only heal our planet, but also protect it for generations to come. When achieved correctly, sustainable development addresses social, environmental, and economic prospects together. Given the similarities between these two concepts, it may seem that ecotourism always results in sustainable development. However, most forms of tourism, despite even the best prevention efforts, have the potential to negatively impact local communities and the environment. It’s possible that ecotourism could be bringing awareness to one environmental problem, while simultaneously contributing to another. The island of Martha’s Vineyard is a perfect example of this.

Conservation and preservation are two terms that will be used repeatedly in this research and must be defined separately because the terms are not interchangeable. Conservation is generally associated with the protection of natural resources for future human use, while preservation is associated with the protection of the land itself from human intervention. Preservation efforts often focus on setting aside portions of land that should remain untouched. According to the National Park Service, “Conservation seeks the proper use of nature, while preservation seeks protection of nature from use.”

To understand the ecotourism industry on Martha's Vineyard it's pertinent to first understand the unique environment of the island itself. The Vineyard was once a self-reliant, small community of growers, fishers, and farmers who relied on each other and the land to meet their needs. The islanders have passed these ideals on, shaping the character of Martha's Vineyard today. A strong sense of community exists among year-round residents who look out for each other long after the summer crowds pick up and leave. Open space has been preserved, with significant area for farming to feed locals and tourists. Ample woods remain intact, along with Native American Wampanoag lands. Most stores are unique to the island, except for a few chains. Restaurant chains are even forbidden on Martha's Vineyard by law, and there are no large shopping malls. Each town maintains a distinct style and small-town feel, and most homes are significantly spread out, compared to average American neighborhood. Locally owned businesses sell products created by local artists, and restaurants serve farm-to-table fares provided by the farmers and fishermen right on island. The community is diverse, although it tends toward the wealthy now more than ever. Environmental awareness is more common than not. Five towns currently prohibit the sale of disposable plastic water bottles—a movement started by a local student group. These facts illustrate that this conscious community can, in many ways, serve as an exemplary model for other communities to follow.

With such a unique place comes increasing intrigue, and as the beauty of the natural environment draws larger crowds, the very character settlers and visitors seek to embrace becomes threatened. Challenges emerge in the three key areas of the environment, the economy, and the community. From an environmental perspective, development continues to take more natural land, traffic and emissions increase with the rising population, and climate change threatens the coast. According to the Intergovernmental Panel on Climate Change, “by the end of

this century we may expect worldwide (eustatic) sea level rise of from 7- 15 inches (from a temperature increase of 3.2 degrees F) to 10-23 inches (from a temperature increase of 7.2 degrees F).” Potential sea rise is even greater on Martha’s Vineyard. Sea level rose 10.2 inches in the last 100 years on Martha’s Vineyard, compared to a 6.7 inch worldwide rise in sea level. This puts both public and private infrastructure at risk, as well as the significant portion of activities and economy that depend on the coastline (Athearn). Change on the island is, at this point, inevitable. The question becomes whether we have the power to make this change more positive than negative.

Economic struggles revolve around serving the needs of tourists over the best interest of locals; the unsustainable growth rate; and the rising costs of living that are making it almost impossible, for families who have lived in the community for generations, to make ends meet. The community currently struggles with a housing crisis that causes an employee shortage for local businesses, as young people struggle to afford rent on the island with the wage they earn in seasonal positions. The growing ecotourism industry on Martha’s Vineyard attempts to address some of these issues and help shape the sustainable development of the island. But are its contributions more positive than negative?

Understanding the challenges facing this island leads us to evaluate the ways the ecotourism industry attempts to mitigate them. When discussing this broad scale of environmental problems, it’s important to note that certain responsibilities—like regulatory change, public improvement, tax abatements, set energy/green standards—fall primarily to local, state, and even federal governments (Athearn). This paper focuses on the areas for improvement where leadership falls on nonprofit and private sectors specific to ecotourism, while in no way attempting to minimize the broad scope of this problem or to assert that this one industry can

solve widespread environmental problems. Ecotourism is one part of the whole—one of many industries that has the potential to be a powerful voice for change. Examining the efforts of local businesses and nonprofits that make up this industry helps discern the complex impact ecotourism has on sustainable development. The ecotourism industry is abundant enough on island to address these key aspects of travel: transportation, accommodation, services, agriculture, food, and awareness.

Transportation

The less widely perceived cost of transportation is a growing carbon footprint. In fact, transportation is tourism's main source of greenhouse gas emissions. Which forms are the worst culprits? According to Sustainable Travel International, "planes and cars generate the most CO₂ per passenger mile, with tour buses, ferries, and trains coming well behind." A plane emits 0.82 pounds of CO₂e per passenger, per mile. Cars emit between 0.55 - 0.68 depending on size, and transit buses emit 0.37 pounds. Ferries rank the lowest of all, coming in at 0.07 pounds of CO₂e per passenger, per mile (Carbon Footprint of Tourism). Martha's Vineyard can't be reached by car, only by ferry boat—the mode of transportation that least harms our environment. It costs upwards of \$100 each way to bring your car along on the ferry, which helps deter tourists from doing so.

You can fly to the island from Boston Logan International Airport with a few small airlines, such as JetBlue, and flights are almost always very expensive for the average traveler. To compensate for the lack of vehicle transportation, Martha's Vineyard offers a bus system between all towns, and extensive bike and walking paths. There are 37 miles of offroad bike paths (Athearn). Many bike rental companies have sprung up to promote this environmentally conscious way for tourists to see the island. Biking allows visitors to embrace the natural beauty

and travel from their accommodation to various places. Town centers offer ample bike racks to promote riding into town rather than driving in and competing for minimal parking. There are no traffic lights on island and almost all roads are single lane. Traffic jams are becoming an increasingly common part of everyday life. Major backups occur daily at intersections near ferry drop off points and town centers, making it difficult for those that live and work there to get around. The ferry boats can control the number of cars let on island to an extent, but car rentals contribute to the problem, as do summer homeowners who leave cars at their residences on the island. Overall, transportation on Martha's Vineyard minimizes carbon emissions in comparison to other forms and promotes zero emission forms of getting from one place to another by providing a network of pathways. As island tourism grows, more individuals visiting the island will inevitably lead to increasing numbers of cars and plane rides, if not carefully controlled.

Accommodation

Large resorts and hotels are often the biggest culprits of high emissions in the accommodation sphere. On the flip side, the homestays and guest houses common on Martha's Vineyard tend to have lower emissions (Carbon Footprint of Tourism). The only real *resort* on island, known as The Winnetu, has just 54 rooms. Most tourists will find historical homes transformed into boutique hotels. Airbnb's are becoming increasingly common on the island, with people renting out their second homes to visitors during the summer months for a steep price. Martha's Vineyard has been careful to keep all hotel chains, such as Marriott and Hilton, from taking business away from locals who build their livelihoods on their bed and breakfast establishments.

The Hob Knob Inn is the perfect example of an eco-boutique hotel. The environmentally conscious efforts undertaken by owner, Margaret White, include:

“Nontoxic cleaning solutions used exclusively throughout the inn, carpets and fabrics meet LEED standards, and low VOC paints also optimize indoor air quality. Composting, recycling, and energy-saving are standard operating procedure. The Hob Knob features locally grown and mainly organic food on its B&B menu” (Wahl).

The inn also exclusively uses Aveda bath products, “the first beauty manufacturer to power its plant with wind energy and one of the largest purchasers of organic ingredients” (Wahl). This establishment is a prime example of the lengths many on-island businesses will go to provide true ecotourism offerings to visitors. Other tourism economies stand to learn from Martha’s Vineyard’s insistence on limiting energy expenditure by keeping accommodations small. Locally owned establishments also keep money flowing to small businesses and support the economy of the island, rather than major corporations. Across the U.S., hotels need to focus on lessening their carbon footprint by using clean energy sources (rather than fossil fuels) to power guests’ air conditioning, hot water, electricity, pools, and kitchens. Martha’s Vineyard has the right idea by starting small in the first place, limiting the scale of energy that can be consumed by guests, and offering unique stays that invite people to consider their own environmental impact in the process.

Services

While tourism itself can be considered a service, for the purpose of this paper services will be defined as economic activities (rather than goods) performed by one party to another. Specific nonprofits are included in this section as these organizations serve people and the environment. The island operates a large service industry with many tour companies, fitness classes, beauty and wellness offerings (spas, hair salons, nail salons, etc.), and event planning. Island Spirit Kayak (ISK) is a service provider offering kayak and paddle board rentals. With

beach cleanups, educational tours, and a conservation-focused kids camp, this business focuses primarily on protecting the planet, and encouraging visitors to do the same. The company is paperless and operates out of a small shack on State Beach in Oak Bluffs, an area ISK workers help to protect from the potential negative impact of tourism. This business also operates in partnership with a local nonprofit organization known as Friends of Sengekontacket (FOS). Together, they hold an annual Oar and Paddle Regatta and Beach Grass Planting.

FOS is, “dedicated to the preservation of Sengekontacket Pond; the Barrier Beach and Trapp’s Pond; to the protection and preservation of water quality; and the preservation of habitat and promotion of environmentally sound management” (Friends of Sengekontacket). This nonprofit does invaluable work in five key areas: preserving the quality of the pond, preserving the Barrier Beach, addressing climate change, protecting endangered species, and protecting against invasive species. State Beach is the most widely used by tourists on Martha’s Vineyard, and this nonprofit’s focus on protecting the area minimizes the damage tourists can do. For example, there are numerous protected “bird islands” on Sengekontacket Pond—which ISK informs all paddlers not to pull up on—and FOS closely monitors by ticketing individuals who do. The nonprofit industry is an essential component of ecotourism, fueled by a desire to protect the natural environment first, these organizations are the only ones in the industry without anything to gain from the dollars tourism generates. For this reason, they may be the only truly unbiased protectors of our environment involved in the ecotourism industry.

Felix Neck Wildlife Sanctuary is a nonprofit organization, and part of Mass Audubon—the largest nature-based conservation organization in New England. This sanctuary protects 194 acres; while simultaneously offering tours, summer and preschool programs, butterfly and bird gardens, and ongoing conservation projects. Projects include Osprey monitoring, Horseshoe

Crab research, and coastal waterbird tracking (Felix Neck Wildlife Sanctuary). Nonprofits like these demonstrate attempts made by people to overcome the negative effects of the tourism industry. Martha's Vineyard exemplifies the need for nonprofits in ecotourism, to conserve the environment, sustain well-being, and educate the public without profit motives. The efforts of nonprofit organizations on island should therefore be modeled by other local communities developing or dealing with tourism economies.

Regenerative Ocean Farming

Regenerative ocean farming has been identified as a key solution to climate change. GreenWave, a global network of regenerative ocean farmers, explains how:

“It has the power to sequester carbon on land and sea, reduce methane production in livestock, rebuild marine ecosystems, enrich soil, and address the global plastics problem” (Our Model).

Local businesses on Martha's Vineyard are using regenerative ocean farming to ensure that island populations (and far wider populations too) continue to be fed with island-grown foods. As land becomes increasingly difficult to come by on island, and animal agriculture increasingly disputed for its contribution to fossil fuels and the destruction of forests for farmland, farmers have turned to an entirely different source that offers a truly sustainable solution. Oysters.

Top Shell Oyster Farm is the newest oyster farm on Martha's Vineyard, beginning its small business model in 2020 with a Kickstarter campaign that raised \$17,000 to help the company answer a central question: How can we feed the world without destroying it? Oysters require no food, water, or land to grow, feeding instead off particles in the ocean water. And they

don't just feed off the water—they actually filter it, removing toxic pollutants like nitrogen and incorporating it into their shells and tissues as they grow.

To comprehend how oysters help our oceans we must first understand why our waters need filtering. Nitrogen and carbon dioxide are in abundance in our oceans due to the warming climate and polluted rainwater runoff from fertilizers, making our oceans increasingly acidic. These added elements spur the growth of algae beyond what animals in the ecosystem can consume. Oysters help with this by consuming phytoplankton. These shellfish filter the nitrogen and use it to build up their shells, which are then thrown back into the ocean by farmers to provide habitat for the naturally growing oyster population to spawn. The nitrogen removal process of shellfish has been researched in the Cape Cod area (where Martha's Vineyard is located), and it has been determined that oysters are still safe to eat (Koenig). Cape Cod Extension fisheries and aquaculture specialist, Diane Murphy, uses the analogy of garden plants to explain that, just like the tomatoes in our gardens that incorporate nitrogen from the soil to grow, oysters do the same thing.

Topshell has set a goal to produce 4 million oysters, which would filter 200 million gallons of ocean water *every day* (Top Shell Oyster Farm, Kickstarter). Oysters are proving to be a truly environmentally conscious way to farm and feed the growing population on Martha's Vineyard, and many farms exist today on island. There are even nutritional benefits associated with eating oysters: according to the USDA, an oyster may contain high levels of protein, vitamin D, vitamin B12, iron, copper, manganese, and selenium. They can be a source of beneficial (good) cholesterol, antioxidants, and omega-3 fatty acids, making oysters "extremely healthy food that can boost your body's overall function and health" (Staughton). Finally, oysters can serve as an alternate protein source for humans to reduce our dependence on meat and

minimize the negative environmental impact of animal agriculture. Topshell describes these and other problems facing our world and the solutions found in oysters with a *Five-Course Menu* that reveals exactly how oyster farming can help with specific environmental concerns on their website:

1. Reduce growth in demand for agricultural products – “Eat more oysters”
2. Increase food production without expanding agricultural lands – “Create a scalable system for deep water oyster farming”
3. Protect and restore natural ecosystems – “Let the oysters go to work”
4. Increase fish supply – “Grow more oysters”
5. Reduce greenhouse gas emissions from agriculture – “Oysters are the key to everything”

This new oyster farm is located in Edgartown, where all protected bay areas are already in use for oyster farming. So, these farmers moved into the open ocean, becoming the first on island to literally and figuratively dive into deeper waters to try to meet the growing need. Topshell hopes to prove that open-ocean farming is both a sustainable and economical option for people to grow oysters around the world.

The impact of oyster farming on the ecotourism industry extends beyond the food it produces, as farms begin to create their own experience-driven offerings to serve and educate tourists. Cottage City Oysters operates tours of their oyster farm out of Oak Bluffs, taking tourists out on a boat to view the farm and shuck oysters straight from the water. These tours also teach tourists about the current crisis facing our oceans and the ways that oyster farming can help combat these issues. Author, Crispin Haskins, wrote and shared a blog post about his tour with Cottage City, citing that he learned about ocean acidification, or the excess of carbon dioxide

that's altering the chemistry of our oceans. He also learned that oysters create an entire ecosystem where they're introduced in the water, "providing a habitat for a myriad of sea life such as crabs, lobster, eels, worms, juvenile fish and more" (Haskins). The farmers make it clear that their farm was carefully inspected before approval, to ensure that they wouldn't be harming any existing marine life or natural habitats. If every island visitor took a tour with one of these oyster farms, they would leave with a new seed of knowledge about the environmental issues facing our oceans, and a tangible way to do something about it.

Ecotourism businesses like these can both educate and inspire travelers, helping them become more aware of their natural environment, and asking them to think about the food about they eat. The hope is that this could inspire individuals to question if their own choices are truly sustainable. Oyster farming is one area of the ecotourism industry that does significantly *more good* than harm, and yet another unique aspect of Martha's Vineyard's economy that could be replicated by other coastal communities to feed growing populations.

Agriculture

There are 26 food-producing farms on Martha's Vineyard. Another 30 farms have 5 acres or more, and the smaller backyard farms are too plentiful to count. 935 acres of the 1,687 classified as farmland, produce food directly for human consumption (Athearn). One of the pitfalls of the modern agricultural industry is that so much happens behind closed doors. Many assert that people would not be so willing to eat meat if they knew just where and how it was made. Certainly, even more would be opposed if they had to do this work themselves. It's a sort of out of sight, out of mind mentality for most Americans: but not on Martha's Vineyard.

Local farms are an important part of the ecotourism industry on island, and they're on full display for everyone to see. These farms encourage tourists to come visit their vast expanses of beautiful farmland; to learn about the ways that animals are cared for, and produce tended to; and to make purchases in their storefronts that sit beside their rolling fields and barns. Most restaurants on-island boast farm-to-table dishes sourced directly from the local farms, providing tourists the unique experience they're looking for: of eating food grown/caught/raised right next door. Martha's Vineyard's agricultural industry provides a great small-scale example of how local farms could function to serve their own community's needs. While this isn't scalable to larger populations with minimal land, like those of cities, it is possible for other local economies turning to tourism to follow in these footsteps of ethical and sustainable farming practices.

Island Grown Initiative (IGI) is a 501(c)3 non-profit organization striving to build a regenerative and equitable food system on the island. The organization promotes regenerative farming, focused on improving the health of the soil (not unlike the way that growing oysters improves the health of the ocean water). This type of farming bans chemical fertilizers, pesticides, herbicides, and genetically modified organisms (GMOs). It includes composting, diverse crops, and grazing animals. The benefits include increased biodiversity, enriched soils, improved watersheds, resilience to climate instability, and improved food security for the community. Reducing and redirecting food waste is one goal that IGI accomplishes by turning the less-fresh produce into animal feed, operating a composter that, "transforms food waste three times faster than the average home compost pile" and collaborating on a pickup system for food waste from local food establishments like restaurants. Shipping wasted food off-the island via ferry cost the towns \$720,000 in 2020—proving that this issue is not only environmental, but economic. In February of 2022, the Environmental Protection Agency (EPA) named IGI (and

Martha's Vineyard Regional High School) as a winner of its Food Recovery Challenge award.

Tourism economies would do well to follow in IGI's footsteps, implementing food waste initiatives and funding organizations to combat these issues.

IGI's community outreach extends even further, by running a summer lunch program aimed at school-aged children, that's also available to anyone in the community—no proof of income is required. These healthy meals incorporate locally grown ingredients and demonstrate a genuine care for feeding the community that should be modeled everywhere. Similarly, IGI's Island Food Pantry is available to anyone who cannot afford groceries. The price of food in grocery stores on-island reflects the difficult ferry journey the food must take to arrive on the shelves. While tourists can afford to splurge on their grocery bill for the week, and upper-class summer-home owners can afford the high prices, it's the year-round population that suffers most under the weight of this expensive food. It's initiatives like these that help members of the local community continue to be able to live on Martha's Vineyard. It's not only "unfair" that generations of islanders be pushed out as the tourism economy grows and prices continue to rise, it's simply not sustainable for the economy itself. Losing the working-class demographic on island means losing workers, and this tourist economy cannot function without an ample workforce. IGI's efforts are no doubt essential at combatting the present crisis, yet this method of free food must be combined with other initiatives to make island living more affordable long term, for year-round residents.

Restaurants

Most restaurants on Martha's Vineyard are locally owned, contributing character and originality to this unique island. Many tourism economies see a rise in corporate establishments that crop up to serve seasonal populations, while failing to serve the local economy. By leaving

space for small businesses, the island economy is enabled to thrive. These restaurants also contribute to the local economy with their choices, sourcing much of their food from local farms and fishermen. This partnership greatly benefits the restaurants themselves, as tourists appreciate the chance to eat locally grown and harvested crops, dairy, meat, seafood, etc. Costs associated with shipping mass amount of food on island to equip the restaurants are also minimized, thanks to this exchange. State Road Restaurant receives its meat and poultry supply from The Good Farm, a farm located on the very same road. Farm.Field.Sea. goes a step above in providing hands-on experiences, allowing guests to harvest fresh ingredients themselves at a local farm before watching a local chef cook their dinner. The Scottish Bakehouse harvests greens from its own onsite farm and operates a grab and go model with outdoor picnic tables serving as the dining space. Quite a few restaurants on island operate similarly, reducing the traditional costs associated with large restaurant establishments.

Beyond the restaurant industry, there's a large catering industry on island to support the variety of events held in this idyllic place, from weddings to corporate business meetings, to celebrity parties. The Kitchen Porch is a great example of a small business that has committed to working closely with local farmers, growers, and producers to create their unique seasonal menus. Their mission is as follows:

“We are committed to improving quality of life for all by being part of the solution; we not only support our community of farmers and fishermen, but also those in the world that are creating regenerative and sustainable practices. We believe the choices we make about what we eat, where it comes from and how it's prepared have a direct and powerful impact on the health of individuals, communities, and the environment” (Buhrman).

It's businesses with missions like these that help Martha's Vineyard continue to be a community that starts conversations about conscious consumerism. Martha's Vineyard's restaurant model of promoting locally owned establishments, who in turn promote local farmers, has proved to be both beneficial for the island economy and the environment, serving as a great example for other tourism economies to follow.

Awareness

The first Earth Day, on April 22nd, 1970, had monumental impact in raising awareness about the importance of environmentalism. Organizations like the Environmental Protection Agency, and protections like the Clean Air Act and Clean Water Act did not yet exist. Because of this awareness campaign, movements were set into motion, creating a ripple effect that grows bigger today. Ripples will not be enough though; we need Tsunami sized waves. Waves—otherwise known as change—that radiate outward in all directions away from their source. It's not enough to have environmentally conscious businesses, we must also inspire a generation of environmentally conscious consumers. People must be informed and educated to understand the impacts of the choices they make on a daily basis, and to recognize that the value of their dollar is intrinsically linked to their voice.

When it comes to the ecotourism industry, it is difficult for consumers to support that which they do not know exists. Which is precisely where the value of communication comes into play in the world of ecotourism and sustainability: its purpose is to generate awareness about the environmentally conscious choices tourists can and should be making. With enough widespread communication, we can eliminate the excuse that people simply didn't know any better and cultivate a system of support from individual consumer to business owner, that fuels a more truly sustainable tourism economy.

Bluedot Living totes itself as the “First Sustainable Living Magazine on Martha’s Vineyard.” It is distributed by 10 of the biggest magazines and websites on the island, including The Martha’s Vineyard Times. It’s also made available, free of charge, at local newsstands, select retail locations, inns, hotels, and bookstores. This magazine highlights, “changemakers who are working towards a greener economy to power the island” (Bluedot Living at Home on Earth). The website can be used by travelers as a guide to find Martha’s Vineyard’s most environmentally conscious businesses. It’s also a great resource for tourists and islanders alike to learn about preservation efforts on island. Even the advertisements on the website encourage you to *find out how energy efficient your home is*. Slogans like *Buy Less, Buy Better* inspire the conscious consumer attitude and articles touch on a variety of environmental topics from news about composting programs, to the dangers of nuclear energy, to food waste, to technology and fossil fuels.

Imagine for a moment that all tourists flipped through this magazine on the ferry ride over. In a matter of minutes, they would be better equipped with an understanding of Martha’s Vineyard’s unique natural environment, and a list of businesses and initiatives to support and explore during their stay. Imagine the hotel concierges too, use information like this to guide guests toward the variety of goods and services (like those listed above) that are curated with environmental care. With effective communication and more widespread media coverage of environmental initiatives, tourists will be made aware of the potential threat they pose to the beautiful place they have come to see. They will be equipped with resources to make ethical choices during their stay that preserve this place so that generations to come can experience the very same thing.

Analyzing Ecotourism on Martha’s Vineyard

The ecotourism industry can be described as well-intentioned. Analyzing the businesses on Martha's Vineyard reveals that the industry helps drive and fund conservation projects, economically supports the local community, and raises awareness about important environmental efforts. It also reveals the unavoidable effects of a tourism driven economy, which can still negatively impact sustainable development even with the best of intentions. High volumes of tourists flood natural environments and pose great danger to delicate ecosystems. Many conservation projects exist because of issues spurred by tourism itself. While aspects of the local economy prosper as small businesses gain support, other locals find themselves increasingly pushed out and ostracized as prices rise. The local industry has become increasingly dependent on seasonal work, and yet businesses struggle to find seasonal workers who can afford the high housing and food costs associated with living on island. The divide in wealth continues to grow and threaten the livelihoods of all participants in this economy. Even the industry itself is at risk without the proper workforce to fuel it. The element of increased awareness of environmental issues is the only facet of ecotourism that has no negative counterpart.

Ecotourism today is a double-edged sword. It is important to recognize the efforts of this industry to combat the negative consequences of travel and conserve the affected environments. To put it simply, ecotourism is better than tourism. Whether or not these unique environments should simply be left alone is somewhat beside the point as the tourism industry continues to grow into the foreseeable future. Economic development is at the forefront of the capitalist society of the United States and the continued driving force for industry growth. Beyond this, traveling has the power to change people's lives for the better, enriching them in ways that staying put in one place cannot. The tourism industry isn't going to shut down altogether, if anything, it's going to see continued growth. Ecotourism is an attempt to, "marry the goals of

ecological conservation and economic development” (Eco-Tourism: Encouraging Conservation or Adding to Exploitation). Environmental conservation efforts are imperfect, though undoubtedly better than nothing as societies inevitably continue to develop.

It's evident that the current ecotourism industry both positively and negatively impacts the sustainable development of Martha's Vineyard, but what if we look to the future? As technology creates new opportunities, clean energy becomes increasingly affordable, and the industry drives awareness that inspires advocacy, is it possible that ecotourism can become the catalyst for true sustainable development? And if so, could these efforts be replicated by other tourism economies that want to survive and thrive for generations to come? With careful and concerted efforts, Martha's Vineyard can push to ensure that the benefits of ecotourism rise and impact the tourists and locals more equally, while the costs are minimized.

Adopt a Preservation Mindset

To achieve sustainable development goals, ecotourism must be carefully planned from the beginning. This way, potential negative impacts can be mitigated before they have the chance to become a destructive reality. One of the most important aspects of environmentalism for industry participants to keep in mind is a focus on preservation over conservation. The preservationist philosophy believes in the right of nature to exist in and of itself, with a focus on leaving natural elements and ecosystems the way we have found them. National Parks are a great example of preserved lands—left untouched to be appreciated for their natural beauty. These parks contribute to tourism industries as people travel to experience the awe of such places. Martha's Vineyard has unique landforms like the Gayhead Cliffs in Aquinnah, biodiverse native species, and the increasingly rare advantage of wide open, undeveloped space—all elements

worth preserving. Harvard's Island Plan speaks to the need to adopt a preservation mindset regarding the island:

“More than 40% of the open space we take for granted on the Vineyard could be developed. Favorite vistas could be blocked, wild stretches of tree-canopied rural roads could become rows of houses with front lawns, and farm fields could become subdivisions. Over time, areas of open land still large enough to support a rich population of plants and animals could become so fragmented – with a road here, a house and lawn there – as to threaten their biodiversity, and especially the survival of rare species. We need to better protect the remaining open spaces, vistas, farms, and habitat; we can also go a long way towards restoring areas that have been compromised” (Athearn).

Conservationism aims to protect nature for the purpose of continued cultivation in the future. As stated in the definitions section of this paper, “conservation seeks the proper use of nature, while preservation seeks protection of nature from use” (Conservation, Preservation, and the National Park Service). Historically, conservationists seek to regulate human use while preservationists aim to eliminate human impact on natural environments entirely. There is a place for both philosophies, but for ecotourism to drive sustainable development, a preservation mindset must be predominant.

Limit Tourists & Lift Locals

No one can dispute the fact that Martha's Vineyard is an island with a limited amount of land. As a result, it can only handle a limited number of people. The Vineyard's population has grown drastically in the last 40 years, both in number of tourists and year-round residents.

Further growth will inhibit sustainable development: waste and water pollution will continue to

rise, land will continue to decrease as it's developed, etc. To sustain the current tourism economy, local businesses and the island's workforce population need to be lifted. Affordable housing must be developed for working class and year-round residents to sustain the summer tourism season so that the economy can continue to thrive. Limiting the number of tourists allowed at one time will help to ensure that the island can draw tourists for hundreds of years to come. Renewable sources of energy should be increasingly used by all segments of the tourism industry to combat the carbon footprint of tourism on island. Going forward, tourism-related facilities should only be constructed in areas that can't serve a deeper environmental purpose—such as the Oyster Farms that had to prove the portion of the ocean they intended to farm wasn't housing any important ecosystems.

Focus on the Local Economy

Martha's Vineyard's strict laws keep out corporations and chains that would draw money away from the local economy. These laws must be maintained, and tourists should be increasingly encouraged by communications efforts to support local businesses and environmentally conscious nonprofit organizations. Locals should be involved in ecotourism projects to ensure that their concerns are heard, and interests preserved. Small businesses and locals wishing to start businesses should receive support—like how Cottage City Oysters helped the Top Shell Oyster farmers' start their business on island in 2021. Nonprofits are essential to sustainability efforts, and they maintain an environmental focus over economic gain. Martha's Vineyard has a large percentage of wealthy residents and visitors who should invest in the local economy to sustain the island they love.

Collaborate

Ecotourism operators should seek assistance from nonprofit organizations to merge their goals and promote true economic and environmental benefit. Island Spirit Kayak's partnership with Friends of Sengekontacket is a prime example for other tourism economies to follow when trying to focus their environmental efforts. Partnerships like these lend credibility and legitimacy to businesses, minimizing greenwashing—which is when companies focus more on marketing themselves to customers as environmentally friendly than funding truly eco-friendly initiatives.

Promote Ecotourism Efforts

The last essential piece of the puzzle is promotion. Businesses and nonprofits are hard at work to raise environmental awareness and offer opportunities for travelers to make conscious choices that protect the environments they come into to contact with, rather than harm them. Effective communication strategies can be used to elevate these businesses, sharing their ethical practices, cutting-edge environmental initiatives, and commitments to care. Tourist can then be doubly educated on environmental initiatives, first when they learn about the businesses they can support as they research and plan their upcoming stay; and secondly when they interact with these establishments during their actual visit. Digital promotion is increasingly easy for businesses to employ themselves, in their marketing efforts to potential customers. The effective use of social media is also a powerful tool to raise awareness about eco-friendly businesses participating in the growth of the industry.

Environmental Communications examines how communications influence our beliefs about—and behavior toward—the environment. According to Robert Cox, in his book, *Environmental Communication and the Public Sphere*, “the methods of communicating about environmental conditions and ideas explain... the emergence of a public discourse on the environment.” Everyone has a right to know information about the environment. Journalists and

environmental groups hold both private and public sectors accountable, by ensuring they comply with environmental standards and public safety (Cox, 115).

When it comes to the tourism industry, “citizens have a right to know whether the actions of private industry have a negative impact on their lives” (Cox, 91). Community activists and individual businesses can do their part to promote sustainable ecotourism efforts, so tourists can be made more aware of the opportunities that exist in the travel industry. The remainder of this paper will examine the function of a particular type of communication, visual rhetoric, on awareness, assessing the role visual images play in influencing public attitudes toward the environment. Visual rhetoric can be used to promote ecotourism efforts. In this specific case, visual rhetoric can be employed to share this case-analysis of ecotourism’s impact on the sustainable development of Martha’s Vineyard, to educate both tourists and other local economies attempting to build on environmental tourism.

“Islands like the Vineyard have an opportunity to show how problems are solutions waiting to happen” according to Camron Adibi, of Engineering for Change. Case studies of Martha’s Vineyard’s climate change preparedness have already been conducted by this organization with the goal of scaling the findings across other island communities. This study examined the issue of nutrient management and wastewater and cited the Vineyard’s increasing reliance on Oyster Farms as one of two solutions to improve water quality. Martha’s Vineyard’s topography alone makes its struggles and successes relevant examples for other coastal communities facing similar environmental issues. Yet it’s the island’s track record of innovative solutions to environmental problems—and its use of ecotourism to drive this change—that makes it a leader worth following.

The Role of Visual Rhetoric

Photographs of Yosemite Valley, Yellowstone, the Rocky Mountains, and the Grand Canyon not only popularized the sites, but also simultaneously mounted public support for preserving the areas. This is an example of ecotourism in action; its ability to effectively drive both business and awareness. Cox proposes that this is due to, “visual media’s ability to affect contexts of understanding and appreciation” (65). When it comes to Martha’s Vineyard, it’s clear that the eco-tourism industry has a twofold impact on the sustainable development of the community—both positively and negatively affecting the environment and economy of the island. As previously stated, there are no drawbacks to the increased awareness being driven by ecotourism. Awareness of this local community’s continued efforts to build an environmentally conscious tourist economy serve as an example for other communities to follow. If growing local economies look to Martha’s Vineyard, they can adopt a set of effective strategies to preserve their environment, limit the impact of tourists, fund the local economy, collaborate with fellow organizations, and prioritize promotion of these various efforts. By publicizing information about these efforts, communities can learn from one another’s successes and failures, hopefully boosting economies—and environments—nationwide.

Alternative media coverage on the environment are on the rise and educated analysis can support—and keep in check—the mainstream media’s environmental coverage. For this reason, I have chosen to summarize and share these findings using visual media. The short video I’ve created aims to capture the beauty of the natural environment of Martha’s Vineyard and shed light on a complex ecotourism economy’s effort to thrive. The goal *is not* to assert that Martha’s Vineyard—or any one entity or thing—offers all the answers on how to make ecotourism entirely sustainable. It is instead, to raise a level of awareness that forces us to acknowledge the harmful realities of tourism; and connects us to the unique opportunity this industry has to be a

catalyst for change. Embracing ecotourism and overcoming the negative effects of the industry is no small feat. It cannot be accomplished by one, but if enough environmentally conscious local communities work together to learn from one another, we can begin to turn the tide on environmentally harmful tourism. Together, with enough force, we can create a tidal wave.

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