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Towards Improving Sustainability in Nags Head, North Carolina Through Increasing Social Capital

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Abstract

Maintaining bodies of knowledge specific to coastal towns can be crucial to maintaining environmental sustainability. It can build relationships of trust while generating social norms and rules about how to interact with the surrounding environment. This report explores the disintegration of social capital in Nags Head, North Carolina over time and how improving the transfer of local knowledge in the town can help to generate sustainable growth in the future. The researchers interviewed past residents of the town to gather information about how people used to interact with the environment in order to compare it to the present. Nine resources were explored; this report focuses on the resource of knowledge and its transfer.

Author's Note

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The ability of a community to develop and sustain itself in a healthy and resilient way is closely tied to the formation and promulgation of diverse bodies of local knowledge. Historically, traditional systems, those based on "inherited patterns" of thought or action (WordNet 2010), "rely on the accumulation of knowledge over many generations, and [that] knowledge is transmitted culturally" (Hollings, Berke, & Folke, 1998, p. 358). Transfers of this accumulated knowledge can maintain and build on cultural traditions while reducing and even ending cycles of ignorance. For example, the Cree Indians, in subarctic Canada, were able to use information about caribou populations based on long-term learning transmitted by the Cree culture from one generation to the next to maintain a stable and constant source of food (Berkes, 1998, p. 120). Ranging from formal schooling to informal conversation between people, transfers of such information are crucial to the continuity and expansion of local information bases - especially in the context of social norms and "common" knowledge - and contribute substantially to a community's long-term social and environmental well-being.

Figure 1: Map indicating the location of Nags Head on the Outer Banks, North Carolina. Source: *http://www.visitob.com/outer_banks/trip/outer_ banks_map.htm*

In order to consider knowledge as a resource, it may be defined as the "common understandings related to knowledge of community, personal, individual and collective information… from sources internal and external to the community" (Falk & Kilpatrick, 2000, p. 99). The body of information that makes up an area's common knowledge is tied deeply to that community. It informs social norms, values and rules, and constitutes the fundamental culture and traditions of a place.

The town of Nags Head, which is located on the Outer Banks barrier islands of North Carolina, has had, nearly since its founding, two relatively divided spheres of knowledge: that of the long-term residents, and that of visiting summer residents. This division between two groups makes the study of knowledge in Nags Head somewhat unique in comparison to many mainland communities. The town has been shaped in large part by the historical loss of a once widely maintained and substantial body of traditional knowledge, as well as a recent deterioration in knowledge transfer within and between the two groups. I maintain that transfer and accumulation of knowledge specific to Nags Head should be fostered and maintained, and must continue to evolve in order for the town to be able to adapt to changing coastal conditions and to move forward in an environmentally sustainable manner.

Originally, Nags Head was characterized by its remoteness and small population. According to one year-round resident, much of the knowledge was originally spread informally, primarily through family and friendships. "No schools down there. You could count on [permanent residents] either fishing or going

Figure 2: Boat arriving in Nags Head with summer residents (date unknown). Source: Outer Banks History Center

into the [military] service" (Interview, 2010). The North Carolina compulsory school law was not enacted until 1914, when all Nags Head children were required to commute to the nearby school established in Manteo. Because of its early isolation, Nags Head's body of knowledge was very specific to the town and its immediate maritime environment. Most Outer Bankers knew how to fish, hunt, grow food, cook, raise animals, brew home remedies, and generally sustain themselves with minimal outside assistance, except for the rare visit to a doctor in Manteo, located across the Roanoke Sound. Knowledge about these basic and general practices was passed orally within and among households with relative ease (Jones & Glass, 1987).

By the early 19th century, summer residents began arriving regularly. As these early tourists trickled in, marked divisions began to form between the permanent and summer residents. Interviews with members of both groups underscore the existence of that divide. According to one summer resident, "[The year-rounders] were friends. But they weren't social friends…we were very careful to stay on the right side of 'em" (Interview, 2010). Trust was already in a form of breakdown at this early stage. One element that served to bring the two populations together, however, was manual labor, as when more manpower was needed to accomplish certain tasks, such as hauling in fish nets. Another summer resident remembers having only her parents around to talk to when her family first visited Nags Head, because interactions with permanent residents rarely occurred. Eventually, however, she was able to get to know local fishermen by helping to pull nets in on the beach (Interview, 2010). For most people, these minimal interactions were insufficient to foster a real connection. Instead, because of their long stays, summer residents formed strong bonds among one another and were able to reestablish those relationships each summer.

The first paved road between the Northern Outer Banks and the more southerly region where Nags Head was located was completed in the early 1930s. The paved road from Manteo to Nags Head was finished a few decades later. One

resident remembers "in the late 40s, early 50s, when you came across the bridge from Point Harbor to Kitty Hawk…it was a wood plank bridge, it had been built by private funds…you couldn't drive 5 mph over that bridge because the planks were all loose…that's what started [the development]." Increasing infrastructure fostered parallel increases in population and visitors, as well as the arrival of a larger and more diverse, but less local and immediately relevant, pool of information. Originally, local knowledge kept residents directly tied to their environment. They depended on it for produce, game, fish, and a clean water supply. The repercussions when harm was done to it could be seen and felt almost immediately. However, today, this is no longer the case. People buy food from supermarkets which import products from all over the globe. If an ecosystem is degraded in one area, consequences are almost never felt by the average American; food continues to remain available in the exact same way. The only area where coastal towns may feel immediate consequences is the supply of local seafood. Since this can be a draw for tourists to coastal areas, less local seafood may have a marginal impact on summer tourist numbers. However, restaurants can still use seafood from other areas without much difficulty; the strain may only be felt by those whose businesses rely on fresh and local food.

Additionally, local norms—living much farther from the ocean beach to avoid damage from hurricanes, building houses to take advantage of summer breezes running through homes, etc. (Interview, 2010)—were gradually lost with major shifts in the knowledge base, impacting the environmental sustainability and resilience of Nags Head. Older summer residents still remember the reasons for the way houses were built: "I think that's why they built 'em up high on pilings, so the water could rush underneath. At that time there were no structures in back of you, and no grass, so the water could go back and forth like it's supposed to." Another talked about the first person to move from the much more protected sound side of the island to the Atlantic Beach side: "Mr. E.R. Outlaw was the first brave soul to move his house to the beach. And he wrote a memoir about it, and I have one if you'd like to see it. His friends said he was crazy" (Interview, 2010).

The late 1960s saw the beginnings of additional infrastructure development to accommodate increasing numbers of tourists, who arrived on the wings of social and economic trends; Americans had more cars, disposable income, and direct access to the beach. The creation of the National Flood Insurance Program in 1968 allowed property owners to build larger, more expensive homes closer to the oceanfront beach (Wilson & Parker, 2010). These trends continued into the 1970s, bringing rapid commercial and residential development along with the expanding infrastructure. New beach home rentals, strip malls, and fast food restaurants sprang up throughout Nags Head (Land Development, 1972; Rountree, 2002, p. 85). The town's 1972 Land Development Plan acknowledged these changes and noted with some foresight that "it is believed that this building boom is just beginning" (Land Development, 1972, p. 10). Nags Head, and the Outer Banks in general, were increasingly marketed as a tourist's paradise and were soon flooded with summer vacationers (Rountree, 2002, p. 84). The percentage of people who knew and understood Nags Head's environment with any degree of intimacy plummeted.

Today, most of the beach houses are owned or rented by people from outside of the area. The formerly held understandings about the safety and security offered by the sound side are well undercut by the romantic ideas of living right on top of the beach. Orrin Pilkey, a recognized advocate against coastal development,

pointed out that "the [coastal] geologist's voice is a lonely one amidst the clamor of realtors, homeowners, mayors, and engineers with vested interests in coastal property development" (Pilkey, 2009). Storms and hurricanes that cause damage to properties near the beach, instead of discouraging living in such a high-risk area, push people to invest in subsidized national flood insurance. This essentially shunts the payment for such risky behavior onto others, and further minimizes the amount that immediate consequences are felt. The idea of buying homes and businesses so close to the shoreline, a practice seen as unthinkable in the days of E.R. Outlaw, is now the norm and provides an example of how much common knowledge has shifted. The influx of outside ideas, about living on the beach, overwhelmed the local knowledge base. Furthermore, because coastal towns often rely on tourism as their main source of income, they may feel the need to accommodate mainland ideas about beach living in order to attract more industry.

The transient nature of tourism hindered the transfer of local knowledge. Older, more local and community-based bodies of knowledge possessed by year-round residents have gradually become specialized (e.g. medicine, agriculture) or institutionalized in museums, libraries, and historical centers. Knowledge transfer now continues in formal contexts such as in schools, in organizations (e.g. the Nags Head Beach Road Committee), and at a few regularly attended gatherings at local restaurants. However, such gatherings are only popular among permanent residents. The number of temporary visitors greatly outweighs year-round residents during the summer, which compounds difficulties associated with cultivating the transfer of local cultural and environmental knowledge both between and among the two groups in Nags Head. For example, the impacts of summer visitors on Nags Head's environment clearly cannot be directly felt by those visitors, as they leave a few days later. Instead, the burden of impact falls on the year round residents. Developing a more effective transfer of local information between year-round residents and summer tourists will increase social capital, which can help to foster more sustainable practices and social norms that are appropriate given the local maritime environment.

The greatest difficulty with increasing local information transfer involves creating incentives. There is no obvious reason why tourists might want to learn about the area and adjust the often careless way they vacation. The best way to do this may be to emphasize yearly returns. Many visitors come back to the same house each year, even if just for a few days, and would not want to see their vacation spot being degraded a little more each time. In reality, however, even an aggressive and well-planned campaign to spread information and understanding about the area's limits will probably not result in the highest possible return on effort at the beginning. A better start-off incentive scheme would be financial. Those renting for a certain amount of time could be given deals if they agree to abide by "green" standards during their stay. These might include shorter showers, more moderate thermostat settings, and the like. Plastic bags at the local grocery store should cost money, to encourage use of reusable bags and to minimize shopping waste. Once information specific to the Nags Head location, and its past practices, becomes common knowledge, a new, more sustainable way of vacationing could become the norm.

A more refined understanding of the situation can be achieved if we recognize that social capital can further be broken down into two components:

bonding and bridging. Bonding occurs between people with similar outlooks, usually within the same community, while bridging occurs between those with differing outlooks, and often between communities (Pretty & Smith, 2004). Enhancing relationships that bond and bridge fosters knowledge transfer and trust, which are crucial to cooperation and connectedness. Essentially, the more social capital there is in a given locale, the greater the amount of available information, and the better equipped that community's citizens are to create an environmentally, socially, and economically viable town.

Nags Head's huge annual influx of tourists swells the permanent resident population of 3,125 (Bortz & Welsh, 2010) to more than 40,000 in the summer (NagsHeadGuide, 2010). In part because of this, the town is challenged in its ability to encourage lasting "relations of trust [to] lubricate cooperation" (Pretty & Smith, 2004, 633). The historic labeling of 'year-round residents' and 'tourists' continues today; one interviewee described summer beach cottage owners as "clannish" and "not looking for somebody new to take in… They don't want anything different" (Interview, 2010). The impediments to local knowledge transfer in towns with a heavy dependence on tourism are substantial. It may seem as though there is an innate conflict between economic viability and the preservation of local knowledge. This does not need to be the case, however, as cases such as Dewees Island (discussed below, pg. 8) can demonstrate.

However, the high volume of people moving in and out of the area brings to and takes away from the place an enormous diversity of useful information. This largely untapped knowledge base can be considered a "library from which a new science of sustainable resource management can borrow" (Berkes & Folke, 1994, p.139). Finding ways to redistribute the social capital between and within both tourists and year-round residents can create a wealth of information pertinent to advancing a community's sustainability. According to a study on ecotourism,

> [Social capital] can improve a community's ability to sustainably manage natural resources through generating appropriate norms and rules and enhancing trust and reciprocity. Trust and reciprocity lubricate cooperation through reducing transactions costs, as people no longer have to invest in monitoring the behavior of others, thus building confidence to invest in collective or group activities. The assumption is, then, that higher social capital affords better environmental protection. (Jones, 2005, p.307)

Better environmental protection affords greater visitation, local health, and cleaner, more abundant natural resources.

Alex Pasquini, a co-researcher in this study on sustainability in Nags Head, looked at Dewees Island, a town which has demonstrated an extremely high level of unity with its natural surroundings. He explains his research and findings:

"John Knott's (Dewees Island CEO and Managing Director) idea for the Dewees Island development was not based on the typical social amenities present in most beach developments. 'We have to get back to building communities rather than commodity housing,' he said (Lurz, 1999). Knott's plan promotes personal engagement and participation in community affairs, which are readily available."

Figure 3: Aggie Gray Ferry. Source: Dewees Island Rentals

Figure 4: Huyler House surrounded by Old House Lagoon and Alligator pond. Source: Carolina Coastal Properties

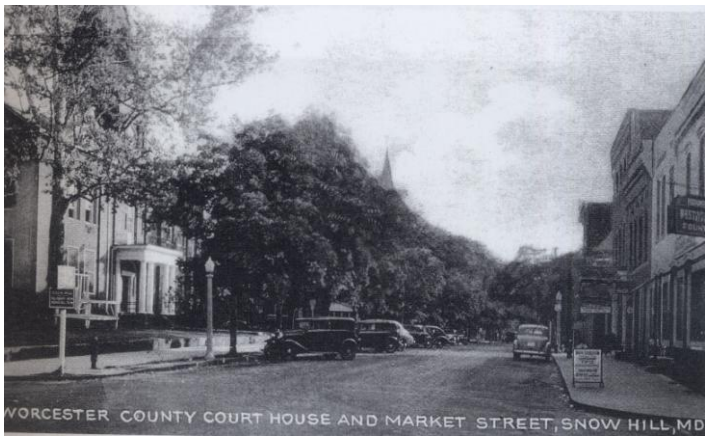

Figure 5: The town of Snow Hill, like other towns in Worcester County, has a rich heritage. The County strives to retain its historic and cultural character. Source: Joseph E. Moore

"Dewees possesses a strong community that is 'triggered by a series of accidental meeting places that are carefully planned' (Lurz, 1999). This idea begins with the ferry ride that residents and visitors must take to get to the Island, and where interaction is very personal. This mode of transportation is different from the 'bubble' experienced by typical vacationers when they travel via car to their destination. Cars are not allowed on the island, so slower modes of transportation are utilized. Golf carts, bikes, and walking are the main modes of transportation, and these 'slower, quieter' methods also permit social interactions to take place. Everyone knows everyone else; this communal interaction has been lost in most social communities. The Huyler House, the community building, has two tennis courts, a pool, a game room, and a community meeting place. It serves as a summer 'hot spot' where social gatherings and childrens' activities regularly take place. The nature center and wet-lab, located next to the public landings dock, are also frequented places where a naturalist is on staff to answer questions and lead nature trips when requested. Free nature-oriented camps for children of owners are available during the summer, and these children get a chance to see and interact with the natural world as well as with other children staying on the island."

There is a huge difference, however, between a town that has been planned from the beginning to be sustainable, as with Dewees Island, and a town that has grown unsustainably and must redevelop itself to achieve that same status. Huge steps would need to be taken at Nags Head to replicate the same kind of community found at Dewees—even, realistically, on the order of complete destruction through hurricane or other natural disaster. Further, the much lower density of Dewees Island combined with the desirability of living near the beach results in a skyrocketing of housing prices for the area. Nags Head, though much less aesthetically pleasing and much more ecologically disrupted than Dewees, still invites middle class America to come and vacation. A county more similar to Nags Head, but less sustainable than Dewees is Worcester County, Maryland. Another co-researcher, Jamie Berger, studied this area:

"Worcester County could serve to inspire the Town of Nags Head regarding sustainable practices. Likewise, Ocean City [in Worcester County], though larger than Nags Head, is geographically and economically similar, and has also taken some laudably proactive steps to increase its environmental, social, and economic resilience. From the 1990s to today, Worcester County's planning philosophy

> 'evolved from a development emphasis to a priority on resource conservation and protecting its rural and coastal character. Realizing that air, water, and land could be overused and despoiled, the plans increasingly moved toward resource protection. If such damage occurred, local residents' quality of life and tourism, the economic linchpin, would suffer. Preserving the county's natural resources and character will therefore, continue to be this plan's main purpose.' (Worcester, 2006)

"The county acknowledges that 'Critical to the County's quality of life and economy has been its rich natural resource base. Our unspoiled rural and coastal assets are becoming increasingly valuable as these qualities decline and disappear in other areas. Stewardship is critical.'"

"Through its land use goals, Worcester County has established itself as forward-thinking and sustainably minded. It seeks to not only preserve resources and

provide a more sustainable built environment, but also to engender a unique 'sense of place' among its residents and visitors. It has identified several mixed-use, pedestrian scale, and sustainable 'best practices' for growth that 'will create communities rather than standard tract housing subdivisions.' (Worcester, 2006)"

In Nags Head, the development of community-centered organizations such as the Beach Road Committee (a group working to guide development of a major beach road in Nags Head) and the efforts of Gallery Row (an association of art galleries) are already helping to facilitate crucial interactions. Moreover, local museums and history centers can, through their historical knowledge, "enable new knowledge to be contextualized and applied" (Falk & Kilpatrick, 2000, p.100). Knowledge transfer efforts, such as those demonstrated by these groups and institutions, need to be encouraged -- particularly if permanent residents are to benefit -- because these lasting and trusted relationships will likely have a "ripple" effect that also benefits tourists. Policymakers must "continue to seek ways to provide support for the processes that both help groups to form, and help them mature along the lines that local people desire and need, and from which natural environments will benefit" (Pretty & Ward, 2001, p.221). Focusing on building physical community areas and relationships will tie people to Nags Head while they are visiting. Dewees Island has been able to use free programs and children's camps to further information transfer, and the same could be used here. Concepts like Worcester County's emphasis on sustainable planning philosophy can also be applied. Physical common areas and free programs like these can bridge interactions and facilitate increased communication among year-round residents.

An important point to note is that building social capital and reaping its benefits takes time. It is nearly impossible to immediately re-establish weak or lost patterns of knowledge transfer, but it can be encouraged through specific community development efforts. Once it begins to take root, social capital becomes "self-reinforcing when reciprocity increases connectedness between people, leading to greater trust, confidence and capacity to innovate" (Pretty & Ward, 2001, p.221). Nags Head should begin taking steps towards rediscovering and expanding its knowledge base, and nurturing a culture of information transfer both between and among year-round residents and the tourist population.

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