Chapter 1 Introduction

"We're fans of Route 9. We like the serenity and the natural beauty of it and we're interested in what happens to it.... If I've had a rough day, I just take a drive down Route 9, and it relieves all the stress. It's cheaper than a therapist."

Nancy Ashton, Odessa Resident

Route 9 is the essence of Delaware. For 50 miles between the Colonial Court House in the City of New Castle, and the John Dickinson Plantation, Delaware's two-lane Route 9 runs in a north to south (or south to north) direction in a course that parallels the western shore of Delaware River and Bay, winding past a succession of uniquely Delaware landscapes: heavy industrial sites, forests, tidal and non-tidal marshland, areas of significant natural resources and wildlife habitat, historic towns and quaint villages, and working farms with cultivated fields of grain, corn and soybeans.

Designated by the Delaware Department of Natural Resources and Environmental Control (DNREC) as the Coastal Heritage Greenway, Route 9 is rich with the wildlife, wetlands and ecosystems of the Delaware River and Bay estuary and has a landscape filled with the record of Delaware history in the form of buildings and towns. Many important examples of Delaware's cultural and natural history, as well as its present day agricultural, industrial, and environmental landscape, are located along Route 9.

¹ Edward L. Kenney, "Push to give Del. 9 'Scenic' Status Begins," *The News Journal*, February 24, 2003, B1.

Route 9 lies within the coastal plain of the Delaware Bay, just above mean high water, and so the road is flat. Along most of its length, Route 9 is rural in character with narrow or non-existent shoulders.

Driving along Route 9 can be an experience in serenity. The road is aligned with the western edge of Delaware's extensive marshland coast, and at many points a variety of marsh vegetation is bridged by the road. Generally, the road is lightly traveled, and signs for slow-moving farm vehicles abound.² The region surrounding Route 9 contains the largest area of preserved coastal marshland on the East Coast of the United States, and in several areas the traveler along Route 9 can see a marshland landscape that would have been visible to a colonist at the time of the American Revolution.

Preservation of this important estuarine corridor is ongoing. In part, preservation has occurred because the Delaware Railroad (constructed 1852-1859) was built through the middle of the State and thus diverted commercial traffic to the west. The value of preserving Delaware's coast has been enacted in protective legislation including the federal Clean Water Act (1972) and Delaware's Coastal Zone Act (1971) that prohibited new "heavy industrial uses of any kind" in Delaware's coastal zone, and Delaware's (Tidal) Wetlands Act (1973) have limited human disturbances of sensitive coastal areas and wetlands. The values and purposes of the Coastal Zone Act have been carried out in the determined conservation efforts of State and federal government agencies and private organizations that have contributed to reducing pollution, improving water quality, and protecting and restoring habitat and ecosystems within the Route 9 corridor.

Route 9 runs through the Delaware estuary watershed basin bridging the many creeks or guts that flow eastward into the Delaware Bay including Army Creek, Red Lion Creek, Dragon Run, St. Georges Creek (and Thousand Acre Marsh), Augustine Creek, Silver Run, the Appoquinimink River, Blackbird Creek, the creeks of Cedar Swamp, the Smyrna

² "Route 9: Dover to Delaware City," *Delaware Today*, May 2006, 74.

River, Taylor's Gut, the Leipsic River, Muddy Branch, Mahon River, and St. Jones River to name a few.

Even though the traveler along Route 9 only has the occasional glimpse of the Delaware River or Bay, the road is dominated by the coast, the wetland ecosystems and habitat, and the water: "[W]ater... can easily stand in your way. Even with minimal rain, [especially when combined with a full moon and a wind from the east] many of the smaller bridges take on water, and they're no mere puddles. That water is full-scale tidal flow. To avoid being washed away opt for a vehicle with some clearance or make sure you check the tide schedule before your trip."³

The landscape along Route 9 changes with the seasons. The seasons are reflected in the farm fields of Kent County where in summer the rows of corn stretch toward the sky and in winter resident populations of geese may be seen feeding amidst the corn stubble. The marsh grasses grow up green in the spring, turn yellow and dry in the heat of the summer and stand ornamented with red tassels and cat tails with the coming of fall.

Shore birds and waterfowl abound, and the birds to be seen along Route 9 change with the seasons as well. Route 9 lies entirely within the Atlantic Flyway. Each spring hundreds of thousands of migrating shorebirds rest in the marshes and refuges adjoining Route 9 where they feed to gain strength and the energy needed to complete their journey northward. In the fall, these marshes and refuges also host thousands of waterfowl migrating between their northern breeding grounds and southern wintering areas.

Human beings have occupied the Delaware estuary for 12,000 or 13,000 years. When the Dutch (1631-1638), Swedes (1638-1663) and English (after 1663) began exploring and settling what is now the State of Delaware, 40 or more communities of Lenape or "common people" grew corn, squash, beans, and tobacco in the rich valleys and bottom

³ "Route 9: Dover to Delaware City," *Delaware Today*, May 2006, 75.

lands of the Delaware watershed; relying on the estuary for its fish and game, and for transportation and trade.4

A royal charter in 1681 granted William Penn the Province of Pennsylvania; in 1682, the Duke of York deeded the three Lower Counties of New Castle, St. Jones, and Deale to Penn. St. Jones and Deale then were renamed Kent and Sussex and annexed to the Province of Pennsylvania in 1683 as the three "Lower Counties" and managed by Penn and his heirs and successors until 1776, when Delaware declared itself a separate State.

The fertile soil, available water, and water-based transportation within the Delaware Bay watershed enabled wheat farming and the milling of grain to thrive in the Eighteenth and Nineteenth Centuries. All the creeks had little landings,⁵ and the Delaware River served as the "highway to Europe and back" that enabled the colonists to develop a system of commercial agriculture and a cheap transportation system to support it. Forests were cleared for farming and marshland was reclaimed through ditching and banking, sluice gates and dikes, thus creating farmland for the cultivation of wheat and other crops that were transported by wagon on land or on shallops plying the creeks to the Delaware Bay and on to Philadelphia, Europe, and the West Indies. The many historic buildings, towns, and sites that can be seen today along Route 9 were directly tied to Delaware's coast, and its readily accessible coastal transportation and coastal wildlife resources that could be hunted, fished or trapped.

The historic and cultural landscapes along Route 9 recall events and people important to the history of the First State. Route 9 connects two of Delaware's most significant historic resources: John Dickinson's plantation and the historic court house in New Castle. John Dickinson (1732-1808), whose mansion and farmstead⁶ are located along

⁴ Tracey L. Bryant and Jonathan R. Pennock, *The Delaware Estuary: Rediscovering a Forgotten Resource*, (Newark, Delaware: University of Delaware Sea Grant College Program, 1988), 11-15.
⁵ Bruce Stutz, *Natural Lives, Modern Times: People and Places of the Delaware River*, (New York: Crown Publishers, Inc., 1992), 58.
⁶ "Being a Quaker, and like George Washington, being part of all the discussions concerning the freedom of this new nation in the making, he freed all the slaves he had at 'Poplar Hall' in 1777. Something [sic] that the majority of slave holders thought unthinkable during this time of history." http://www.state.de.us/facts/history/dicknbio.htm

Route 9 southeast of Dover, was a delegate to the Continental Congress (1776), member of the Delaware General Assembly (1776, 1779), President (Governor) of Delaware (1781) and signer of the U.S. Constitution (1787) which Delaware ratified first, making it the First State. The New Castle County Court House (ca. 1732) is a National Historic Landmark because it was the "beginning point of the 12-mile radius that determines Delaware's curved northern boundary," and the meeting place of the Delaware State Assembly where the first state constitution was written, and the site where the state's name of "Delaware" was adopted.

The importance of heavy industry and business to Delaware following World War II is also an inescapable part of the cultural landscape of Route 9. The Delaware River from Marcus Hook to Philadelphia contains the second largest agglomeration of oil refineries in the United States. Oil tankers move through the Delaware Bay transporting the products of the refinery operations. Navigation on the Chesapeake and Delaware Canal (the C&D Canal), which is spanned by Route 9's Reedy Point Bridge (1961) numbers approximately 25,000 ships per year.

Valero Energy Corporation's refinery facility immediately north of Delaware City and the concentration of related industrial facilities to the north of the refinery are located on both sides of Route 9 for several miles. In addition, Route 9's eastern skyline for many miles of the corridor is dominated by the 512-foot cooling tower of the 700-acre Salem and Hope Creek nuclear power complex that is located across the Delaware Bay in New Jersey. This facility has been producing electricity for Delaware, New Jersey, and New York since 1977.

Delaware's Route 9 forms a curving line of separation between the marshland of Delaware's eastern coast and, especially in Kent County, the cultivated fields of corn, soybeans, and potatoes that extend to the west as far as the eye can see. A significant portion of these working farms is protected under Delaware's Agricultural Lands Preservation Program.

Route 9 transports the visitor, as nearly as can be done in the Twenty-first Century, to Delaware's beginnings: to the Delaware Bay and its vast, seemingly limitless, resources of plants and wildlife, and to the European emigrants' organization of the landscape through the cultivation of the rich coastal soils they found there, and the building of houses, settlements, schools, and towns. At the same time, Route 9 confronts the visitor with the challenges faced by the fragile ecosystems of the coastal marshland and the Delaware River and Bay estuary: striking a balance between an industrial economy, commercial transportation in the Bay and the C&D Canal, and encroaching residential development.

Delaware's Route 9 corridor is the essence of Delaware. Route 9 is Delaware's Coastal Heritage Scenic Byway.

Chapter 2

Description, Maps and Corridor Segments

"Here in the easy undulation I would roll past fields deep green with winter wheat or turned up into rich brown by the plough. Vistas of marsh running out until they reached blue water would open up and then pass from sight as I drove slowly along."

Dudley C. Lunt

The proposed Route 9 Coastal Heritage Scenic Byway corridor connects some of Delaware's most important natural resources, historic properties, and bucolic agricultural areas. Road segments described in this Chapter total over 64 miles. This nomination is based on the corridor that begins in New Castle's National Historic Landmark⁸ historic district and ends at the John Dickinson Plantation - a designated National Historic Landmark located east of Dover Air Force Base at the intersection of Route 9 and Route 113. The eastern boundary of the proposed Coastal Heritage Scenic Byway is the Delaware River and Bay; the proposed western boundary is generally 1,000 feet west of the centerline of Route 9, but includes the entirety of resources – public refuges and wildlife areas, and farms protected through Delaware's Agricultural Lands Preservation Program - located within the 1,000 feet corridor area.

Dudley C. Lunt, *Taylors Gut in the Delaware State*, (New York: Knopf, 1968), 284-285.

The National Historic Landmark program was established by the National Historic Sites Act of 1935, as amended, (16 U.S.C. 461). Section 1 of this Act enumerated "it is hereby declared that is a national policy to preserve for public use historic sites, buildings, and objects of national significance for the inspiration and benefit of the people of the United States." There are 12 designated National Historic Landmarks in Delaware. There are five along the Coastal Heritage Scenic Byway, including the Corbit-Sharp House in Odessa and the George Read I House (Stonum).

Route 9 lies within the Coastal Plain of the Delaware Bay, just above mean high water. It runs more or less parallel to Delaware's eastern coastline in southern New Castle and northern Kent Counties. However, Route 9 is a consolidation of several different coast roads, and its alignment winds and turns as each separate road was joined with the next to form a continuous transportation corridor. Along most of its length, Route 9 is a narrow, two-lane, rural road.

Generally, Route 9 is located on the first fast land along the western edge of Delaware's coastal marshes. Much of the land lying east of Route 9 is wetlands that cannot be developed. And much of this tidal and non-tidal wetland is preserved and protected within designated State and federal refuges and natural areas managed for wildlife habitat, conservation, and environmental education. Recreational opportunities within the publicly-owned, protected areas include birding, hunting, fishing, wildlife viewing, trails for walking and access areas for boating. In addition, a significant portion of the working farms and farmland adjacent to Route 9 are preserved through Delaware's Agricultural Lands Preservation Program.

Maps, Photographs and Viewsheds

Words are not adequate to communicate fully the qualities of Route 9 and the experience of driving along the roadway corridor. Nevertheless, maps and photographs can illuminate the boundaries of the corridor and identify the kinds of resources within the corridor and their proximity, one to another. The fact that much of the lands adjoining Route 9 is in public ownership and protected and managed by various agencies within the State and federal government is made clear through mapping.

Four maps accompany this nomination (Appendix A) and provide a more precise, graphic representation of specific aspects of the Coastal Heritage Scenic Byway:

- The map entitle "Protected Areas" shows (a) Delaware Route 9 for the length of the proposed byway; (b) the proposed buffer area on the west side of Route 9 at a distance of 1,000 feet; (c) the location of wetlands, water and natural areas within the corridor; and (d) the boundaries of areas protected through public ownership or management, or in the case of farmland preservation, the purchase of development rights, by Department of State, Division of Historic & Cultural Affairs; the Department of Agriculture, Agricultural Preservation Program; Department of Natural Resources & Environmental Control, Division of Parks & Recreation and Division of Fish & Wildlife; New Castle County, and the U.S. Fish and Wildlife Service.
- The map entitled "Land Use Land Cover" shows the actual use to which the land within the Route 9 corridor is put, i.e., wetlands, urban development, agricultural uses, and other land uses. In addition this map shows the boundary of Delaware's Coastal Zone which is co-terminous with Route 9 for a substantial portion of the byway's length.⁹
- The map entitled "Points of Interest" identifies preserved lands, natural areas, and historic sites, properties, and districts that are listed on the National Register of Historic Places.
- To narrate the visitor experience, the Route 9 corridor is divided into thirteen corridor segments, each of which is described below. The Corridor Segment map shows the location of each of the thirteen corridor segments.

The areas denominated on the "Land Use - Land Cover" can be generally described as follows: agricultural includes: croplands, pasture, orchards, horticulture/nursery, animal feeding area, farm structures/buildings; forestland includes: deciduous forest, conifer forest, mixed forest; water includes: streams, lakes, ponds, rivers, bays coves, canals; urban includes: residential, commercial, industrial, institutional/government; wetland includes: tidal and freshwater wetlands - wetlands are "wet" "land," but are generally defined as a transitional area (land) between "dry land" and bodies of water.

The photographs contained in the photolog that is attached as Appendix B represent the experience, intrinsic qualities, and the natural and cultural landscapes that are visible to one traveling along the Route 9 Coastal Heritage Scenic Byway.

In 2003 members of the Route 9 Steering Committee evaluated viewsheds within the Route 9 corridor and prepared a Scenic Viewshed power point presentation which is included with this nomination as Appendix C.

The Visitor Experience: Corridor Segments

Route Segment 1: City of New Castle

Length of Segment: 1.35 miles

The proposed Route 9 Coastal Heritage Scenic Byway starts at the New Castle County Court House, located in the City of New Castle on Delaware Street between 2nd and 3rd Streets. The City of New Castle, located six miles south of Wilmington on the Delaware River, has a population today of just under 5,000. New Castle was founded in 1651 when Peter Stuyvesant established Fort Casimir as an outpost of what was then a Dutch colony. In March 1682, New Castle was conveyed to William Penn, and in October 1682 the area in New Castle that is now known as the Battery served as William Penn's landing place when he first set foot on American soil. Penn and his successors administered colonial Delaware as the three Lower Counties of the Province of Pennsylvania.

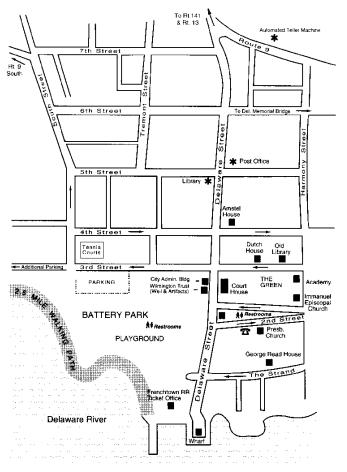
New Castle was the seat of Delaware's colonial government, Delaware's state capital



until 1777, and continued as the location of federal courts and New Castle County government until 1881 when the county seat moved to Wilmington. Because of its location on the Delaware River, New Castle was an important transportation hub connected by rail in 1832 (the New Castle and Frenchtown Railroad) and with ferry service operating across the Delaware River until completion of the Delaware Memorial Bridge in 1951.

New Castle is important for the number of Georgian and Federal style buildings that have been preserved. New Castle's historic district with its brick sidewalks, cobblestone streets, and preserved neighborhoods attracts thousands of visitors each year. Most of the downtown is a historic district that is listed on the National Register of Historic Places and

includes examples of Victorian architecture. Through a unique governing structure in place from the time Delaware was a colony, the Trustees of the New Castle Common, established in William Penn's time, have administrative control over many properties in the City of New Castle. Long-term leases of Trustee property generate income that today benefits the citizens of the City of New Castle.¹⁰



The New Castle County Court House (ca. 1732) was designated a National Historic Landmark in 1972 for its historical significance as the seat of governance in Delaware during the colonial and early statehood eras. The cupola served as the beginning point of the 12-mile radius that determines Delaware's curved northern boundary. It was here in 1776 that Delaware's decision to separate from Great Britain and Pennsylvania culminated with the writing and adoption of the first state constitution and where in 1848 Quaker abolitionists Thomas Garrett and John Hunn were tried

for aiding the enslaved members of the Hawkins family in their escape to freedom on the "Underground Railroad." 11

The purpose of the Trustees, as envisioned by William Penn, is to benefit the citizens, to preserve the historical City of New Castle and the remaining lands and open space now held in trust. Trust income is derived primarily from property rentals and investments. The Trustees annually assist the City Council financially and support a number of local activities. The Trustees continue to support education for City residents by financial grants. (Excerpted from the City of New Castle web site www.ci.new-castle.de.us) S. Allen Chamber, Jr., National Landmarks, America's Treasurers: The National Park Foundation's Complete Guide to National Historic Landmarks, New York, New York: John Wiley & Sons, Inc., 2000. Robin Bodo, New Castle Court House revised National Historic Landmark application, 2002.



The Strand is the site of some of the largest and most gracious homes in New Castle. This lovely, quiet, genteel street belies the gritty earlier history of this seaport town. Packet Alley, the small cobblestone alley that intersects the Strand, once lead down to the docks where cargocarrying packet boats were

loaded and unloaded. While standing in the alley, look up and see the hoists above the windows of what was once a storehouse. Taverns and hotels once flourished here. The George Read II House, a museum owned by the Historical Society of Delaware, is open to the public, providing access to one of the largest and most grand private residences in the City if not the state.

It is hard to imagine, but the Battery, New Castle's beautiful waterfront park, was for most of its history the industrial hub of New Castle. The New Castle and Frenchtown Railroad Ticket Office near the Delaware Avenue Pier is the only remnant of what was once the rail yard that extended towards the western edge of town. Once thought to have been the site of a battery fortification during the War of 1812, Battery Park is now an actively used open space along the Delaware River Waterfront. Delaware's Tall Ship, the Kalmar Nyckl, docks here on occasion for public inspection.

Route Segment 2: City of New Castle to Red Lion Creek

Length of Segment: 4.49 miles



In the Nineteenth Century, steam-powered side-wheelers carrying passengers to then-fashionable destinations along the Delaware coast docked at Deemer's Beach, and other towns along the coast, to disembark holidaymakers for afternoons at the beaches and piers that dotted the shoreline. The area south of New Castle and its close association with the Delaware River is characterized today by industrial coastline development, which depends on access to the Delaware River for transportation. Once the site of a steel mill, the community of Dobbinsville is located immediately south of the City of New Castle. South of Dobbinsville, open marshland and the intermittent views of the industrialized segments of the Delaware River predominate.



In the last twenty years, suburban river edge development has spread south of the City of New Castle offering views of the marshes and Delaware River as an amenity. Wetlands and marshes overgrown with the pestiferous invasive *Phragmites*, which tends to takeover where

marshland is disturbed, along with some remaining areas of woodland and other habitat cover are interspersed among developed areas. Two important governmental facilities are located east of Route 9 in this segment. The offices of the Delaware National Guard is one. The 206-acre Ommelanden Hunter Education Training Center is managed by the Department of Natural Resources & Environmental Control's (DNREC) Division of Fish and Wildlife and provides hunter safety training. Recreational opportunities in this segment include soccer fields and the privately managed Blue Diamond Park.

Route Segment 3: Red Lion Creek to Wrangle Hill Road
Length of Segment: 1.71 miles

The area from Red Lion Creek to Wrangle Hill Road is predominately industrial, and industrial operations here have resulted in the wetlands of Red Lion Creek being designated a superfund site.¹² The landscape south of Red Lion Creek and north and west of Delaware City is dominated by Valero Energy Corporation's Delaware City Refinery, which is located on approximately 5,000 acres.

 $^{^{12}}$ Superfund listing in 1987 resulted from spills of chlorobenzenes and volatile organic compounds in 1981 and 1986 by Standard Chlorine of Delaware, now Metachem.



Construction of the refinery was begun in 1954 and the refinery was opened in 1957. The refinery's production today includes conventional and reformulated gasoline, diesel, low sulfur diesel fuel and home-heating oil, with a total throughput capacity of 210,000 barrels per day. Various industries that complement oil refining cluster around Valero's refinery operations. Agglomeration allows the businesses within the industry cluster to gain the raw products and further refine these products into other industrial chemicals, air products, and by-products. Industrial development between Red Lion Creek and Delaware City is closely associated with easy transportation access to the Delaware River, as well as rail and interstate and interstate connections to the north and south.

In spite of the intense industrial development, this segment still has occasional views of the Delaware River, and even small amounts of open space, and Valero Energy Corporation maintains a substantial part of its holdings as open space. Along Route 9 east of the Valero refinery, as the traveler drives into Delaware City, the visitor sees the system of pipelines connecting the refinery to the Delaware River. But this scene soon gives way to more open space and views of the surrounding marsh and farmland owned by Valero, separating it from Delaware City and other nearby land uses. The real estate now owned by Valero once included Kings College which was physically relocated to upstate New York along the Hudson River when the refinery was constructed in the mid-1950s.



Just north and west of Delaware City is the Dragon Run Natural Area, composed of upland areas of mixed hardwood forest and freshwater marshes in addition to containing a wildlife preserve, Dragon Run Park, and the New Castle-Gunning Bedford Environmental Lab, a former educational site.



Route Segment 4: Delaware City,

Wrangle Hill Road to Reedy Point Bridge

Length of Segment: 3.22 miles

Delaware City was first called Newbold's Landing, after the developer/promoter

John Newbold who laid out the town in 1826 as the eastern terminus of the Chesapeake and

Delaware Canal (C&D Canal). The city's name was changed to Delaware City when the

canal opened in 1829. Delaware City is located 14 miles south of Wilmington and lies

between Dragon Run and the Delaware River. The town was originally laid out with its

broad main street running down to the water. The marshland areas bordering Delaware City

have been important to its economy as the habitat of waterfowl and muskrat which were

hunted and trapped. Much of the outlying area beyond the marsh was highly productive

farm land and is still so used.¹³

 $^{^{\}rm 13}$ Valerie Cesna, National Register of Historic Places Inventory - Nomination Form for Delaware City Historic District, 1983, Section 7, 1.



Today, Delaware City has a mix of architectural styles that evince its significant development of the town from the first half of the Nineteenth Century through the 1930s. Delaware City has a historic district -listed on the National Register of Historic Places-that covers 68 acres and includes 232 major buildings, 92 percent of which contribute to the significance of the district.

Delaware City is the access point for the ferry service to Fort Delaware State Park. Fort Delaware, located on Pea Patch Island, is one of Delaware's first state parks, created in 1951. On the National Register of Historic Places, the Union fortress that once served as a prison for Confederate prisoners of war dates back to 1859, but the military installations on the site were originally built for coastal defense to protect the ports of Wilmington and Philadelphia. Delaware acquired the Fort from the Federal Government in 1947.



From the parking area in Delaware City, visitors take a half-mile ferry ride to Pea Patch Island aboard the Delaware River and Bay Authority's Three Fort Ferry. A jitney provides transportation from the island dock to the granite and brick fortress. Here, authentically-clad historical interpreters begin your journey back to the summer of 1863. The island's remote marshes is the summer home to nine species of herons, egrets and ibis and one of the largest wading bird nesting areas on the East Coast.

The site of another coastal defense immediately accessible from Route 9 is just south of Delaware City. Fort DuPont started as a twenty-gun battery subordinate to Fort Delaware but was expanded and commissioned in 1898 as part of a three-fort protection strategy for Philadelphia. The numerous earthworks, emplacements and bunkers of this installation that can still be seen by the visitor were active in wars up to and including World War II, when Fort DuPont served as a training location for officers and as a camp for

German prisoners of war. More recently known as the Governor Bacon Health Center, DNREC manages these historic and cultural resources from its offices in the Grass Dale Conference Center, located on the west side of the north approach to the Reedy Point Bridge.

Near the southern boundary of Delaware City, on the west side of Route 9, along what was the old canal, is the Polktown historic district, today consisting of nine houses, recalling what was the largest and earliest (1835) settlement of free blacks in Delaware. A Civil War era cemetery in which African-American troops are buried lies along the western side of the branch canal below Route 9.

The 14-mile long C&D Canal crosses the northern Delaware/Maryland peninsula from Reedy Point, Delaware, on the east to Chesapeake City, Maryland, on the west. The canal is named for the two bodies of water that it connects.



The C&D Canal was federalized in 1919 in order to convert it to a sea level facility and eliminate the system of locks used up to that time. When the canal was reopened in 1927,

the eastern terminus was 2 miles south of Delaware City, at Reedy Point. Today, a remnant of the original canal borders the historic downtown and the last surviving canal lock is maintained as a historic site. Historic preservation in Delaware City is supported by a Main Street Program that has revitalized the streetscape and the downtown area with shops, restaurants, and a waterfront promenade.

A boat ramp is maintained at Fort DuPont State Park by the Division of Fish and Wildlife, providing direct access to the C&D Branch Canal. The ramp is located at the north end of the Branch Canal, with easy access to the Delaware River.

Today the C&D Canal is a modern sea-level, electronically controlled commercial waterway carrying 40% of all ship traffic in and out of the Port of Baltimore. The 7,700 acres of federal land comprising the C&D Canal owned by the U.S. Army Corps of Engineers (USACE) which oversees the passage of more than 25,000 ships each year. Within the federally-owned lands, DNREC's Division of Fish and Wildlife manages approximately 5,000 acres of natural areas and wildlife habitat.

In April 2006, the USACE, U.S. Rep. Mike Castle, DNREC and a coalition of organizations and agencies, with strong public participation and support, produced the "Chesapeake and Delaware Trail Concept Plan" which will be the foundation for creating a total of 29.2 miles of multi-use trails on both sides and along most of the C&D Canal. As a phased project, the Trail Concept Plan calls for a multi-use trail system to be built along the existing service roads with connections to adjacent communities for bicyclists, walkers, skaters, strollers, and equestrians, while adding parking, rest areas, wayfinding and interpretive signage, and improved native plantings integrated into the exiting landscape features. Funding for the initial phase of this important multi-use trail project was announced in August 2006.



From the vantage point of the Reedy Point Bridge the traveler appreciates the wide vistas of marshland and open space along and south of the C&D Canal, of Fort Delaware State Park, Pea Patch Island, and Fort DuPont to the north and east, and of the Village of Port Penn directly to the south, as well as the industrial areas and shipping traffic along the Delaware River.

Route Segment 5: Reedy Point Bridge

and the Village of Port Penn

Length of Segment: 3.75 miles

Just south of Reedy Point Bridge, approximately two miles north of the Village of Port Penn, west of Route 9, south and east of NC 417, and north of NC 2 and NC 418, is one of the most significant habitat areas along Route 9, the Thousand Acre Marsh. Covering approximately 1,150 acres most of which are privately owned, Thousand Acre Marsh is a major watershed area composed of a network of ditches and guts fed from both the Delaware River and upland freshwater run-off from farm fields and forests.



Thousand Acre Marsh is one of the most highly productive and diverse habitat areas in Delaware and is presently an extensively utilized foraging area for wading birds from both the Armstrong and Pea Patch Island heronries.¹⁴

Dotting the marsh grass landscape of the Thousand Acre Marsh are the distinctive lodges of muskrats, an economically significant mammal throughout the history of this area.

¹⁴ David B. Carter, Jennifer L. Lukens, Elaine A. Logothetis, "The Thousand Acre Marsh Wetland Rehabilitation Project: An Innovative Approach to Management of Private Lands," August 1996, 4-6.

Muskrats provided opportunities for nearby farmers and watermen to trap for much coveted muskrat fur as well as to supply the market for muskrat meat.

Farmland north of Port Penn is flat and low, i.e., very close to the high water mark, and characterized by small fields ringed by hedgerows and intersected at all angles by small creeks and guts. Flooding of the roadways and farmland from the estuary waters pushed back by easterly winds and full-moon high tides is a frequent occurrence in this area, and visitors are advised to mind warnings of wet weather and possible flooding. Part of Thousand Acre Marsh, west of Route 9, is in the Ashton Historic District which includes part of an early land grant in St. Georges Hundred that has seen little alteration since the first half of the Eighteenth Century. The Robert Ashton House was built around 1700, and although the structure has undergone extensive alteration, the scale and setting are much as they were at the turn of the Eighteenth Century.¹⁵

The visitor traveling south along the Coastal Heritage Scenic Byway is welcomed into Port Penn by the Port Penn Interpretive Center located in a former schoolhouse at the corner of Liberty and Market Streets in the heart of the Port Penn Historic District. The Interpretive Center, operated by the Division of Parks and Recreation (Fort Delaware State Park staff), contains a large collection of photographs, and clothing, equipment, and tools used in the traditional Delaware River-based industries and occupations that were commercially important to the Port Penn area until the 1930s: fishing, trapping muskrat and snapping turtle, hunting waterfowl, and harvesting marsh hay. The collection also includes a floating cabin and muskrat skinning shed accessed from Route 9 on the Wetlands of Port Penn Interpretive Trail. Port Penn's "watery setting," the marsh and the Delaware River, have dominated Port Penn from the time of its initial settlement in the Eighteenth Century. 17

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¹⁵ ______, National Register of Historic Places Inventory - Nomination Form for The Ashton Historic District.

The Port Penn Historic District was listed in the National Register of Historic Places in November, 1978.
 Gabrielle L. Lanier and Bernard L. Herman, Everyday Architecture of the Mid-Atlantic, Baltimore, Maryland: Johns Hopkins University Press, 1997, 281.



Port Penn was founded in 1763 by Dr. David Stewart who created a plan for a river port city to rival Philadelphia. But commercial activities in Port Penn including hunting, fishing, trapping, and farming were generally limited and the village for the most part served only as a landing for the shipment of local farm products to markets in Wilmington and Philadelphia. 18 The Port Penn Historic District contains the entire eight-block town plan laid out by David Stewart and includes the Stewart house (ca. 1755), a farmhouse that reflects the substantial means of the Stewart family. The Village of Port Penn is a well preserved example of a small nineteenth-century river town. "Market Street west to the junction with Route 9 presents a streetscape of dwellings all built before 1868 . . . , their exterior trim and profiles are reflective of Port Penn's boom period of growth." Looking to the east from Port Penn the traveler sees partial views of the river as well as the landings associated with the houses that once belonged to watermen who plied their trade along the river.

¹⁸ Lanier and Herman, *Everyday Architecture of the Mid-Atlantic*, 303.
19 Bernard L. Herman, et al, National Register of Historic Places Inventory - Nomination Form for Port Penn Historic District, 1978, Section 7, 1-2.

South of Port Penn is the 169-acre Augustine Beach Fishing and Access Area managed by the Division of Fish and Wildlife. This site is directly accessible from Route 9 and affords the visitor expansive views of the Delaware River. A ramp gives boaters direct access to the River. A key feature of the 2,602-acre Augustine Wildlife Area is an observation platform with outstanding views of the coast.

Route Segment 6: Port Penn to Taylors Bridge Road
Length of Segment: 6.52 miles



Augustine Beach and the Augustine Wildlife Area is also the location of the nineteenth-century Augustine Beach Hotel, once a tourist destination that provided food and lodging for passengers traveling the Delaware River on steam-powered side-wheelers between Wilmington and Frederica, Delaware. A farmer's market was operated along the waterfront in Augustine Beach where passengers could buy local produce, dairy products, eggs, and meat. Here Route 9 follows a causeway traversing the marshlands and crossing little guts and creeks. This area of marshland is dotted with duck blinds and hunting features maintained by Delaware Wild Lands, Incorporated and the Division of Fish and Wildlife and that in the fall attract hunters to the Delaware coast from all over the eastern United States.



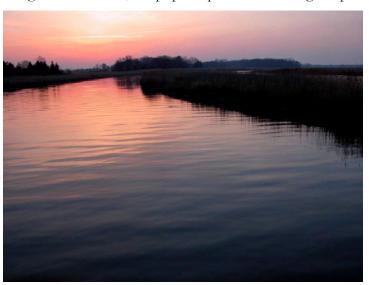
At the south end of the seasonal community of Bayview Beach is the Liston Range Front Lighthouse (1908), one of a 17.5 nautical mile series of range lights from the entrance of the Delaware Bay to Philadelphia that guided shipping through the channel of the Delaware. The Liston Range Front light ceased operations in 1952, and the house and light were sold into private hands. The use of an American Four Square house as a lighthouse is unique in Delaware, and the Liston Range Front Lighthouse has been beautifully restored by its current owner.²⁰

Beyond the marshes, further south, working farms predominate. Some of the most productive farmland in New Castle County is here along Route 9. Agricultural productivity is enhanced by the moderating effect of the Delaware River as well as the frequent rainfalls that provide additional water along the coast. Starting just north of Taylors Bridge Road, many of the farms adjacent to Route 9 have been preserved under Delaware's Agricultural

Robin Bodo and William Duncan, National Register of Historic Places Inventory -Registration Form for Liston Range Front Lighthouse, 2004, Section 8, 3.

Lands Preservation Program. Farms that are protected are a significant part of the Route 9 corridor landscape. Agricultural preservation has protected the traditional dairy and grain farms of the area as well as newer farm enterprises growing and selling nursery stock and involved in agricultural tourism.

Public ownership of lands along this segment of the proposed Coastal Heritage Scenic Byway protects habitat and provides cover for the wildlife in the area as well as affording opportunities for hunting in season, bird watching year-round, and other recreational opportunities. Occasional views of the Delaware River are provided across the flat marshlands, with the far eastern horizon dominated by the massive cooling tower of the Salem and Hope Creek Generating Station in New Jersey. The bridges in this area, like the bridge at Silver Run, are popular places for fishing for perch and catfish and for crabbing.



Scattered residential development in this area bisects the historic and cultural landscape, separates and isolates areas of open space and habitat, and represents a threat to the protection of the existing natural resources and ecosystems.

Route Segment 7: Route 9 to Odessa

via Route 299 (to Route 13 South)

Length of Segment: 2.17 miles

The two-mile trip from Route 9 via Route 299 to Odessa takes the traveler past New Castle County's sewage disposal plant and water reclamation area known as Water Farm 1. Typical suburban development is located opposite the treatment plant and the availability of sewer to this area is causing intensive residential as farmland is converted into housing developments.

In contrast to the suburbanization of the surrounding areas, Odessa has retained much of its eighteenth and nineteenth-century charm. Initially named Cantwell's Bridge after one of its first European settlers, Captain Edmund Cantwell, Odessa was an important transportation hub, with a road connecting it to the Chesapeake Bay to the west and to areas to the north via the King's Road (completed in 1762). Odessa's location on the banks of the Appoquinimink River made it an important grain shipping port and a center of trade in the Nineteenth Century. In 1855, the town "aspiring to the fame of the Russian seaport on the Black Sea" changed its name to Odessa. But when the major north-south railroad line was completed in the 1850s through neighboring Middletown to the west, Odessa's importance as a commercial center diminished.



Though located in an area rapidly changing from a rural to suburban landscape, the section of Odessa which is now zoned as a historic district has remained almost unchanged for over a century.

Among the important historic resources included in the historic district are the Collins-Johnson House (ca.

1700), the Judge Lore House (log construction), the elegant Georgian Corbit-Sharp (1774) and Wilson-Warner (1769) Houses, the Federal style Brick Hotel (1822) and the Davis Store and residence (1824, 1830). Numerous examples of the Italianate style, such as the Cyrus Polk House (ca. 1850) and the New Castle National Bank of Odessa (1853), occur throughout the district too.



The Collins-Johnson House was moved to Odessa; it had been originally built on a site on the Delaware River coast and relocated to Odessa by H. Rodney Sharp in 1962 when it was threatened by a proposed oil refinery.²¹ Ten of the structures within the historic district were donated to Winterthur Museum between 1958 and 1988 and were opened as house museums. Today the Corbit-Sharp House and the Wilson-Warner House are operated as house museums by the Historic Odessa Foundation.²²

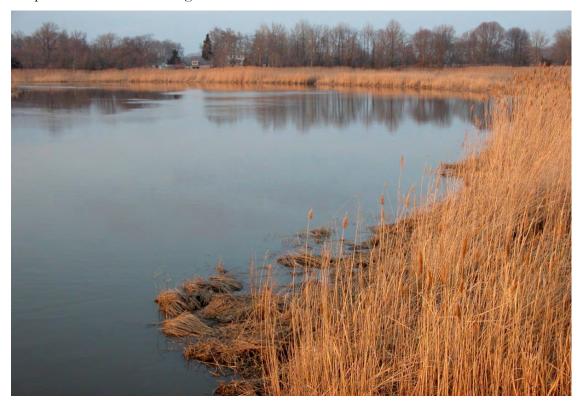
Richard Jett, National Register of Historic Places Inventory - Nomination Form for Odessa Historic District, 1984, Section 7, 1.
 Historic Odessa Foundation, P.O. Box 697, Odessa, Delaware 19730, (302)378-4119.

Route Segment 8: Taylors Bridge Road to Smyrna River –

Woodland Beach

Length of Segment: 9.00 miles

In this segment of the proposed byway the traveler is again in the midst of scenes of broad agricultural fields, much of it preserved farmland, interspersed with marshland, small creeks and guts leading down to the Delaware Bay. Route 9 is intersected by a series of small roads, named for the landings they accessed, that end at the Delaware River. The traveler also has views of the Delaware River in the distance appearing beyond the short grass marshes that persist in this area, though much of the disturbed land is vegetated with the pestiferous invasive *Phragmites*.



Important work to manage, preserve and restore this portion of the Delaware estuary is carried on by the Delaware National Estuarine Research Reserve (DNERR), Blackbird Creek Component, located upstream from Route 9. The Blackbird Component consists of freshwater tidal and non-tidal wetlands and brackish-water marshes. The wetlands

vegetation of the Upper Blackbird Creek estuary is salt marsh cordgrass to the east with some fringes of common reed. At slightly higher elevations, saltmeadow cordgrass, big cordgrass, salt grass, salt wort, high tide bush, and groundsel bush can be found. Most of the lower Blackbird Creek estuary has been overrun by *Phragmites*, forming a dense, monotypic cover over vast expanses of wetlands. The Blackbird Creek drainage contains bald eagle nesting areas, as well as significant habitat diversity providing cover for upland as well as marshland animals. Public efforts to preserve farmland in this area have been matched by private efforts like those of Delaware Wild Lands, Incorporated, that controls several thousand acres of critical marshland around the Taylor's Bridge area.

Several historic farmhouses are in this area including the Naudain family farmstead known as the Huguenot House (c.1840). The Naudains were Huguenots who arrived in southern New Castle County at the turn of the Seventeenth Century. Huguenot House is west of Taylors Bridge on Route 9.

The official demarcation line between the Delaware River and the Delaware Bay is at Liston Point which is within this segment but can only be viewed from the Bay, where the monument marking the spot is located. The area around Liston Point was the site of the earliest Quaker settlements along the Delaware River. Early accounts of life along the river in this area include stories of pirates from the Caribbean who landed here and terrorized farmers and carried off valuables and slaves.

The Cedar Swamp Wildlife Area, 4,840 acres, is managed by the Division of Fish and Wildlife and is an area in which hunting is permitted. Prior to the hurricane of 1878 which inundated the area, Cedar Swamp was a forest of white cedar; now it is a breeding ground for waterfowl, raptors, deer and raccoons and muskrat. A portion of Cedar Swamp is owned, preserved, and managed by Delaware Wild Lands, Incorporated. Collins Beach, within Cedar Swamp, was a popular summer resort in the 1870s when excursion operators carried passengers to then-fashionable destinations like Collins Beach or Augustine Beach along the Delaware Coast. The fishing village and landing of Flemings Landing concludes this segment. The Smyrna River at Flemings Landing being the boundary between New Castle and Kent Counties.



Route Segment 9: Smyrna River to Leipsic

Length of Segment: 9.23 miles



The area around and south of the Smyrna River is characterized by some of the largest farms in Kent County. Expansive farm fields, interspersed with forest, predominate in this segment. The land here has a high water table. In the past, it was considered unsuitable for

agriculture and was maintained, instead, as habitat for diverse populations of wildlife. Some farmers still earn additional income by allowing hunting in, and offering hunting leases for, low, uncultivated areas.

The Woodland Beach Wildlife Area, 6,236 acres, owned and managed by the Division of Fish and Wildlife, is the most extensive state-owned public lands set aside for wildlife habitat along this section of the Delaware Bay. The Wildlife Area includes facilities for education and scientific study of the estuary for youth at the Aquatic Education and Research Center. Just below Mallard Lodge on the west side of Route 9 is *Taylors Gut*. This shallow impoundment of brackish water has been made famous in at least two books written about the area, its changing seasons and the rich wildlife there.²³

Woodland Beach Wildlife Area is characterized by tidal creeks and cordgrass meadows and mudflats exposed at mean low water provide habitat for muskrat, rabbit, marsh birds, waterfowl, shorebirds and waders is lovingly described in Dudley C. Lunt's *Taylors Gut* and Tony Florio's *The Progger*. The area also includes a large waterfowl refuge with

²³ See Tony Florio, *Progger: A Life on the Marsh*, (Dexter, Michigan: Thomson-Shore, Inc., 2002) and Lunt, *Taylors Gut*.

mowed pasture interspersed with freshwater ponds. A large tract of forest serves as habitat for many species of songbirds and other forest dwelling wildlife.

East of the intersection of Routes 9 and 6, is the Delaware Bay village of Woodland Beach. Once a thriving resort, steam ships brought visitors to the boardwalk, swimming area, concession stands, rides, and dance hall. A storm in 1878 washed away the land west of the village leaving Woodland Beach a virtual island. A newly constructed fishing pier allows excellent fishing opportunities in the Delaware Bay. Woodland Beach is only 2.75 miles from Route 9.



South of the Woodland Beach Wildlife Area, Route 9 passes adjacent to the lands of the Bombay Hook National Wildlife Refuge. Bombay Hook, established in 1937, has 16,110 acres, a large portion of which is salt marsh maintained in a near pristine state.²⁴ Managed to protect and preserve valuable natural habitat, Bombay Hook is a focal point for more than 150,000 waterfowl migrating between their northern breeding grounds and southern wintering areas and an important stopover for migrating shorebirds that feed to gain strength and the energy to complete their journey northward. The Refuge attracts 170,000 visitors

annually, primarily for year-round bird watching, although in-season hunting is permitted in

Approximately four-fifths of Bombay Hook is tidal salt marsh. The refuge has one of the largest expanses of nearly unaltered tidal salt marsh in the mid-Atlantic region. It also includes 1,100 acres of impounded fresh water pools, brushy and timbered swamps, 1,100 acres of agricultural lands, and timbered and grassy upland. The general terrain is flat and less than ten feet above sea level.

several controlled areas within the Refuge. The Refuge's geographic area stretches nearly to the Town of Little Creek.



White Hall Neck Road provides the main entrance into the Refuge and is lined with historic farmsteads of the Raymond's Neck Historic District. The Allee House (ca. 1775), located within the boundaries of Bombay Hook NWR was built by Abraham Allee, the son of John Allee, a Huguenot refugee from Artois, France. John Allee arrived in Hackensack, New Jersey, in the 1680s and from 1706 until his death in 1718, John Allee

acquired property in Delaware and left a large estate to his children. His son Abraham, a member of the Delaware Assembly in 1726, a Justice of the Peace in 1738, and a Chief Ranger for the County in 1749, received the eastern half of the "home plantation" at Bombay Hook. Allee House stands today, as it did in the Eighteenth Century, overlooking the fields and marshes of Kent County. It is one of the most handsome and best preserved examples of an early brick farmhouse in Delaware. Allee House was restored and furnished in 1966 and listed on the National Register in 1971 as an important example of the vernacular architecture of eighteenth century Delaware.

Route Segment 10: Leipsic to Little Creek

Length of Segment: 6.7 miles



Across the Leipsic River, south of Bombay Hook is the Town of Leipsic, a small fishing village with an important crabbing and fishing industry and the last remaining commercial working-waterfront along Route 9. Watermen leave at dawn and return in the afternoon, and the visitor can enjoy crabs and other local seafood at restaurants in Leipsic that offer views of the river and boats at work, tied at the docks or in the boat yards.

Leipsic's unique charm and historic character attract many visitors. Working farms that are protected through Delaware's Agricultural Lands Preservation Program add to the picturesque setting of Leipsic where the visitor sees a landscape marked by the traditional sharp edge between the village and the surrounding farmlands, many of which have remained in the same families for over one hundred years. This segment of Route 9 is also

marked by private holdings of important habitat which have been improved over the years with privately-funded investments that have enhanced the value of the local ecosystem by creating the potential for an economic return from hunting, bird watching, photography, and the like.

Suburban and strip developments are common in rural Kent County also and represent potential areas of conflict between new residential residents and the traditional, working farms. A new Coastal Zone Protection Overlay that includes the Kent County portion of the Coastal Heritage Scenic Byway was enacted in 2006 by the Kent County Levy Court to provide additional protection to Kent County's coastal areas by placing limits on residential development.

Muddy Branch, Herring Branch, and other small creeks and guts crisscross the area. In this area of northeastern Kent County, potato growing once predominated on farms founded in the 1950's and 1960's by farmers who moved to Delaware from Long Island when suburban development forced them out of business. They found that the soils and climate in Delaware were very similar to what they had experienced on Long Island, and they re-established potato production here. Along Route 9, before entering the town of Little Creek is a crossroads known as Cowgills Corner, historically significant as an early settlement of African-Americans whose families have continued in ownership for over a century.

Route Segment 11: Route 9 to Dover, Delaware, via South Little

Creek Road

Length of Segment: 4.5 miles

Since the late 1600s, Dover has been a center of Delaware's political, social and mercantile activity because of its position as the seat of Kent County and its location as an important transportation hub at the head of the St. Jones River. In 1777, Dover became Delaware's capital city and remains home to a beautifully preserved capitol complex. This includes two state capitol buildings: the Old State House (1792), now a museum owned by the state's Division of Historical and Cultural Affairs, and Legislative Hall, which replaced it as the seat of government in 1933.



A city of great architectural beauty reflecting its history, Dover has two historic districts on the National Register of Historic Places. The Dover Green National Register Historic District is centered around the more than 300-year-old public square that was the original heart of Dover. Lying just north of this district, the Victorian Dover National Register Historic District reflects the growth of Dover in size and wealth that accompanied the arrival of the railroad in the 1850's. A heritage tourism initiative of Governor Ruth Ann Minner in 2004 created The First State Heritage Park at Dover.

Under the leadership of Delaware State Parks, this park is a partnership of State and city agencies along with nonprofit organizations and the private sector, collaborating to link historic and cultural sites within Dover's downtown historic core. In addition to the former and present state capitol buildings, these sites include among others the Delaware Public Archives, Delaware Visitor Center, Biggs Museum of American Art, three museums at



Museum Square, the Governor's residence at Woodburn (1798), the Kent County Court House (1874), and the Delaware Supreme Court. Also included in the park is the site of the Golden Fleece Tavern. It was here that Delaware became the "first state" when its

delegates were the first to ratify the United States Constitution in 1787. This momentous event along with stories from three centuries of Dover and Delaware history are interpreted to visitors on the park's walking tours led by historic interpreters in eighteenth-century dress and its self-guided audio tours, and through a variety of programs and exhibits developed by the park's partner sites.²⁵



²⁵ More information about visiting Dover can found at www.destateparks.com./heritagepark and at www.visitdover.com

Route Segment 12: The Town of Little Creek

And Little Creek State Wildlife Area

Length of Segment: 8.0 miles



As the traveler approaches Little Creek, agricultural businesses are evident on the landscape. A visitor sees a large grain storage operation and Lane's Garden Farm Fresh Market where Route 8 meets Route 9.





The Town of Little Creek, to the south, had its origins as a fishing village along the Little River and evidence can still be seen at the riverside of the docks, once the center of activity in this small village. Route 9 is the only street through town. The Town of Little Creek has become a destination for people wanting to enjoy crabs and seafood caught locally.

Beyond the Town of Little Creek itself, Route 9 bisects the Little Creek Hundred Rural Historic District covering 2,500 acres of agricultural land and eleven distinct adjoining farm complexes, arranged in "typical Delaware Valley fashion," with the main house the first building approached and with the supporting buildings arranged behind. Also within the historic district are an Octagonal School House (1836) and the Little Creek Quaker Meeting House and cemetery. The contributing resources within the district were all built before 1860. The Little Creek Rural Historic District is historically and architecturally significant because it preserves, almost intact, an example of the historic rural central Delaware landscape from the period between about 1850 and 1950.²⁶

Little Creek Wildlife Area encompasses a total of 4,721 acres. This Wildlife Area complex consists of upland fields interspersed with freshwater wetlands, small tracts of forests, and brackish water impoundments that function as habitat for a variety of wildlife including deer, turkey, waterfowl, shorebirds, wading birds, songbirds, reptiles, and amphibians. This wildlife area is one of the many conserving valuable upland and aquatic coastal resources and is recognized as part of the larger Delaware River and Bay estuary system. Estuaries are nurseries not only vital to animal populations, but also to the human population that relies upon them for drinking water, industry, food production and

²⁶ Steven del Sordo, National Register of Historic Places Inventory - Nomination Form for Little Creek Hundred Rural Historic District, 1984, Section 7, 1-3 and Section 8, 1-4.

recreation. Estuaries are lined with wetlands that strain stormwater runoff from the land, absorbing a great deal of pollution from the water before it meets with rivers and bays



Port Mahon Road intersects Route 9 in Little Creek. This road leads to a boat ramp heavily-used by watermen and recreational boaters. The Port Mahon lighthouse, built in 1903, once stood sentry on this part of the Delaware coastline; it burned down in 1984. In the past, this road was lined with fishing shacks, docks, oyster shucking

houses, and some residences. Today, the area is mostly surrounded by the protected lands of the Little Creek Wildlife area. The industrial pipeline seen along the road is the main jet fuel supply line for Dover Air Force Base.

Route Segment 13: Little Creek to St. Jones River

John Dickinson Plantation

Length of Segment: 4.15 miles



The remaining length of the Coastal Heritage Scenic Byway south of Little Creek continues through large fields of corn and soybeans, interspersed with areas on the eastern side of publicly-owned wildlife areas extending to the Delaware Bay. One of the small architectural features

associated with Delaware potato farms are the migrant labor camps that can be seen along Route 9 at the margins of the fields. These small block or frame buildings have been used over the last fifty years to house the migrant laborers that traditionally worked in the potato

fields picking up and bagging potatoes. For the most part, these buildings are now empty but remain on the landscape as a reminder of agricultural systems of the past.

Dominating the landscape at the very southern end of this segment is the Dover Air Force Base (DAFB), the largest military airlift command base in the United States and often the embarkation point for material and troops bound for Europe, Africa, and the Middle East. Requirements for official sound attenuation and crash zones has meant that DAFB has acquired and is preserving substantial buffering acreage, much of it leased for farming, that serves to prevent potential conflicts associated with residential growth. The areas around the Base are also controlled in such a way as to eliminate the bird populations that threaten aircraft flying in and out of DAFB.

In 1994, DAFB's Building 1301 was listed in the National Register of Historic Places for its service as the headquarters and engineering facility for the 4146th Army Air Force Base Unit between 1944 and 1946 when the 4146th developed America's first successful, combat proven, air-launched rocket. The nationally significant air launch technology contributed to America's effort to win World War II. Today, the Air Mobility Command Museum is housed in DAFB's Building 1301. It is open to the public.



At the southern terminus of the Route 9 Coastal Heritage Scenic Byway is the John Dickinson Plantation, the historic home of John Dickinson (1732-1808), one of the signers of the United States Constitution. Dickinson was a prominent politician and statesman from Delaware in the Colonial and Early Republic Periods. Dickinson's home has been restored by the State of Delaware's Office of Historical and Cultural Affairs to the time when John Dickinson occupied the property. Dickinson's plantation attracts thousands of visitors each year who wish to have a glimpse into colonial plantation life. Although John Dickinson was a lawyer, a statesman, and, as the son and grandson of wealthy tobacco planters, Dickinson was also a farmer with large holdings in both Pennsylvania and New Castle County, Delaware. But his favorite place was his boyhood home on Jones Neck (now the St. Jones River) called Poplar Hill. Dickinson had increased his Kent County holding to over 5,000 acres by the time of his death in 1808.

The Dickinson Plantation lands were typical of nineteenth-century coastal Delaware. They consisted of marsh, wooded and cleared land. All features of the land were utilized. The cleared land was planted with grain crops or tobacco. Orchards dotted the landscape in small groves. Marshes and wooded areas served as grazing lands for cattle and pigs. Finally, the woods provided a source of fuel, food, and animal fodder.

DNREC's Division of Soil and Water manages the 430-acre St. Jones National Estuarine Research Reserve that adjoins the Dickinson Mansion and Plantation. The Reserve includes a one-mile, self-guided nature trail that includes a quarter-mile boardwalk across the marsh. The Reserve features tidal brackish-water and salt marshes dominated by saltmarsh cordgrass (*Spartina alterniflora*), salt hay (*Spartina patens*) and open water of creek, river and bay areas, buffered by freshwater wooded fringe, farmlands and meadows.

The Ted Harvey Conservation Area consists of 2,661 acres managed by the Division of Fish and Wildlife. This Wildlife Area consists of upland fields, forests, and brackish water impoundments that function as habitat for a variety of wildlife including deer, waterfowl, shorebirds, wading birds, reptiles, and amphibians. This is the site of the "Kingston-Upon-Hull" courthouse, perhaps Kent County's oldest historical house. This wildlife area is located off Kitts Hummock Road, approximately 5 miles east of Route 9.

Conclusion

Traveling along Route 9 is a special experience. The great variety of landscapes along the corridor: natural areas maintained as habitat or managed to protect fragile ecosystems, working farms, fishing villages, historic towns, businesses, industry and historic landmarks that define Delaware's heritage, not only contrasts Delaware's past and the present day, but also demonstrates how critically important the Delaware Bay and Estuary drainage basin is to Delaware.

Route 9, Route 299 to Odessa and Route 8 to Dover, encompass every type of land use. But traveling the Route 9 corridor impresses the visitor with both the amount of water, marshland, forest and open space contained within the corridor but also the critical importance of these natural areas: as diverse habitat and breeding grounds for many species of native mammals, invertebrates, amphibians, reptiles and birds and as staging grounds for seasonal migrations of waterfowl and shorebirds, as flood control and natural water filtering, and for hunting, fishing, hiking, boating, year-round birding and wildlife viewing and photography.

The visitor traveling along the proposed Route 9 Coastal Heritage Byway, as well as the Route 299 and Route 8 segments, experiences the variety of Delaware's unique coastal lands and sees the dominant role that Delaware River and Bay has played in the historic and cultural landscapes along the corridor. Life, history and the environment in Delaware are inextricably linked to the Delaware River and the Delaware Bay. Delaware's coastline and the coastal natural and historic resources are not just amenities; they are irreplaceable and play a crucial role in the health of Delaware and its environment, its water and its wildlife and the quality of life of all Delawareans.

Chapter 3

Intrinsic Qualities and Associated Resources of Significance

"Home of the muskrat, opossum and otter, waterfowl and shorebird, turtle and terrapin, fish and crab, the marsh represents the last truly wild area of Atlantic America."

Tony Florio

Applicants for designation under Delaware's Scenic and Historic Highway Program must show how the nominated transportation route exemplifies at least one of six intrinsic qualities. The selected intrinsic quality or qualities must be identified and summarized, and the nomination must include an inventory of resources along the nominated byway that comprise the intrinsic quality and that demonstrate that they are sufficiently significant to justify designation of the route. Route 9 exemplifies two intrinsic qualities: its Natural Quality and its Historic Quality.

Route 9's primary intrinsic quality is "Natural Quality."

Natural Quality applies to those features of the visual environment that are in a relatively undisturbed state. These features predate the arrival of human populations and may include geological formations, fossils, landforms, water bodies, vegetation, and wildlife. There may be evidence of human activity, but the natural features reveal minimal disturbances.

Route 9 falls within the Delaware Bay and Estuary drainage basin. There are four major drainage basins in Delaware comprising 45 smaller units called watersheds, of which, sixteen watersheds fall within the Delaware Bay and Estuary Basin. The Delaware Bay and

ROUTE 9 COASTAL HERITAGE SCENIC BYWAY
DELAWARE SCENIC & HISTORIC HIGHWAY NOMINATION

²⁷ Florio, *Progger*, 4.

Estuary Basin encompasses approximately 520,960 acres or 814 square miles.²⁸ The Route 9 corridor contains the largest area of preserved coastal marshland on the East Coast of the United States. Some of Delaware's most diverse freshwater, brackish river, and saltwater wetland communities constitute more than 27% of the Delaware Bay and Estuary Basin. Moving upstream from estuarine marshes, travelers pass through brackish river wetlands dominated by forest or shrubby vegetations and through linear freshwater stream wetlands.

Marshes and wetland ecosystems perform functions that are critical to the health of Delaware's environment and wildlife and to the health of the entire Delaware estuary. These critical functions are: (a) they act as a filter for sediment, nutrients and pollutants; (b) they minimize storm and tidal flooding; (c) they slow down erosion by providing a buffer against tides, waves, and storm flows; (d) they serve as spawning grounds for fish, crustaceans, and other animal life; (e) they serve as a place of high productivity where plant and animal life thrives; and (f) they provide habitat for fish, crustaceans, waterfowl, beavers, muskrats, and other wildlife.29



The significance of the coastal marshland within the Route 9 corridor to the State of Delaware was established beyond question with the Delaware General Assembly's passage in

Delaware Department of Natural Resources and Environmental Control, *Delaware Bay and Estuary Environmental Profile*, 04/12/03.
 Wetlands produce food through breakdown of biological material and provide important primary and seasonal habitat for animal and plant species dependent upon wetland environments.

1971 of the Coastal Zone Act (CZA). This law protected the coastal area that includes the Route 9 corridor from new heavy-industrial development. Then Governor Russell W. Peterson wrote the following in a letter in early in 1971 arguing for passage of the CZA:

"We have in Delaware a unique and very valuable asset in our ocean and bay fronts and their accompanying wetlands, streams and open spaces. Delaware is a very small area of 2,000 square miles, which is only 5/100 of 1 percent of the United States. It is a playground for millions of people from our neighboring states. It provides us with one of our most profitable industries – tourism- and great enjoyment for our own people.

We have been fortunate that man has seen fit to ignore most of our little peninsula, leaving it pretty much in its natural beauty. But now our turn has come!

Strong economic forces in our modern world point to Delaware Bay as the most attractive place on the East Coast for building a major transportation and industrial complex."

"What do you think would happen on the wide-open undeveloped lands along our Bay with, in effect, a coal mine, an iron ore deposit and a river of oil at their front door?"

"Our bay and rivers would be lined with refineries, steel mills and allied industries converting what we now have to Marcus Hook-to-Philadelphia pattern. [Will Delaware] be better off as a result?" "We are heading full steam ahead toward the industrial complex. Without prompt action, this choice will win by default. I intend to do all I can to lead the State into preserving the bulk of our Bay and coastal areas for recreation and compatible commercial and industrial uses". 30

ROUTE 9 COASTAL HERITAGE SCENIC BYWAY
DELAWARE SCENIC & HISTORIC HIGHWAY NOMINATION

³⁰ Russell W. Peterson, *Rebel with a Conscience*, (Newark, Delaware: University of Delaware Press, 1999), 132-134.

Delaware's (Tidal) Wetlands Act of 1973 has served to implement the intent of the CZA through a program managed by DNREC that requires permits for activities that would disturb tidal wetlands. Recognizing the significance of the wetland and the wetland resources along Delaware's eastern coast in southern New Castle and northern Kent Counties, the State of Delaware has acquired substantial portions of these fragile coastal wetland areas and adjacent uplands. These and other lands within the proposed Coastal Heritage Scenic Byway corridor are protected and managed by DNREC, Bombay Hook National Wildlife Refuge, and others. Around Shearness Pond at Bombay Hook, Woodland Beach Wildlife Area, and the upper, eastern areas of the Blackbird Creek Component of the Delaware National Estuarine Research Reserve, for example, the landscape allows the traveler to look into the past and see what much of the natural areas and coastal marshes must have looked like before the Europeans first set foot in Delaware.

And most recently, in 2001, the entire Delaware Coastal Zone was designated as a Globally Important Bird Area by the American Bird Conservancy because this area has one of the largest concentrations of horseshoe crabs on the planet spawning, making the Delaware Bay one of the two most critically important sites for migrating shorebirds along the entire Atlantic Coast of North America.



Tens of thousands of watch-listed birds, including the Red Knot, plus other wading and shore birds, such as the Semipalmated Sandpiper, the Ruddy Turnstone, and the Sanderling, use the Bay area as stopovers on their long migratory flights.

The natural resource areas within the Route 9
Coastal Heritage Scenic Byway corridor are depicted on
the map included in Appendix A entitled "Protected
Areas." The Delaware River and Bay dominate the
Coastal Heritage Scenic Byway corridor, although they

are literally out of sight for almost its entire length. Each of the landscapes that one sees along Route 9, whether natural, industrial, historic, or agricultural, relates to the river.

The Delaware Estuary runs from near Chester, Pennsylvania, to the mouth of the Delaware Bay - a linear distance of about 75 miles. . . . It is in this region that the waters from the Delaware River and Atlantic Ocean are mixed by tidal currents to form a continuum of fresh to brackish to salt waters. ... 31

The shore of the Delaware estuary is fringed with a continuum of tidal marshes. A tidal marsh is "an area of grasses, sedges, rushes, and other plants that have adapted to continual, periodic flooding. . . . The salinity of the tide defines what plants and animals can survive in the marsh." In salt marshes, the salinity ranges from about 20 to 30 parts per thousand (ppt), and the tides generally flood the areas twice each day. Freshwater marshes have only slight traces of salt and are fed from headwaters of tributary streams along the estuary. Brackish-water marshes between the C&D Canal and Port Mahon³² are transitional wetlands that ranges from 5 to 20 ppt and were the areas where salt hay (Spartina patens) was traditionally harvested as a significant part of the marsh economy.³³ The vertical range of the tide, up to 6 feet in most locations along Route 9, delineates tidal flooding depths and thus the height of vegetation, and the tidal cycle controls how often and how long vegetation may be submerged.

"The Delaware Estuary and its marshlands have served as a continual resource to the individuals living within its proximity." Hunting (deer, waterfowl), fishing (sturgeon, shad, oysters, crabs) and trapping (muskrat, snapping turtle) in Delaware's extensive marshland supplemented income from agriculture and, beginning in the 1830s, were important

Tracey L. Bryant and Jonathan R. Pennock, *The Delaware Estuary*, 43.
 Tracey L. Bryant and Jonathan R. Pennock, *The Delaware Estuary*, 95-98.
 Caroline C. Fisher with Alison W. Elterich, Bernard L. Herman, Rebecca J. Siders, *Marshland Resources in the Delaware Estuary*, 1830 to 1950+/-: An Historic Context, (Newark, Delaware: Center for Historic Architecture & Engineering, College of Urban Affairs and Public Policy, April 1993), 88-90.

commercial activities in Delaware. The cultural landscape of Route 9 reflects the importance of these traditional marshland activities and the fact that life and history in the places along the Delaware coast are inextricably connected to the Delaware River and Bay and its marshland.

Associated Natural Resources and Natural Resources Areas

There are eleven State designated Natural Areas nested within the boundaries of the proposed Route 9 Coastal Heritage Scenic Byway. A Natural Area is an area of land or water, or of both land and water, whether in public or private ownership, which either retains or has reestablished its natural character (although it need not be undisturbed), or has unusual flora or fauna, or has biotic, geological, scenic or archaeological features of scientific or educational value.

Traveling south from the City of New Castle, the first natural area the visitor encounters is the Natural Area, composed of upland areas of mixed hardwood forest and



freshwater marshes in addition to a wildlife preserve, Delaware City's Dragon Run Park, and the New Castle-Gunning Bedford Environmental Lab, a former educational site. Biological surveys have revealed the following plant species: arrowarum, spatterdock,

water-willow, marsh mallow, smartweed, *Phragmites*, red maple, white oak, sweet birch, and the endangered trailing arbutus. Numerous species of fish and reptiles are present. Dragon Run marshes are notable as the northernmost unimpaired freshwater marshland in Delaware. Two small patches of the rare trailing arbutus occur here. Significant wood duck

nesting and the first Delaware record of purple gallinule nesting have been observed in this area. Approximately 200 bird species have been recorded by the Delmarva Ornithological Society.

The Dragon Run Natural Area is owned in part by the Valero Delaware City Refinery, Delaware City Park District and various private owners.

To the east and just north of Delaware City lies the Pea Patch Island Natural Area and Nature Preserve. This Natural Area/Nature Preserve contains a fill area, constructed by the U.S. Army Corps of Engineers, which supports the nationally significant heronry. Vegetation in this area is a mixed hardwood-shrub belt along the periphery including red maple, sweet gum, black gum, willow oak, wild black cherry, pin oaks, box elder, and green ash in the canopy. Red mulberry, wild black cherry, eastern red cedar, and cockspur hawthorn constitute the understory. The diverse shrub layer contains elderberry, southern arrowwood, tall blackberry, American elder, northern dewberry, highbush black blueberry, winged sumac, and re-osier dogwood. Poison ivy, Virginia creeper, and Japanese honeysuckle are the main components of the ground layer. The original island land contains Fort Delaware and tidal marshes. Phragmites and cattail are prominent in this location.

Pea Patch Island Natural Area and Nature Preserve, 310 acres, contains the largest heronry on the east coast from Maine to Virginia, which is very important to the Delaware estuary ecosystem. Nine species have been observed nesting in this heronry: Great Egret, Great Blue Heron, Cattle Egret, Snowy Egret, Little Blue Heron, Louisiana Heron, Black-Crowned Night Heron, Yellow-Crowned Night Heron, and Glossy Ibis.³⁴

ROUTE 9 COASTAL HERITAGE SCENIC BYWAY
DELAWARE SCENIC & HISTORIC HIGHWAY NOMINATION

³⁴ Susan E. Love, ed., *Pea Patch island Heronry Region: Special Area Management Plan, Progress Report, Three Years of Strategy Implementation, June 2001, 1-5.*



South of Delaware City is the Thousand Acre Marsh, the largest freshwater marsh in the state, subject to intermittent flooding and highly attractive to waterfowl. Thousand Acre Marsh is a major watershed area composed of a network of ditches and guts fed from both the Delaware River and upland freshwater running off farm fields and forests. Many species of waterfowl and other birds breed in this area; osprey, bald eagles, and muskrats are in evidence here. Vegetation is dominated by *Phragmites* with wild millet, cattail, marsh mallow, Olney's three-square, duckweed, and smartweed also present. Two archaeological sites in the area have indicated Native American occupation during the Late Archaic and Woodland periods.

A majority of the approximately 1,150-acres of land comprising Thousand Acre Marsh is mostly privately owned. Delaware's Division of Fish and Wildlife owns a portion of the Thousand Acre Marsh Nature Preserve that it manages for hunting and to provide beneficial habitat/buffer for wildlife and a buffer between wildlife and the residents of the Port Penn area.³⁵

Traveling south on Route 9, the Augustine Creek Natural Area is located just below Port Penn. Augustine Creek Natural Area contains a creek, marshes, wooded upland areas, and the Armstrong Heronry Nature Preserve, a heronry of national significance. Vegetation in the marsh is mainly cattail and marsh mallow, with some areas being dominated by saltmarsh cordgrasses. Areas of less salinity are dominated by rice cutgrass. Phragmites occur throughout the marshes. The woods are mature and oaks of the white, chestnut, red, and basket varieties dominate with American beech and mockernut hickory in the canopy of some areas, while white oak and mockernut hickory dominate in others. The understory contains red maple, American beech, red oak, and flowering dogwood. The shrub layer includes the following species: northern arrowwood, mapleleaf viburnum, black gum, and highbush berry. The ground cover contains Japanese honeysuckle, common greenbrier, and low blueberry. The growth of these two lower layers is significantly hindered by heron excrement in the woods near the heronry. This Natural Area is a highly productive marsh with a notable nesting colony of the Great Blue Heron. The heronry, located upland and contiguous to the marsh, is one of only a few in the United States containing more than 100 nests (estimated by the U.S. Fish and Wildlife Service) and the marsh is an essential buffer and feeding ground. Unique habitats for marine and subaqueous species are found here, as well as the remains of earlier cultures. Augustine Creek Natural Area and the J. Gordon Armstrong Heronry contain 2,602 acres of marshland and were established by the conservationist J. Gordon Armstrong.

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³⁵ David B. Carter, Jennifer L. Lukens, Elaine A. Logothetis, "The Thousand Acre Marsh Wetland Rehabilitation Project: An Innovative Approach to Management of Private Lands," August 1996, 4-6.

The Silver Run Marshes Natural Area consists of flood zones and tidal marshes with spawning grounds and scientific research areas. Marsh vegetation is dominated by *Phragmites*. Saltmarsh cordgrass and big cordgrass are also present. This Natural Area contains important breeding and nursery grounds for fish and blue crabs. Studies have shown that a zone located adjacent to the mouth of Silver Run is the prime area for fish reproduction in the Delaware estuary.

Continuing south on Route 9 you will cross the Appoquinimink River Natural Area, the only large marsh system in Delaware remaining essentially undisturbed by humans. Plant species present include salt hay, marsh mallow, switchgrass, marsh elder, groundsel bush, arrow-arum, with cordgrasses dominating. Wild rice occurs in freshwater marshes. The area serves as a nursery for numerous fish species including white catfish, weakfish, channel catfish, spot, and eels. Ducks, egrets, herons, and birds of prey breed in the area. Within this natural area is a geological site known as Marl Pit where the mineral glauconite, or greensand, is exposed. An area of archaeological importance, Hell Island Site, is adjacent to the Appoquinimink River and contains the best preserved collection of artifacts, particularly ceramics, in southern New Castle County. The Appoquinimink River and its surrounding areas have national importance for several fish and wildlife species. Both federally listed species, such as the Bald Eagle, and state rare species, including marsh marigold, are found in this natural area. There is great potential for research and educational purposes, and some research has already been conducted at both the Hell Island Site and Marl Pit. Hell Island has been placed on the National Register of Historic Places.

Continuing south, you will find the Blackbird Creek Natural Area. This Natural Area and its surrounding areas have national importance for several fish and wildlife species. Both federally listed species, such as the Bald Eagle, and state rare species, including marsh marigold, are found in this Natural Area. Plant species present include salt hay, marsh mallow, switchgrass, marsh elder, groundsel bush, arrow-arum, with cordgrasses dominating. Wild rice occurs in freshwater marshes. The area serves as a nursery for numerous fish

species including white catfish, weakfish, channel catfish, spot, and eels. Ducks, egrets, herons, and birds of prey breed in the area.

Silver Run Marshes Natural Area, Appoquinimink River Natural Area, and Blackbird Creek Natural Area contain 8,000 acres largely held in private hands, with the Blackbird Creek Component, part of the National Estuarine Research Reserve System (DNERR), managed by the Division of Soil and Water Conservation.

The Cedar Swamp Natural Area is the most southern Natural Area in New Castle County. This Natural Area is a tidal marsh which has historical and archaeological, as well as ecological importance. The tidal marshes, which were once fresh water and largely protected from tidal action, were transformed into their present state by a tidal wave in 1878. Today the Cedar Swamp Natural Area is dominated by cordgrasses such as saltmarsh cordgrass, big cordgrass, saltmeadow cordgrass, with *Phragmites*, marsh mallow, and hightide bush also present. Numerous prehistoric artifacts have been discovered in the area which may date as far back as 4000 B.C. Cedar Swamp is a National Natural Landmark nominee, meriting the sole New Castle County remnant of Atlantic white cedar. The area is also significant because of its largely unaltered tidal marsh, which provides highly attractive breeding and migratory feeding grounds for waterfowl and raptors such as the common teal, blue-winged teal, black duck, mallard duck, great egret, snowy egret, glossy ibis, great blue heron, kestrel,



and marsh hawk. Cedar Swamp is also a valuable nursery area for sea trout, herring, spot, and white and channel catfish. Cedar Swamp Wildlife Area is a 4,840 acre reserve managed by DNREC's Division of Fish and Wildlife in which hunting is permitted.

The first natural area in Kent County is the Woodland Beach Natural Area. This Natural Area is composed of the

Woodland Beach Wildlife Area, owned and managed by Delaware's Division of Fish and Wildlife. Mudflats, tidal creeks, and marshes provide habitat for a variety of species.

Saltmarsh cordgrass and big cordgrass dominate the marsh vegetation with *Phragmites*, salt hay, and saltmarsh bulrush also present. The state rare plant, soapwort gentian, thrives in a low, wet area where sweet gum and red maple dominate the canopy. Understory species in this area include highbush black blueberry, eastern red cedar, and wild black cherry. Southern arrowwood and Japanese honeysuckle occupy the shrub layer and switchgrass, marsh mallow, and *Phragmites* are present at the wood's edge. Many species of wildlife are found in this natural area which provides habitat for the state rare plant, soapwort gentian, a fall blooming wildflower. This could be the only location in the state where this flower is found. Research and educational potentials are great in this area and much research has already been conducted here. Woodland Beach Wildlife Area has been nominated for designation as a National Natural Landmark.



Woodland Beach Natural Area, lovingly described in Dudley C. Lunt's *Taylors Gut* and Tony Florio's *Progger*, contains 6,320 acres. This is the location of the Aquatic Resource Education Center that functions as a wetland learning center for teachers and students.



Directly below Woodland Beach, is the Bombay Hook Natural Area. This Natural Area includes the federally-owned Bombay Hook National Wildlife Refuge, as well as several tidal creeks and rivers, and marsh islands containing quality saltmarsh cordgrass, salt hay, big cordgrass, and saltmarsh bulrush. The Marshall Island Research Natural Area contains two islands which will be kept unaltered by man. Comparisons with altered sites will be made. In the creeks and rivers, the following fish species are found: white perch, blue crab, weakfish, immature spot, immature winter flounder, black sea bass, striped bass, and eels. The Refuge supports approximately 250 species of birds, 33 mammals, and 37 reptiles and amphibians. This Natural Area is of great importance to the Delaware Bay estuarine system. Adult bald eagles can be seen from early December to mid-May. It also contains several endangered species. Scientific research and educational opportunities are great. There are significant historical and archaeological features present.



Bombay Hook National Wildlife Refuge, established in 1937, covers 16,110 acres. The Bombay Hook visitors' center is 2.4 miles east of Route 9 on Whitehall Neck Road.

Little Creek Wildlife Area, 4,646 acres, consists of upland fields interspersed with freshwater wetlands, small tracts of forests, and brackish water impoundments that function as habitat for a variety of wildlife including deer, turkey, waterfowl, shorebirds, wading birds, songbirds, reptiles, and amphibians. This area is located along the eastern side of Route 9 between Bombay Hook National Wildlife Refuge and the St. Jones River.

Finally, the Route 9 Coastal Heritage Scenic Byway corridor terminates at the St. Jones River Natural Area that includes both brackish and freshwater estuaries dominated by saltmarsh cordgrass (Spartina alterniflora), salt hay (Spartina patens) and the open water of creek, river, and bay areas, buffered by freshwater wooded fringe, farmlands, and meadows.³⁶ It is representative of the diverse estuarine ecosystems found throughout the Mid-Atlantic.

³⁶ http://www.nerrs.noaa.gov/Delaware/St.JonesRiver.html

The more seaward Lower St. Jones River Reserve is 3,750 acres, distributed along 5.5 miles of medium-salinity tidal river situated at the lower end of the St. Jones River watershed, with the river discharging into mid-Delaware Bay. The Lower St. Jones River Reserve is home to the Delaware National Estuarine Research Reserve (DNERR) education and research facility and small laboratory for DNERR researchers. In addition, a 698.5 acre additional reserve contains thirty-five parcels of land, tidal marshes, upland fields, woodlots, and croplands held by twenty-three private land-owners, the DNERR, and one other state agency.

Ted Harvey Conservation Area is a 2,661-acre wildlife area that consists of upland fields, forests, and brackish water impoundments that function as habitat for a variety of wildlife including deer, waterfowl, shorebirds, wading birds, reptiles, and amphibians. This is the site of the "Kingston-Upon-Hull," perhaps Kent County's oldest historic house. This wildlife area is located off Kitts Hummock Road, approximately 5 miles east of Route 9.

Route 9's secondary intrinsic quality is "Historic Quality."

Historic Quality encompasses legacies of the past that are distinctly associated with physical elements of the landscape, whether natural or manmade, that are of such historic significance that they educate the viewer and stir an appreciation for the past. The historic elements reflect the actions of people and may include buildings, settlement patterns, and other examples of human activity. Historic features can be inventoried, mapped, and interpreted. Historic features must possess integrity of location, design, setting, material, workmanship, feeling, and association.



Human beings have occupied the Delaware estuary for 12,000 or 13,000 years. When the Dutch (1631-1638), Swedes (1638-1663) and English (after 1663) began exploring and settling what is now the State of Delaware, 40 or more communities of Lenape or "common people" grew corn, squash, beans, and tobacco in the rich valleys and bottom lands of the Delaware watershed relying on the estuary for its fish and game, and for transportation and trade.³⁷

A royal charter in 1681 granted William Penn the Province of Pennsylvania; in 1682, the Duke of York deeded over to Penn the three Lower Counties of New Castle, St. Jones, and Deale. The counties of St. Jones and Deale were renamed Kent and Sussex and the three Lower Counties were annexed to the Province of Pennsylvania in 1683 and managed by Penn and his heirs and successors until 1776, when they declared themselves to be the separate State of Delaware.

³⁷ Tracey L. Bryant and Jonathan R. Pennock, *The Delaware Estuary*, 11-15.

The fertile soil, available water, and water-based transportation provided by the Delaware Bay watershed, and the Bay itself, enabled wheat farming and the milling of grain to flourish in the Eighteenth and Nineteenth Centuries. All the creeks had little landings, ³⁸ and the Delaware River served as the "highway to Europe and back" enabling the colonists to develop a system of commercial agriculture and transportation for shipping their crops and other agricultural products to market. Forests were cleared for farming and marshland was reclaimed through ditching and banking, and the use of sluice gates and dikes to create fields for growing wheat and other crops that were transported by wagon on land or on shallops plying the creeks to the Delaware Bay and on to Philadelphia, Europe, and the West Indies. The many historic buildings, towns, and sites that can be seen today along Route 9 are directly tied to Delaware's coast, and its readily accessible coastal transportation and coastal wildlife resources that could be hunted, fished, or trapped.



Traveling Route 9 is the best way to learn about the early statehood history of Delaware, from the surviving landscapes to the individual important personages to the lifeways and architecture: it is an outdoor classroom. Historic properties associated with important individuals include the large manor house at the John Dickinson

³⁸ Bruce Stutz, *Natural Lives, Modern Times: People and Places of the Delaware River*, (New York: Crown Publishers, Inc., 1992), 58.

Plantation, to the agricultural landscapes organized around the Ashton Historic District, Raymond Neck Historic District, the plantation houses of Snowland near Leipsic, Wheel of Fortune near Little Creek, and the Huguenot House near Odessa. The religious history of the state can be understood in the variety of congregations who built distinctive urban churches in New Castle and rural Quaker meeting houses near Little Creek and Odessa. The political history is grounded in the New Castle Court House and John Dickinson Plantation. The National Historic Landmark Program designates the nationally important places in our country's history and five of Delaware's twelve designated National Historic Landmarks occur along Route 9: New Castle Court House, George Read I House (Stonum), New Castle Historic District, Corbit-Sharp House, and the John Dickinson Plantation.

Grouped by theme, the following is a list of the historic resources within the Route 9 corridor. All are listed on the National Register of Historic Places that is administered by the National Park Service, U.S. Department of the Interior. Since being listed on the National Register recognizes the significance of the nominated resource and each nomination for national listing can be reviewed for its statement of significance, additional statements of significance are not repeated here. Many additional historic sites and properties are located within the Route 9 corridor that have not been nominated to the National Register, but nevertheless have regional, state, or national significance.

Detailed descriptions of many of the historic districts, structures, and sites listed below are included in Chapter 2, above, as part of the description of 13 Route Segments into which the Route 9 Coastal Heritage Scenic Byway has been divided. The historic resources described in Chapter 2 are identified by being typed in italics.

Museums and Historical Interpretive Centers along Route 9: John Dickinson Plantation, Dover AFB Air Mobility Command Museum, Octagonal School House Museum, Allee House, Historic Houses of Odessa including the Corbit-Sharp House, Port Penn Interpretive Center, Fort Delaware, Eastern Lock of the Chesapeake and Delaware Canal, New Castle Court House Museum, Amstel House Museum, Dutch House Museum, New Castle Historical Society Museum in Old New Castle Library, George Reed II House.

Publicly-Owned Historical and/or Cultural Resources (Federal, State, or Local): John Dickinson Plantation, Dover AFB Museum, Octagonal School House Museum, Bombay Hook Wildlife Refuge, Allee House, Short's Landing Hotel Complex, properties and sites within Port Penn, Fort Delaware, Fort DuPont, Eastern Lock of the Chesapeake and Delaware Canal, Old Court House Museum (New Castle), New Castle Court House Museum and other state-owned historic properties in New Castle.

<u>Colonial Delaware</u>: Kingston-Upon-Hull, *John Dickinson Plantation*, Byfield Historic Archeological District (Caesar Rodney), Tyn Head Court, *Allee House*, *Corbit-Sharp House*, *Ashton Historic District*, Old Dutch House Museum, Amstel House, New Castle Court House Museum, Stonum (George Reed I Summer Home).

Maritime History: Port Mahon Lighthouse Site, towns of Leipsic and Little Creek; Reedy Island Range Rear Light, Liston Range Front Lighthouse, Liston Range Rear Light Station, Port Penn Historic District, Port Penn Interpretive Center, Eastern Lock of the C&D Canal, New Castle Ice Breaker Piers.

<u>Education</u>: Octagonal School House, New Castle Academy, Taylor's Bridge School, Port Penn School, Booker T. Washington School (New Castle Historic District).

Agriculture: John Dickinson Plantation, Cherbourg Round Barn, Little Creek Hundred Rural Historic District, Macomb Farm, Mifflin-Marim Agricultural Complex, Wheel of Fortune, Snowland, Raymond's Neck Historic District, Timothy Cummins House, Savin-

Wilson House, George Farmhouse, Thomas Sutton House, Johnson Home Farm, Riverdale, Robert Grose House (House and Garden in Central Delaware MPS).

From Slavery to Freedom, African American History Trail: John Dickinson Plantation, John Wesley Church and Cemetery Site (Dover AFB), Appoquinimink Friends Meeting House, Corbit-Sharp House, Fort Delaware, New Castle Court House Museum, Booker T. Washington School.

Military History: Dover AFB Museum, Liston Range Front and Rear Lighthouses, Fort DuPont, Fort Delaware.

Historic Districts: New Castle National Historic Landmark District, Delaware City Historic District, Fort Delaware, Fort DuPont, Ashton Historic District, Port Penn Historic District, Odessa Historic District, Raymond Neck Historic District, Little Creek Hundred Rural Historic District, Leipsic and Little Creek Multiple Resource Area, Lower St. Jones Neck Historic District

Chapter 4

Public Participation, Public Support

"O public road, I say back I am not afraid to leave you, yet I love you, you express me better than I can express my self."

- Walt Whitman

Broad public participation and support are vital to the success of any byway initiative. Therefore, one requirement of Delaware's State Scenic and Historic Highway nomination is a description of public involvement conducted to date and the comments and input resulting from the process.

General Description of Public Outreach

The effort to nominate the Route 9 Coastal Heritage Scenic Byway as a State Scenic and Historic Highway began in November 2002. The submission of this nomination marks the end of the effort to nominate Route 9 for designation as Delaware's Coastal Heritage Scenic Byway. The Coastal Heritage Scenic Byway corridor has been celebrated in books³⁹ and has long been recognized as a special place by the residents, farmers, and businesses living or working along the corridor. Those who visit or drive also recognize the Route 9 Coastal Heritage Scenic Byway's special qualities when they experience the cultural landscape that unfolds along Route 9.

Past recognition, planning and preservation efforts have accomplished much in the way of raising awareness of and preserving the resources within the Coastal Heritage Scenic Byway corridor. Many dedicated community, historical, and environmental groups are doing great work to preserve and enhance the byway corridor and the qualities that make Route 9 such a highly valuable resource that contributes to the quality of life in Delaware.

³⁹ See, for example, Dudley C. Lunt, *Taylors Gut in the Delaware State*, especially, Chapter 15, 284-297 and William Least Heat Moon, *Blue Highways*, (Boston: Little, Brown and Company, 1982), 383.

Community interest in the Coastal Heritage Scenic Byway initiative is strong. From the public outreach conducted to date, it is clear that the people of Route 9 care for and consider themselves to be stakeholders in matters involving "their road." In an effort to reach out to those most directly affected by the designation and to those that can do the most to secure the Coastal Heritage Scenic Byway's future as a State Scenic and Historic Highway, a database of nearly 5,000 names and addresses was created for public outreach. The addresses were selected based on their proximity to Route 9.

A total of four mailings during 2003 and 2004 and one in 2006 were sent to individuals, households and businesses included in the Route 9 database. The first mailing was a flyer inviting the public to attend one of two open houses in Kent and New Castle Counties in February of 2003. The second, third, and fourth mailings were Route 9 Scenic Byway Update newsletters that provided in-depth information and special interest articles concerning the Route 9 Byway initiative. The most recent mailing (September 2006) was an announcement of and invitation to public workshops/open houses to introduce the public to the draft nomination, to give notice of where a copy of the nomination could be obtained, to give the webpage address for information on the nomination, and to urge the public to comment and/or support the Coastal Heritage Scenic Byway.

In July 2003 a written survey was distributed with the second newsletter that was mailed out to the individuals, households and businesses included in the Route 9 database. The survey responses were compiled and a summary of the results is set out in Appendix D.

The 2006 public open house/workshops were held on October 17 and 18, 2006, at Grassdale Center in Delaware City and at the Leipsic Fire Hall, respectively.

Copies of two of the three newsletters (no copy of the first newsletter could be found), notices, and other correspondence sent by direct mail to residents, businesses, and state and local elected officials representing the corridor are included with this nomination in

Appendix D, along with a summary of written comments received at or following the 2006 public workshops/open houses.

Route 9 Steering Committee

In addition to the public workshops/open houses, survey outreach, and the Route 9 Scenic Byway Update newsletter publication, a diversity of interests and stakeholders participated as a coalition on the Route 9 Steering Committee. The Steering Committee met seven times between January 2003 and April 2004 and three times between January and October 2006 to help guide and develop the nomination application process. Membership on the committee was open to anyone who wished to participate. A total of 57 individuals representing landowners, farmers, grassroots organizations, businesses, public agencies, and elected officials attended one or more meetings. The list of those who participated in one or more meetings of the committee is attached in Appendix E.

The Steering Committee's work spanned more than three years. The Steering Committee, taking into consideration comment and suggestions from the public and from Route 9 corridor residents:

- developed byway goals,
- drafted and edited articles for the newsletters,
- planned and hosted the public workshops/open houses,
- named the byway,
- evaluated the qualities of Route 9, taking into consideration both public comments and technical evaluation, and
- chose the Byways' primary and secondary intrinsic qualities to be the basis for the nomination,
- provided text, photographs and editing for the nomination, and
- generated ideas for further consideration as part of the development of a Corridor Management Plan for the Route 9 Coastal Heritage Scenic Byway.

A number of Steering Committee members made special contributions that made this nomination possible, and have agreed to be listed as contacts for questions that may arise in connection with the nomination. The Steering Committee extends kudos and special thanks to Metta Barbour, former Executive Director of Delaware Greenways, Inc. In addition to managing Steering Committee meetings, Metta researched the environs of Route 9, gathered text from the Committee, and wrote and compiled the nomination document.

Steering Committee Member	Contact
Delaware Greenways, Inc. 100 W. 10th Street, Suite 1001 P.O. Box 2095 Wilmington, DE 19899	Brad Killian (302) 655-7275
Linda Lee Beck Port Penn, DE	(302) 834-7525
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New Castle County Dept. of Land Use 87 Read's Way New Castle Corporate Commons New Castle, DE 19702	John P. Janowski, Planner (302) 395-5400 JPJanowski@co.new-castle.de.us
Department of Agriculture 2320 South DuPont Highway Dover, DE 19901	Michael H. McGrath, AICP, Chief of Planning (302) 698-4530 michael.mcgrath@state.de.us
Dover/Kent County MPO P.O. Box 383 Blue Hen Corp Center, Suite 208 Dover, DE 19903	Dan McNulty, Planner II, PAC Liaison (302) 760-2712 daniel.mcnulty@state.de.us

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Division of Parks & Recreation

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Terry Villanueva (302) 730-3616

Terry-villanueva@fws.gov

Letters of Support 2006

Listed below are the individuals, businesses, organizations, agencies, and elected officials who provided letters of support for the nomination in 2006. If and when additional letters of support are received, they will be forwarded as a supplement to the nomination. Copies of the support letters are included in Appendix F.

Letters of Support

A number of individuals, businesses, organizations, agencies and elected officials have provided letters of support for the nomination. Copies of the support letters are included in Appendix F.

Past Recognition, Planning and Preservation Efforts

Route 9 has long been recognized for its scenic and natural beauty and rich coastal, colonial and marshland legacy. In fact, the Department of Transportation once posted signs for "Scenic Route 9" long before the Delaware Scenic and Historic Highways Program was established. The efforts summarized below highlight some of the many initiatives that honor and seek to protect and preserve the corridor for future generations.

Press Coverage

Copies of magazine and newspaper articles written about Route 9 are included in Appendix G.

The Delaware Coastal Zone Act

Former Governor Russell Peterson signed the Delaware Coastal Zone Act (CZA) into law on June 28, 1971. The CZA recognizes that the coastal areas of Delaware are the most critical areas for the future of the State in terms of quality of life. This law is designed to protect Delaware's coastal area from the destructive impacts of heavy industrialization and offshore bulk product transfer facilities. The Act is intended to protect the natural environment of the coastal areas and safeguard their use primarily for recreation and tourism.

Coastal Heritage Greenway Auto Tour

The 90-mile Coastal Heritage Greenway was created by former Governor Castle in 1992 and managed by the former Coastal Heritage Greenway Council as an advisory group to the State Division of Parks and Recreation. The Greenway, stretching from Fox Point State Park to Fenwick Island, recognized the following important resources within this region: cultural richness, ecological life, coastal defense, industrialization, agriculture, resort life, and maritime history. The core thread binding most of this Greenway system is Route 9. The Coastal Heritage Auto Tour guidebook that described 27 stops along the route, highlighting the rich natural, cultural, and historic treasures along Delaware's coast was published in 1993. The stops and resources are identified with Coastal Heritage Greenway

signs located along the route. Several interpretive trail guides, including DNREC's "Coastal Heritage Greenway" guidebook, further interpret the rich cultural and natural history of sites along the coast. Information about and a description of the Coastal Heritage Greenway Auto Tour is available on the internet at:

http://www.destateparks.com/greenway/trailguides/autotour/intro.htm.

Comprehensive Conservation and Management Plan

In 1996, the Delaware Estuary, encompassing the Delaware River and Bay, became part of National Estuary Program. A Comprehensive Conservation and Management Plan (CCMP) - a collaborative blueprint for conservation and stewardship - was developed for the entire Delaware estuary. The estuary is 134 miles long and includes portions of thirteen counties in four states: New York, Pennsylvania, New Jersey and Delaware. The CCMP is a guiding document that includes numerous education, outreach, science, management, and policy goals. Today, the Partnership for the Delaware Estuary leads collaborative and creative efforts to protect and enhance the Delaware Estuary and its tributaries for current and future generations.

Globally Important Bird Area by the American Bird Conservancy

The entire Delaware Coastal Zone which includes the Route 9 Scenic Byway Corridor. As the location where one of the largest concentrations of horseshoe crabs on the planet spawns, the coastal area of Delaware is one of the two most critically important sites for migrating shorebirds along the entire Atlantic Coast of North America. Tens of thousands of watch-listed birds, including the Red Knot, plus other wading and shore birds, such as the Semipalmated Sandpiper, the Ruddy Turnstone, and the Sanderling, use the Bay area as stopovers on their long migratory flights.

Delaware Scenic Highway 4

In 1965 the Delaware State Highway Department prepared a report on Route 9 entitled "Delaware Scenic Highway 4, Length 95.2 Miles" recommending the route for

development as a scenic road because of the scenic quality of the corridor, rated as excellent, and the variety of recreational experience, also rated as excellent.

National Scenic Highway Study for the State of Delaware

In 1974 the Delaware Department of Highways and Transportation, in cooperation with the Federal Highway Administration, prepared a National Scenic Highway Study for the State of Delaware. Route 9 from Dover to New Castle is Scenic Route #1 in this report which includes photographs of images along the route, scenic route coding sheets, recommendations from affected agencies, and personal contacts and references.

Appendix A

Maps

Appendix B

Photolog

Appendix C

Scenic Viewsheds of the Route 9 Highway

Appendix D

Survey Results and Workshop/Open House Comment Summaries

Appendix E

Members of the Coastal Heritage Scenic Byway Steering Committee

Appendix F

Copies of Letters of Support

Appendix G

Copies of Magazine and Newspaper Articles