

OPEN SPACE REPORT AND INVENTORY

Lamoine Conservation Commission
March, 2013

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By the Lamoine Conservation Commission
For The Town of Lamoine
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TABLE OF CONTENTS

Foreword by the Lamoine Conservation Commission.....	1
Introduction to the Open Space Report and Inventory.....	1
Chapter I. Open Space Resources in Lamoine	2
Overview	2
The Marine Environment	3
Basic Inventory	3
Shellfish Harvesting	3
Eelgrass Restoration	4
Watershed Planning for Frenchman Bay	5
Shorebird Habitat	5
The Forest Environment	5
Wetlands and Vernal Pools	5
Soils and Surficial Geology	6
Conserved Lands	6
Chapter II. Special Issues for Open Space	7
Aquifer Protection	7
Gravel Pits	8
Large Habitat Blocks	9
Chapter III. Recreational and Scenic Resources	10
Parks	10
Trails	11
Scenic Resources	12
State of Maine Downeast Coastal Scenic Inventory Sites	12
Other Notable Scenic Views	13
Protection of Scenic Views	14
Chapter IV. Town Policy on Open Space	15
Population and other Demographic Changes	15
The Lamoine Comprehensive Plan of 1996	16
Open Space Issues Not Addressed by 1996 Comprehensive Plan	17
Orderly Growth and Development	17
Affirmative Conservation Planning	18
Economic Development	19
Town Support of Open Space	19
Chapter V. Next Steps in Developing Open Space Policy	22
Chapter VI. A Proposed Open Space Vision for Lamoine	24
Acknowledgements and Resources	26

Appendix

(Bound Separately-- Available in the Lamoine Town Office)

- A. *Mini-Handbook of Lamoine's Groundwater Hydrology*, Willem Brutsaert, Ph.D.
- B. *Can We Balance Uses of Sand and Gravel Deposits to Support Local Industries and Protect Groundwater Supplies*, Progress Report (2005) Mitchell Center for Environmental and Groundwater Research
- C. *Report of the Long-Range Planning Committee* (2006)
- D. *Lamoine Comprehensive Plan* (1996), Part VI, "Natural Resources" (pp.36-41),
- E. *Frenchman Bay Atlas, Version 1.0*, August 2012
- F. *Sand and Gravel Aquifer Study, Lamoine Maine*, A Report for the Lamoine Planning Board by Robert G. Gerber, Inc. (1983)
- G. *Lamoine Well/Spring Survey*, Lamoine Planning Board (2002)



Open Space Report and Inventory

Foreword by the Lamoine Conservation Commission

This Open Space Report and Inventory is prepared by the Lamoine Conservation Commission for the use and consideration of the citizens and decision-makers of the Town of Lamoine.

Maine Law requires all Conservation Commissions to prepare an Open Space Inventory but does not specify any particular content or format. The Conservation Commission has chosen to provide an inventory which catalogues features of open space in Lamoine, but also goes beyond that goal. This Open Space Report and Inventory also discusses the importance of open space resources for Lamoine and discusses Town policy with respect to Open Space, concluding with a proposal for a Vision for Open Space and suggest some policy and planning challenges for the next two decades and some next steps which the Town might wish to pursue.

The Conservation Commission is indebted to the members of the 1996 Comprehensive Plan Committee, current and recent Planning Board Members and the Town staff, particularly Stu Marckoon, and Maine's Beginning with Habitat program for their help in putting this Open Space Report and Inventory together.

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Introduction to the Open Space Report and Inventory

Lamoine's open spaces are described in Chapter I, beginning with the marine environment and working to the interior. Discussion of the Marine Environment will include particular attention to the work of townspeople to restore the clam flats through the Shellfish Conservation Ordinance, and to restore eelgrass in Frenchman Bay off Lamoine. The effort to protect the resources of Frenchman Bay by collaboration across town lines by the Frenchman Bay Partners process and the Clean Water, Clean Shore program will be discussed as well.

The Intertidal Zone and Shoreland Habitat, Forests, and Wetlands are also discussed in Chapter I, briefly describing the resources and human uses of each area as well as the wildlife habitat information from the State of Maine "Beginning with Habitat" program and State websites, and the implication of that information for land use planning in Lamoine.

Special issues for Lamoine, including Aquifer Protection, Gravel Pits and Large Habitat Blocks, are discussed in Chapter II. Since everyone relies on groundwater wells, the quality and quantity of available groundwater is an important concern for the Town. Chapter II will document what is known of Lamoine's primary aquifer, what has been done to protect the drinking water supply and the role of open space in preserving this resource

Chapter III will take a look at the Recreational and Scenic Resources of the Town, including the Town and State Parks, hiking trails and spectacular views.

Chapter IV will focus on Town Policy with respect to Open Space. This will begin with the provisions of the 1996 Lamoine Comprehensive Plan relating to open space issues and then discuss the actions taken since 1996 on those issues. Chapter IV will also discuss the demographic changes in Lamoine between the 1990 census and the 2010 census and their implications for the policies set out in the current Comprehensive Plan.

Lamoine has expressed its support for open space in many ways over the past decade. Chapter IV will also review the creation of the Conservation and Parks Commissions, Town Meetings decisions on open space issues, the results of the Long-Range Planning Committee survey, and other initiatives around town indicating appreciation and support of Lamoine's open space and natural resources.

Chapter IV will also review some of the issues not addressed by the 1996 Comprehensive Plan which should be considered for future action.

Chapter V will discuss some of the next steps which may be pursued by those interested in preserving and enhancing the open space resources of Lamoine.

Chapter VI will propose an Open Space Vision for Lamoine.

Chapter I: Open Space Resources of Lamoine

Overview

Physically, Lamoine is a peninsula in eastern Frenchman Bay. It is bordered on the north by relatively urban Ellsworth (and a sliver of Hancock), on the west by Trenton and the Jordan River, on the South by Frenchman Bay and on the east by the Skillings River and Hancock. The following descriptions of the Town are drawn from the Town's Comprehensive Plan, approved by the Town in 1996, and census data through 2010.

The Town encompasses about 17.5 square miles (just over 11,200 acres), and has over 28 miles of shoreline. Although the current population of over 1600 people (in about 1000 housing units) is the largest in the Town's history, the overall population density is still a modest 0.14 people per acre, or 0.09 housing units per acre, similar to neighboring towns and Ellsworth, according to 2010 census data.

Lamoine has a rural distribution of housing, with some, relatively recent subdivisions with a suburban character. There is essentially no village center, though there is a relative concentration of public buildings and dwellings near the Lamoine Consolidated School and Fire Station (Lamoine Corner), and the Lamoine Marketplace general store and Town Hall provide another small center of activity at the junction of Routes 184 and 204. As will be discussed later in more detail later, most development in the Town is along the existing paved roads and between those roads and the shore.

More than one-half of the Town is less than 100 feet above sea level, with most of the elevated parts of town comprised of gravel ridges which are currently being mined. There are numerous wetlands (estimated at 250 acres in 1996), and many areas with soils which are not ideal for septic systems. There is no municipal water or sewer service in the Town. There is one Great Pond, Blunt's Pond, of about 35 acres.

Lamoine's Marine Environment: An Economic and Recreational Asset

Basic Inventory: As noted above, Lamoine is a peninsula on the north shore of Frenchman Bay with approximately 28 miles of shoreline. Some of this, such as Lamoine Beach, is on the open bay; some is along the salt water inlets of Jordan and Skillings Rivers, and some is in large coves such as Partridge Cove, Raccoon Cove, and Berry Cove.



The shoreline is a great resource for commercial harvesting of clams, mussels, worms, sea vegetables, and snails in the intertidal zone and provides access to marine life in deeper waters, primarily from the harbor at Lamoine State Park.

Recreational and commercial activity along the shore, including boating, swimming, walking and tide-pooling, is centered at Lamoine State Park and the two town-owned parks at Lamoine Beach Park and Marlboro Beach. There are public boat launches at the State Park and Lamoine Beach and small recreational craft such as canoes and kayaks can be hand-carried to launch points on the shore.

Shellfish Harvesting and the Intertidal Area: For years Lamoine did not regulate shellfish harvesting in the intertidal areas around the town. Anyone with a State of Maine shellfish license could dig in Lamoine. As a result, no one had a sufficient stake in the health of the intertidal area to undertake any conservation work.

The Shellfish Conservation Ordinance, adopted in Lamoine in April, 2010, marks a significant protection of shellfish along Lamoine shores. This ordinance is parallel to those passed by the adjacent towns of Trenton, Ellsworth, Hancock, Franklin, Sullivan, and Sorrento

and creates a unique model of cooperation among the seven communities. These ordinances established licensing agreements for commercial and recreational harvesting designed to keep harvesting at sustainable levels. The seven towns jointly hired a full-time warden to monitor compliance. Each licensed harvester is required to make a commitment of 12 hours of conservation work and education to support shore clean up and re-seeding programs. A Shellfish Harvesting Advisory Committee comprised of licensed harvesters from each town is committed to meeting regularly and to working with the Department of Marine Resources to stay abreast of ways to increase the productivity of this resource.

In support of the efforts to clean up the shore, in 2010 the Lamoine Conservation Commission committed to participating in the Clean Water, Clean Shores project. Lamoine State Park has observed its annual September clean up for years. The project not only removes litter but also raises awareness among all ages of participants about the need for stewardship. The Shellfish Harvesting Advisory Committee participates in this clean-up as part of their conservation efforts.

Eelgrass Restoration. Eelgrass is an important incubator species for many of the commercially important resources in Frenchman Bay. Eelgrass was common in all parts of Frenchman Bay around Lamoine as recently as 1996, however it decreased sharply over the next ten years according to data from the Maine Department of Marine Resources, probably due at least in part to dragging for mussels in productive eelgrass beds.

Eelgrass monitoring and restoration along the Lamoine shores in the Narrows between Lamoine and MDI and along the Jordan River began in the summer of 2009 and has developed into a vital project. Its purpose is to preserve beds of eelgrass which are critical nurseries for



many species of marine life in Frenchman Bay including lobster, mussels, scallops, clams, and fin fish. Initiated by MDI Biological Laboratory and involving interns from the University of Maine, this project has spread to multiple sites. It has also evolved into an opportunity for hands-on science in the local schools, including middle school science classes of the Lamoine Consolidated School.

Eelgrass restoration efforts depend on a supply of eelgrass sufficiently dense so that a significant number of plants can be pulled up by the roots and planted elsewhere, using a variety of evolving methods. Restoration efforts in Frenchman Bay are dependent on the eelgrass beds found in the Jordan River between Lamoine and Trenton. A two-town effort to protect this critical supply is needed. Also needed are ways to inform mussel draggers and others about the locations of restoration efforts and voluntary agreements not to drag or otherwise disturb those locations.

Watershed Level Planning: Thirteen towns and 3 unorganized territories are involved in the watershed running into Frenchman Bay. Representatives of many of those towns, including the Lamoine Conservation Commission, as well as interested organizations and businesses, have come together to form the Frenchman Bay Partners. The mission of this group is to protect the beauty and ecological health of the Bay in order to assure sustained harvesting of marine resources and availability of recreational pursuits.

Shorebird Habitat: Much of Lamoine's shore frontage is intertidal and shallow subtidal habitat rated as having significant value for shorebirds and waterfowl by the United States Fish and Wildlife Service. The upper portions of the Skillings and Jordan Rivers and all of Raccoon Cove have the highest possible rating with respect to habitat suitability for 34 species of shorebirds and waterfowl which are in decline or are identified as threatened or endangered, at least 15 have historically been observed in Lamoine. Based on available data, these areas of shorebird habitat are the most important habitat of any kind in Lamoine. Since the same area is also important economically for worming, clamming and mussel-harvesting, protecting the shore from pollution should be a high priority for the Town.

The Forest Environment

As the view on the cover shows, Lamoine is essentially a forested town. While land cover will vary from year to year, the latest data indicate that 9,664 of the approximately 11,000 acres in Lamoine are in trees. Forestland is therefore important both to the economy and open space character of Lamoine. Of the forested acres, about 4300 are in evergreens, 1200 in deciduous, 4000 in mixed forests and 600 in forested wetland. An average of 200 acres per year have been harvested in Lamoine over the past decade. There are 10 properties in Tree Growth tax status in Lamoine, totaling 272.9 acres and one identified deer wintering yard in Lamoine, south of the Walker Road and west of Route 204.



Hancock County reported harvest of nearly 15 million board feet of softwood sawlogs and 255,000 green tons of pulpwood in 2010, less than one-quarter of the harvest in Aroostook or Penobscot County.

Wetlands and Vernal Pools in Lamoine

Lamoine has several types of wetlands which provide habitat, erosion control and can act as a sponge to hold overflow water during times of flood. Although much forest land is wet a good part of the year, wetlands are formally identified for planning purposes by the presence of wetland tolerant plant species.

The Maine Department of Inland Fisheries and Wildlife (MDIFW) has divided wetlands into various categories and mapped the documented presence of wetlands in Lamoine on maps

which can be found at the Town Hall (Wetlands Characterization map.) These maps are not complete and are not conclusive when considering whether there is a wetland on any particular piece of property for planning purposes. A wetland analysis may be necessary to make this determination.

The most common types of wetlands in Lamoine are wetlands just inland from the shore (Other wetlands) and forested wetlands (Forested Wetlands, Shrub-scrub Wetlands).

Lamoine also has vernal pools, which are fishless, seasonal ponds which hold water at least 2 ½ months a year. Vernal pools in Lamoine are breeding grounds for several amphibians, as well as fairy shrimp. Vernal pools are subject to development setbacks under Maine law. Due to their seasonal nature, vernal pools are not shown on the Wetlands Characterization map.

Soils and Surficial Geology

The lay of the land in Lamoine was largely shaped by the glacier that covered the area and retreated about 12,000 years ago. Moving in, the glacier scraped the landscape down to bedrock. Retreating it deposited sand and gravel. Lamoine is partially defined by one such deposit, the long ridge of sand and gravel deposits (“Esker”) in north and East Lamoine, roughly along Route 184.

Despite Lamoine’s agricultural past, Prime Agricultural Soils are not abundant in Lamoine, though roughly 10% of Hancock County soils qualify. There are four tax parcels with a total of 438.3 acres in Farmland tax status in Lamoine, with all but one parcel of 16 acres being the fields on Route 204 and the Mud Creek Road. Although there is a separate booklet documenting soil types in Lamoine, available at the Town Hall, a quick reference map or catalogue of agricultural soils in Lamoine is not readily available.

The best agricultural soils are also highly suitable for septic systems and, as a consequence, residential uses often compete with agricultural uses for productive farmland. If the Town decides to encourage agricultural activity, identification of the best soils in Lamoine and land use ordinance provisions discouraging development on these soils will need to be considered.

Conserved Lands



Conserved Lands in Lamoine include the Lamoine State Park and the three town parks which are discussed below. There are at least three conservation easement properties: one a 94 acre property on Old Point and two with trails in the eastern part of Town. There are three properties with a total of 165 acres in Open Space tax status

Chapter II. Special Issues in Lamoine's Open Space

Aquifer Protection

Most if not all of Lamoine is over “water-bearing” fractured bedrock. This water-bearing bedrock is in most places under “overburden” consisting of a variety of deposited material, mostly of glacial origin. The most prominent of these deposits is the sand and gravel aquifer in western Lamoine, mostly straddling Route 184.

The extent of the aquifer and a more detailed description of how it works to provide potable water can be found in the booklet put out by the Lamoine Conservation Commission in 2009, entitled Mini-Handbook of Lamoine's Groundwater Hydrology, (see Appendix) Lamoine resident and civil engineering hydrologist Dr. Willem Brutsaert was the primary source of the scientific content of the booklet.

Fresh water from beneath the town is the only source of drinking water in Lamoine. There is no water treatment plant purifying lake water for Lamoine, as there is for Ellsworth, for instance. Almost everyone in Lamoine has their own well, and even Cold Spring Water Company (which serves about 49 homes, the school, grange building, firehouse, Lamoine Baptist Church and Forest Hill Cemetery) provides local groundwater to its customers.

There are certain limits on this resource. There appears to be a plentiful **quantity** of water. The water available is, however, recharged by rainfall, and may become less available if amounts of water in excess of that recharge are withdrawn for use outside of Lamoine.

The **quality** of the water is at present excellent. But it is important, even critical, to understand that if the aquifer were to become polluted there would be serious consequences for the Town. No polluted aquifer has yet been successfully cleaned up-- anywhere. In one town in neighboring Washington County, for instance, some two decades after pollution of the local aquifer by a military facility, the federal government still has no plan for how to clean up the aquifer. As a result nearby homeowners are still drinking bottled water.

The Conservation Commission, Cold Spring Water Company, the Lamoine Consolidated School and participating students, volunteers, parents and landowners are engaged in several ongoing efforts to promote knowledge of Lamoine aquifer and drinking water and appreciation of the fresh water resource that we have in Town:

The **Freshwater Initiative** established by Lamoine Conservation Commission secured two water level loggers which have been installed in active local gravel pits (one remains active.) These loggers can give a record of water levels at all times which may be printed out whenever a computer is brought to the site for a reading. This record is far more precise than that provided by the monitoring wells required by the State. Over time such monitoring would provide a better understanding of the levels of groundwater at logged sites, including seasonal variation. Water level loggers are currently not required and are installed with the consent and cooperation of gravel pit owners.

GET WET! (Groundwater Education Through Water Evaluation & Testing) was established by the Lamoine Conservation Commission in cooperation with The George Mitchell Center for Environmental and Watershed Research at the University of Maine. GET WET! provides on-going collection of data about groundwater over and near the aquifer, and raises awareness among students and the general public about the importance of monitoring our sources of potable water. Each year since 2006, the 5th and 6th grade students of the Lamoine Consolidated School and chemistry students of Ellsworth High School have tested water samples brought from home for nitrates, iron, conductivity, hardness, pH, and chloride. This regular testing serves as an early warning system that will alert us should any significant changes occur. To date, there have been none.

Gravel Pits

Current tax records show 24 commercial gravel pits in Lamoine. The tax lots that they are on have a total of 282 acres, about 2.5% of the area in the Town, and gravel pits are likely to continue to displace currently forested areas in Lamoine. In addition, in some places gravel extraction may remove the ridges which run through the Town and create pits with floors below the level of nearby roads. There are open space issues relating to aquifer protection and the quality of the post-mining landscape of Lamoine.

Sand and gravel are commercially valuable as a mined commodity for construction purposes. Its removal from over the aquifer has occurred for years and at times has given rise to concerns that there may be a negative impact on Lamoine's drinking water. The Conservation Commission was able, in 2004 and 2005, to commission a grant-funded study of these impacts. The resulting report found that there was "no evidence of large changes in Quantity" of groundwater, and that water quality degradation is "limited in Magnitude and Occurrence."

The report did raise concerns about potential problems in abandoned gravel pits, which were mined prior to State and local requirements for restoration. There is currently no mechanism to require restoration of abandoned gravel pits.



Several protective measures have been instituted to protect the aquifer, in keeping with what is now known to be good practice. They are:

The **Lamoine Gravel Ordinance** follows the guidelines of the State regulations for mining of sand and gravel. Among other provisions, the Gravel ordinance prohibits mining gravel "at a level of less than five (5) feet above the average seasonally high water tables," as established by required monitoring wells placed at the pit's lowest level from which an annual reading of the water level must be reported to the State. In addition, no substance or item potentially harmful to groundwater quality can be stored or dumped in a gravel pit. Finally, restoration of the surface of the gravel pit is required when extraction of sand or gravel from a pit or a portion of a pit has been discontinued. The restoration must be with perennial vegetation on a specified incline, and 85% of this vegetation must have taken hold two years after its planting

or renewed restoration is required. This restoration procedure is to provide a filter for rain water seeping down into the aquifer.

The **Lamoine Building and Land Use Ordinance (BLUO)** was amended at Town Meeting in 2010 to include provisions designed to protect the aquifer and the Town's drinking water. These provisions, among others, list a number of particularly hazardous activities which cannot receive a permit without meeting demanding safety requirements, and place restrictions on the commercial extraction of water to assure that it cannot exceed the recharge capacity of the town's groundwater.

Large Habitat Blocks

Lamoine is a coastal community and was settled as one. Traditional reliance on water transportation has given way to new habits of automobiles and roads, but the scenic attractions of the shoreline have assured that development continues along the shore.

Inland, Lamoine is crossed by several roads which provide connections between shore areas and with the larger roads system outside the Town. The result is a band of development along the shore and existing roads, with relatively little development in the interior blocks defined by those roads. Activity within those interior blocks can be extensive, as the profusion of gravel pits shows, but is often periodic forestry-related activity, with some agricultural activity in limited areas.

These interior blocks range from 200 acres (the block enclosed by Needles Eye Road, Walker Road and Route 204) to 1300 hundred acres (the block enclosed by Needles Eye Road, Asa's Lane and the Lamoine Beach Road). Due to sparse development along at least some of the



edges of each block, they support wildlife that requires up to 2000 acres of habitat. These large habitat blocks are a primary reason that Lamoine is a rural, rather than a suburban, atmosphere, an attribute that past surveys have shown is very important to Lamoine residents.

Wildlife vary greatly in how much habitat they require. Certain animals, such as raccoons, Blue Jays and squirrels, have either adapted to

human proximity or require very little undisturbed habitat. On the other hand, moose require 1280 to 12,000 acres; Bobcats about 6000 acres and Black Bears about 20,000. The total of

Lamoine's large blocks is in the 6000 acre range and some of these blocks extend for significant acreage into other towns.

Such habitat blocks are not common in coastal communities, which are more densely populated, often with "cul-de-sac" subdivisions which break up the larger blocks into a suburban, rather than a rural, pattern. They need to be appreciated by Town citizens and planners as significant and worthy of consideration as a whole, rather than as merely an aggregate of acres and lots. These habitat blocks are a separate resource and should be regarded as such.

Maintenance of the diversity of wildlife currently found in Lamoine will require continuation of the traditional settlement pattern of development along the currently existing roads and the shore. Ways should be found to discourage "cul-de-sac" type subdivisions which penetrate into large habitat blocks, particularly those with substantial wetlands or deer wintering yards. As development pressures increase, some penetration of habitat blocks with relatively good soils for residential development could be encouraged, while discouraging development of interior blocks with poor soils and high wetland productivity.

In addition to guiding development along historical patterns, it would be highly desirable to think about the movement of animals from one habitat block to another. Perhaps targeted conservation easements from private landowners concerned about maintaining the diversity of wildlife in Lamoine would be tailored to meet this objective. Other wildlife corridors will be needed to provide wildlife access to the shore. Since the shore will always be relatively heavily developed, this may depend on the willingness of owners of larger tracts of shore property to restrict development to their parcels, by use of conservation easement or Open Space tax designation restrictions.

Chapter III Recreational Resources

Parks

The Town maintains parks at Blunt's Pond (Bloomfield Park), Lamoine Beach and Marlboro Beach. All are open to the public. They vary in amenities, from virtually nothing except an access road at Marlboro Beach to a parking lot, well-established picnic area and privy at Lamoine Beach. The Parks Commission provides volunteer maintenance and periodic improvements at Lamoine's parks.

Lamoine Beach Park has a considerable stretch of beach for beach combing, tide-pooling and cooling off on hot summer days. The park has wonderful views of Frenchman Bay, Mount Desert Narrows, Hancock Point and Mount Desert Island. Small boats can put in and take out at the park. It is located at the end of Route 184.

Marlboro Beach Park is at the Marlboro side of Raccoon Cove, a cove which nearly empties out at low tide. It is a favorite of bird-watchers at low and mid-tide. Small boats can be launched and taken in at the park. The Town's holding is quite small, and users need to be

respectful of nearby private property. Access is by the Marlboro Beach Road off the end of Route 204 or from the Raccoon Cove Road.

Bloomfield Park is the site of the Town's swimming hole on Blunt's Pond, providing a sandy bottom, privy and picnic tables (but no lifeguard). There is also a short hiking trail, which may some day be a part of a larger trail network. Canoes or kayaks can be launched for use on Blunt's Pond (a Great Pond of about 35 acres). Access is off the Bloomfield Park Road at the top of Asa's Lane on a new access road developed by the Parks Commission.



The **Lamoine State Park** is available on a seasonal fee basis for camping, fishing boat launching, hiking, picnicking and other recreational uses. A Maine Department of Marine Resources lab is located on the premises, which have historical significance as a former naval coaling station.

Trails

There are several hiking trails, both along the shoreline and in the mixed forests of Lamoine. As is noted below, these trails are owned and managed in different ways and are not under the jurisdiction of the Lamoine Parks Commission. Many rely on voluntary land owner permission for access. Most rely on volunteers for development and maintenance.

The **Lamoine State Park Trail** is located within the boundaries of the State Park and offers scenic views and rest stops for hikers and cross-country skiers. About a half-mile long, it is maintained by the State and a fee is charged for access during the summer season.

The **School Cross-Country Trail** is available with the permission of the school. It is a mile and a half and is maintained for cross-country practice by parents and other volunteers. It begins behind the School baseball diamond backstop.

The **Coleman Woods Trail** in Marlboro is a mile and half trail system within a fifty-five acre conservation property subject to an easement to Frenchman Bay Conservancy. The trail offers several loops for variety and differing distances. The landowners of this property developed the trail for public access and it is very popular. It is currently managed by the Small Woodlot Owners of Maine (SWOAM) and maintained by volunteers. It is located about one mile down the Seal Point Road from Route 204, and there is limited parking along the road.

The **Snowmobile Trail** is maintained for snowmobiles by the Frenchman Bay Riders and parts can be hiked in appropriate seasons. It crosses numerous parcels of land whose owners allow use of the trail. There are many miles of trails, connecting several parts of Lamoine, but not all are maintained. There are several access points to the trail, but the road along Blunt's Pond is one of the most used.

The **Simon Woods Trail** is a project of local landowners, who have granted an easement to Frenchman Bay Conservancy which provides for public access to the trail on their property. The trail (just under a mile) has been established but needs a trailhead/parking area off Partridge Cove Road.

Scenic Resources



Among Lamoine's notable attractions are its many scenic views of Frenchman Bay and Mount Desert Island. In addition, the Town has several areas of scenic forests and farmland, generally private lands visible from public rights of way or publicly owned land or from the several trails within the town boundaries, outlined in 3.C. above.

The State of Maine has developed criteria for especially scenic sites and these criteria have been used to create the basic inventory of Designated Sites of the Downeast Coastal Scenic Inventory, set out below.

Designated Sites of the State of Maine Downeast Coastal Scenic Inventory

Marlboro Beach: *Views of Frenchman Bay and Raccoon Cove* Marlboro Beach is located on a peninsula accessed by Raccoon Cove Road. The Town owns a small portion of the beach. The remaining peninsula is privately owned and public access is permitted, Raccoon Cove is a large tidal cove and a working site for clamming, worming and mussel harvesting and an important feeding flat for waterfowl. Marlboro Beach has a view of Hunters' Ledge, a tidal shoal frequented by sea ducks, avian wildlife and seals. The Town maintains its portion of the beach.

Marlboro Beach has fine views of Hancock Point, broad views of Frenchman Bay and its islands, and excellent bird-watching. As artificial lighting in the area is minimal, Marlboro Beach is a particularly fine place to enjoy the night sky.

Lamoine Beach Park: *Views of Frenchman Bay, Mt. Desert Island and Eastern Bay.* Lamoine Beach Park is located at the end of State Road 184. There is public access to the

sand beach, boat launch and picnic areas. There are information kiosks, bicycle and bathroom facilities. The wide-angle view of Frenchman Bay from Lamoine Beach is particularly striking. Lamoine Beach was once the site of commercial wharves, a seaside restaurant and was also used during World War II as a firing range for troops stationed in Ellsworth. The Park is leased by the Town and is maintained by the Lamoine Parks Commission.

Bloomfield Park: *Views of Blunts Pond* Blunts Pond is a ridge-top pond in the center of Lamoine on Bloomfield Park Road off Asa's Lane. There is public access to a sand swimming beach, boat launch, picnic facilities, walking trails and information kiosks. . Bloomfield Park is maintained by the Lamoine Parks Commission. The shallow pond offers canoeing and kayaking, and foliage views in all seasons. Blunts Pond is the site of the annual winter family fishing derby. The Pond has always been a community picnic area. It was also once the site of a thriving ice harvesting operation. The ice was cut, and sent down a slough along what is now Asa's Lane and Ice House Lane to the shores of Frenchman Bay. The ice was then shipped to cities along the eastern seaboard.

Mud Creek/Pinkham's Flats: *Views of Mud Creek and Pinkham's Flats* Mud Creek, a tidal estuary flowing into the Skillings River, crosses under the Mud Creek Road that traverses the Pinkham's Flats. Pinkham's Flats are privately owned and currently provide an open vista of wildflower and active hay fields. Views from the Mud Creek "S-Curve" bridge look west to the tidal estuary and pond and east to the Skillings River. Public viewing is only possible from the Mud Creek Road. There is a roadside pull-off near the bridge. In addition to the scenic creek and nearby fields, Mud Creek bridge is a fine bird-watching spot and is often frequented by Belted Kingfishers and osprey as well as wading shorebirds. The open fields along Mud Creek Road and Maine Route 204 are locally known as Pinkham Flats and are a reminder of the once-thriving dairy farms in Lamoine.

Other Notable Views

Lamoine State Park and Lamoine Town Harbor: *Views of Lamoine Harbor and Mt Desert Island.* Lamoine State Park, located on State Road 184, offers striking views of Mt. Desert Island, Eastern Bay and Mt. Desert Narrows. The right of way to the water is open year round. The Lamoine Harbor borders the Park and is the home to working fishing and lobster boats, a pier and pleasure boat mooring, all of which are supervised by the Lamoine Harbormaster. The waterfront of the Park offers a broad view of the mountains of Mount Desert Island and the narrow portion of Eastern Bay of Frenchman Bay, as well as a view of the working waterfront.

Intersection of Route 184 and Asa's Lane: *Views of Mt. Desert Narrows* . Public viewing of the Mt. Desert Narrows and Acadia's mountains at this location is only possible from Route 184, as the land to the water is privately owned. The view across the mouth of Berry Cove to the west can be dramatic in late afternoon light.

Route 204 entering North Lamoine: *View of tidal estuary of the Jordan River.* Public viewing is limited to Route 204, as the land to the water is privately owned. The Jordan River, once the site of numerous shipbuilders, was also home to salt cod fisheries. The Jordan

River, as the home of a healthy eelgrass bed, is now an important part of eelgrass restoration efforts in Frenchman Bay.

Marlboro Beach Road: *Panoramic Views of Frenchman Bay, Cadillac and Dorr Mountain on Mt. Desert Island.* This location also provides views of the Skillings River leading to Frenchman Bay and shores of Hancock Point. Land to the water is privately owned except for the Marlboro Beach Park.

Views from the Water: An additional perspective on scenic Lamoine comes from the water. Kayakers and boaters can explore the many coves of the Skillings River, Jordan River, and Eastern Bay, putting in at the Mud Creek bridge, Marlboro Beach, Lamoine Beach, the State Park, or from private lands with permission.

Protection of Scenic Views

Four of the above scenic areas (Lamoine State Park, Marlboro Beach, Lamoine Beach Park and Bloomfield Park) are protected by town or state ownership. The remaining four can be viewed from a public roadway. In the future these views could be impacted by development. Due to the high value of the remaining scenic areas, it is impractical to assume that the Town will purchase any of these sites outright. There may, however, be opportunities, particularly in partnership with the State or private conservation organizations, to protect some access points through purchase or donation of land or scenic easements. A small picnic area near the Mud Creek bridge, for instance, might be considered.

This inventory should be viewed as a tool to assist the town in protecting scenic sites. As land development continues, it is important to know which views are most valuable and to develop strategies to protect them or access to them.



Chapter IV Town Policy and Open Space

Lamoine is essentially a rural residential community. People live here because of the attractive and accessible natural resource setting within reach of retail and other services nearby. Some also work within the town or in nearby Ellsworth, but many commute to Mount Desert Island or the Bangor Area for work. The open space character of Lamoine is a major part of its appeal. Lamoine has a generally low density of development and forests and fields which dip to the sea on three sides and in several bays, coves and tidal estuaries. A 1991 survey of residents documented at that time the primary reason for moving to Lamoine was the “woods/sea” setting, and the small town atmosphere. That appeal remains intact.

Population and Other Demographic Changes. Population data since the 1990 Census show a steady increase.

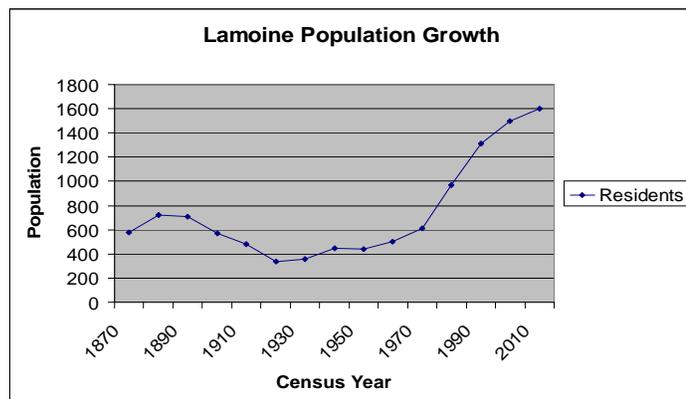
RECENT LAMOINE CENSUS DATA			
Census Year	1990	2000	2010
Census Category			
Population	1311	1495	1602
Registered Voters			1510
Median Age	36.7	41.0	48.0
Median Household Income		\$39,783	\$58,542
Occupied Housing Units	501	605	712
Taxable Value of Real Estate	\$42,576,400	\$100,839,900	\$251,930,200
Median Home Value	\$86,800	\$102,900	\$203,600

Many new residents in Lamoine will purchase open land and build homes, an immediate conversion of open land to developed use. In general, development is good for the town, generating tax revenue, increasing the chances that it will be able to maintain its elementary school, and increasing its overall vitality.

Lamoine residents are older, have fewer children in the home, have a higher median household income, and have a higher median home value than national averages. A larger proportion of Lamoine housing units are owner-occupied than is true for the nation as a whole.

The population data is consistent with a long-term trend, which shows Lamoine’s population has been rising since the 1930’s, as the accompanying graph indicates.

Lamoine’s housing market, like most across the nation, has seen drastic changes since the early years of this century. Residential building permits peaked at 31 in 2002, stayed in the 20’s



through 2005 and dropped by 40% in the latter part of the 2000's reflecting the economic downturn. These totals include both houses and mobile homes, with the mix shifting more to houses in later years. Similarly, in the five years from 2001 to 2005, the Lamoine Planning Board approved 134 new subdivision lots. In the subsequent 5 years (2006-2010) only 55 subdivision lots were approved, and none in 2009 and 2010. Less than half the subdivision lots approved in that ten year period have had a building permit issued for development on the lot.

This level of development has left a great deal of Open Space in Lamoine. There are over 12,000 acres of land in Lamoine, so the population density is about seven acres per person. There is over eleven acres for each residence in Town.

The Lamoine Comprehensive Plan of 1996

Open Space is a substantial part of the appeal of the Town and arguably vital to maintenance of Lamoine's small-town rural character. Does Lamoine have a policy or plan with respect to its Open Space?

Various actions by the Town through the Town meeting will be discussed in the next Section, Town Support of Open Space. The Town's vision for Open Space, however, should also be found in the Town's Comprehensive Plan. Lamoine's Comprehensive Plan was adopted in 1996 after several years of work by a citizen's committee and review by the State of Maine. At that time, Comprehensive Plans were not required, as they are today, to include a specific Open Space Plan. Comprehensive Plans are intended to be updated every ten years, and Lamoine's 1996 Plan is now out-of-date.

The 1996 Comprehensive Plan nonetheless includes a number of policy recommendations approved as part of that plan. Those recommendations appear below, along with an analysis of the extent to which the recommendation has been fulfilled:

Developing and maintaining a land use map that identifies areas for commercial development, residential use, with the remainder a rural/agricultural area with provisions to allow residential expansion while maintaining the essential rural character.

A zoning map showing these zones has been developed and is in place. It designates an area around the Route 184 and Route 204 intersection as the commercial development area of the Town. The area along Buttermilk Road is designated as a residential area, suitable for cluster development. Essentially the rest of the Town is in the Rural/Agricultural area with few restrictions. Subsequent work, including maps developed by the College of the Atlantic for the Town in 2004 and those provided by the State of Maine Beginning With Habitat Program, could provide a much better guide to areas of town that would be more suitable for residential and commercial development, and therefore, by implication, areas of the Town which should remain as Open Space.

Identifying and protecting Critical Natural Resources.

This has not been done on a Town-wide basis. The above-referenced Beginning With Habitat maps provide a good starting point. Other sections of this Report will make other suggestions for resources to be protected.

Creating a housing committee to monitor housing needs for elderly and low income residents, maintain mobile home safety standards and revise the mobile home park ordinance;

This has not been done. The Lamoine Planning Board has invested considerable effort in looking at cluster housing for Lamoine, but neither Lamoine's ordinances nor the 1996 Comprehensive Plan are really conducive to cluster housing in Lamoine. Given that the population of Lamoine is more elderly than the nation's population as a whole and growing more so, possible siting of a facility for the elderly should be on the Town's policy and land use agenda.

Creating a Town Recreation Committee to keep track of and improve public parks available within the town.

The Town has created a Parks Committee which has been active in the preservation and improvement of Town parks.

Open Space Policy Issues Not Addressed by the 1996 Comprehensive Plan

Orderly Growth and Development. Several objectives are spelled out in the 1996 Comprehensive Plan for which no specific recommendations were developed. The first, and most important to the overall rural-residential character of Lamoine, is to assure orderly growth and development. Considerable progress has been made in achieving this objective since 1996 with the Building and Land Use Ordinance (BLUO) passed in 1999 and improved over the years. The BLUO identifies areas of priority for residential and commercial development, with all other areas categorized as rural- agricultural. The ordinance is largely permissive, however, with little attempt to encourage agriculture and related open space by restricting residential development to a defined residential district. As new homes are built in the rural district, the market value of adjacent land will inevitably rise to reflect development potential, thus increasing the "carrying cost" of open space.

The 2000's have seen nearly 30 subdivision proposals at some stage in the town permitting process. Since the Lamoine Building and Land Use Ordinance requires that a subdivision of 12 lots or more set aside 20,000 sq ft of common open space (less than half an acre), most of the requested subdivisions stop at 11 lots. A subdivision of 16 lots or more must have a "cluster" design with 80,000 sq ft of common area for every 16 units and the Planning Board may require up to 10% of a proposed subdivision of any size be kept as open space. Thus town officials and voters have seen the importance of protecting open space within residential developments. The remaining question is where those subdivisions are located relative to the overall open space character of the town.

Residential building on open land is permitted virtually anywhere in Lamoine that is not in violation of shoreland zoning. Residential development may be mixed with other uses in the development district and the rural and agricultural district established by the Building and Land Use Ordinance, in addition to the designated residential district. Minimum lot size is 40,000 sq ft (less than an acre) with 200 feet of road frontage, assuring a modest amount of open space with every residence. The same minimum lot size and frontage requirement applies to the Limited Residential District of the Shoreland Zoning Ordinance. Lamoine's Shoreland Zone Map of January, 2007, reveals that with a few exceptions, the entire salt water shore is eligible for residential development. This open space is private, not physically accessible to the general public, but provides much of the open space visual amenity that people value while living in or passing through Lamoine. Further, examination of each of these platted subdivisions in Lamoine reveals that fewer than half of the approved lots have houses on them, providing additional open space in the meantime.

Maps prepared by a class at College of the Atlantic in 2004 identify areas with development potential and vacant lots throughout the town that entail open space. These maps are useful and should be updated. Traditional resistance to zoning has to this point meant that there has been no zoning related to preservation of the open space values which are important to those living in and moving to Lamoine. At some point the Town needs to enact meaningful zoning which guides new development to those areas of Town with soil and water resources particularly suited to such development while encouraging various kinds of open space planning in high value open space.

The Town of Trenton has recently approved a Comprehensive Plan which includes the development over time of a new village center for the Town, of mixed commercial and residential development, designed on a pedestrian friendly scale. Such a plan could contribute to the identity of the Town and develop a small-town atmosphere, focus development on a local scale and preserve open space. Lamoine should consider whether such an approach makes sense in our town.

Affirmative Conservation Planning.



The Town should also consider identifying extremely valuable open spaces in Town and beginning to plan affirmatively to protect them. This could be done by direct acquisition if the Town wishes to acquire more park area to actively manage. An alternative would be to partner with other organizations to encourage formation of public access trails, access points to the shore, and other open space assets which do not need to be owned directly by the Town. There has been limited use of conservation easements within Lamoine. Through use of a conservation easement, an owner may permanently transfer the right to develop a parcel of open land to an authorized

conservation organization while retaining all other ownership rights in the land. The owner can then receive property tax and other tax benefits for giving up the development potential of the property and the general public receives the benefit of this private open space. The Town of Hancock has placed several tax-acquired shorefront properties under conservation easement, each to be accessed by a public-access trail owned by a local conservation organization. Lamoine should examine the possibilities for greater use of conservation easements for trail development, access to the shore and for the preservation of outstanding views enjoyed by the general public. Maps and data developed by College of the Atlantic in 2004 would offer a good starting point for identifying areas in Lamoine with high priority for protection.

The recent slow-down in residential development provides an opportunity for Lamoine to come up with some policy recommendations encouraging open space and recreational development.

Economic Development. Economic development, particularly small business development consistent with the rural-residential nature of the town or of service to the larger commercial sector in Ellsworth, is important to Lamoine's future. Various tax incentives should be introduced to attract small businesses to designated commercial areas. Farmers in the town need to know that they will not be squeezed by new housing or commercial growth and may thus be willing to make needed investment in the farm enterprise. Current or prospective residents need confidence that the open space attributes that they value will not be lost. Economic improvement and open space protection can be mutually consistent goals.

Town Support of Open Space

The Town of Lamoine and its citizens have shown consistent appreciation of and support for the open space in the Town over the last ten years.

In 2001, the Selectfolk created an exploratory committee to examine the desirability of creating a Conservation Commission, and the 2002 Town Meeting passed the ordinance creating the Conservation Commission. The ordinance instructed the Conservation Commission to "hear the conservation concerns of the community," to "conduct research, in conjunction with the Planning Board, into local land areas and natural resources," and to obtain "information relating to the proper protection, development or use of those open spaces, natural resources and recreational assets."

The Conservation Commission seeks and has obtained research grants to learn more about Lamoine critical water resources, works with the Lamoine Consolidated School to bring hands-on science to school children, and holds a number of educational programs each year on subjects ranging from Lamoine's aquifer to underappreciated assets in the area (the night sky, bluebirds) to how-to programs on gardening.

In 2004 the Town Meeting created the Lamoine Parks Commission, with specific authority over the three Town of Lamoine parks: Bloomfield Park on Blunt's Pond, Marlboro Beach and the Lamoine Beach Park.

Also in 2004, Lamoine resident Georgia Munsell organized the Conservation Commission's annual Roadside Clean-up of litter. Support by townspeople for walking the roadside ditches and removing and bagging litter for pick-up by volunteers and the Maine Department of Transportation was quite impressive. This activity evolved into an Adopt-A-Road program approved by the Town in 2008 which is still keeping Lamoine's roadsides clean today.

The clean-up effort continued to expand and in 2010 the Conservation Commission joined with the State Park and local community groups in other area Towns, loosely banded together under the umbrella Clean Water Clean Shore, to sponsor a shore clean-up in three locations around Town.

In 2005, the Town's ad hoc Long-Range Planning Committee surveyed the townspeople on a number of Town issues. There were a quite respectable 253 responses. Support for open space and recreation was very strong. The Final Report of the Committee summarizes these results as follows:

There was a lot of support for maintaining a rural, non-industrial, Lamoine. More respondents listed "Beauty of Woods and Sea" as one of their primary reasons for moving to Lamoine than any other reason (194 or 69%). In response to the question "How important do you rate protection of open space and environmental protection of land in the future of Lamoine?" An overwhelming number of respondents rated this as "Very Important" or "Important" (225 or 89%).

Many responses to these questions and some of the recreational questions, and particularly the comments that some respondents made to supplement their answers, showed a strong sense of loss as Lamoine grows. Many of these losses, like loss of a favorite view, or walking path or hunting privileges or access to the shore for clamming, worming or musseling, occur due to changes on land not owned by the respondent. That is, to keep those aspects of Lamoine which we treasure is not possible simply through individual ownership of a lot in Town.

This gave rise to what may be the largest surprise in the results. The question was asked: "Would you support the acquisition of land for the following uses: Public Recreation; Public shore access points; landscape protection easements." There were significant votes in favor of each: Public recreation (154, or 61%), Public Shore Access Points (162 or 64%); and Landscape Protection Easements (115 or 45%). Even more striking, most people did not support all three items, and so the total number of people who support public land acquisition of some sort was 196, or 77%. Of course, this support is offered in the abstract, without a specific proposal with a specific price tag, but nonetheless this is a noteworthy endorsement of the need to think realistically about the long-term future of Lamoine and to take some proactive steps to secure the land assets which we will need to assure access to the woods and shore and beauty of Lamoine.

A question about concern over the future quality and quantity of drinking water got a strong response (212 or 84% either "Very Concerned" or "Concerned."). Although abundant pure drinking water seems like a Maine birthright, there are a

number of threats to Maine's drinking water over the next generation. Continued research into and consideration of reasonable, measured steps to protect the sand and gravel aquifer under Lamoine make sense and get a significant mandate from the respondents to the questionnaire.

One specific recreational concern expressed in the survey was the safety of walking and biking on the roads in Lamoine:

Nearly 50% of the respondents enjoy bicycle riding while nearly 95% percent report that they or family members enjoy walking. Our narrow roadways do not offer a safe place to walk or to ride a bicycle leading 78% of the respondents to recommend that bike lanes be added to roads as they are reconstructed.

These results indicate that open space, scenic enjoyment and recreational opportunities are an important part of the identity of Lamoine. There is an increasing understanding that these features of life in Lamoine are not guaranteed to exist forever without planning and commitment. Respondents by and large expressed support for affirmative preservation of the open space amenities and recreational opportunities in Lamoine.

A 2011 survey by the Lamoine Planning Board showed similarly strong support for open space. That survey, circulated with Town property tax bills, yielded 235 responses. Taxpayers were asked to indicate which of 17 land uses they 1) strongly encouraged, 2) would permit where the landowner chooses, 3) would support within limited zones or 4) would not permit at all. The four land uses with the highest “strongly encourage” responses were:

Preservation of Natural Space- Shore
Preservation of Natural Space- Inland
Preservation of Natural Space- Recreation
Agricultural Development (farms)

In 2007, the Town Meeting established a Land Conservation Reserve Fund to accept donations and appropriations for future conservation purchases, and made modest appropriations to the Fund in 2007 and 2008.

In 2008, the Parks Commission proposed changes, including relocation of the access way, and expansion of Bloomfield Park, a popular swimming hole and picnic area on Blunt's Pond. Unlike many of the items listed here, this proposal came with a price tag, but was approved by the Town Meeting.

In 2008 the Conservation Commission sponsored a picnic with an appreciation of the Night Sky which has become an annual August event with good attendance. Lamoine, and most of rural Maine, has less light pollution than the rest of the eastern United States. Lamoine resident Linda Penkalski has acted as “tour guide” to the stars.

Lamoine has no public water supply other than the Cold Spring Water Company, which was established in the late 1800's and is owned by its customers. Cold Spring Water Company provides water to about 54 homes and buildings. The rest of the Town relies on individual wells,

most of which are dependent on the sand and gravel aquifer which extends over much of the eastern portion of the Town. The Planning Board and Conservation Commission (with the enormously appreciated help of Lamoine resident and hydrogeologist, Dr. Willem Brutsaert) developed a series of water source protection amendments to the Town's Building and Land Use Ordinance to protect the Town's drinking water. These were passed by the Town Meeting in 2010.

As open space and recreation issues have been presented to the Town, the response has been positive. Lamoine citizens have expressed support for open space, recreational opportunities, clean water and a clean landscape, not only with expressions of support in opinion polls, but by establishing a Town infrastructure such as the Conservation Commission and the Parks Commission, appropriating funds for appropriate projects, restricting development which threatens the water supply, and doing the dirty work in roadside ditches.



Chapter V. Next Steps in Developing Open Space Policy

This Report has been largely devoted to setting out what is currently known about Lamoine's Open Space resources. The Conservation Commission has, in the course of compiling it, done some thinking about what more needs to be done as the Town looks to the future. The Commission held a forum in February, 2013 to solicit thoughts from concerned citizens about what lies ahead. As a result of these efforts, the Conservation Commission offers the following recommendations for Next Steps.

1. Update the Lamoine Comprehensive Plan

The Lamoine Comprehensive Plan from 1996 needs to be updated. Since it was drafted and approved, demographic trends and projections for Lamoine have changed. In addition, the amount of information available for planning purposes has increased enormously due to technological advances. The world outside Lamoine has been changed by 9-11, by climate change, by an increasingly global economy and by the internet and other technological advances. We can see challenges to infrastructure, energy production, and health care, to name a few, that would have been hard to visualize in the mid-90's.

Open Space Issues which a new Lamoine Comprehensive Plan should stress:

Continued Protection of the Town's Drinking Water. As discussed in Chapter II, all of Lamoine is dependent on private wells. Lamoine is unlikely to have the resources to bring in a public water supply from out-of-Town sources, so protection of the aquifer and drinking water resources of the Town from pollution is vital. In addition, drinking water is rapidly becoming a scarce resource world-wide, and Maine, with its relatively abundant supply of unpolluted water, is already the site of large-scale industrial extraction for export.

Local Food Production. The multi-town shellfish conservation effort around Frenchman Bay is an example of a project with benefits in terms of job creation and preservation, resource conservation and food production. Local food production makes tremendous sense for small rural communities. Local food to some extent offers some hedge against interruptions or contamination of the conventional food supply.

A Vision for the Town When the Gravel Resource has been Depleted.

Lamoine's gravel is being hauled away. Eventually, the ridges in Town will be gone or greatly diminished. What effect will that have on the Town's resources? Does the Town have the scientific understanding of the consequences of this change?

Planning for New Sources of Energy and Other Technological Changes. Electricity from the tides and wind, including offshore wind, are quickly being developed in the Northeast. Unlike oil, which can be shipped relatively efficiently by pipeline, electricity is quite inefficient to move through transmission lines. As new electrical generating technologies come online there will be pressure for them to be sited near the population centers of the northeast. In addition, broadband computer capability and wireless communications technologies are rapidly perceived as essential by large segments of the population. How are these changes likely to affect Lamoine? Does land need be set aside by the town for future facilities?

Assessment of the Needs of the Town's Aging Population. As the Town's elderly population increases, will Lamoine be under more pressure to provide transportation services? Should the Town aggressively pursue some sort of elderly housing project?

Affirmative Conservation Planning. A new Comprehensive Plan should make a case for designation of preferred locations for residential development, including perhaps an elderly housing complex, based on soil types, accessibility and consumer preferences. Other locations,

which have high recreation or habitat values and are less suitable for residential development, should be designated as areas where conservation would be a preferred option. Conservation priorities should include protection of the valuable shorebird habitat in Raccoon Cove and the upper reaches of the Skillings and Jordan Rivers, protection of some of Lamoine's large habitat blocks and deer wintering yards, and creation of wildlife corridors between large habitat blocks and the shore. Expressed Town priorities of public access to the shore and establishment of a community forest would also be useful.

Designation of conservation priorities and of areas which are consistent with those priorities can be extremely useful. Even without being enforced by zoning restrictions, such designations can be a factor considered by Town planners when considering land use proposals. Examples might be encouraging subdivision plans to orient along existing roads, rather than creating "cul-de-sac" subdivisions which break up existing large habitat blocks. Town designation of conservation objectives may also help the Town access grant resources and conservation partners to work with willing sellers towards land use decisions consistent with the Town's priorities.

2. Work with Neighboring Towns to Protect Shared Resources.

The Shellfish Conservation project involves a number of towns in managing resources in the intertidal zone shared by those towns. The fact that several towns are involved defrays the costs of enforcement, and provides consistency across jurisdictions. Lamoine is also actively engaged with other towns in school management and solid waste projects. A proposed multi-town wind energy project has been shelved, but similar projects may arise in the future.

The Frenchman Bay Partners initiative may provide a framework for other needed cooperative projects. Protection of the eelgrass "nursery" in the Jordan River between Lamoine and Trenton is one example. Another might be creation of an entity or mechanism for marine water testing along the shore to protect Frenchman Bay from point source pollution. This is traditionally a State responsibility but has been compromised by State budget cuts in recent years.

Chapter VI. Open Space Vision

Lamoine's Open Space resources are abundant and highly prized by its citizens. Open Space will continue to be important as the Town develops and changes over the next few decades. The Town's Comprehensive Plan is due for a review and Open Space concerns will be woven through any new Comprehensive Plan as they were in the 1996 Plan. The Conservation Commission suggests that setting out an Open Space Vision for the Town will provide a useful guide in looking at future challenges and opportunities.

The Conservation Commission has therefore considered and approved the following Open Space Vision for Lamoine, to be adopted by the Town as a guide to future planning and decision-making.

An Open Space Vision for Lamoine

Lamoine will continue to be recognized as a place defined by its rural character and open space resources – open fields and woodlots, scenic vistas, scenic road corridors, with an abundance of wildlife and flora. People in all parts of Lamoine, in both established neighborhoods and newer subdivisions, will have convenient access to open space. Access will be provided to the ocean and Blunt's Pond for swimming, boating, fishing, hiking, and sightseeing. The park system will be maintained as a significant component of the open space system.

Townpeople will identify key natural resources that are inherent elements of the town's rural character. They will continue to be involved in land preservation efforts, actively learning from the success of other towns with histories of natural resource protection.

Additional homes and roads will be built as the community grows. At the same time, new residential development will preserve natural features; provide buffers along roads, wetlands, and streams; and incorporate meaningful pieces of open space. Connections between open space areas will be a priority in siting new development. These connections will be for both wildlife in the form of travel corridors and interconnected habitat and pedestrians in the form of off-road trails. Some larger natural areas will be preserved to protect habitats of area-sensitive species and provide opportunities for traditional outdoor pursuits, such as hunting, snowmobiling, and hiking.

ACKNOWLEDGEMENTS

Work on the Inventory started several years ago, and past as well as present members of the Conservation Commission have contributed to it over the years, particularly David Schick, Rae Dumont and Lynda Tadema-Wielandt. Jennifer Kovacs at the Town Office was consistently helpful and, as always, Town Administrator Stu Marckoon has been the Answer Man, providing information and other assistance when called on. John Holt and Gordon Donaldson of the Lamoine Planning provided valuable background information, and Willem Brutsaert made every effort to keep us from several scientific illiteracies. Megan Facciolo at Hancock County Soil and Water Conservation generously gave of her time. Anne Stocking provided considerable editorial help.

Gordon Longworth at the College of the Atlantic GIS lab provided the cover. The photographs came from Georgianna Pulver (Inside Cover, Table of Contents and pages 3, 5, 9, 14, 18, 22 and 27); Dr. Jane Disney, MDI Biological Laboratory (page 4); Anne and Fred Stocking (pages 6, 7, 11, & 12). The charts on page 15 were by Larry Libby (Census) and Fred Stocking (Population).

RESOURCES

The days of a straightforward Bibliography are fading fast, particular with reference to current information on resources. Documents which exist primarily in print form have been pulled together into an Appendix, available in the Town Hall, Except the Comprehensive Plan and the “yellow book” Soil Potential Rating for Land use Planning at a Local Level in Maine, (Bulletin 747 of the Maine Agricultural Experiment Station (December, 1977))

Almost everything in this report could be gleaned from websites, but citations from websites are often not useful over time as particular web addresses change frequently. This list will not try to reference specific pages, but merely the basic websites.

Much of the information in this Report and Inventory comes from the Maine Beginning with Habitat program, found generally at www.beginningwithhabitat.org. Beginning with Habitat periodically provides towns with large scale maps of resources in the town. The most recent version of these maps is in the map case in the public portion of the Lamoine Town Hall.

Accompanying those maps is a series of maps done in 2004 by students working under Gordon Longworth and Isabel Mancinelli in a College of the Atlantic course combining basic planning theory with GIS programming which used Lamoine as its focus.

Information is also available on the websites of the Maine Department of Marine Resources, the Department of Environmental Protection and the Department of Inland Fisheries and Wildlife, accessed generally through www.me.gov.

One particularly useful source of current resource information is the *Frenchman Bay Atlas* (Version 1.0, August 2012) by Alex Brett, Chris Petersen and Gordon Longworth of the

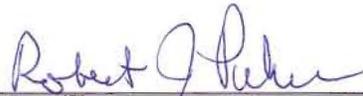
College of the Atlantic, which provides data maps of the Frenchman Bay Region and currently accurate resource references. It is available on the Frenchman Bay Partners website.

Organizations with informative websites dealing with Lamoine and the surrounding area include:

Town of Lamoine (Lamoine-me.gov)
College of the Atlantic (coa.edu)
Mount Desert Island Biological Laboratory (mdibl.org)
Frenchman Bay Partners (frenchmanbaypartners.org)
Hancock County Planning Commission (hpcme.org)
Frenchman Bay Conservancy (frenchmanbay.org)
Maine Coast Heritage Trust (mcht.org)

CERTIFICATION

The foregoing Open Space Report and Inventory was accepted and approved at a meeting of the Lamoine Conservation Commission on February 27, 2013 at which a quorum was present. The Open Space Vision included therein was officially adopted as the Open Space Vision of the Lamoine Conservation Commission.



Robert Pulver, Chair
Lamoine Conservation Commission

