The Borderland of the Present

By Catherine Schmitt and Tim Garrity

The Tourist in AD 2000

He will sail for Egypt some sunny day, To visit the Nile o'erjoyed, And will find they have carried the Sphinx away, And that Cheops has been destroyed.

He will go to Pisa, the quaint and free, The town of medieval power, And will reach it only in time to see, The collapse of the leaning tower.

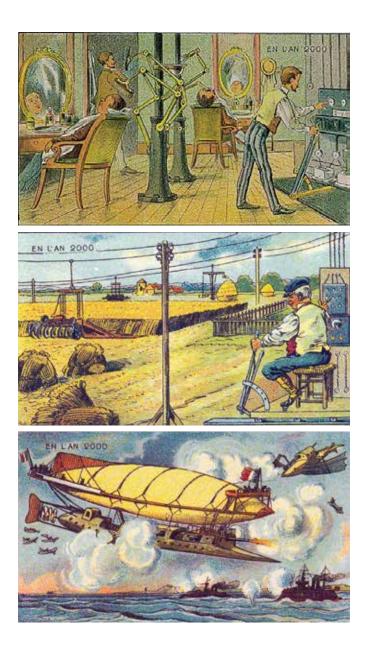
To Helvetia then he will be expressed, By the glaciers to be awed, But will find the Jungfrau and all the rest Of the glittering mountains thawed

-Anonymous, Mount Desert Herald, July 19, 1890

Introduction

At the dawn of the twentieth century, futurists conjured a year 2000 where mechanical devices would create a world of ease, and humans would extend their activities of daily living into the air and under the sea. In their vision, barber shops are a mechanized blur of combs, razors, and scissors. By remote control, a farmer directs the work of enormous farm machines out in his fields. In the air, fighter planes joust with battleship-dirigibles. Firefighters wearing winged suits rescue babes in arms from burning rooftops. Under the sea, passenger buses are powered by whales. In the classroom, loads

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Unlike most futurists at the turn of the twentieth century, who envisioned a world transformed by mechanization, Acadia's visionaries foresaw a landscape that would be protected from modernization and development. The images on these pages show



postcards depicting visions of the future by Jean-Marc Côté and others, published in France from 1899 to 1910. *Source: Wikimedia Commons*

of books are fed into a hopper, and the knowledge they contain is delivered to students' brains through electrical wires.¹

Past predictions for the world of the present may seem fanciful and amusing, but forecasts for Acadia National Park have been remarkably durable. The founders recognized the historical events associated with its locality. They understood the precarious nature of the present: that valuable land, if not preserved immediately, would be privatized and exploited. They intended the park as a gift to future generations.

The founders lived in the borderland of the present, where the past and future overlap. Living in the first decades of the twentieth century, they were influenced by the past but looked to the future. Largely, their predictions held up over the next century. We have taken on a similar challenge. Living in the park's centennial year in 2016, we have tried to forecast what our successors may find upon its bicentennial. You will know in a century if we were right.

Part 1: The Acadian Future as Seen a Century Ago

A concept of the future was essential to the founding of Acadia National Park. The park's supporters recognized its many significant and unique qualities and forecast their decline in the absence of federal protection. The founders predicted that dwellers of the urbanized Eastern Seaboard would need a wild place for rest, recreation, and engagement with the natural world. They recognized the damage that an industrialized society inflicted on humans who, then and in the future, would need places of refuge, wild places to heal the harassed modern soul.

In the late nineteenth century, before the idea of a national park gained traction, certain local investors believed enough in the future to build hotels and the infrastructure necessary to accommodate a major increase in the summer population. In 1887, the editor of the *Mount Desert Herald* noted that the people who built Bar Harbor into a summer resort, "were not wealthy. They were laboring men; but they had a few acres of land and they had energy, and enterprise, and more than this, they had unbounded faith in the future of the Island of Mount Desert."² As a sign of their faith, they heavily mortgaged their properties to build cottages and hotels. One *Mount Desert Herald* correspondent in 1891 noted that working people had adopted a custom known only to the wealthy a few years before—the practice of taking an annual vacation. "The rush of modern life is so intense that without the summer letup, nature could not endure the strain." The writer went on to say, "The time is coming when one hundred thousand people will annually seek the shores of Mount Desert."³ That time first arrived in 1926, when 101,256 visitors came to Acadia National Park. In 2015, the number of annual visitors exceeded 2.8 million.⁴

In 1907, F.P. Pray predicted the transformation that would result from infrastructure and transportation improvements. He envisioned a prosperous and beautiful, if heavily populated, Mount Desert Island. Playfully adopting the voice of a biblical prophet, Pray envisioned "the building of a great city, which shall cover the whole island of Mt. Desert." Pray saw mansions whose construction would require the employment of hundreds of men. He predicted that George B. Dorr would found a park by the little village of Pretty Marsh and hundreds of cottages would be constructed on Bartlett's Island, the Cranberry Isles, and all along the western shore of the island. Bar Harbor would be a city of "a thousand palaces." Though the island would have some auto roads, the speed limit would be twenty miles per hour, and many other scenic roads would be built where autos were prohibited. The abundance of opportunities for work and investment on the island meant that "Love, peace, health, and happiness shall be within it. The rich, the poor, shall dwell in it. The rich with his stately mansion, the poor ... [s]hall dwell in peace in his woodbine cottage and be as happy as the multimillionaire in his palace."5

A decade later, the most influential men of the community had a different vision for the island's future. Rather than dreaming of unbounded growth, they saw how prosperity was tied to landscape protection. Attorney George E. Googins wrote in 1918, "The idea of preserving for future generations our forest and mountain scenery is one of those of the most sensible yet conceived by those who have the welfare of the island at heart. Civilization in its rapid strides too often fails to respect the primitive conditions of the country. ... A national park here amid these ancient hills will preserve the scenic beauty of our island which in the past has and still does attract millions of dollars to eastern Maine." 6

The most determined and compelling conceptions of the future of Mount Desert Island came from those most directly responsible for the creation of Acadia National Park.

In 1880, a young Charles Eliot organized a group of his fellow Harvard students to spend the summer on Mount Desert Island with the understanding that they would undertake scientific studies. Calling themselves the Champlain Society, Eliot and his companions quickly realized the unique qualities of the island, its vulnerability, and the value of protecting it. In their "First Annual Report of the Botanical Department 1880," Champlain Society members W.H. Dunbar and E.L. Rand wrote,

... is it possible to protect the natural beauty of the island in any way? ... A company of interested parties could buy at a small cost the parts of the Island less desirable for building purposes. To these they could add from time to time such of the more desirable lots as they could obtain control of either by purchase or by arrangement with the proprietor. This tract of land should then be placed in the charge of a forester and his assistants; the lakes and streams should be stocked with valuable fish; the increase of animals and birds encouraged; the growth of trees, shrubs, plants, ferns and mosses cared for. This park should be free to all on condition that no rules of the Association were violated. ... I hope, however, that we may have the pleasure before long of listening to a paper on this subject by one of its earnest advocates, "Captain" Charles Eliot.⁷

A few years later, Charles Eliot wrote, "The scenery of Mount Desert is so beautiful and remarkable that no pains should be spared to save it from injury—to the end that many generations may receive all possible benefit and enjoyment from the sight of it."⁸ As Eliot advanced his career as a landscape architect, he expanded his thinking about Mount Desert Island and his influence on its future. In an 1890 article in *Garden and Forest*, he wrote, "The United States have but this one short stretch of Atlantic sea-coast where a pleasant summer climate and real picturesqueness of scenery are to be found together. Can nothing be done to preserve for the use and enjoyment of the great unorganized body of the common people some fine parts, at least, of this sea-side wilderness of Maine?"⁹

Though Charles Eliot died at age 37 without realizing his dream of conserving Mount Desert Island, his influential and able father, Charles W. Eliot, president of Harvard University, took up his son's cause. In a pamphlet published in 1904, "The Right Development of Mount Desert," Charles W. Eliot suggested The Hancock County Trustees of Public Reservations should be empowered "to secure large areas of land on the island for this free public use, particularly the hilltops, and narrow pieces of shore which lie between public highways and the sea."¹⁰

Addressing a much larger audience a decade later, Charles W. Eliot stated his case for the conservation of Mount Desert Island in *National Geographic Magazine*. He noted the terrible toll that the industrial age inflicted on the individual, writing "The past 100 years have supplied civilized mankind with a complete demonstration that the evils which attend the growth of modern cities and the factory system are too great for the human body to endure."¹¹ He believed the remedy lay in creating a reservation of wild and beautiful land on the coast of Maine. He wrote,

If the government of the United States should set aside as a national monument a large area on this picturesque and unique island, it would help to consecrate for all time to the improvement of the human environment one of the most beautiful and interesting regions in the whole country; and in so doing it would take appropriate part in resisting and overcoming the destructive influences on the modern civilization of urban life and the factory system.¹²

In the same issue of *National Geographic*, George B. Dorr invoked the past and the future as he named the qualities of Mount Desert Island that made it suitable for preservation:

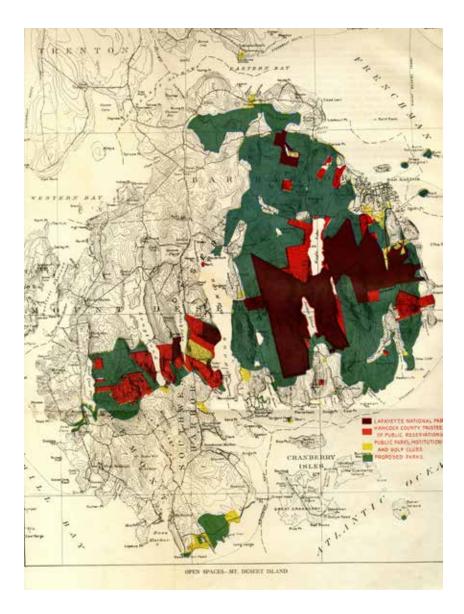
Saved to future generations as it has been to us, in the wild primeval beauty of the nature it exhibits, of ancient

rocks and still more ancient sea, with infinite detail of life and landscape interest between, the spirit and mind of man will surely find in it in the years and centuries to come an inspiration and a means of growth as essential to them ever and anon as are fresh air and sunshine to the body.¹³

In a report prepared for the Bar Harbor Village Improvement Association in 1928, Charles William Eliot II, nephew of Charles Eliot and grandson of Charles W. Eliot, undertook a thorough description of the present state of the island and made recommendations for the coming years. In "The Future of Mount Desert Island," he described the present conditions and then turned his attention to the future.¹⁴

His report included a map of the island's open spaces, proposing large tracts of land for future acquisition by the park. These lands included the mountain ridges and shoreland, including features of present-day Acadia National Park that have become iconic, such as the sea front along present-day Ocean Drive, Gorham Mountain, and the south ridge of Cadillac Mountain and the valley of Hunter's Brook. He wrote, "This stretch of coast wonderfully illustrates the magnificence of the headlands and rock-bound coast of New England. Because of its abruptness and exposure it is less suited to development for cottage sites and at the same time better suited to Park use."

Not all of Charles William Eliot II's visions were realized, such as his proposed magnificent entrance to the park at the southern end of Bar Harbor Village. He wrote, "To bring the park into Bar Harbor and to approach the park from Bar Harbor through the valley of Cromwell Harbor Brook is the great opportunity of the moment." In another instance, his vision was not ambitious enough to encompass the ultimate boundaries of the park. He did not predict that a large swath of land on the southwestern side of the island would soon be acquired by the government, preserving much of a dense forest between the Wonderland Campground and Seal Cove Pond. Nor did he foresee the acquisition of Sand Beach and Great Head. But his errant forecasts and unforeseen events are the exception. Rather, his predictions were remarkably prescient. Because they pursued a course of preservation, stopping change in its tracks, Acadia's visionaries ensured that a river of years could rush past the rock



Charles W. Eliot II's 1928 map showed in green the parts of Mount Desert Island that would be most suitable for future acquisition by the national park. *Courtesy of the National Park Service, Acadia National Park, William Otis Sawtelle Collection*

of Mount Desert Island with relatively little effect. A century after the founding, their predictions for the park's future have proved remarkably durable. But will they hold up for another one hundred years?

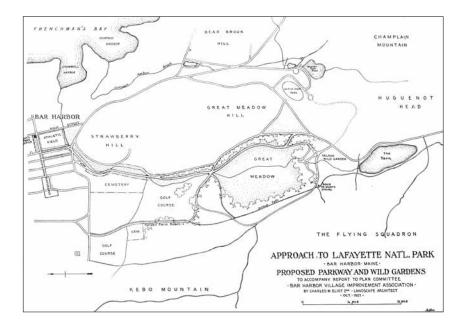
Part 2: The Future Seen from the Present

The sharp and attentive minds of Acadia long worried about what the place would become. Thanks to the actions they took in response to their fears and out of their love for the place, many of their worst visions will never be realized. Acadia will not become a place like Long Branch, Coney Island, or Newport, a place dependent "on its air, its society, and its scenery to attract visitors," as members of the Champlain Society feared in 1880. The Harvard students knew that "even the scenery will suffer great harm in the future if the woods are destroyed, and unsightly buildings erected on beautiful sites."¹⁵

The people of Acadia, having already witnessed the decline of the trail system and the carriage roads in the late twentieth century and having taken great pains to restore them, are unlikely to let them slip again. People from near and far will still come to Acadia in search of respite from the urbanized world, and engagement with the natural world. Visitation numbers are likely to fluctuate as they always have, but we can imagine that millions more will seek outdoor experiences, as the physical and psychological benefits of nature are known, accepted, advertised as such—nature as medicine, nature as an antidote to our technology-accelerated, socially-disconnected, multitasking lives.¹⁶

Yet many future solace-seekers will arrive nonetheless with various electronic devices of plastic and precious metal and expect to use them everywhere. This demand will stimulate a supply of quality wireless reception, and more people will interact with the park via these devices. Perhaps technology will provide a solution to the unsightly roadside poles and wires that so vexed the Village Improvement organizations in the early twentieth century.

We may see park managers addressing new forms of recreation as they emerge: Will hover boards be allowed on the carriage roads? Will aerial cameras—what we call drones today—become another crowding issue atop Cadillac? Will people ever stop building rock piles and towers?



Charles W. Eliot II's vision of a magnificent entrance to Acadia National Park, to be located south of Bar Harbor, was never fulfilled. From Charles W. Eliot II, "The Future of Mount Desert Island." *Courtesy of the National Park Service, Acadia National Park, William Otis Sawtelle Collection*



THE APPROACH FROM BAR HARBOR LOOKING TOWARDS BAR HARBOR

While some might be disturbed by these ideas, others will acknowledge that anything that gets people, especially young people, outside into nature is a positive thing.¹⁷

Sophisticated mapping and global positioning applications will make it harder to get lost in Acadia. At the same time, those who do find themselves with dead batteries or a signal void, perhaps in the depths of The Amphitheater or somewhere in the Great Notch, may be less skilled and less prepared for navigating and traversing wild terrain.

Residents have already demonstrated great will and capacity to address threats to their sense of place, at least those within their local control. F.P. Pray's vision of increased population and development did not become a reality. Thousands of acres on Mount Desert Island, Schoodic Peninsula, Isle au Haut, and surrounding islands were protected from development. In areas outside of the park boundary, changing demographics and employment situations, and the construction of seasonal housing have forced the year-round communities to question their stability, leading to visioning efforts by Mount Desert Island Tomorrow, a two-phase, multi-year process in which citizens discussed and identified solutions to shared concerns such as schools, housing, and water and wastewater infrastructure.

At the end of the most recent round of future-talk, Mount Desert Island Tomorrow leaders recognized that Acadia's support services are still vulnerable. Village centers are losing the goods, services, and human resources necessary for a year-round economy. Despite gains, affordable housing remains in short supply. Will these trends continue, or will things have to get worse before change can come?

If the island becomes an unaffordable place for working people to live and businesses that cater to the needs of working people disappear, then island villages may become ghost towns in the winter, and overrun tourist resorts in the summer, with tremendous summer traffic jams at the head of the island and other points as commuters vie with tourists for the same roadways.¹⁸

Charles William Eliot advocated an island free of automobiles. "Electric cars and automobiles," he wrote, should be excluded from the roads of Mount Desert Island "because these vehicles imply broad roads, noise, and city-like commotion."¹⁹ Eliot's opposition to motorized vehicles characterized the view of many wealthy summer residents at the time, who opposed the disquieting effects of automobiles, while most local people welcomed their practicalities. Autos were not allowed in all island towns until 1915. More than a century later, the community continues to try to find a balance between the benefits and the deleterious effects of automobiles.²⁰ Cars will still cruise along the historic Park Loop Road, but will everyone have to ride the bus—or walk—to the top of Cadillac?

At present and likely into the near future, the majority of visitors arrive in Acadia via automobile, traveling through the corridors of Routes 1, 1A, and 3. Based on present observations, it's easy to imagine a more distant future where these travel routes are builtout with strip malls, service stations, and businesses, and all the undeveloped and unprotected land is developed.

In a land where we cling ever tighter to the "bundle of sticks" known as private property rights, houses will keep being built, filling in the available lots abutting park boundaries. The wealthier wealthy will have more reasons to escape urban areas, and a piece of forested oceanfront abutting a national park in close proximity to Boston, New York, and Philadelphia won't lose its appeal. The space is too irresistible. In the near future, the sounds of construction, the whining buzz of the chainsaw, the hammering, and the beepbeep-beep of trucks in reverse will fill the air; granite walls will magnify the noise of traffic whooshing by on island roads. Perhaps the pursuit of silence will follow Acadia's leadership in the Night Sky Initiative. The stars still shine in 2116, but will a quiet place still be found?

Acadia's Greatest Threats Are Global

Like starlight, the challenges faced in the future will come more and more from outside the boundaries of Acadia.

Unless there are revolutions in politics, culture, and technology, the world will certainly continue to spew greenhouse gases and other chemicals in the pursuit of elusive capitalist dreams. Already, plastic particles, visible and invisible, derived from every continent and having drifted along the ocean's conveyor belt, saturate beaches and harbors with chemicals. Polluted air masses from afar, laden with mercury, acid, and soot, combine with ever-hotter air to cloud the view from Acadia's summits. Ever hotter. The last two decades in Acadia were 1.0 and 0.8 °F warmer than the 1901-2000 average.²¹ Imagine a future two to three degrees hotter on average than the present day. Spring starts earlier. Autumn lingers later. The seasons are wetter, too, with more rain than snow in winter. More heavy precipitation events stress water and sewage systems and strain budgets.²² Warmer temperatures bring changes to Acadia's flora and fauna. Plants that are at the southern edge of their range yield to plants expanding northward. There are more pitch pines, fewer jack pines. Dogwoods and mountain laurel replace rhodora and boreal blueberry. Phragmites and purple loosestrife and knotweed spread.

Nearly 20 percent of the plants found in Acadia a century ago have disappeared. Will we lose another 20 percent in the next century? Will beachhead iris and baked appleberry go the way of showy lady's slipper, sweet pepperbush, wild mint, trout lily, white bog orchis, and northern sedge?²³

The lines between what is "native" and "invasive" will only get blurrier. What is considered noxious remains clear: ticks that carry Lyme and other diseases. Will we see continued damage by winter moth, red pine scale, and hemlock wooly adelgid? Will the emerald ash borer devastate the Wabanaki's basket trees? These are only the invasions we can anticipate. As-yet-to-be-identified pests, diseases, and infections have the potential to completely alter Acadia's flora.²⁴ There is always the potential for surprises. Who could have predicted the fire of 1947 and the resulting transformation of one-third of Mount Desert Island's vegetation?

Fauna, too, will change, but less predictably. The moose, an unlikely symbol of Acadia on tee shirts and hats, will move north to colder forests. The future of cod is doubtful. They, too, need the cold.

Will there be mackerel, lobster, herring, and clams beneath the surface of the sea? It's unclear. Or will there be jellyfish, acidloving bacteria, and dazed-and-confused species hailing from the mid-Atlantic? That depends. Other species that already range widely across the latitudes may fare better.

Migratory whales, so carefully watched, may survive as long as they can find enough food. Alewives will be more abundant, thanks to so many efforts to restore their passageways between the sea and inland lakes. Maybe eels, too, will be okay for the same reason.

For birds, the future is less certain. Seabird populations have fallen due to a resurgence of predators like bald eagles—something unfathomable to people living in the third quarter of the twentieth century, when avian predators were endangered by pesticides like



A recent study by the US Geological Survey found that a two-foot rise in sea level will inundate the marshes of Bass Harbor, bringing salt water up into areas that are now freshwater marsh. *Photograph courtesy of Bob Thayer*

DDT.²⁵ In the twenty-second century, we will tell our children about the Endangered Species Act, how it brought the bald eagle and the peregrine falcon back from the brink of extinction, but could not save others. What lives will we lose from this world? We don't want to imagine.

Rising seas will exert one of the greatest forces on the future of Acadia. The current rate of 0.07 inches (2 mm) per year is much faster than at any time in the past 5,000 years. Projections of sea-level rise by 2050 range from six inches to more than three feet. Beyond that, it's anyone's guess. An estimated \$50 million in Acadia's assets are at high risk from exposure to sea-level rise.²⁶

Vulnerable are the low-lying areas—beaches, salt marshes, and river mouths, and the roads that cross near them. At Sand Beach,

the narrow finger of beach between the cove and the marsh may disappear. Regular flooding may occur at Seawall and Otter Cove. About one-quarter of Acadia's marshes don't have enough space, water flow, or sediment supply to spread out or shift in response to rising sea levels. At Northeast Creek and Bass Harbor, salt marsh plants could displace freshwater wetlands as the boundary between salt and freshwater changes.²⁷

The Acadian archipelago will contract as rising waters flood small, low-elevation islands, like Milliken, Drum, White Horse and Black Horse, erasing what seabird habitat they provide. Seabirds may crowd shrinking habitat on the remaining islands: Schoodic, Heron, Shabby, Great Spoon, Green, and Shag. East Bunker Ledge will disappear with a two-foot rise in sea level.

All of this speculation assumes a rather steady rate of sea-level rise. But things can happen much more suddenly in response to changing atmospheric and ocean conditions, which is what took place in 2009-10, when sustained heavy North Atlantic winds and a sluggish Gulf Stream allowed water to pile up along the coast of the Northeastern United States, leading to a two-inch increase in relative sea level in just one year. Such events are predicted to increase in the future.²⁸

As ocean water expands with heat, increasing temperatures also lead to a rise in sea level relative to the land surface. The last time temperatures increased by 3.6-5.4 °F (2-3 °C), approximately 125,000 years ago, the accompanying melting of portions of Greenland and Antarctica resulted in a sea-level rise of more than sixteen feet.²⁹ It is difficult to predict scientifically how this might correlate to the land surface, but not all that hard to imagine: Acadia still bears the scars from the last sea level "high stand" or maximum: caves, pillars, and beaches two hundred feet up the mountainsides.

Flooding is part of life in the twenty-first century. We will become accustomed to rapid changes in shoreline features and the conduct of waterfront business. Surprises like rapid sea-level rise are difficult to anticipate, yet could result in the greatest changes in Acadia. But the majority of landscape endures, thanks to Acadia's geography and geology.

Geography: Acadia National Park lies within a broad latitudinal transition zone between temperate ecosystems to the south and boreal

ecosystems to the north. The ocean moderates temperature and adds moisture and salts. Five thousand years ago, this coastal influence allowed spruce and fir to persist in Acadia as they disappeared from the rest of Maine. The ocean will continue to influence Acadia in 2116, keeping the park a safe harbor for spruce and other coolweather flora after the rest of the state has dried out and warmed faster. The salt air and fog should continue to fold into the peaks.

Geology: Being made of mostly bedrock, with steep slopes and hard surface, Acadia will resist the encroaching sea.³⁰ The shape, the characteristic outlines of the Mount Desert hills, are etched in stone. The "scenery," the look and feel, that which has always motivated people to think about the future of Acadia and take action, should not lose its beauty or ability to inspire.

The founders were able to focus on Acadia parcel by parcel with an almost obsessive preoccupation with local boundaries. Present and future supporters of the park will have to address outside forces, oceans and atmospheres, and in the process, protect not just Mount Desert and the surrounding archipelago, but the whole Earth beyond.

Catherine Schmitt is the author of The President's Salmon: Restoring the King of Fish and its Home Waters and Historic Acadia National Park, forthcoming from Lyons Press in Spring 2016. She directs communications for the Maine Sea Grant College Program at the University of Maine.

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Tim Garrity's biography appears on page 77.

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