

# A Historical and Biological Survey of Egg Rock



Tammy McGrath  
Senior Project  
May 30, 1997

## Acknowledgments

I would like to thank my advisors, John Anderson for all his technical and logistical support and Anne Kozak for her editing advice, also Linda Gregory for helping with plant identification and the ornithology class for helping with the seabird survey. I would like to thank United States Coast Guard officials, Sergeant Perry of group Southwest Harbor and Lieutenant Toohey in Rhode Island, for finding and sending information to me in such a timely fashion. Ken Black of the Shore Village and Captain Ted Spurling of Islesford, ME contributed useful information that added some of the more interesting historical facts to the final paper. A special thanks to Sue Spoelhof for her computer expertise.

## **ABSTRACT**

Information about Egg Rock and its lighthouse station was compiled from a variety of sources into a single document. Sources included the National Archives, United States Coast Guard (USCG) records, Historical Societies, technical reports, museums, and personal communications.

Biological data dating back to the early 1900's was collected, and the island was surveyed May 21, 1997. Census numbers that were adjusted using a Lincoln Index resulted in an estimated total of 290 gull nests and 21 eider nests. A visual estimation suggested that there were about 3 herring gulls to every 1 black-back gull on the island; guillemonts were observed in the shore waters, and 2 bald eagles were loafing on the southern ledge.

## INTRODUCTION

Egg Rock—located at 44° 21' 15" N latitude, 68° 08' 19" W longitude—is a 3.5 hectare, rocky island situated at the mouth of Frenchman Bay (Figure 1), about 6 km (3.75 mi) southeast of Bar Harbor, ME (Burr, 1908). Today this island serves as an important navigational aid complete with a lighthouse, boat slip, and fog signal. Egg Rock light is currently maintained by the United States Coast Guard (USCG).

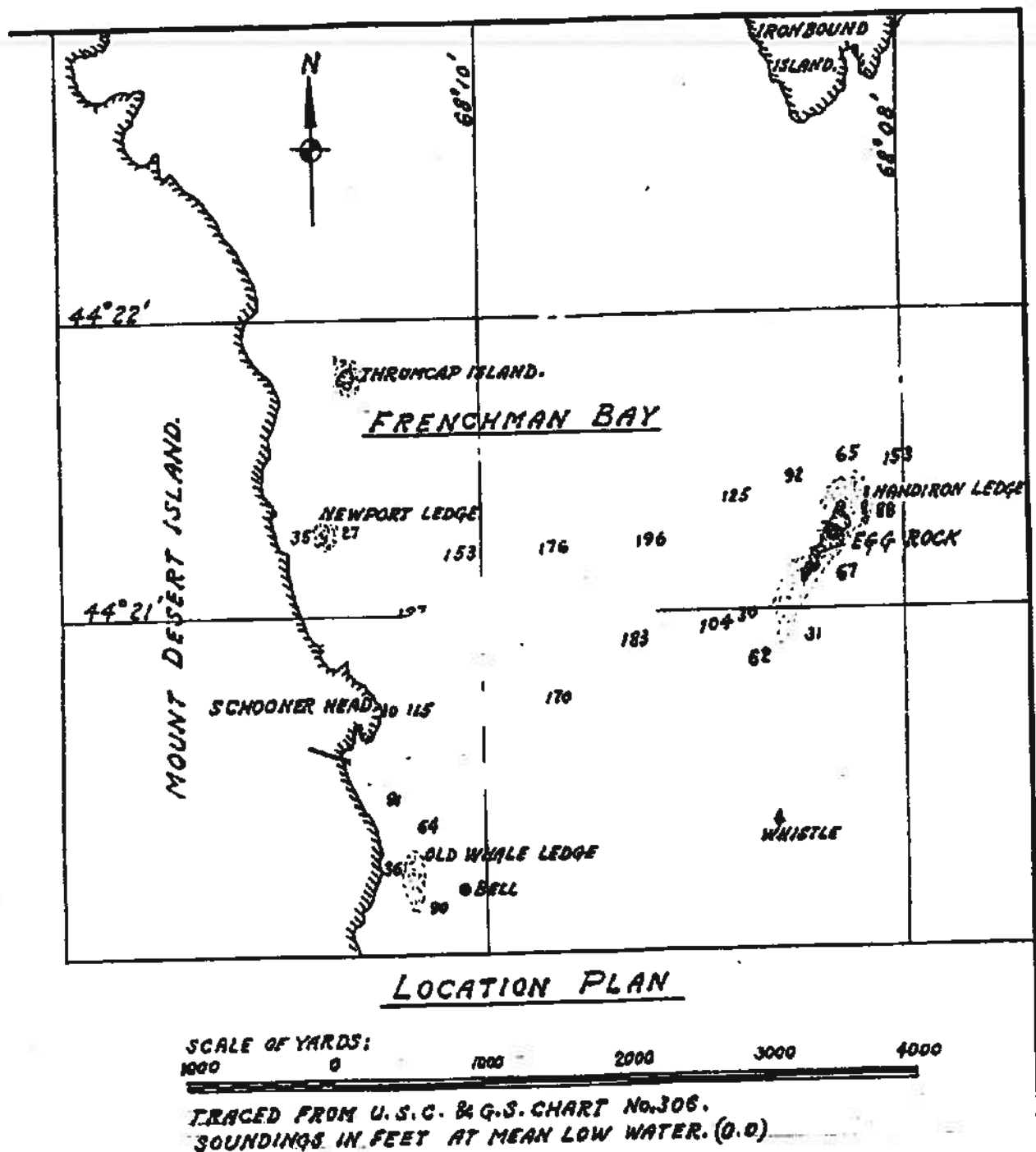
The first known record of Egg Rock is found in the 1662 journal of a French explorer, Sieur Antoine de la Mothe Cadillac. He wrote of discovering 600 dozen eggs on the "rocq" in the middle of Doauaqez Bay, now known as Frenchman Bay, and this account is used to explain the name Egg Rock. After the American Revolution, the island was named Gull Island; however, this name did not persist. The first map showing Egg Rock is found in a series of charts, created before the Revolution, called the "Atlantic Neptune Series" (McClane, 1989).

On February 21, 1866, the small island or ledge formation known as Gull or Egg Rock Island was sold by the State of Maine for \$10 to Mr. Eben M. Harris (Maine State Planbook, 2a). It is unclear as to how ownership of this island was transferred to the state of Maine, but on November 4, 1874, the Governor of Maine ceded Egg Rock to the United States government (Appendix 1).

## THE LIGHTHOUSE

During an inspection in 1908, Lieutenant Colonel Edward Burr of the Army Corps of Engineers described the lighthouse buildings and premises. The following descriptions as well as lists of historical events on Egg Rock until 1912 are taken from the United States Lighthouse Records: Egg Rock File, which is located

Figure 1



EGG ROCK LIGHT

in the National Archives, Washington D.C.

The history of the Egg Rock Lighthouse Station begins on June 23, 1874, when Congress appropriated \$15,000 for the construction of this lighthouse site (Appendix 2). Construction began in June 1875, and on the night of November 1, 1875, the light shone for the first time. During this first year all materials were landed, the ironwork was completed, foundation laid, brickwork finished, and a fog bell installed (Figure 2). The original house was only one-story high and built around the tower which measured 11.8 m (39 ft) high from the ground to the ventilator ball with a diameter of 3.0 m (10 ft) sq.

The tower is 19.5 m (64 ft) from the mean high-water mark and is built of bricks that are 35.5 cm (14 in) thick at the base, thinning to 30.5 cm (12 in) at the parapet. There are 6 landings of iron stairs leading to the top of the tower which, in 1875, contained the polygonal, 5th-order lantern. Each side of the polygon is comprised of a 3.2 cm (1.3 in) thick plate that measures 71.1 x 92.6 cm (28 x 36.5 in). This plate is held in place by a cast-iron framework and covered by an iron roof. The watchroom in the top of the

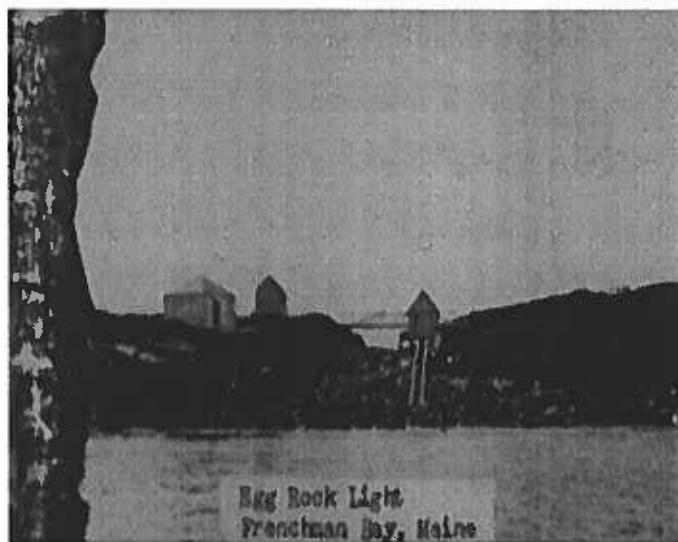


Figure 2 Photo of Egg Rock Lighthouse buildings from the late 1800s. Courtesy of the Shore Village Museum

tower is fitted with a closet; the outside gallery consists of a floorboard along with a two-rail pipe railing. The only other structures present on the island in 1875 were the fog bellhouse and a fuel shed.

During a gale on March 25, 1876, high seas flooded the house, carried away the fuel shed, and displaced the fog bellhouse approximately 9.1 m (30 ft). In 1877 violent waters again washed the bellhouse down the island. Finally, when on December 28, 1987, a major storm damaged the bellhouse, the Coast Guard replaced the old bellhouse with a skeleton tower—a box containing the bell that was set 3-3.7 m (10-12 ft) high legs—so that the sea could pass underneath. In 1988 they also installed a new 454 kg (1,000 lbs) bell, complete with striking machinery.

In 1880, the keeper repainted the exterior of the tower and dwelling for the first time, and in 1882, the first major renovation was made to the premises when the Coast Guard installed a 145-foot-long boat slip, located 45.7 m (150 ft) from the lighthouse. In 1884 a boathouse was constructed next to the slip.

Further renovations were made in 1890 when a fuelhouse was built and the fog-bell machinery repaired. A foot bridge was also built over a chasm in the rocks to connect two areas on the island—one with the main building and the other with the oil and storehouses which were located approximately 76.2 m (250 ft) north of the tower. This was a much-needed improvement for the keepers because during some high tides, the chasm in the rocks filled with water. Keeper Sawyer reported that during a strong gale on February 1, 1908, the sea moved rocks weighing from 2-30 tons and measured approximately 2.1 m (7 ft) deep in the chasm (Egg Rock Light, 1911).

Despite the need for frequent repairs, the fog bell wore well considering the foggy weather that Egg Rock is subject to in summer. In July 1897—one of the foggiest months on record—the signal sounded for 360.75 hours, and the longest continuous run was for 105 hours from June 21-25, 1895 (Egg Rock Light, 1911).



Figure 3 Photo of Egg Rock in the early 1900s.  
Courtesy of the Bar Harbor Historical Society.

In an 1899 assesement of the keeper's dwelling, inspectors decided the rooms were too dispersed for adequate heating in the severe winter months. They proposed adding a second story with enough rooms to accommodate one family for a maximum cost of \$1,700 (Figure 3). In 1901 contractors built a cellar under the dwelling, and the old bell-striking machinery was replaced.

When the striking machinery which was similar to that shown in Figure 4 was repaired in 1902, the lens



Figure 4 Photo of striking machinery.  
Courtesy of Shore Village Museum

was changed from a 5th-order lens to a more powerful 4th-order one. The lens of the light was made by Barbier, Benard, and Quienne in Paris. These lenses, which were comprised of lead crystal prisms and magnifying glass, concentrated the beacon of light which could then be seen for miles. The light signal was also switched from a constantly shining red light to one that flashed white every five seconds. Similar to a cuckoo-clock mechanism, the flashing was caused by different colored panels that were rotated by weights. This lens was set on a pedestal, with a clock attached to run the rotational equipment. After one winding, the revolving machinery would run for about 7 hours.

On August 14, 1903, the warship *Massachusetts*, coming down the bay from Bar Harbor, ran ashore in the dense fog and was badly damaged (Egg Rock Light, 1911). Although the lighthouse keeper assured officials that the fog signal was in working order, the signal was replaced and upgraded in 1904 to a 1st-order Daboll trumpet, made by the U.S. Machine Shop in Boston. Constructed of copper and run by compressed air, this trumpet was 4.7 m (15 ft, 7 in) in length. The trumpet was activated by air moisture and blew at a pressure of 4 lbs for 4 seconds, then was silent for 2 seconds, blew for another 4 seconds, and was silent for 24 seconds. In 1907 this trumpet operated for 1,813 hours—an operation that consumed over 2886.4 l (762 gal) of oil.

According to the publisher Joseph Pulitzer, who lived approximately 2 mi north, just opposite Thrumcap, this new trumpet worked a little too well. To block out the sound, he built a sound-proof room in his estate that some refer to as the tower of silence. Although he requested the fog horn be shut off, his complaints resulted only in repositioning the axis of the trumpet to face magnetic south (Spiker, 1965).

Other structures on Egg Rock in 1908 included a brick cistern with a 7,575.8 l (2,000 gal) capacity located under the dwelling, and two cannons that were mounted on the island May 6, 1899, as part of an effort to protect French-

man Bay and Bar Harbor from possible attacks by the Spanish fleet (Bar Harbor News, Bicentennial Supplement, 1996). Both cannons are 3.5 m (11 ft, 5 in) long; the muzzles, are marked "Fort Pitt, Pa. - SCL 1865" with the weight and cannon number following. The first cannon weighed 6,827 kg (15,020 lbs), was marked with the number 344, and was located in front of the lighthouse. The second cannon weighed 6,818 kg (15,000 lbs), was marked on the front with the number 312, and was located on the rocks (Appendix 3) (USCG Records, 1971).

On September 16, 1971, Coast Guard officials proposed moving the two cannons from Egg Rock by helicopter (USCG Records, 1971); in the early 1990s they were placed in Agamont Park, near the beginning of the shore path in Bar Harbor, just to the left of the Bar Harbor Inn (Ganet, pers. comm.).

By 1930 improvements to the original land on Egg Rock included a bell tower, fuel house, oil house, boat house and slip, dwelling surmounted by tower, and a telephone line extending to MDI (Appendix 4) (Sherman, 1930). Until March 7, 1939, when the station was electrified, the Egg Rock light burned kerosene. With electric power the light intensity was increased from 9,000 to 16,000 candlepower, and the light, which was powered by direct current furnished by 56 two-volt batteries, could then be seen further out to sea. The batteries were charged while the light or fog horn was on or by a dynamo which was powered from a gas and kerosene engine. The engine had to be started 3 hours after the light was turned on, typically at sundown, but if the fog horn was running, the engine and dynamo had to run continuously. The engine was started with gas, and subsequent refueling was with kerosene ("Egg Rock Light House Completely Electrified", 1939).

Egg Rock was automated on October 8, 1976, when the keeper was lifted from the rock by helicopter (Matava, 1982). The old labor-intensive fresnel lense was replaced, and the lantern house removed. The top of the tower looked as though it was lopped off, and there was much public criticism because of this.



**Figure 5 Replacement of the lanternhouse. Courtesy of the Bar Harbor Times**

**Finally in 1986, as part of a restoration project, a new 1500-pound lantern house (Figure 5) was mounted around the modern beacon to improve its appearance (Feller-Roth, 1988).**

**Since the automation of the light station, USCG workers usually spend a few weeks in June checking equipment and repairing damaged structures. Appendix 5 lists projects completed in June of 1984, while Appendix 6 includes invoices**

for some modernization done to the light and fog signal in 1992. This 1992 report states that signs were to be installed on Egg Rock where necessary and were to have read: "NO TRESSPASSING" and "CAUTION, SOUND SIGNAL MAY SOUND AUTOMATICALLY WITHOUT WARNING. SOUND PRESSURE LEVELS BEYOND THIS POINT MAY BE HAZARDOUS TO YOUR HEALTH." The signs were specified to be yellow with black, 1.3 cm (.5 in)-high letters, and they had to be weather-proof and capable of withstanding high winds and salt spray. Whether these signs were actually installed is unclear. However, they were not present on the island in May 1997. This 1992 report also noted that workers needed to verify whether the remote intrusion alarms and fire suppression systems were working properly and that all debris should be properly removed from the site—no debris would be thrown into the water (USCG records 1992).

The underwater cable that runs from Egg Rock to Mount Desert Island (MDI)—NECTO Pole #3-120—on Schooner Head Road was inspected and repaired on July 1, 1991 (Appendix 7). In 1997, this cable continues to power Egg Rock,

and, at this date, the lighthouse site included not only a helicopter pad, boat slip, foot bridge over the chasm, fuel



Figure 6 The dwelling and fuel shed. Photos taken during 1997 survey.

shed that is probably now used for storage, but also duplex dwelling with boarded windows and a fog signal box located on its southeast face (Figure 6).

#### THE LIGHTHOUSE KEEPERS AND NOTEABLE EVENTS

“The keeper of the lights and frequently their families have traditionally shared not only the dangers and hardships always faced by sea-faring folk, but have exhibited heroism beyond the call of duty when the need for courage arose” (Spiker, 1965).

Keepers as listed in the register of Lighthouse Keepers for Egg Rock (Nat. Archives microfilm m1373) include:

<u>KEEPERS</u>	<u>FROM</u>	<u>TO</u>
Ambrose H. Wasgatt	1876	1885
Amaziah R. Small	1885	1889
Lewis F. Sawyer	1889	1899
Herbert Sawyer	1899	1912
W.H. Dodge	1912	?
Winfield Kent	1916	
J. B. Pinkham	1935	
<u>ASSISTANT KEEPERS</u>		
Hebert Sawyer	1898	1899
Clifford M. Robbins	5/1902	7/1902
Stephen Flood	11/1902	1905
John E Purington	9/1905	10/1905
J.B. Ingalls	1908	
Harry Smith	1912	
Augustine Hamor	1916	
Buster Dalzall	1935	

The Coast Guard took over lighthouse management from the Lighthouse Service in 1932, and a staff person from the National Archives stated in a telephone interview that the USCG probably never compiled a comprehensive list of keepers because that information was not administratively necessary. The following accounts are primarily based on the Keeper’s Logs and Correspondences (from record group 26) in the National Archives.

From 1876-1912 lighthouse keepers at Egg Rock were paid between \$600 and \$620 per year, and assistants between \$400 and \$480, to maintain the light, fog signals, and buildings. These jobs were critical to ensuring safe navigation through the waters and were sometimes all-day and all-night commitments. For example, when keepers were first on the island, the light signal mechanisms had to be checked regularly; if they found the weight-driven mechanism stationary during the night, they had to not only remedy the problem but also check the mechanism each hour throughout the night to detect any irregularities. The fog bells too were constantly monitored. Appendix 8 is a correspondence from January 10, 1888. This letter informed inspectors that a gale had disabled the fog bell and that the keeper would strike the bell by hand in thick weather to answer signals from passing vessels. The keepers' responsibilities also included washing the windows, keeping the crystal fresnel lenses spotless, and polishing the brass—a duty that many keepers and keepers' wives considered the bane of their existence (Appendix 9).

With this amount of continual work, an assistant keeper seemed essential. However, in 1889, while a father and his son had been maintaining the light for the past year, the inspector wrote in correspondence that despite all the difficulties maintaining a station like Egg Rock only one keeper should tend the light as in earlier years. The position of assistant keeper was abolished in 1899, but later records show assistants to be on the island again in 1902.

The old logbooks are a testament to the keepers' dedication to their positions and include records of important events, daily weather conditions, storms, and damage. Keeper Sawyer recorded that on December 24, 1899, the fishing pinky, *Julia Ann*, ran ashore during the night. Sawyer said that by morning the boat looked like kindling wood and that this was a very mysterious occurrence because both men on board died; he thought maybe they fell asleep while rowing (Egg Rock Light, 1911).

Some keepers recorded only required data, whereas others also reported excursions to the mainland for supplies, picnics, or other events. Keeper Dodge reported that on May 16, 1912, Smith, his assistant, went ashore for mail, supplies, and medicine for the baby boy who was sick with measles. Harry Smith later reported that on July 23 the keeper and his family went to Schoodic for berry picking. When digging through these records, I found the first record of a family—assistant Clifford M. Robbin's family—on the island in 1902 (Keepers' Log). Keeper Sawyer lived with his wife on the island, but whether other family members were present was not clear. He stated that he "liked his work, and is never lonesome, nor is his competent wife either" (Egg Rock Light, 1911). In 1912, the keeper, W.H. Dodge, had his family on the island, as did Winfield Kent in 1916 (Keepers' Log).

Because Egg Rock is so near MDI, keepers could get supplies and escape the loneliness of island life more easily than the light keepers at stations such as Mount Desert Rock. However, even though the trip to the mainland was a less than 6.5 km (4 mi), the waters could still be treacherous, especially in winter. In fact, on March 14, 1918, the keeper began rowing to Bar Harbor and lodged the boat in floating ice. A patrol boat had to tow him home. Although this keeper was returned safely home, one assistant drowned while rowing to the island. Assistant Buster Dalzall was lost in February 1935 while rowing into Bar Harbor. It is thought that he hit some ice in the water which wrecked the boat. He drowned just before his wife gave birth to their third child. Although Mitchell (1940) reported that "Frenchman Bay never gives up its dead" and that keeper's body was never found, Captain Ted Spurling (pers. comm.) reported that Dalzall's body was found about 3 weeks after his death.

Since October 8, 1976, when the lighthouse was automated, the critical roles of the keepers have been performed by relays, generators, and computer chips. Now the island is visited by researchers observing wildlife, USCG workers

maintaining the buildings, and an unfortunate boater or two. On August 18, 1981, Bar Harbor's largest fishing vessel—*The Northern Miner*—ran aground on Egg Rock at 1:52 AM (Figure 7). The boat suffered a 10-in gash in the keel, and her sister ship, the *Jesse*, from Steuben had to come in the afternoon to help pull her off at high tide (Brechlin, 1981). The reasons the boat ran aground at this early hour are unclear. Quinn (1983) reported that “Egg Rock is the only island ledge with a light house (which was operating at the time) and there was no explanation given as to why the vessel grounded.”

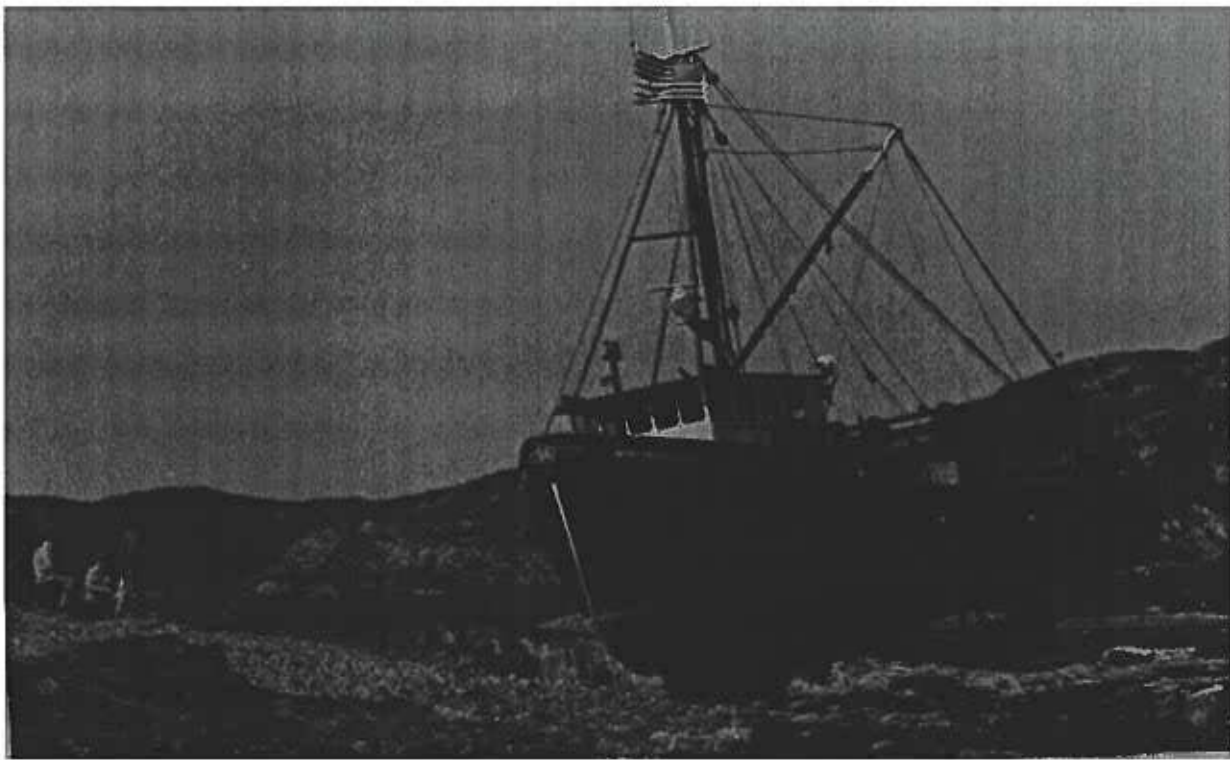


Figure 7 *The Northern Miner*. Photo taken from Quinn (1986)

## BIOLOGICAL DATA

The earliest biological information recorded for Egg Rock is Sieur de la Mothe Cadillac's 1692 journal entry describing 600 dozen eggs on Egg Rock. The earliest, and only, record of vegetation on the island was found in a 1913 issue of the journal *Rhodora*. *Sedum rosea*, commonly called roseroot or roseroot stonecrop, was recorded as rare on Egg Rock. This plant was reported by Professor A. E. Verill as "new to the flora of Maine in 1863" (Norton, 1931). The plant is an arctic species that commonly grows in moist crevices south along the coast and sea cliffs to Maine (Fernald, 1989). Locally it is common at the south end of Little Moose Island but is rarely found elsewhere in Acadia National Park (Grant and Sharpe, 1963).

From both the island's name and Sieur de Cadillac's record of eggs on the island, we can conclude that over the past 300 years seabirds have periodically nested on Egg Rock. However, I found no record of birds nesting on the island from 1875-1977, when lighthouse keepers were maintaining the island. Allen and Norton (1931) compiled information about seabirds on Maine coastal islands in the early 1900s. They also showed no record of birds on Egg Rock. In addition, lighthouse keeper records from November 19, 1916 read, "Keeper took wife to Bar Harbor, assistant killed his dog" (Keeper's Log). The dog's presence would further decrease the chances of birds nesting on the island.

In 1977, just after the automation of the lighthouse and the break-up of the nearby Petit Manan colony—the largest laughing gull and tern colony in Maine—laughing gulls and common terns were reported to be nesting on Egg Rock. However, no quantitative data were recorded for this year. Data on all nesting seabirds from 1977-1994 is summarized in the following list:

YEAR	SPECIES	NUMBER	SURVEY	SOURCE
1977	Laughing gull	nesting	ve	Folger (1985)
	Common tern	nesting	ve	
1981	Laughing gull	175	ve	Allen (pers. comm)
	Common tern	300	ve	
	Arctic tern	300	ve	
	Black-back gull	5	ve	
	Herring gull	25	ve	
	Common eider	8 pairs		
1983	Laughing gull	175 pairs		Folger (1985)
	Common tern	140 pairs		
	Arctic tern	120 pairs		
	Roseate tern	5 pairs		
	Common eider	4 pairs		
1984	Laughing gull	100 pairs	nc	Folger (1985)
	Common tern	325 pairs	nc	
	Arctic tern	60 pairs	nc	
	Roseate tern	3 pairs	nc	
	Herring gull	40 pairs	nc	
1985	Laughing gull	25 pairs	nc/ve	Folger (1985)
	Common tern	375 pairs	nc/ve	
	Arctic tern	25 pairs	nc/ve	
	Black-back gull	10 pairs	nc/ve	
	Herring gull	15 pairs	nc/ve	
	Common eider	6 pairs	nc/ve	
1986	no terns			Folger (unpub)
1987	Common terns	6		Folger (unpub)
1989	Black-back gull	56 pairs	nc	Allen (pers. comm.)
	Herring gull	48 pairs	nc	
	Common eider	15 pairs	nc	
1992	Gulls	258		Anderson (1992)
	Common eider	40		

nc—nest count  
ve—visual estimate

The most extensive bird survey of Egg Rock was conducted during June and July 1984, when biologists from College of the Atlantic (COA) observed bird activity on Egg Rock. Upon arrival on June 5, the USCG was repairing buildings, and researchers found only 25 tern nests, all of which were abandoned. However, after work was completed, the terns continued to set up territories. Folger (1985) counted nests using capture/recapture methods and reported 388 tern nests on June 21. Folger stated that the repair work affected reproductive success as evidenced by the destruction or abandonment of the birds' nests and subsequent laying of eggs late in the season. Reproductive success, however, was low; only 30-55 fledged out of a colony of about 388 pairs.

Another reason for low fledging success was predation. Folger and Drennan (1984) noted that about 10 individual gulls were responsible for the over 245 gull incursions into the tern colony. A minimum of 29 incursions resulted in the death of tern chicks or laughing gulls. Predation rates varied according to location on the island and proximity to the house where the researchers were staying; researchers harassed the gulls by the house and destroyed the 40 herring gull nests that they found on the island. On July 12 they reported that an immature peregrine falcon made two passes over the colony but made no kills.

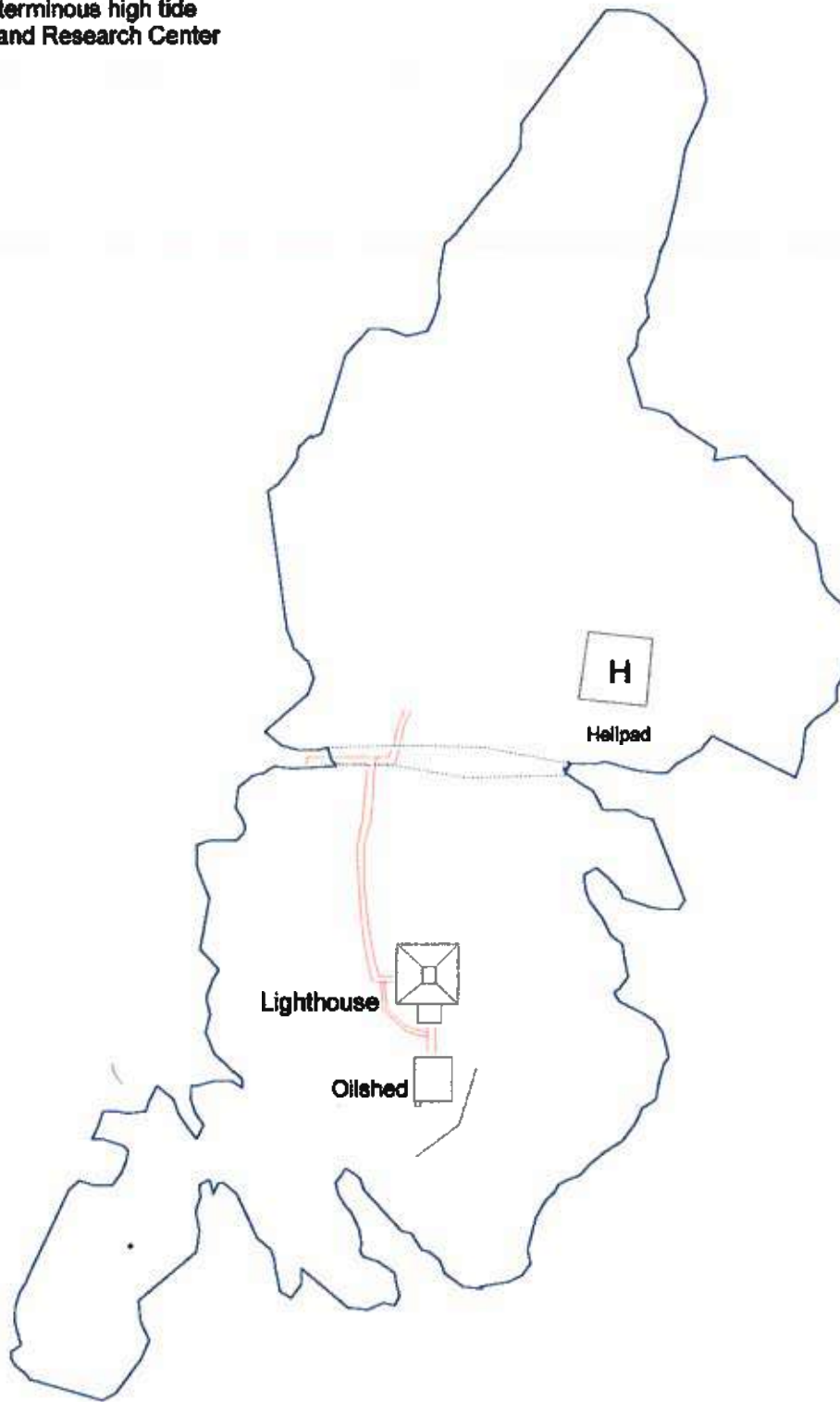
Folger and Drennan (1984) predicted that because of Mt. Desert Island's active fishing and tourist industries, and consequently the waste produced, Egg Rock would be a prime roosting location for gulls, and therefore the tern colony would likely perish without active management.

Personal comments from local naturalists indicate the periodic visitation of peregrine falcons and consistent loafing of bald eagles to feed on Egg Rock (Hill, Anderson, pers. comm.). Similarly, harbor seals, *Phoca vitulina*, as well as gray seals, *Halichoerus grypus*, prefer to sun and rest on half-tide ledges or small islands (Kenny and Gilbert, 1994) and are also known to use Egg Rock as a haul

Figure 8

# EGG ROCK LIGHT STATION

Shoreline is co-terminous high tide  
Surveyed by Island Research Center  
May 20, 1997



out (Hill and Stevenson, pers. comm.). Both kinds of seals are common on the southwest ledge of Egg Rock from May through September. Although I was unable to find reports documenting numbers of seals resting on Egg Rock, I did find that on June 7, 1972, a USCG observer found 1 gray seal, *Halichoerus grypus*, stranded/dead on the island (Richardson, 1976). During May of 1997 up to 30 seals were observed resting on the island (Sharp, pers. com.). The site also appears to be used for pupping by 3 female harbor seals (Anderson, pers. comm.).

### 1997 BIOLOGICAL SURVEY

The island was mapped on May 21, 1997. We used a Trimble GeoExplorer Differentially Corrected GPS to survey the island. The coastline was mapped by walking the shore, just above the splash-water mark, while the GPS unit recorded one point every 5 sec. (Figure 8). We also photographed the buildings and collected plants to be identified.

On May 27, 1996, 17 COA researchers visited the island to count seabirds. When we arrived, there were two eagles resting on the southern ledge, and we observed guillemots in the shoreline waters. As suggested by Drury (1986) we used mark/recapture methods to survey the seabird colony on Egg Rock, which consisted of herring gulls, black-back gulls, and common eiders. We formed a line, each person spaced an arms-length apart from one another, and walked across the island, counting and marking with 10.8 cm craft sticks each nest we encountered. Once completed, John Anderson recounted a section of the nesting area, recording both the number of marked (59), and unmarked (4) nests. Using these numbers, I calculated a Lincoln index as follows: The total number of nests recounted (63) divided by the number of marked nest found (59). I then multiplied this index (1.06) by the total nest count (294) to get a final corrected nest count of 311.64—21.2 eider nests and 290.44 gull nests. The uncorrected nest count results for the island are as follows:

SPECIES	SCRAPES	1 EGG	2 EGGS	3 EGGS	4 EGGS	5 EGGS
Elders	6	3	2	6	6	3
Gulls	232	93	93	85	3	

Gull clutches ranged from 1-4 eggs, the average being 1.9 with a standard deviation of .83, and elder clutches ranged from 1-5, averaging 3.2 with a standard deviation of 1.28. Although we did not distinguish between herring and black-back gulls, we visually estimated an approximate 7:3 ratio of herrings to black backs. We also observed that most of the black-back gulls were nesting in the southern, more protected area of the island whereas the majority of the herring gulls were on the northernwestern exposed ledges.

Because Egg Rock is a low-lying treeless island comprised mostly of bare rock, there is minimal space for vegetative cover. The highest point, just around the lighthouse, does support perennial vegetation. In this preliminary vegetation survey, we found grass species--blue joint grass, *Calamagrostis canadensis*, and Lyme grass, *Leymus arenarius*-- to be the most prominent. In the sheltered but barren crevices, growing lower on the island than most other vegetation, we found roseroot, *Sedum rosea*, to be fairly abundant. Norton (1931) had noted the presence of *Sedum rosea* on Egg Rock, and Rand and Redfield (1894) listed it as locally rare in the area around MDI. One other locally rare species commonly called star flowered Solomon's seal, *Smilactna stellata*, was found on Egg Rock; the plant was collected about 5 m northeast of the footbridge. Other species collected from Egg Rock included: Seaside angelica, *Colopleurum lucidum*, meadow rue, *Thalictrum polygamus*, raspberry, *Rhubus sp.*, strawberry, *Fragaria virginiana*, wild caraway, *Carum carvi*, sorrel, *Rumex sp.* (either *R. crispus* or *R. pallidus*), yarrow, *Anchillea millefolium*, buttercup, *Ranunculus acris*, chickweed, *Stellaria media*, and pasture or virginia rose, *Rosa virginiana*.

## CONCLUSION

Lighthouses have been an important part of our nations history; they symbolize safety, security, and heroism. Since the automation of lighthouses, there has been question about how to best maintain the light and fog signals, while preserving the historic beauty of the lighthouse sites. In September of 1996, authority over the disposal of lighthouses in Maine was given to the Island Institute. Although maintenance of the navigational aids is done by the Coast Guard, U. S. Fish and Wildlife Service is currently slated to gain ownership of the island. However, because Egg Rock is viewed by millions of visitors to Acadia National Park, the Fish and Wildlife Service is negotiating the logistics of maintaining Egg Rock cooperatively with the National Park Service.

---

## Appendix 1

Land titles for the sales of Egg Rock in both 1866

KNOW ALL MEN BY THESE PRESENTS,

That I, *James R. Clark*, "Agent to superintend and manage the sale and settlement of the Public Lands" of the STATE OF MAINE, in virtue of the authority by law in such Agent vested, in consideration of *Five*

dollars paid for the use of said State, by *Edwin M. Rowan* of *Eden in the County of Hancock*

the receipt whereof to the use aforesaid, I acknowledge, do hereby in behalf of said State, give, grant, bargain, sell and convey to said *Rowan*

heirs and assigns forever, the following described land, to wit:—  
All the right title and interest which the State of *Maine* has in and to a small island or ledge for-  
mation, known as "Burr's Egg Rock Island" situated at the *Mouth of Frenchman's Bay in the County of Hancock,*

not *incorporated in the Schedule of State's Property* to *Maine*; Should the title to the State in not *to be required to run back to the grantee in sum-*

*language therein in favor of said State*

containing *Five* acres, more or less, according to the survey and plan of said township made and returned to the Land Office in 18— by *Surveyor*, reference to said survey being had.

Provided however, if the said notes of hand by him signed bearing even date herewith, payable to the Treasurer of said State, for the sum of *Dollars each*, shall fall *years with interest annually, or if the said*

shall cut any timber on said lot without license from the Land Agent, except what may be necessary for building and improving the same until said notes are paid, or has failed to perform all the duties required of a settler in conformity to chapter 5 of the Revised Statutes, approved April 17, 1857, and all other Acts additional or amendatory thereto, then this deed shall be void and the fee remain in the State.

To have and to hold the same, with all the privileges and appurtenances thereof to the said *Edwin M. Rowan* his heirs and assigns, to *him* their use and behoof, forever.

My testimony aforesaid, I, the said Agent in behalf of said State, have hereto subscribed my name and affixed my seal, this *Twenty first* day of *February* in the year of our Lord one thousand eight hundred and sixty *Six*

Signed, Sealed and Delivered in presence of us, *Wm Cabline*

*James R. Clark* Personally appeared *James R. Clark* SS *February 21* 1866 and acknowledged the above Instrument by him subscribed, to be his act and deed as Agent as aforesaid, made in behalf of said State. Before me, *Wm Cabline* Justice of the Peace.

STATE OF MAINE.

IN COUNCIL, OCT. 30 1874.

THE STANDING COMMITTEE ON PUBLIC LANDS AND BUILDINGS  
TO WHICH WAS REFERRED THE ACCOMPANYING PAPERS  
REPORT, THAT WE RECOMMEND THAT THE FOLLOWING ORDER BE PASSED

ORDERED, THAT THERE BE AND HEREBY IS CEDED TO THE UNITED  
STATES OF AMERICA THE TITLE AND INTEREST OF THE STATE OF MAINE TO AND  
THE JURISDICTION OF THE FOLLOWING LOTS OF LAND IN SAID STATE OF MAINE  
DESCRIBED AS FOLLOWS, VIZ:

FIRST: AVERY OR CHANNEL ROCK SO CALLED IN MACHIAS BAY WASH-  
INGTON COUNTY.

SECOND: EGG ROCK IN FRENCHMAN'S BAY HANCOCK COUNTY.

THIRD: THE SOIL UNDER THE BREAKWATER IN THE HARBOR OF PORT-  
LAND IN CUMBERLAND COUNTY BEYOND THE LINE OF LOW WATER.

RESERVING TO THE STATE OF MAINE CONCURRENT JURISDICTION WITH  
THE UNITED STATES OVER SAID LANDS AND ALL BUILDINGS ERECTED THEREON SO  
FAR AS RELATES TO THE EXECUTION OF ALL CIVIL MILITARY AND CRIMINAL PROC-  
ESSES ISSUED BY AUTHORITY OF THE STATE OF MAINE OR ANY OFFICER THEREOF.

20. THAT THE COUNCIL HEREBY SIGNIFY THEIR CONSENT THAT THE

GOVERNOR MAY CEDE THE PREMISES ABOVE NAMED TO THE UNITED STATES.

WHICH IS RESPECTFULLY SUBMITTED.

L. G. DOWNES CHAIRMAN.

SEAL:

IN COUNCIL, OCT. 30 1874.

READ AND ACCEPTED BY THE COUNCIL, AND BY THE GOVERNOR  
APPROVED.

ATTEST: G. G. STACY SECRETARY OF STATE.

STATE OF MAINE.

OFFICE OF SECRETARY OF STATE,

AUGUSTA, OCT. 30 1874.

SEAL:

I HEREBY CERTIFY THAT THE FOREGOING IS A TRUE  
COPY OF THE ORIGINAL AS DEPOSITED IN THIS OFFICE.

SIGNED: ALDEN JACKSON

DEP. SECRETARY OF STATE.

PORTLAND ME. NOV. 5, 1874.

HON. GEORGE H. WILLIAMS,

ATTORNEY GENERAL,

WASHINGTON D. C.

SIR:

I HAVE THE HONOR TO REPORT, THAT GEN. J. C. DUANE, OF THE LIGHT HOUSE SERVICE, HAVING CALLED ON ME FOR AN ABSTRACT OF THE TITLE TO THE TERRITORY ON WHICH THE BREAKWATER IN PORTLAND HARBOR IS CONSTRUCTED; ALSO OF THE TITLE TO A STERILE ROCK RISING ABOVE THE SURFACE OF THE SEA IN MACHIAS BAY, KNOWN AS AVERY OR CHANNEL ROCK; AND TO A SIMILAR ROCK IN FRENCHMAN'S BAY, KNOWN AS EGG ROCK, ALL THESE PREMISES BEING WANTED FOR USE AS LIGHT HOUSE STATIONS:

IT WAS FROM THE FIRST CLEAR THAT THERE WAS NO PERSON HAVING PROPERTY IN THE BREAKWATER LANDS BELOW LINE OF LOW WATER, AS UNDER THE LAW OF THIS STATE, THAT LINE LIMITS INDIVIDUAL PROPRIETORSHIP.

THE MOST CAREFUL INQUIRY AND INVESTIGATION FAILED TO DISCOVER ANY PERSON CLAIMING ANY TITLE BY GRANT OR POSSESSION OF EITHER OF THE TWO ROCKS I HAVE NAMED. EACH LIES FAR FROM THE MAIN LAND, AND EACH IS NAKED ROCK.

154  
FINALLY I CONCLUDED THAT THE PROPERTY OF EACH OF THESE PAR-  
CELS REMAINED IN THE STATE OF MAINE. ACCORDINGLY APPLICATION WAS  
MADE TO THE EXECUTIVE DEPARTMENT OF THE STATE, IN CONFORMITY WITH CHAP.  
2, OF THE REVISED STATUTES OF MAINE, FOR A CESSION TO THE UNITED STATES  
OF THE TITLE AND JURISDICTION OF THE PREMISES. ENCLOSED I FORWARD,  
THE DOCUMENTS RECEIVED IN ANSWER TO THAT APPLICATION.

AND IN MY OPINION, UNDER AND BY THESE INSTRUMENTS AND RECORDS,  
THE UNITED STATES TAKE GOOD TITLE TO THE PLACES NAMED.

VERY RESPECTFULLY,

SIGNED: NATHAN WEBB,

U. S. ATTY. FOR MAINE.

Department of Justice

Washington Dec. II, 1874.

Sir:

I return herewith the papers referred to me from your Department on the 18th ult., relative to the title of the United States to light-house sites at Avery's Rock, Egg Rock, and Portland Breakwater, in Maine, and have the honor to state that, from the information furnished by these papers, the United States have in my opinion acquired a valid title to the sites referred to, by virtue of the accompanying grant from the Governor of Maine dated Nov. 4, 1874.

I am, sir, very respectfully

Your obedient servant

(Signed)

Geo. W. Williams

Attorney General.

Hon. B. H. Bristow

Secretary of the Treasury.

C. I. K.

Treasury Department,

Washington, D. C., December 14, 1874.

Sir:

Referring to the letter of Major P. C. Hains, Engineer Secretary of the Light House Board, dated the 14th ultimo, enclosing certain papers relating to the title of the United States to the light-house sites at Avery Rock, Egg Rock, and Portland Breakwater, and requesting that said papers be referred to the Honorable the Attorney General for his opinion as to the validity of the title, you are informed that the papers having been referred as desired a reply has been received from the Attorney General, dated the 11th instant, from which it appears that in his opinion, from the information furnished by the papers in question, the United States have acquired a valid title to the sites referred to, by virtue of the accompanying grant from the Governor of Maine, dated the 4th November, 1874.

The letter of the Attorney General and the papers referred to, are herewith enclosed.

I am,

Very respectfully,

BE IT KNOWN TO ALL PERSONS TO WHOM THESE PRESENTS SHALL COME,  
THAT, WHEREAS BY THE LAWS OF THE STATE OF MAINE, I, NELSON DINGLEY JR.  
IN MY CAPACITY OF GOVERNOR OF THE STATE OF MAINE, AM AUTHORIZED AND EM-  
POWERED, WITH THE CONSENT OF THE EXECUTIVE COUNCIL OF SAID STATE, TO  
CEDE, TO THE UNITED STATES OF AMERICA, FOR PURPOSES NAMED IN THE CONSTI-  
TUTION OF SAID UNITED STATES, ANY TERRITORY, NOT EXCEEDING TEN ACRES,  
AND NOT INCLUDING ANY PUBLIC OR PRIVATE BURYING GROUND, DWELLING HOUSE,  
OR MEETING HOUSE WITHOUT THE CONSENT OF THE OWNER OR ANY HIGHWAY, RE-  
SERVING TO THE STATE OF MAINE, JURISDICTION OVER SUCH TERRITORY FOR THE  
EXECUTION IN AND UPON THE SAME OF CIVIL, CRIMINAL AND MILITARY PROCESS  
LAWFULLY ISSUED BY AN OFFICER OF SAID STATE;

AND, WHEREAS, THE SAID UNITED STATES OF AMERICA HAS MADE AP-  
PLICATION FOR THE CESSION BY THE STATE OF MAINE, TO THE UNITED STATES  
AFORESAID, FOR THE PURPOSES OF CERTAIN NEEDFUL PUBLIC BUILDINGS, OF THE  
TITLE TO AND JURISDICTION OVER THE FOLLOWING LOTS OR PARCELS OF LAND LY-  
ING WITHIN THE LIMITS OF, AND OWNED BY THE STATE OF MAINE; THAT IS TO  
SAY, AVERY OR CHANNEL ROCK, SO CALLED, SITUATED IN MACHIAS BAY, IN THE  
COUNTY OF WASHINGTON, IN THE STATE OF MAINE; ALSO EGG ROCK, SO CALLED,  
SITUATED IN FRENCHMAN'S BAY, IN THE COUNTY OF HANCOCK, IN SAID STATE;  
ALSO, THE SOIL UNDER THE BREAKWATER IN THE HARBOR OF PORTLAND, IN THE

COUNTY OF CUMBERLAND, IN SAID STATE, BEYOND THE LINE OF LOW WATER:

AND WHEREAS IT HAS BEEN MADE CERTAIN THAT UPON NEITHER OF SAID LOTS OR PARCELS OF LAND, IS ANY PUBLIC OR PRIVATE BURYING GROUND, DWELLING HOUSE, MEETING HOUSE OR HIGHWAY, AND THAT THE TERRITORY OF SAID LOTS DOES NOT EXCEED TEN ACRES:

AND WHEREAS, THE EXECUTIVE COUNCIL OF THE STATE OF MAINE, AT A MEETING LAWFULLY HELD AT THE COUNCIL CHAMBER, IN AUGUSTA ON THE THIRTIETH DAY OF OCTOBER IN THE YEAR OF OUR LORD ONE THOUSAND EIGHT HUNDRED AND SEVENTY FOUR, AS BY THE RECORDS OF SAID MEETING NOW REMAINING IN THE OFFICE OF THE SECRETARY OF THE STATE OF MAINE WILL MORE FULLY APPEAR, DID FORMALLY AND FULLY CONSENT TO THE CESSION OF TITLE AND JURISDICTION AS AFORESAID, OF AND OVER SAID SEVERAL LOTS OR PARCELS OF SAID LAND TO THE UNITED STATES OF AMERICA:

NOW, THEREFORE, I, NELSON DINGLEY JR. GOVERNOR OF THE STATE OF MAINE, BY VIRTUE OF THE POWER AND AUTHORITY WITH WHICH I AM AS AFORESAID VESTED, AND IN PURSUANCE OF THE SAME, AND WITH THE CONSENT AFORESAID OF THE COUNCIL, IN THE NAME AND BEHALF OF THE STATE OF MAINE, HAVE CEDED AND DO HEREBY CEDE TO THE UNITED STATES OF AMERICA AND THEIR ASSIGNS FOREVER, ALL THE RIGHT, TITLE, INTEREST AND ESTATE OF THE STATE OF MAINE IN AND TO SAID SEVERAL LOTS OR PARCELS OF LAND, THAT IS TO SAY, IN AND

TO, AVERY OR CHANNEL ROCK, SO CALLED SITUATE IN MACHIAS BAY; ALSO EGG  
ROCK, SITUATE IN FRENCHMAN'S BAY; AND THE SOIL UNDER THE BREAKWATER, IN  
PORTLAND HARBOUR, BEYOND THE LINE OF LOW WATER, ALL IN THE STATE OF MAINE;  
TOGETHER WITH ALL JURISDICTION OVER SAID SEVERAL LOTS OR PARCELS OF  
LAND, EXCEPTING JURISDICTION FOR THE SERVICE AND EXECUTION IN AND UPON  
SAID PLACES, OF CIVIL, CRIMINAL AND MILITARY PROCESSES LAWFULLY ISSUED BY  
ANY OFFICER OF SAID STATE OF MAINE, FOR THE WHICH SERVICE AND EXECUTION  
OF PROCESS, JURISDICTION OVER SAID PLACES, CONCURRENT WITH THE JURISDIC-  
TION OF SAID UNITED STATES OF AMERICA, IS HEREBY EXPRESSLY RESERVED.

TO HAVE AND TO HOLD THE AFORE CEDED PREMISES TO THE SAID UNI-  
TED STATES OF AMERICA, AND THEIR ASSIGNS FOREVER.

IN TESTIMONY WHEREOF, I, NELSON DINGLEY JR. GOVERNOR OF SAID  
STATE OF MAINE, HAVE CAUSED THESE PRESENTS TO BE ATTESTED BY THE SECRE-  
TARY OF SAID STATE OF MAINE, AND THE GREAT SEAL OF SAID STATE TO BE  
HERETO AFFIXED, THIS, FOURTH DAY OF NOVEMBER IN THE YEAR OF OUR LORD,  
ONE THOUSAND EIGHT HUNDRED AND SEVENTY FOUR, AND OF THE INDEPENDENCE OF  
THE UNITED STATES OF AMERICA THE NINETY-NINTH.

:SIGNED: NELSON DINGLEY JR.

:SEAL:

ATTEST

:SIGNED: GEO. C. STACY

SECRETARY OF STATE.

HANCOCK SS.

REGISTRY OF DEEDS.

RECEIVED

MARCH 15TH 1875 @ 2<sup>L</sup> A. W. & RECORDED IN VOL. 151 PAGE 13T.

ATTEST

:SIGNED:

W. B. CAMPBELL

REGR.

## Appendix 2

# Appropriations for the Construction of Egg Rock Lighthouse Station

From "Statement of Appropriations, No. 1"  
 From March 4, 1874, to June 30, 1882.  
 Estimated in 1883.

General object (title of appropriation), and details and explanations.

Egg Rock light-station,  
 For a light-house and fog-signal at Egg Rock, Frenchman's  
 Bay, Maine.....

Total.....

FORM 154.

Date of act making the appropriation.	Reference to the State, at Large.			Amount of annual appropriation.	Year of expenditure.	Expenditure by warrants.	Repayments.	Amount carried to the surplus fund.	Net expenditures.
	Volume.	Page.	Section.						
June 22, 1874	18	217	1	15,000 00	1875 1876	8,300 51 6,699 49			8,300 51 6,699 49
				15,000 00					15,000 00

(General Nature—No. 89.)

AN ACT making appropriations for sundry civil expenses of the Government for the fiscal year ending June thirtieth, eighteen hundred and seventy-five, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums be, and the same are hereby, appropriated, for the objects hereinafter expressed, for the fiscal year ending June thirtieth, eighteen hundred and seventy-five, namely:

x            x            x            x            x            x            x            x

Light-Houses, Fog-Signals, and Beacons.

x            x            x            x            x            x            x            x

For a light-house and fog-signal at Egg Rock, Frenchman's Bay, Maine, (or vicinity,) fifteen thousand dollars.

x            x            x            x            x            x            x            x

Approved, June 23, 1874.

## Appendix 3

### Cannons on Egg Rock and their Proposed Relocation

776 110  
377 110

Commander  
U.S. Coast Guard Group  
Southeast Harbor, Maine  
04679

4810  
Ser: 518-71  
16 September 1971

From: Commander, Coast Guard Group Southeast Harbor  
To: Commanding Officer, U.S. Army Garrison Fort Devens, Ma.

Subj: Proposed helo airlift

1. The Coast Guard desires to remove and transport 2 cannons which are located at the USCG Light Station Egg Rock, an island in Frenchman's Bay, Maine. Several methods to accomplish this have been studied. During a recent conversation between CWO STEVENS, USA who is under your command and CWO MAJANDIG, USCG Operations Officer of this command the possibility of utilizing U.S. Army helicopter support to airlift the cannons was discussed. The operation would require the airlift and transportation of the cannons from the island to a selected site nearby on the mainland for further disposition as USCG artifacts. It was suggested by CWO STEVENS that the details concerning the proposed operation be forwarded to your command for evaluation and determining the feasibility of a helo airlift.
2. The general information concerning the proposed operation is forwarded as enclosure (1). Also photo sheets and an aerial photo which depicts the cannons and their positions at the Light Station are forwarded as enclosures (2) and (3).
3. Your approval of Army support for this operation is requested. If granted, a detailed operational plan will be prepared by my Operations Officer in cooperation with a designated member of your command and based on the joint services capabilities and your recommendations.
4. Authorization to perform the proposed operation will be requested from Rear Admiral R. W. GOEHRING, Commander First Coast Guard District. All proposed plans will be submitted by this command to the Admiral for his approval.
5. If further information is desired the telephone number at this command is: 207-244-5517.

R. T. YOUNG

Encl: (1) General information sheet  
(2) Photo sheets of cannons  
(3) Aerial photo  
(4) CGGS Chart 306

Copy to:

GENERAL INFORMATION SHEET

1. Egg Rock Light Station is located on a small rocky island  $44^{\circ} 21.2N - 69^{\circ} 08.3W$  in Frenchman Bay, Mount Desert, Maine area. The Light was established in 1875. (CGCB Charts 1202, 306)

2. Cannon No. 1 is located approx 38 feet  $310^{\circ}$  true from the main light structure. The inscription on the face of the muzzle is as follows:  
"Fort Pitt, Pa. - SCL 1865 - 15,000# No. 11312"

3. Cannon No. 2 is located approx 63 feet  $063^{\circ}$  true from the main light structure. The inscription on the face of the muzzle is as follows:  
"Fort Pitt, Pa. - SCL 1865 - 15,020# No. 344"

4. Cannon measurements:

Length: 11 feet,  $4\frac{1}{2}$  inches

Circum: Muzzle end -  $52\frac{1}{2}$  inches

Circum: Largest section after end - 8 feet, 5 inches

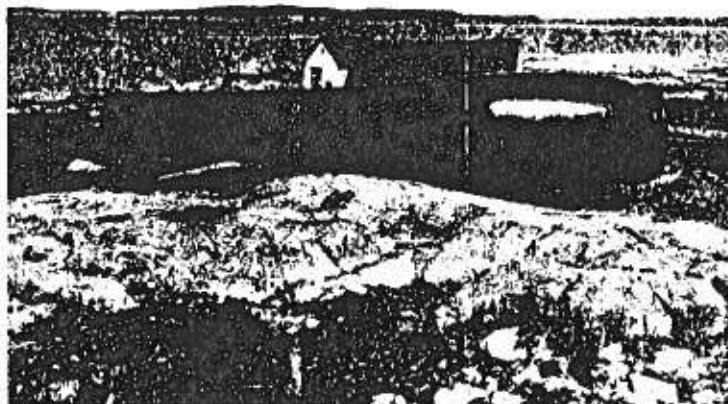
Bores: 10 inches

5. The house including tower section is approx 28 feet high. The lantern house is no longer attached to the structure. The beacon on top of the structure is approx 4 feet in height.

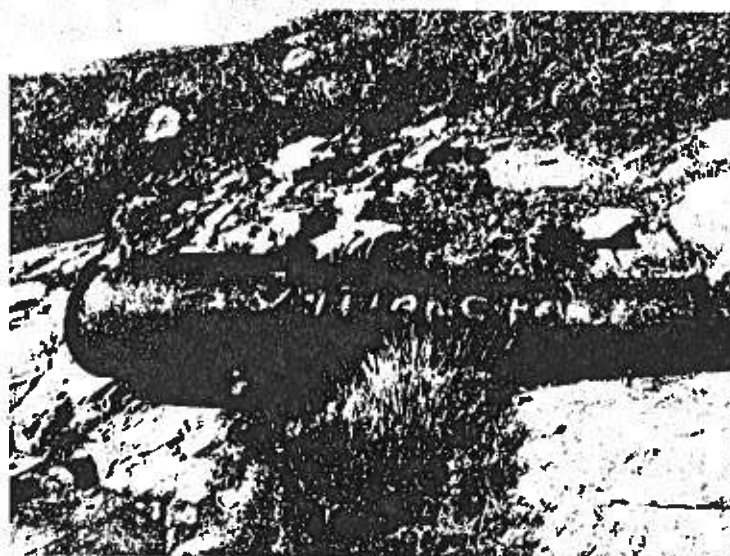
6. The site at which the cannons would be transported to could be selected from the following places:

- a. USCG Base Southwest Harbor - Southwest Harbor, Maine distance of 9 nautical miles - off load on buoy dock.
- b. Back Harbor Airport - Trenton, Maine distance of 11 nautical miles - off load on flat bed trailer for trucking.
- c. Winter Harbor, Maine - Distance  $3\frac{1}{2}$  nautical miles - off load on flat bed trailer for trucking.

If another site other than those mentioned above is considered more desirable, off-load will be on flat bed trailer for trucking.



No. 1 CANNON 15,000 Pounds



No. 2 CANNON 15,000 Pounds



View of No. 1 CANNON, Position in relation to structure



View of No. 2 CANNON, Position in relation to structure

## Appendix 4

### 1930 Real Estate Survey

Identifying Serial  
No. of Property LE-1-J.

ME #21

QUESTIONNAIRE COVERING REAL ESTATE OWNED BY THE UNITED STATES

Note: Use a separate sheet for each separate piece or parcel of property, with as many extra blank sheets as may be required for the replies.

1. Dept. or establishment having custody:  
Department of Commerce, Lighthouse Service,
2. Name and location of property: Egg Rock Light Station,  
Franchman's Bay, Maine.
3. Present use (such as Navy Yard, military reservation, hospital, etc.):  
Lighthouse reservation.
4. Original purpose (if it has been changed by Executive Order, so state):  
Site for lighthouse.
5. Date of and authority for acquisition: November 4, 1874.  
Deed recorded, book 416, page 356, Registry of Deeds, Cumberland County, Maine.
6. Original cost: None. Cession by State of Maine without fee.
7. Area:
 

Land:	About 1 acre (bare rock)
Water:	---
Marsh:	---
	Total: 1 acre.
8. If the property is held incident to navigation purposes, so state, and describe whether the Government's interest is fee simple, or reversionary.  
Yes. Ceded "for the purposes named in the Constitution of the United States."
9. If the property is held for water power purposes, so state; and describe whether the Government's interest is fee simple or reversionary.  
No.

Note: See Explanatory Notes on other side.

10. If property is held for agriculture, manufacture or other purpose, state the purpose and the Government's interest.

No.

11. Describe briefly and generally the improvements on land such as buildings and other structures with uses.

Dwelling surmounted by tower, oil house, engine house, bell tower, boat house and slip, fuel houses.

12. Describe streets, waterways, sewers, telephone and telegraph lines, owned by the United States or held by it under lease or permit.

Coast Guard telephone line

13. If under exclusive jurisdiction or laws of the United States so state; if not explain.

Jurisdiction reserved by State of Maine for service and execution of civil, criminal and military processes issued by an officer of the State concurrent with the jurisdiction of the United States of America.

14. Is the property owned by the U. S. Government, or under permanent lease, to revert to original owners in case Government vacates.

Ceded "to the said United States of America and their assigns forever".

15. Appraised value: \_\_\_\_\_ Land: \_\_\_\_\_  
Improvements: \$25,700

Total: \$25,700.

16. If available, submit sketch or blue print of the property in question with this questionnaire. None available.

17. Remarks:

18. No.

Date: FEB 7 1930

By whom made: O. E. SHERMAN Superintendent of Lighthouses.

(Name; Title; Address)

P O Box 467, Portland, Maine

# Appendix 5

## 1984 USCG Projects Report

U.S. Department  
of Transportation

United States  
Coast Guard



Commanding Officer  
USCGC WHITE LUPINE (WLM5  
Rockland, ME 04841

16500  
21 August 1984

From: Commanding Officer, USCGC WHITE LUPINE (WLM 546), Rockland, ME  
To: Commander, First Coast Guard District (oan), Boston, MA  
Via: Commander, Coast Guard Group Southwest Harbor, ME

Subj: EGG ROCK LIGHT LHM COMPLETION

1. Egg Rock Light LHM project was completed in June 1984. Enclosure one (1) is a list of work performed.

2. It should be noted that this project was accomplished utilizing Base Southwest Harbor Industrial and White Lupine personnel. I think this works out very well and would like to see this continued in the future.

D. M. WHEATON

Encl: (1) Egg Rock LHM Work List

Copy: (1) CCGDONE (ecv)  
(2) OinC ANT GSWH

EGG ROCK LHM WORK LIST.

1. Repair wooden seawall on Eastern side of engine room. (Base Industrial personnel to assist)
2. Scrape and paint engine room exterior approx. 800. Sq Ft Re-nu-it white. 200 Sq ft. of Re-nu-it.
3. Engine room loft replace louver or cover with screen.
4. Rebuild wooden steps front of dwelling.
5. Replace missing siding on dwelling (Base Industrial to assist)
6. Repair rotten window sill on rear of dwelling.
7. Reshingle roof of pump house.
8. Repair and rehang door to pump house.
9. Scrape and paint window covers on dwelling.
10. Install louvers in all window covers that have none three (3) ea. 10"x 10".
11. Scrape and paint foundation of dwelling (brick) approx. 1000 sq. ft (gray Re-nu-it)
12. Scrape and paint secondary light stand.
13. Remove metal ladder from horn foundation.
14. Replace board walk from dwelling to engine room.
15. Wire brush interior of tower.
16. Scrape and paint first deck of tower (interior).
17. Re-tar tower deck (exterior) roofing cement.
18. Scrape and paint exterior tower.
19. Replace gasket on hatch leading to lantern deck (bilco hatch).
20. Remove chimney and cap roof Northeast side of dwelling.
21. Install 12 x 12 Alum. louver in center of glass block window in tower (Base Industrial to accomplish).
22. South bathroom. Replace missing trim (exterior) and repair roof leak.

(Enclosure 1)

## Appendix 6

### 1992 USCG Invoice and Description of Work

DEPARTMENT OF TRANSPORTATION U.S. COAST GUARD CG-3103 (Rev. 7-84)	WORK ORDER	PRIORITY	WORK ORDER NO. 0394-92
		INDUSTRIAL ACTIVITY Base Southwest Harbor	

**SECTION I. - UNIT TO BE CHARGED (For Completion by Requisitioner)**

UNIT NAME OPFAC Egg Rock Light 01-41946	DATE REQUIRED 9/30/92
--	--------------------------

DESCRIPTION OF WORK TO BE PERFORMED

**CATEGORY II RETROFIT**

1. Perform a Category II Retrofit of Egg Rock Light in accordance with Enclosures (1) and (2).
2. Upon completion of all purchases and travel expenditures, return this work order to CEU Providence providing the actual cost, date completed and any other pertinent information in the blocks in Section II below.
3. POC for this project is Mr. Harry Duvall (617) 223-8086.

*ACCOUNTING DATA: 2/3/201/132/13/0/WL/41946/2544*

MATERIALS REQUIRED  
See Paragraph B of Enclosure (1).

Copy to: ANT Southwest Harbor (less Encl.)  
Group Southwest Harbor (less Encl.)  
CCGDONE (oan) (less Encl.)  
MLCA (tes-3) (less Encl.)

ENCLOSURES  
(1) Description of Work, (2) CEU Prov Dwg. No. P000057 (3) Lighthouse Inspection

REQUESTED BY H. Duvall	APPROVED BY CDB J.N. R...	DATE APPROVED 9/29/92
---------------------------	------------------------------	--------------------------

**SECTION II. - COST SUMMARY (A thru H - Ind. Acct. Only)**

DESCRIPTION	CUSTOMER ESTIMATE	INDUSTRIAL ESTIMATE	ACTUAL COST
A. DIRECT LABOR HOURS	1,414.		
B. COST PER DR LAB HR			
C. DIRECT LABOR COST (A x B)			
D. OVERHEAD RATE			
E. OVERHEAD COST PER DR LAB HR (B x D)			
F. OVERHEAD COST (A x E)			
G. TOTAL COST PER DR LAB HR (B + E)			
H. TOTAL LABOR COST (C + F) OR (A x G)			
I. MATERIAL COST	\$18,100.		
J. TRAVEL COST	\$5,512.		
K. OTHER COST			
L. TOTAL COST (H + I + J + K)	23612		

DATE COMPLETED	COMPLETED BY	ACCEPTANCE BY CUSTOMER H. Duvall
----------------	--------------	-------------------------------------

## DESCRIPTION OF WORK

### A. GENERAL

1. Provide the necessary labor, materials and transportation to accomplish a Category II Retrofit at Egg Rock Light. When completed, the navigational aids at Egg Rock Light will operate automatically and will continue to be monitored by ACMS at Group Southwest Harbor.

2. The existing main light, a 190mm rotating beacon, will be replaced with an FA-251-AC optic (RED), rotating at 2 RPM. The existing 250mm lantern (RED) with 2.03 Amp lamps and CG-6P lampchanger mounted outside the lantern house on a trolley mast will remain as the emergency light. The main sound signal will consist of the existing CG-1000 Power Supply and a rebuilt ELG-300/02 Emitter. The existing FA-232(DC) will remain as the emergency sound signal. The sound signals will be controlled by the existing fog detector which will be relocated from the west window of the sound signal building to a new hood assembly located in the south wall of the sound signal building. All equipment associated with the monitor and control of the aids to navigation will be installed in a signal volume constructed within the sound signal building.

3. A separate 120V AC, 100 Amp electric service will be the primary source of power to the new signal volume. The existing 400 AH NICAD battery rack will be installed in the signal volume to provide power to the emergency aids.

4. All materials should be purchased and on hand prior to commencing work on site. Refer to the drawings and this work order for materials required.

5. Any changes to the drawings and/or this work order must be approved by Mr. H. Duvall, Project Engineer, prior to implementation. All changes shall be recorded with red pencil on an "As Built" set of drawings. Submit an "As Built" set of drawings to CEU Providence as directed by Mr. H. Duvall upon completion of this work order.

6. Requests for additional funds or extension of completion date shall be submitted, in writing, with justification to CEU Providence.

7. Accomplish this work order with the minimum amount of outages to the aids to navigation. The installation of temporary aids may be necessary to provide uninterrupted service to the mariner while technicians are connecting and testing the modernization package. All scheduled outages shall be coordinated by message with CCGDONE (oan). NOTE: At least three weeks lead time is required to allow proper review by CCGDONE (oan).

ENCLOSURE (1)

8. Final acceptance of the modernization will be performed by representatives from CEU Providence, Base Southwest Harbor and ANT Southwest Harbor.

9. Upon completion of this work order, correct ANT Southwest Harbor's Electronics Installation Record, Form CG-3134, and submit EICAM Reports, Form CG-4334 to cover all "DI" and "NI" actions.

10. This work order involves installing, connecting and testing equipment operated by voltages which are dangerous and may be fatal if contacted by personnel. Extreme caution shall be exercised when working with this equipment and strict observance of all safety precautions is mandatory. Under no circumstances should any person service this equipment without assistance of another person capable of rendering aid. In addition, all work will be performed in conformance with OSHA Standards 29 CFR 1910 General Industry and 29 CFR 1926 Construction.

#### B. MATERIALS

##### 1. COMDT (G-ECV-3) FURNISHED

- a. 12V DC Distribution Panel
- b. Halon 1301 Fire Suppression System (36 lb.)

##### 2. CEU Providence Furnished

- a. Audio Visual Controller, GCF-RWL-2098
- b. Rotating Optic, FA-251-AC (White-1 RPM)
- c. ELG-300/02 Emitter with spacer

##### 3. Equipment to Remain at Egg Rock Light

- a. 12V Battery Charger, CDSA-IBC-12-30A.
- b. Battery NICAD, McGraw-Edison Type ED-400 (10 EA)
- c. Navaid Sensor Module Panel, GCF-RWL-2241
- d. Navaid Sensor Module, GCF-RWL-2076 (2 EA)
- e. ACMS Remote Unit
- f. Sound Signal Power Supply, CG-1000
- g. Sound Signal, FA-232 (DC)
- h. Fog Detector, CDNC-147.122/222

- i. 250mm Lantern (RED)
- j. CG-6P Lampchanger
- k. CG-181 Flasher, FL 6 (0.6)

4. Locally Furnished

- a. Motor, 2 RPM (for FA-251-AC) API P/N 9035-0042 \$325.00
- b. Lens cover (RED) for FA-251-AC API \$325.00
- c. All other equipment, cable, conduit and miscellaneous hardware necessary to complete a Category II Retrofit at Egg Rock Light.

C. PRELIMINARY WORK (\$8,200.00 Materials - 742 MH)

1. Sound Signal Building

- a. Remove the 10 KW Lister-Lima engine-generator set, fuel piping, air exhaust ducts, engine exhaust system, associated hardware and wiring. Retain the engine-generator set at Base Southwest Harbor as Group spare equipment.
- b. Remove the Type HED-100 engine starting batteries, 24V battery charger and associated wiring. Retain batteries and charger at ANT Southwest Harbor as Group spare equipment.
- c. Remove the two (2) 275 gallon fuel storage tanks and associated piping. Use caution to avoid spillage of fuel, dispose of any excess fuel in the proper manner. Properly dispose of the fuel tanks.
- d. Remove the automatic power system controller, indicator and associated wiring. If the controller is excess to the needs of ANT Southwest Harbor, survey in accordance with current regulations.
- e. All equipment presently installed at Egg Rock Light which is to be retained and reinstalled in the new signal volume is itemized in paragraph B.3 of this work order. All equipment listed in paragraph B.3 shall be removed from the sound signal building and properly stored in the dwelling until construction of the new signal volume is completed.
- f. Remove all electrical boxes, conduit, light fixtures, motorized louvers, miscellaneous equipment, associated hardware and cable that will not be reused in the new signal volume. NOTE: Retain

the 3KW, 240V AC industrial type, wall mounted electric heater and install in the sound signal building as part of the retrofit.

- g. Remove the concrete pads used for the generator, fog detector and ACMS cabinet. Repair floor to match the existing floor.
- h. Remove all existing glass block (10 EA) in the opening in the east wall and replace with new blocks.
- i. Repoint and seal the glass blocks in the high voltage cage area.
- j. Remove the window and frame (west wall) where the fog detector was located. Provide and install glass blocks in the opening.
- k. Remove a sufficient number of bricks from the original south facing window (which was bricked in) and install a fog detector hood adapter. Insure hood assembly is weathertight.
- l. Remove the radio link antenna, wall mounting brackets and associated coaxial cable from the south side of the sound signal building. Retain at Egg Rock for future installation.
- m. Remove rainhoods and brick in the openings used for air exhaust and air intake. Repair/patch all holes and/or penetrations in the exterior brick. The new brick shall match the existing brick and the mortar shall match the existing mortar in color and texture.
- n. Remove the lightning protection system from the sound signal building roof, store and properly reinstall after all work on the roof and exterior brick has been completed.
- o. Strip the entire roof to the roof boards. Check roof boards and rafters, replace as necessary. Provide and install new felt paper and extra clear cedar shingles, installed 5 inches to the weather. Apply two (2) coats of oil base red stain to the new roof. NOTE: Building shall remain watertight at all times.
- p. Inspect all exterior wood trim and fascia boards, repair and replace in kind as necessary. Scrape all peeled paint and sand smooth. Prime all new and bare wood. Apply a finish coat of exterior oil base paint (spruce green) to all wood trim and fascia boards.

- q. Inspect exterior brick and point as required. Scrape all loose paint, clean and seal as necessary.
- r. Replace the existing metal entry door with a stainless steel door and frame. Provide a stainless steel slide bolt and ATON lock.
- s. Replace the wood storm entry doors in kind. Prime and paint, match the existing color.
- t. Construct a signal volume within the sound signal building as shown on the drawings. Install 2" x 4" studs 16" on center on all walls, insulate between studs and install 3/4" plywood on interior. Install a suspended ceiling, insulate above ceiling. Fill all holes and seams, provide moldings where necessary, prime and paint white.
- u. Provide a means for gaining access to the loft area from outside the signal volume. A permanently installed ladder or fold down stairway is suggested.

2. Light Tower

- a. Remove the metal terminal board enclosure located on the north wall of the main level.
- b. Replace all cracked and broken glass blocks in the west window.

3. Light Tower (Watch Room)

- a. Remove the metal terminal board enclosure, 4" x 4" rusted metal wireway, sound powered phone and 12V call bell located on the north wall.
- b. Remove the GCF-RWL-1889 DC Regulated Power Supply. Retain power supply at ANT Southwest Harbor as Group spare equipment.
- c. Properly prepare the deck and ladder surfaces. Prime and paint, match the existing colors.

4. Lantern House (Interior)

- a. Remove the 190mm rotating optic and associated wiring. Retain optic at ANT Southwest Harbor as District spare equipment.
- b. Properly prepare surface of deck. Prime and paint, match existing colors.

5. Lantern House (Exterior)

- a. Replace the existing rusted trolley mast winch assembly. New winch shall be stainless steel similar or equal to ANCO Industries Inc. No. 611140.
- b. Properly prepare the deck and railing surfaces. Prime and paint, match existing colors.

6. Miscellaneous

- a. Repair the deteriorated concrete walkway between the dwelling (south end) and the sound signal building.
- b. Repair the conduit system for the electric boat winch and dwelling at the north side of the sound signal building. Replace all rusted fittings and hardware. Insure conduits are secured firmly to the ledge.
- c. Repair conduit system for the signal cables between the east side of the sound signal building and the dwelling (south side). Replace all deteriorated fittings and hardware, insure conduits are secured properly to the ledge.
- d. Repair and seal the concrete foundation for the main and emergency sound signals.

D. EQUIPMENT INSTALLATION AND INTERCONNECTION (\$9,400.00  
Materials - 660 MH)

1. Signal Volume

- a. Install equipment, conduit, boxes, wireway and associated hardware as shown on sheet 2 of the drawings and necessary to complete a Category II Retrofit at Egg Rock Light.
- b. Insure all modifications have been performed on the audio visual controller, including Field Change 3, installation of the solid state current detector.
- c. Check the LED and relay in the fire suppression system supervisory station. Insure LED and relay are rated for 12V DC operation.
- d. Check the CG-1000 Power Supply meter panel. Insure panel is properly secured to standoff hardware.
- e. Interconnect all equipment within the signal volume in accordance with the appropriate drawing.  
NOTE: The fire suppression system shall be armed only by a technician who has attended a HALON School at Fenwal or has been trained in the proper

installation techniques at the ATON School; otherwise, a local Fenwal, Inc. representative shall be utilized.

- f. Mark all permanently installed cables to correspond with cable designations shown on the drawings. Markers shall be placed as close as practicable to each end near the point of connection. Whenever possible markers shall be attached to a straight portion of cable, bends shall be avoided. Markers shall be placed so that they are easily read. Self-laminating cable markers manufactured by W.H. Brady Company are recommended.
- g. Provide and install rubber matting as necessary.
- h. Technical manuals and instruction booklets for all equipment installed at Egg Rock Light shall be stored properly in the signal volume.

## 2. Sound Signal Building

- a. Provide and install a new secondary disconnect switch (rated at 200 Amps) for the 120/240V AC power distribution. Label disconnect "240V AC DISC", use black and white phenolic plastic identification strip.
- b. Provide and install circuit breaker enclosures for the dwelling (100 Amp) and the electric boat winch (50 Amp). Enclosures shall be located as near as possible to the appropriate existing conduit system. Label enclosures "DWELLING" and "BOAT WINCH", utilize black and white phenolic plastic identification strips.
- c. Provide and install an AC distribution panel (120/240V AC, single phase) with the following breakers:
  - (1) 50 Amp - Main
  - (2) 20 Amp, 2 Pole - Electric Heater
  - (3) 20 Amp, 1 Pole - Receptacles
  - (4) 20 Amp, 1 Pole - Lights
  - (5) 20 Amp, 1 Pole - Spare

Locate the panel as shown on sheet 2 of the drawings.

- d. Install the 3KW, 240V AC industrial type, electric heater that was previously installed in the sound signal building, see sheet 2 for location. Connect heater to the AC distribution panel.

- e. Provide and install flourescent lighting fixtures, locate as shown on sheet 2. Connect fixtures to the AC distribution panel.
- f. Provide and install an adequate number of 115V AC, 20 Amp duplex electrical outlets. Connect to the AC distribution panel.
- g. Label all circuit breakers in the sound signal building AC distribution panel appropriately and in a legible manner.
- h. Install the radio link antenna in the loft area, orientate antenna in the direction of Bass Harbor Head Light and connect to the ACMS cabinet in the signal volume. Provide a safe and permanent working platform in the loft area surrounding the link antenna.

### 3. Light Tower (Main Level)

- a. Provide a single phase, 120V AC distribution panel (Square D Circuit Breaker Load Center or equivalent). The AC distribution panel shall contain the following breakers:

- (1) 30 Amp - Main
- (2) 15 Amp - Vent Fan
- (3) 15 Amp - Tower Lights
- (4) 20 Amp - Tower Receptacles

Install the AC panel on the existing plywood panel, connect to the existing conduit system. Connect the existing branch circuits (lights and receptacles) to the appropriate breakers. Provide and install a directory to identify each circuit breaker.

- b. Provide and install a PVC enclosure (JB2), size to suit on the existing plywood mounting panel. New enclosure shall connect to the existing conduit system. Label enclosure "JB2", use black and white phenolic plastic identification strip.

### 4. Light Tower (Watch Room)

- a. Provide and install a sound powered phone unit (item 21, sheet 2) on the existing plywood equipment mounting panel. Provide and install the necessary PVC conduit and cable to interconnect the units as shown on sheet 13 of the drawings.
- b. Provide and install a PVC enclosure (JB3), size to suit on the existing plywood mounting panel. New enclosure shall connect to the existing conduit

system. Label enclosure "JB3", utilize black and white phenolic plastic identification strip.

- c. Provide and install a 4" x 4" PVC wireway similar or equal to PVC wireway manufactured by Carlon. Wireway shall mount on the existing plywood panel and connect to the existing conduit system.

#### 5. Lantern House

- a. Provide and install a vent fan in the apex of the lantern house. An acid/steam resistant ventilating fan manufactured by Vent-Axia is recommended.
- b. Provide and install the necessary PVC conduit, boxes and cable to operate the vent fan. Connect to the tower AC distribution panel.
- c. Install the FA-251-AC rotating optic on the existing pedestal. Insure the focal plane of the optic is in line with the focal plane of the lantern house.
- d. Provide and install the necessary PVC conduit, PVC boxes and cable to interconnect the main light (FA-251) with the AVC in the signal volume via JB1, JB2 and JB3. Provide and install field service, disconnect switches for the main light. Disconnect switches shall be located directly beneath the main optic. Label disconnect switches "LAMP DISC" and "MOTOR DISC", utilize black and white phenolic plastic identification strips. Interconnect the main light as shown on the appropriate drawing.
- e. Provide and install the necessary PVC conduit, PVC boxes and cable to interconnect the existing emergency light with the AVC in the signal volume via JB1, JB2 and JB3. Interconnect the emergency light as shown on the appropriate drawing.

#### 6. Sound Signal System

- a. Remove the existing ELG-300/02 Emitter and spacer from the concrete foundation. Install emitter and spacer provided by CEU Providence, utilize stainless steel hardware. Retain removed emitter and spacer at ANT Southwest Harbor pending further disposition instructions.
- b. Provide the necessary PVC conduit, PVC boxes and cable to interconnect the main and emergency sound signals with the signal volume. Connect signals in accordance with the appropriate drawing.

#### E. SYSTEM CHECKOUT (8 MH)

1. Test all systems and confirm proper operation. Simulate all possible failures and normal modes and verify correct responses and displays. Utilize the appropriate section of the Lighthouse Inspection, Enclosure (3) to this work order, to check out each aid to navigation.

2. The following items do not appear in the Lighthouse Inspection but should be included in the checkout:

a. To verify the proper operation of the remote intrusion alarm, close all doors with intrusion alarm switches, reset the security interlock circuit by momentarily depressing S1 on the remote intrusion alarm assembly. The MU display should be normal. Verify intrusion by opening the signal volume door. The MU display should show INTRUSION. To verify the remote resetting of the security interlock circuit, close all doors with intrusion alarm switches. Call for a RESET from the MU. The MU display should be normal.

b. Perform a complete check of the fire suppression system except the actual release of the extinguishing agent. All tests shall be made with the initiator removed from the system. Each thermal detector should be checked for proper operation by using a heat source, a heat gun being preferred. The manual and supervisory pull stations should be checked also. When a fire detector is energized or a pull station activated, a FIRE indication should be displayed at the MU.

3. Upon completion of the checkout, notify H. Duvall, CEU Providence (Boston Office - FTS 223-8086) so an initial inspection can be scheduled. All discrepancies resulting from the initial inspection must be corrected prior to final inspection and acceptance.

F. MISCELLANEOUS (\$500.00 Materials - 4 MH)

1. Provide and install "NO TRESPASSING" signs as appropriate and in conspicuous locations.

2. Provide and install a minimum of two (2) sound signal warning signs in the vicinity of the sound signal building (north side) in conspicuous locations. Signs shall read as follows:

CAUTION

SOUND SIGNAL MAY SOUND  
AUTOMATICALLY WITHOUT WARNING.  
SOUND PRESSURE LEVELS BEYOND

THIS POINT MAYBE HAZARDOUS  
TO YOUR HEALTH.

Signs shall be black lettering on yellow. Height of letters shall be 1/2 inch. Signs shall be weatherproof and must withstand high winds and salt spray.

3. Remove all debris from the site caused by the modernization project and dispose of properly. No debris will be thrown into the water.

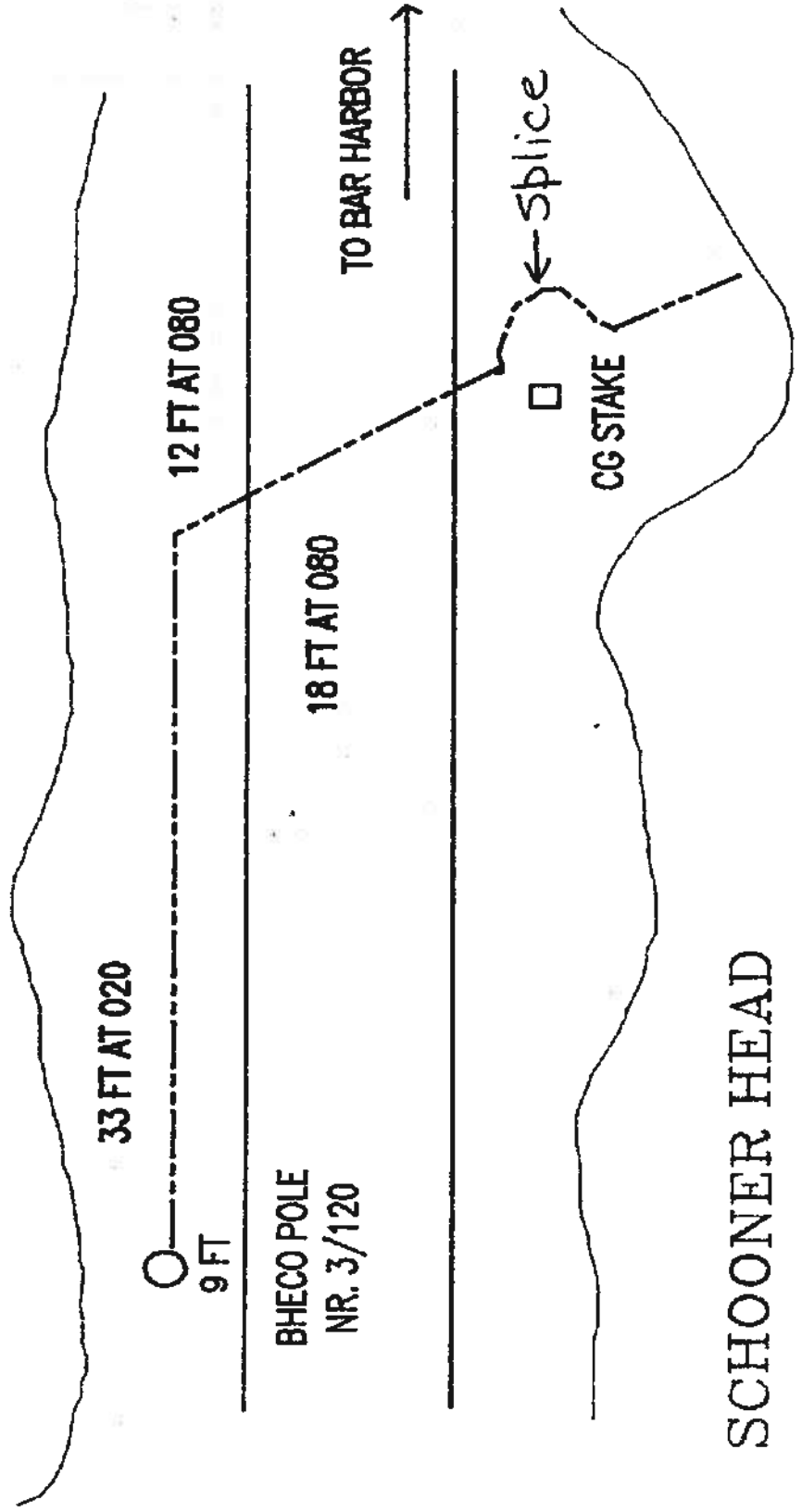
## Appendix 7

### Underwater Cable Diagram and Repair Work

**US COAST GUARD  
EGG ROCK LIGHT SUBMARINE POWER CABLE**

**CABLE TYPE: 5KV/3 COND**

**LENGTH: 12,758**





**SUBMARINE CABLE DATA FOR: EGG ROCK LIGHT**

**DATE OF WORK: 01 JUL 91**

<b>LOC. NO.</b> 25	<b>LNLR</b> 1835	<b>CABLE NO.</b> 2026	<b>CHART NO.</b>	<b>SERVICE POWER</b>	<b>VOLTAGE</b> 2400VAC
<b>FROM: SCHOONER HEAD RD. ME</b>			<b>TO: EGG ROCK LIGHT STATION</b>		
<b>REASON FOR TEST:</b> BIENNIAL TEST AND INSPECTION			<b>TECHNICIANS:</b> TT2 BROWN TT3 YARD		
<b>CABLE TYPE</b> TYPE I	<b>LENGTH (FT)</b> 13,608	<b>NUMBER OF CONDUCTORS</b> 3	<b>CONDITION OF CABLE:</b> ELECTRICAL - EXCELLENT PHYSICAL - GOOD (SEE REMARKS)		
<b>CONDUCTOR USAGE:</b> BLUE- HOT RED- NEUTRAL WHITE- NEUTRAL			<b>TYPE ELECTRICAL TEST CONDUCTED</b> BRIDGE(LOOP) BIDDLE BRIDGE #01 SER# C1099 MEG BIDDLE MEGGER EML1 #02 SER# 1864		
<b>POWER COMPANY</b> BANGOR HYDRO	<b>PHONE NUMBER</b> (207)667-2526	<b>AIR TEMP</b> 75 DEG	<b>WATER TEMP</b> 55 DEG F	<b>SEA CONDITIONS</b> CHOPPY	

<b>INSULATION RESISTANCE [IN MEGOHMS]</b>				<b>LOOP RESISTANCE (OHMS)</b> <b>LEAD RESISTANCE .05</b>	
R/W	G/BL	R/GND	G/GND	R/W	R/BK
		2G		10.70	
R/BL	W/BK	W/GND		R/BL	R/BL
		1.5G		10.64	
W/BL	R/G	BL/GND		W/BL	G/BL
		2G		10.69	
W/G	R/BK	BK/GND		W/G	R/G

<b>CONDITION OF BOTTOM</b> ROCK AND LEDGES	<b>CONDITION OF LANDINGS</b> SHORE - ROCKS AND LEDGE LIGHT - PEBBLE BEACH	<b>TERMINALS &amp; PROTECTION</b> SHORE - FUSED CUTOFF LIGHT - OIL SWITCHES
---	---	---

<u>SPLICES</u>					
Shore End					Light End
100FT	888FT	10	1965FT	1246FT	1889FT
				4959FT	
					884FT
					1795FT
					20FT
X	X	X	X	X	X
X	X	X	X	X	X
888FT AND 10FT SECTIONS UNJACKETED ALL OTHER SECTIONS JACKETED					

**Date Laid:** 14 OCT 80    **By:** ESMT PORTSMOUTH    **Method:** CG LCM 56020

**REMARKS:** [Agreements, Right of Ways, Permits, Etc.] NO RECORDS AT THIS UNIT

- Continue remarks on next page -

**SENIOR SUBCABLE TECHNICIAN'S REVIEW**    **UNIT:** ESMT PORTSMOUTH  
**SIGNATURE:** TT2 M. D. BROWN *M.D. Brown*    **DATE:** 05 JUL 91

**CERTIFIED CORRECT OFFICER IN CHARGE:** *R.J. Laviolette*  
**R. J. LAVIOLETTE TIC OINC**    **DATE:** 8 JUL 91

**SUBMARINE CABLE DATA CONTINUATION SHEET FOR: EGG ROCK LIGHT**

**DATE OF WORK: 01 JUL 91**

**REMARKS CONTINUED: STANDARD INSULATED PLATE TERMINATIONS WITH LUGS ARE STILL NEEDED ALONG WITH OIL SWITCH REMOVAL (SEE REMARKS 01 AUG 90)**

PERFORMED MINOR REPAIRS TO SHORE SIDE LANDING BY REPLACING WORN AND MISSING OUTER JACKET SECTIONS WITH RUBBER MASTIC TAPE COVERED WITH 88 TAPE SHOULD BE LOOKED AT IN 92 TO DETERMINE ITS EFFECTIVENESS RECOMMEND CABLE BE WORKED IN FY 92 AND SHORE LANDING BE REPLACED WITH DOUBLE ARMORED CABLE

RECOMMEND CABLE CLAMPS ON POLE BE REPLACED WITH MINERALAC CONDUIT CLAMPS

CABLE IS TERMINATED ON NETCO FLOE NO. 3-120 ON SCHOONER HEAD RD.

ANT SOUTHWEST HARBOR IS RESPONSIBLE FOR THIS AID (207)244-5517

## Appendix 8

### Correspondence--Bell Struck by Hand

Office of U. S. Light-House Engineer, *LL*

FIRST AND SECOND DISTRICTS,

Boston, Mass.,

1888

*Appendix  
8*

To the Chairman,

Light-House Board,

Washington, D.C.

Sir:

I have the honor to report that it *come to*  
my knowledge that the operation of the striking machine at the fog-  
bell at Egg Rock, Maine, light-station was sometime ago interrupted by  
the foreman charged by me to bolt the bell tower to the ledge and  
raise the floor one story so that the sea could pass beneath it.

He was sent to the station from another distant one under  
the impression that he had all the necessary appliances to raise and  
rehang the bell and reset the machine, but lacking them the interrup-  
tion arose from a misapprehension of his instructions which contem-  
plated never, under any circumstances, interfering with any aid to  
navigation without specific authority and previous notice.

I understand that the Inspector of the district was aware of  
the interruption and that the bell is now rung by hand.

I regret very much that the error should have occurred, and  
will rehang the bell and restore the striking machine to working

504  
order as soon as the work required of the Myrtle in connection with  
the work at Bear Island will permit her to reach the station.

Respectfully yours,

*H. S. Houston*

Major of Engineers,

Engr. 1st. and 2nd. L. H. Dists.

## Appendix 9

### Poem About Brass Caldwell (1981)

O what is the bane of a lightkeeper's life  
That causes him worry, struggle and strife,  
That makes him use cuss words, and beat at his wife?  
It's Brasswork.

What makes him look ghastly, consumptive and thin,  
What robs him of health, vigor and vim,  
And causes despair and drives him to sin?  
It's Brasswork.

The devil himself could never invent  
A material causing more world-wide lament  
And in Uncle Sam's service about ninety percent  
Is Brasswork.

The lamp in the tower, reflector and shade,  
The tools and accessories pass in parade.  
As a matter of fact the whole outfit is made  
Of Brasswork

The machinery, clockwork, fog-signal bell,  
The coal hods, the dustpans, the pump in the well.  
Now I'll leave it to you, mates, if this isn't well  
Brasswork

I dig, scrub and polish, and work with a might,  
And just when I get it all shining and bright,  
In comes the fog, like a thief in the night;  
Good-by Brasswork

And when I have polished until I am cold  
And I'm taken aloft to the Heavenly fold  
Will my harp and my crown be made of pure gold?  
No, Brasswork."

## Literature Cited

- Allen, Robert P. and A. H. Norton. 1931. An inspection of the colonies of seabirds on the coast of Maine by the National Association of Audobon Societies June 23-July 14, 1931, and a comparison of present conditions with those existing in the 1900s and subsequent years of the association's protection.
- Bicentennial news (cannons). Bar Harbor Historical Society: Lighthouse File, Egg Rock.
- Brechlin, Earl. 1981. Caption for photo of the *Northern Miner* run aground on Egg Rock. *Bar Harbor Times*.
- Burr, Edward. 1908. 1st District Department of Commerce and Labor. Description of lighthouse tower, buildings, and premises.
- Caldwell, Bill. 1979. Islands of Maine; where America really began. Guy Gannet Publishing Co., Portland, ME. p. 142.
- Drury, William H. 1986. Suggestions for field studies. unpublished. pp.41-44.
- Egg Rock Light. 1911, February 11. *Bar Harbor Times*.
- Egg Rock Light House Completely Electrified Now. 1939, March 16. *Bangor Daily News*.
- Erwin, R. M. and C. E. Korshgen. 1979. Coastal waterbird colonies: Maine to Virginia--an atlas showing colony locations and species composition. U.S. Fish and Wildlife Service. 218 pp.
- Feller-Roth. 1983. *Lighthouses--A guide to many of Maine's coastal and offshore guardians*. DeLorme Publishing Company: Freeport, ME. p. 40.
- Fernald. 1989. Gray's Manual of Botany. Discorides Press, Portland, Oregon. p. 734.
- Folger D. and M. Drennan. 1984. Report on the status of tern colonies in Eastern Maine. Unpublished report to U.S. Fish and Wildlife Service.

- Folger, David. 1985. Acadia National Park Colonial Waterbird Inventory. Unpublished report to National Park Service.
- Grant and Sharpe. 1963. *101 Wildflowers of Acadia National Park*. University of Washington Press, Seattle. p. 25.
- Keepers Log. United States Lighthouse Records. Group 26: Egg Rock file. National Archives: Washington D. C.
- Kenny, Mary K. and James R. Gilbert. 1994. Increase in harbor and gray seal populations in Maine. Unpublished report to National Marine Fisheries Service, Woods Hole, MA.
- Matava, Mary Ellen. 1982, August 12. Lighthouses guide sailors around Mount Desert Island. *Bar Harbor Times*.
- McLane, Charles B. 1989. *Islands of the Mid-Maine Coast vol.II: Mount Desert to Machias Bay*. Kennebec River Press, Inc., Maine.
- Mitchell, Edwin V. 1940. *Anchor to Windward*. Coward-McCann, Inc., New York. 240pp.
- Norton. 1913. Some noteworthy plants from the islands and coast of Maine. *Rhodora* . vol. 15, issue 176:137-143.
- Quinn, William P. 1983. *Shipwrecks around Maine*. The Lower Cape Publishing Co., Orleans, MA. p.159.
- Rand, Edward L. and J. H. Redfield. 1894. *Flora of Mount Desert Island*. University Press, Cambridge.
- Richardson, David T. 1976. Assessment of harbor and gray seal populations in Maine: Research period, July 1974-September 1975. Unpublished report prepared for Maine Department of Marine Resources.
- Sherman, C. E. 1930. Questionnaire covering real estate owned by the United States. Photocopied from Acadia National Park Archives: Egg Rock File.

Spiker, LaRue. 1965, November 25. Lighthouses symbolize the reach and hazards of island waters around MDI. Bar Harbor Times.

United States Coast Guard. 1971. Proposed helo airlift. Records from Group Southwest Harbor.

United States Coast. 1980 and 1992. Changes and maintenance. Records from Group Southwest Harbor.

United States Government. National Archives, Washington D. C. Correspondence by District Engineers and Inspectors Feb. 1853-Dec. 1900. Record Group 26: Egg Rock File.

United States Government. National Archives, Washington D. C. Keeper's Log. Record Group 26: Egg Rock File.

## Bibliography

- Allen, Robert P. and A. H. Norton. 1931. An inspection of the colonies of seabirds on the coast of Maine by the National Association of Audobon Societies June 23-July 14, 1931, and a comparison of present conditions with those existing in the 1900s and subsequent years of the association's protection.
- Bicentennial news (cannons). Bar Harbor Historical Society: Lighthouse file, Egg Rock.
- Brechlin, Earl. 1981. Caption for photo of the *Northern Miner* run aground on Egg Rock. *Bar Harbor Times*.
- Burr, Edward. 1908. 1st District Department of Commerce and Labor. Description of lighthouse tower, buildings, and premises.
- Caldwell, Bill. 1979. *Maine Magic*. Guy Gannett Publishing Co., Portland, ME.
- Caldwell, Bill. 1981. *Islands of Maine: where america really began*. Guy Gannet Publishing Co., Portland, ME. p. 142.
- Conkling, Philip W. 1981. *Islands in time: A Natural History of the Islands of Maine*. Capital City Press: Vermont.
- Conkling, P. W., R. E. Leonard, and W.H Drury. 1984. People and Islands. Resource management for islands in the gulf of Maine. Maine Island Institute: Rockland, ME. pp.185-198.
- Davis, Deborah. 1987. *Keeping the Light: A handbook for adaptive re-use of island lighthouse stations*. Island Institute: Rockland, ME. 51pp.
- Drury, William H. 1986. Suggestions for field studies. unpublished. pp.41-44.
- Egg Rock Light. 1911, February 11. *Bar Harbor Times*.
- Egg Rock Light House Completely Electrified Now. 1939, March 16. *Bangor Daily News*.

- Erwin, R. M. and C. E. Korshgen. 1979. Coastal waterbird colonies: Maine to Virginia--an atlas showing colony locations and species composition. U.S. Fish and Wildlife Service. 218 pp.
- Feller-Roth. 1983. *Lighthouses--A guide to many of Maine's coastal and offshore guardians*. DeLorme Publishing Company: Freeport, ME. p. 40.
- Fernald. 1989. Gray's Manual of Botany. Discorides Press, Portland, Oregon. p. 734.
- Finnegan, Kathleen E. and T. E. Harrison. 1991. *Lighthouses of Maine and New Hampshire: a pictorial tour of the lighthouses of Maine and New Hampshire*. Quantum Printing Corporation: Laconia, NH.
- Folger D. and M. Drennan. 1984. Report on the status of tern colonies in Eastern Maine. Unpublished report to U.S. Fish and Wildlife Service.
- Folger, David. 1985. Acadia National Park Colonial Waterbird Inventory. Unpublished report to National Park Service.
- Grant and Sharpe. 1963. *101 Wildflowers of Acadia National Park*. University of Washington Press, Seattle. p. 25.
- Hill, Ruth A. 1996 *Discovering Old Bar Harbor and Acadia National Park*. Down East Books: Camden, ME. pp. 117-118.
- Holland, Ross F. 1989. *Great American Lighthouses*. The Preservation Press, Washington D. C.
- Keepers Log. United States Lighthouse Records. Group 26: Egg Rock file. National Archives: Washington D. C.
- Kenny, Mary K. and James R. Gilbert. 1994. Increase in harbor and gray seal populations in Maine. Unpublished report to National Marine Fisheries Service, Woods Hole, MA.
- Krebs, Charles J. 1989. *Ecological Methodologies*. Harper and Row Publishers, New York.

- Matava, Mary Ellen. 1982, August 12. Lighthouses guide sailors around Mount Desert Island. *Bar Harbor Times*.
- McLane, Charles B. 1989. *Islands of the Mid-Maine Coast vol.II: Mount Desert to Machias Bay*. Kennebec River Press, Inc., Maine.
- Mitchell, Edwin V. 1940. *Anchor to Windward*. Coward-McCann, Inc., New York. 240pp.
- Mittlehauser, Glenn, J. H. Connery, and J. Jacobs. 1996. Inventories of selected flora and fauna on 10 islands of Acadia National Park, Maine. National Park Service, Boson, MA.
- Norton. 1913. Some noteworthy plants from the islands and coast of Maine. *Rhodora* . vol. 15, issue 176:137-143.
- Palmer, Ralph S. 1949. *Maine Birds*. Printed for the Museum of Comparative Zoology at Harvard College, Cambridge, Massachusetts.
- Quinn, William P. 1983. *Shipwrecks around Maine*. The Lower Cape Publishing Co., Orleans, MA. p.159.
- Richardson, David T. 1977. Distribution and abundance of harbor and gray seals in Acadia National Park area. Prepared for National Park Service and Department of Sea and Shore Fisheries.
- Richardson, David T. 1976. Assessment of harbor and gray seal populations in Maine: Research period, July 1974-September 1975. Unpublished report prepared for Maine Department of Marine Resources.
- Smith, Robert L. *Ecology and Field Biology*, 3rd ed. Harper and Row Publishers, New York.
- Spiker, LaRue. 1965, November 25. Lighthouses symbolize the reach and hazards of island waters around MDI. *Bar Harbor Times*.
- Sterling, Robert T. 1935. *Lighthouses of the Maine Coast and the Men who Keep Them*. Brattleboro, Vt.: Stephen Daye Press. p. 214.

United States Coast Guard. 1971. Proposed helo airlift. Records from Group Southwest Harbor.

United States Coast. 1980 and 1992. Changes and maintenance. Records from Group Southwest Harbor.

United States Government. National Archives, Washington D. C. Correspondence by District Engineers and Inspectors Feb. 1853-Dec. 1900. Record Group 26: Egg Rock File.

United States Government. National Archives, Washington D. C. Keeper's Log. Record Group 26: Egg Rock File.

Whitmore, Diane. 1985, August 15. Coast Guard repairing three lighthouses. *Bar Harbor Times*.