

Woods Hole Historical Collection
P. O. Box 185
Woods Hole, MA 02543

REGISTER
Pacific Guano Company
1859 - 2010
3 boxes
Artifacts

Pacific Guano Company

1859-1889

History

The Pacific Guano Company was for twenty-six years (1863 –1889) the principal industry of Woods Hole. It was the result of the association of the Boston shipping firm of Glidden and Williams and two Cape Cod families. One family, the Shivericks, operated the Shiverick shipyard of East Dennis. The other family, the Crowells, also was from East Dennis. Its members were captains, owners, and financiers of the sailing vessels built by the Shivericks. In the 1850s, there was a slump in the international trade in which the ships of these parties were engaged. Their ships often spent months in the Far East looking for a cargo to carry on the return voyage to New England.

At about this same time, it was discovered that the islands along the west coast of South America as well as many Pacific islands had guano (bird dung) several hundred feet thick. When guano was determined to be a successful fertilizer, the Cape Codders began to fill their ships with guano for the return trip to the east coast. These men soon realized that they might do even better financially if they were to go into ownership of the guano supply and fertilizer production. In 1859, the Crowells and Shivericks joined with the firm of Glidden and Williams to form the Pacific Guano Company. Under the 1856 U. S. Guano Act, the Pacific Guano Company leased Howland Island at the equator in the Pacific for their own use.

Woods Hole, the only natural deep water harbor on Cape Cod, was chosen as the site of the Pacific Guano Company factory. Construction of the factory began in 1863 on the Long Neck (Penzance Point) land owned by company partners, William T Glidden and John M. S. Williams. It was not until 1867 that the company itself gained ownership of the property.

When the factory began operations, one of the Crowell sons became the company chemist and one of the Shiverick sons became the superintendent. Men, many of them Irish immigrants, were hired. Housing was constructed. The ships started to come in from the Pacific with guano. The local fish market was contracted to supply menhaden and other fish scraps to mix with the guano to improve the fertilizer.

By 1867, the guano at the Howland Island had been mined out. The company then claimed the Swan Islands in the eastern Caribbean off Honduras as its source of guano. It also brought guano from nearby Navassa Island. In that same year, beds of “rock phosphate,” a fertilizer additive, were discovered in South Carolina.

The Pacific Guano men changed their equipment and formulas, bought Chisholm Island in South Carolina, and built a rock phosphate crushing plant on the island. Sulfuric acid was necessary to make the rock phosphate soluble in water, so a separate building for the production of the acid was built in Woods Hole. In 1869, the company built a second factory in Charleston, South Carolina.

The company prospered, often showing profits of 20% a year. In 1879, it had a production of 36,000 tons of fertilizer.

It is not clear why the Pacific Guano Company failed. There are stories of embezzlement by the treasurer. It is probable that artificial chemical fertilizers developed in Europe were too profitable and competitive for the older method and its manufacture. For whatever reasons, by 1889 the finances of the company were in ruin. Bankruptcy was declared. The buildings and the dock were abandoned.

Pacific Guano Company 1859-1889

Scope

The Pacific Guano Company built its Woods Hole factory in 1863 and conducted business here for twenty-six years. This collection provides general information about the guano industry as well as specific information about the rise and fall of the company. A xeroxed portion of William Bunting's *A Day 's Work* Volume II as well as the text of the Guano Act of 1856 and an 1850 United States Senate resolution give insight into the industry. Current newspaper articles and histories written by Woods Hole residents, as well as those from the period, provide information on the 1859 origin and growth of the Pacific Guano Company. Newspaper articles from February, 1889 and the March, 1889 "Report of the Committee of Investigation" describe the company's failure. Ephemera which include photographs and maps of the factory, advertising booklets, newspaper advertisements, letters to and from company principals, an insurance policy, an advertising fan, and a fertilizer bag from the 1880s all provide insight into the factory's workings.

Note:

Some of the most detailed, important and thorough information on Guano is contained in a doctoral thesis which is part of the WHHM archival reference library: **From Recycled Wastes to Commercial Fertilizers: the Evolution to a Technological System in the Eastern United States 1800-1880**, Volume I and II, by Richard Wines. This thesis was done in partial fulfillment of the requirements for a Degree of Doctor of Philosophy in the Department of History at Brown University, June 1981. The story of the guano trade and manufacture is extremely complex and it is covered in great detail in this long thesis.

Pacific Guano Company

Box 1

- 1-1. Typewritten short history of the Pacific Guano Company: written by Prince S. Crowell (1881-1972), n.d. Xerox copy.
- 1-2. Typewritten transcription: talk by Prince S. Crowell (1881-1972) on the Pacific Guano Company, n.d. Two typed original copies. One xerox copy.
- 1-3. Typewritten ms. Very short history of the Pacific Guano Company, author unknown, n.d. One typewritten original, one carbon copy, one xerox copy.
- 1-4. Typewritten ms. "The Story of Swan Island" by Donald Emerson Glidden, 1960. One xerox copy.
- 1-5. Typewritten transcription: history of the Pacific Guano Company written to accompany 2000 exhibit entitled "Woods Hole and the World". Text by James Mavor. Includes Xerox copies of the following illustrations in the exhibit:
 - a. Etching of P. G. C. from 1877 report by Commissioner Spencer F. Baird of U. S. Commission of Fish and Fisheries.
 - b. Map of Woods Hole coast, n.d.
 - c. Painting by Franklin Lewis Gifford of P.G. C.
 - d. Photograph of Asa Shiverick.
 - e. Diagram of P. G. C plant and storehouse.
 - f. Physical Map of North America with Swan Islands highlighted.
 - g. Drawing: Loading guano at the Chincha Islands. Drawing from painting in the collection of Mystic Seaport. Xerox copy was used in exhibit (unknown source).
- 1-6. Text from William Bunting's "*A Day's Work*", Volume II, 2000 - Guano Industry: Chincha Islands.
 - a. two photocopies of a photograph showing sailing vessels in Chincha harbor.
 - b. text describing activities in Chincha harbor while ships waited to be loaded and while loading. One xerox copy.
- 1-7. Newsclipping. "Understanding Ourselves by Looking Back: Falmouth at Work. - Pacific Guano Company" by Jennifer Gaines, 2004. Falmouth *Enterprise* Supplement.
- 1-8. Appendix to Progress Report No. 10: includes an 1880 map of Woods Hole, text of the Guano Act of 1856, and a 1850 resolution of the United States Senate regarding the trade in guano. Two xerox Copies.
- 1-9. Business brochures:
 - a. Booklet: "Pacific Guano Company", Earle and Peckham, Agents. Worcester, MA., 1865 - 1867.
 - b. Advertising calendar picture: Penzance Point, 1870.

- 1-10. Deed and two permits issued by the Commonwealth of Massachusetts Harbor and Land Commissioners' Office with accompanying maps and drawings.
 - a. Handwritten 1867 Deed/Bill of Sale for factory property. Xerox copy.
 - b. Handwritten 1877 permit to extend and fill existing wharf along with drawings. Xerox copy.
 - c. Handwritten 1880 permit to build and fill sea walls and pile platforms, with drawings. Xerox copy.
 - d. 1889 map of Great Harbor showing Pacific Guano Works. Xerox copy.
 - e. 1898 map of Woods Hole showing Pacific Guano Works. Xerox copy.
- 1-11. Receipts
 - a. 1873 receipt to Joseph Fay.
 - b. 1876 receipt to Asa Shiverick from C.E. Davis for filling Ice House for J.M. Glidden.
 - c. 1886 receipt to Mrs. Prince G. Moore Xerox copy.
- 1-12. Two sections of the booklet "The Pacific Guano Company."
 - a. Its History; Its Products and Trade, 1876. Xerox copy.
 - b. Its Relationship to Agriculture, 1876. Xerox copy.
- 1-13. Handwritten letters, Pacific Guano Company business:
 - a. Asa Shiverick, Jr. to A. F. Crowell, August 31, 1871. *Letter written when Crowell was in Omaha for his health.* Accession No. 10-06.
 - b. John S. Williams, Clerk, to A. F. Crowell, August 20, 1873. *Letter appointing A. F. Crowell manager of the works in Woods Hole.* Accession No. 10-06.
 - c. V.F. Hatch to A.F. Crowell, March 19, 1875. Accession No. 10-06.
 - d. Asa Shiverick Jr. to A. F. Crowell, November 8, 1879. Accession No. 02-26.
- 1-14. Handwritten letters to John M. Glidden from O. S. Follett., February 4, 1880 and April 3, 1880: *Follett discusses the cost effectiveness of using his method of producing acid phosphate.* Original and Xerox copy of each.
- 1-15. Handwritten letter re: Patent. February 18, 1880.
- 1-16. Handwritten letter: November 10, 1880 to A. F. Crowell from U. S. Commission of Fish and Fisheries requesting a historical statement of the Pacific Guano Company. Xerox copy.
- 1-17. Article on St. Julien Ravenel M.D. who developed methods of commercial fertilizer production. *City of Charleston , SC Yearbook*, 1882. Xerox copy.
- 1-18. Newspaper articles announcing the failure of the Pacific Guano Company:
 - a. "A Big Firm Goes Under," *New York Times*. February, 1889. Xerox copy.
 - b. "Boston's Big Failure," February 10, 1889. Xerox copy.

- c. "Pacific Guano Company's Failure," February 16, 1889. Xerox copy.
 - d. "Boston's Big Failure," March 3-4, 1889. Xerox copy.
 - e. "The Pacific Guano Failure," March 8, 1889. Xerox copy.
- 1-19. Report of Committee of Investigation, Pacific Guano Company, March 7, 1889. Two xerox copies.
- 1-20. Pacific Guano Company souvenir fan, 1888 or 1889.

Pacific Guano Company

Box 2

Includes material transferred from Crowell Family Collection

- 2-1. Typewritten paragraph. "The first railroad into Woods Hole." Description of Prince S. Crowell's influence in bringing the railroad to Woods Hole in 1872. Original and Xerox copy.
- 2-2. Material on guano and phosphate samples and assays of these samples, 1873-1884.
- a. Handwritten letter from S. Dana Hayes of the State Assayer's Office, July 28, 1873 with analysis of manufactured guano. Original and xerox copy.
 - b. Handwritten letter from S. Dana Hayes of the State Assayer's Office, July 31, 1873 with analysis of "soluble Pacific guano." Original and xerox copy.
 - c. Handwritten letter to Azariah F. Crowell from John M. Glidden accompanying a sample of Sulphate of Potash, October 23, 1876. Original and xerox copy.
 - d. Handwritten letter to Azariah F. Crowell from B.G. Frith (?) on Pacific Guano Company letterhead. Charleston, S.C. July 13, 1878. Letter concerns formulas for soluble Pacific guano fertilizer. Original and xerox copy.
 - e. Handwritten letter to Azariah F. Crowell from Professor Wiley, U.S. Department of Agriculture, Chemical Division, Washington, D.C., 1884, thanking him for sample of fertilizer and giving his assessment of the contents. Original and xerox copy.
- 2-3. Material on the Centennial Exhibit of 1876 in Philadelphia
- a. Typewritten letter, October 18, 1875, from Spencer F. Baird to John Glidden, re his participation in the Centennial Exhibition in Philadelphia to be held in 1876. Typewritten original (may be a copy made by P.S. Crowell), and xerox copy.
 - b. Typewritten letter, October 23, 1875, from Spencer F. Baird to John Glidden, re his participation in the Centennial Exhibition in Philadelphia to be held in 1876. Typewritten original (may be a copy made by P.S. Crowell), and xerox copy.
 - c. Two copies of handwritten notes on the Centennial Exhibition. Two xerox copies.
 - d. Handwritten (pencil) draft letter to Edward C. Kendall, Smithsonian Institution, January 13, 1961 (probably from Prince Sears Crowell).
- 2-4. Handwritten letter. Letter of January 18, 1882 lays out the formation of a partnership between John M. Glidden, George W.W. Dove, and A.F. Crowell May 18, 1877.

2-5. Ephemera and Miscellany

- a. Postcard of Franklin Lewis Gifford painting of P. G. C.
- b. Black and white photograph of original painting for Gifford postcard.
- c. Postcards. Peabody Museum postcards depicting a Clipper card circa 1865 which advertises the departure of the Glidden & Williams Line clipper, *Akbar*. Two postcards.
- d. Calling card. Glidden & Curtis, General Selling Agents, Pacific Guano Company, Tremont Bank Building, State Street, Boston. Stamped in red: A.F. Crowell, Special Agent, for Mass., R.I., Conn. And Eastern N.Y. Handwritten list of income and expense 1883-1889 on reverse.
- e. Calendar. Sepia reproduction of Penzance Point in 1870, with Pacific Guano Company and ships at dock. Brief description is attached (from printed calendar).
- f. Negative of photo used in calendar
- g. Handwritten notes on Pacific Guano Company ("Pacific Guano Works, Long Neck, Woods Hole. The Old Vitriol Works. On wharf just beyond the 3 rocks and gate to Penzance Pt. Woods Hole. Production 1865 = 754 tons. 1889 = 45,000 tons fertilizer.")
- h. Typed list. Addressed to Col. Alexander M. Ferris, Edgar Harding, George B. Wilbur and H.E. Hibbard (all later owners of land on Penzance) – a list of labor and dates (1876 -) which includes some work on Guano Company items. Original labeled by hand: P. S. Crowell. Original and xerox copy.
- i. Booklet. "Foreign Phosphates being a Lecture delivered before The Young Men's Christian Association, April 21, 1879." By Charles U. Shepard, Jr.
- j. Brochure. "Soluble Pacific Guano Manufactured by the Pacific Guano Company of Boston, Mass. Sales in 1880, Forty-Five Thousand Tons. Sepia copy of an original and xerox copy.
- k. Plot of buildings and facilities at Pacific Guano Company, Works B, Woods Holl, Mass. 1880. Xerox copies.
- l. Insurance Policy: Details coverage of The Pacific Guano Company Works. n.d. Xerox copies.
- m. Cape Cod newspaper advertisement page, labeled 1880, including ad for Pacific Guano Company's soluble Pacific guano. Two very poor xerox copies.
- n. Topo map of Great Harbor and Penzance Point: shows locations of Pacific Guano Company buildings and breakwater, n.d. Xerox copy.
- o. Typed short history of Pacific Guano Company, n.d.
- p. Printed email message: Harold Burstyn describes the rise in demand for superphosphate fertilizers in the mid to late 1800s. Sources cited. 2007.

2-6. Advertising Booklet. Pacific Guano Company Represented by Walter O. Luscombe, Woods Holl, 1896.

2-7. Newsclippings. Falmouth *Enterprise* Pacific Guano Company articles:

- a. "Woods Hole Was Once A Factory Town", and other articles from Mail-Away Edition, May 19, 1961. Original whole newspaper section.
- b. "Woods Hole Was Once A Factory Town", and other articles from Mail-Away Edition, May 19, 1961. Cut-up mounted clippings of above articles.

2-8. Handwritten notes. Pencil notes on lined and unlined pre-used paper written by Prince Sears Crowell (1881-1972) of a detailed history and his recollections of the Pacific Guano Company. Originals and xerox copies. Pages 9 through 28 marked in sequence.

2-9. Swan Island material assembled by Norman T. Allen.

a. Notes made by Norman T. Allen from detailed talk with Prince S. Crowell (1881-1972) regarding Crowell's visit with Sumner Smith, owner of Swan Island, January, 16, 1962.

Allen also includes:

b. "The Hemisphere," *Time Magazine*, May 2, 1960.

c. "Island Radio Station Pulls Fidel's Beard", *Standard Times*, ca. 1960?

2-10. Swan Island material assembled by Prince Sears Crowell (1881-1972)

a. Handwritten letter or copy of original letter. Letter to Prince S. Crowell, December 30, 1880, about Swan Island.

b. Newsclippings. "Return to Swan Island" by Ethel M. Crowell and associated articles from Falmouth *Enterprise*, July 6, 1962. Multiple copies.

c. Handwritten letter (or draft copy). Letter from (Prince Sears Crowell ?) to Christian Herter, Secretary of State, May 2, 1960. "Facts pertaining to Swan Island."

d. Typewritten letter. Letter from Charles E. Higdon, Deputy Director, Office of Central American and Panamanian Affairs (in answer to letter to Herter), May 31, 1960.

e. Handwritten notes. Prince Sears Crowell's journal of visit to Swan Island, March 14-18, 1962.

f. Handwritten notes. Prince Sears Crowell's notes on visit to Swan Island, 1962.

g. Typed ms. "Now An Official Document." Note to Editor of the Falmouth *Enterprise*, stating that "Return to Swan Island" is now kept among official information given out by O. Etzel Peasley for the Department of State. N.D.

h. Typed ms. Memorandum. Typed notes on Swan Island and its status in 1962 from the Department of State, after visit with Prince Sears Crowell.

i. Typed ms. Memorandum explaining the deeds relating to Swan Island, written for the U.S. State Department. N.D.

j. Handwritten letter with envelope. Letter from Donald E. Glidden from Grand Cayman Island, October 27, 1964, to Mr. and Mrs. P.S. Crowell.

k. Handwritten letter. Letter from Donald E. Glidden from Grand Cayman Island, January 1, 1965, to Mr. & Mrs. Prince S. Crowell.

l. Typewritten letter with envelope.. Letter from Barbara H. MacPhee, September 15, 1965 to Prince S. Crowell.

m. Chart. Naval Hydrographic Office chart of Swan Island Anchorage, Caribbean Sea. Two reduced scale xerox copies.

n. Pencil drawing. Hand-drawn pencil map of Swan Island and its features. Labeled with name of Prince S. Crowell. N.d. Also xerox copy.

o. Pamphlet. "The Pacific Guano Company: Its History; Its Products and Trade; Its Relation to Agriculture. Exhausted Guano Islands of the Pacific Ocean: Howlands

Island, Chincha Islands, Etc., Etc. The Swan Islands. The Marl Beds and Phosphate Rock of South Carolina. Chisholm's Island Phosphate. The Menhaden. Cambridge: Printed for the Pacific Guano Company at The Riverside Press, 1876. Very poor copy And better quality xerox copy.

2-11. Newsclippings. Material and Newsclippings about Swan Island.

- a. Newsclippings. "Research Takes Prince S. Crowell To Swan Islands." Falmouth *Enterprise*, March 23, 1962. Original and xerox copy.
- b. Newsclipping. "Brimstone, Sulphuric Acid, Guano and Fish Went In. Out Came A Fertilizer And A Tremendous Stink." Falmouth *Enterprise*, May 19, 1961. Two copies.
- c. Newsclipping. "Cloak and Dagger With a Laugh:" "A Paradise Island Where Tourists Not Welcome." Boston *Globe*. November 8, 1964. Two copies.
- d. Newsclipping. "Cloak and Dagger With a Laugh II." "Sabotaging Castro's Beer." Boston *Globe*. Two copies.
- e. Newsclipping. "Cloak and Dagger With a Laugh III." "Unwary Tourists Feted." Boston *Globe*. Two copies.
- f. Newsclipping. "Boston-Owned Swan Island." Drawing of Swan Island and Cuba. Original and copy.
- g. Notice (in Spanish). "Protesta del Partido Unionista Centroamericano por la Vialacion de Territorio del Estado de Honduras en las Islas del Cisne, per gobeirno Norteamericano." Two copies.
- h. Newsclipping. "U.S. Agrees to Cede 2 Islets to Honduras." The New York *Times*, November 23, 1971. Original and xerox copy.
- i. Newsclipping. "U.S. Gives Up Swan Islands." Falmouth *Enterprise*, November 26, 1971.
- j. Newsclipping. "Great Swan Isle Is Not So Great: Ask The Lizards." The Miami *Herald*, September 1, 1974.

2-12. Photographs. Photographs of Swan Island.

- a. Album page. Two color photos (3 ½ x 3 ½) of dock, native village, radio personnel quarters, U.S. Weather Bureau – photos taken from elevation above the buildings.
- b. Two color photos (5 x 3 ½ inches).
 - man
 - photo labeled "cooks."
- c. Two men holding an iguana. 8 x 10 inch B/W photo print with border. Stamped on reverse: Official Photograph Coast and Geodetic Survey, File No. IS 21893-O.
- d. Man sitting under tree. 8 x 10 B/W photo print with border. Stamped on reverse: Official Photograph Coast and Geodetic Survey, File No. IS 21893-J
- e. Men being pulled ashore in skiff by two men on rocky shore. 8 x 10 inch B/W photo print. Official Photograph Coast and Geodetic Survey, File No. IS 21893-G.
- f. Men being pulled ashore in skiff by two men on rocky shore. 8 x 10 inch B/W photo print. Official Photograph Coast and Geodetic Survey, File No. IS 21893-H.

2-13. Newsclipping. Falmouth *Enterprise* article: "Return to Swan Island", by Ethel M. Crowell, July 6, 1962. Two Xerox copies.

- 2-13A. Typewritten correspondence. Correspondence of Ethel Crowell concerning her article "Return to Swan Island."
- 2-14. Material from George L. Moses
- a. Typewritten letter. Letter from George L. Moses to Mr. (Prince Sears) Crowell asking if he would write about the Pacific Guano Company, May 6 (no year).
 - b. Newsclipping. "Slightly Salty" - Penzance Point...", by George L. Moses, Falmouth *Enterprise* column, ca. 1970?. Xerox copy.
- 2-15. Typewritten report. Falmouth EIS Progress Report No. 10, December 27, 1979 by CE Maguire, Inc. Describes economic importance of guano, the size of the guano works, and speculates about the possible pollution of Falmouth ponds during the rail shipment of guano. Xerox copy.
- 2-16. DVD: Slide Show on Guano, made by Jim Green for WHHC, September 9, 2008. This also appears as an online exhibit on the website (www.woodsholemuseum.org – Exhibits).
- 2-17. Magazine article. Pages of History. "Rocks to Riches in Woods Hole" by Les Garrick. *Cape Cod Life*, July 2006. Copy.
- 2-18. Other references:
- a. Typed list. References to the Pacific Guano Company in Richard Wines' Doctoral thesis **From Recycled Wastes to Commercial Fertilizers: the Evolution to a Technological System in the Eastern United States 1800-1880**, Volume I and II.
 - b. Handwritten list: References for Guano Industry.
 - c. Page from *The National Union Catalog of Manuscript Collections*: describes collection of Pacific Guano Company records and Crowell family papers in collection of Baker Library (Baker Business Historical Collections), Harvard University, Cambridge, MA. Xerox copy.
 - d. Printed web material. Pacific Guano Company items held at Baker Library (Baker Historical Collections), Harvard University, Cambridge, MA.
- 2-19. Printed email. Material from Duncan Oliver, Yarmouth Historical Society, on various Cape Cod guano and fish oil manufacturing facilities, 2010.

Pacific Guano Company

Box 3

- 3-1. Fertilizer Bag c.1880s.

Artifacts

Retort used by chemist at Pacific Guano Company.

Metal stencil master for cloth bags of fertilizer

Guano from Swan Island

Phosphate rock