Editor's Note: In celebration of the Drum Point Lighthouse 100th birthday, the museum asked Ross Holland, author of AMERICA'S LIGHTHOUSES, to give a talk on Chesapeake Bay light-houses. What follows is a portion of Holland's lecture given at CMM on August 19, 1983. For more information on Drum Point Lighthouse, the museum has published both a brochure and booklet on the history of CMM's prized possession, now one century old.

Chesapeake Bay Lighthouses
F. ROSS HOLLAND, JR.

Drum Point Lighthouse is a screwpile structure that came into service in 1883. It was erected at the northern entrance to the Patuxent River, just offshore in about 10 feet of water. It was placed there not only to guide ships along that area of the bay and into the river, but also to warn ships off the spit of land that makes off the point.

Interestingly enough is the fact that this spit of land had long been recognized as a danger. In 1809, Captain Lawrence Furlong, in writing about Drum Point, took the opportunity to warn navigators about Virginia and Maryland waters:

"To every point, more especially where the land is low, give a good berth in passing, because spits or flats of land extend from them, and, consequently, the water is shoal in such places."

For nearly eighty years, the hexagonal structure and the fifth order lens that sat atop it guided ships safely past, around, and to the point. Nothing spectacular happened at the site during its active years. The lighthouse and its keepers were like good soldiers who go about doing their duty and serving their purpose without the blare of trumpets and banging of drums.

The real significance of the Drum Point Lighthouse lies in what it represents and symbolizes in Chesapeake Bay, for as a structure it makes a clear statement about the maritime heritage of this great body of water. But, to appreciate it, one has to understand something about the history of aids to navigation in Chesapeake Bay.

Chesapeake Bay had all the principal types of aids to navigation — the masonry tower, the scr
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Chesapeake Bay Lighthouses

pile lighthouse, the caisson structure, and the lightship. The history of its aids parallels that of the remainder of the country.

Let's trace the history of lighthouses in the Bay.

The beginning of lighting the Bay was with the erection of the Cape Henry light at its entrance in 1792. It was a tall masonry structure and not only served to mark the entrance, but also as a coastal light. This tower remained in service for nearly ninety years when it was replaced by a much taller tower which is the one in service today. Cracks had been found in the old lighthouse and the Lighthouse Board feared for its safety. Despite these cracks, the old light tower has remained standing to this day.

Inside the Bay, the first two lighthouses to go into service were at Smith Point at the entrance to the Potomac River and Old Point Comfort at the entrance to Hampton Roads. Both were lighted in 1802, just two years after the capitol moved to Washington.

Three years later, the new Point Comfort lighthouse at the entrance to Mobjack Bay winked on.

A number of years passed before another light came into being in Chesapeake Bay. Bodkin Island light on the south side of the entrance to the Patapsco River and the Port of Baltimore was established in 1822, and, two years later, was followed by the North Point Range lights on the opposite side from Bodkin Island. Thomas Point light at the entrance to Annapolis was lighted in 1825, as was the Poole’s Island light near the Patapsco.

Along about this time, the general superintendent of lights placed a lightship at Willoughby Spit. The position proved too exposed and he had the light vessel moved to Crane Island near Norfolk. It was not only the first lightship in Chesapeake Bay, but it was also the first lightship in the United States. A year later, in 1821, four more lightships appeared in Chesapeake Bay, including one at Smith’s Point and another at Upper Cedar Point in the Potomac. Over the years prior to the Civil War, several other lightships took up station in Chesapeake Bay.

For 32 years, the Fifth Auditor of the Treasury was responsible for the United States’ lighthouse system. His administration was marked with fiscal zealouosness and a basic misunderstanding of aids to navigation and their purposes. Complaints from ship captains, commercial organizations, and local mariners about lighthouses arose frequently during his rule. The most common complaint was that the light of a lighthouse could not be seen. For example, Captain David D. Porter said that the first nine times he passed the Cape Hatteras light, generally regarded as the most important one on the East Coast, he did not see it, though he was within sight of the breakers the light guarded ships against.

After years of complaints, Congress created a Lighthouse Board to look into the problems of this country’s aids to navigation. In 1852, the Board submitted a printed report, 760 pages long, outlining the problems. They ranged from unqualified light keepers to poorly maintained lighting equipment to an inadequate lighting system. The lights that received the most praise were the three or four that had fresnel lenses.

As with the rest of the country, the lights of Chesapeake Bay received their share of bad marks. Several of the lights were reported dim, those lighthouses the investigators inspected were found to consume an excessive amount of oil. Smith Point lighthouse had the reputation of being the worst light in the Bay.

The upshot of the report was that aids to navigation were taken out of the hands of the Fifth Auditor and turned over to a Lighthouse Board composed of military officers and scientists. The Board went to work quickly. It instilled discipline in the keepers and instituted changes that improved the lighting of lighthouses. In the process, the Board moved the United States to being among the countries with the best lights.

Two actions the Board took that had a profound effect upon lighthouses in Chesapeake Bay were to order fresnel lenses installed in all lighthouses of the country, and set the policy of substituting screw-pile lighthouses for inside lightships.

But, to go back a bit, after the masonry towers, the next development in Chesapeake Bay was the introduction of the screwpile lighthouse. In 1852, the first such lighthouse structure in this country was placed at Brandywine Shoals in Delaware Bay.

Three years later, the Lighthouse Board lighted a similar structure in Chesapeake Bay at Seven Foot Knoll near the entrance to the Patapsco River.

The Civil War slowed things down in the Chesapeake Bay as far as aids to navigation were concerned. The greatest impact seemed to be in the lower part of the Bay where at least several lightships were seized by the Confederates and damaged severely. It was the practice of the Confederates to put lighthouses and lightships in their territory out of commission, feeling aids to navigation benefited the Federal forces, who had a superior navy and were blockading the South, far more than Confederate blockade runners. Once the war ended, the Light- house Board went about getting all the Bay’s aids to navigation back into shape. In addition, the conditions gave impetus to the Board to implement its policy of replacing lightships with screwpile lighthouses. In 1869, a screwpile lighthouse went in at Windmill Point replacing the light vessel; in
1870 the Wolf Trap received a screwpile lighthouse; and in 1871, with the erection of a similar structure at The Thimble at the entrance to Hampton Roads which obviated the need for the lightship at Willowby Spit, the last lightvessel disappeared from the Bay.

The building of lighthouses continued in the Bay in the 1870's. Most were of the screwpile type. Two or three per year went into service. Some illuminated unlighted points or stretches on the Bay, but some replaced old masonry towers no longer as useful as they had been. The Thomas Point light, erected in 1825, for example, was not as usefully visible as it had been, but with the more modern technology, the Board could put a more useful light on the shoals a mile and a quarter away by building a screwpile structure, and determined to do so.

It, however, did not build the screwpile structure there after all, because during the winter of 1872-73, ice heavily damaged the Love Point screwpile lighthouse. This act of nature alarmed the Lighthouse Service and it decided to build an iron-pile type structure right at Thomas Point.

To prevent the ice from doing damage to the screwpile lighthouses, the engineers recommended building rip-rap ice-breakers on critical sides of each threatened lighthouse. It helped but did not solve all the problems.

Ice proved a real problem in the 1870's and 1880's. In January, 1877, ice carried away the Hooper Straits lighthouse. The wreckage was found five miles from the site. About the same time, ice damaged the foundation of the Thomas Point light. Two years later, ice destroyed the James Island screwpile lighthouse. In the same year, 1879, ice damaged the Sharp's Island screwpile lighthouse at the entrance to Choptank River. Two years later, ice carried away this lighthouse. The Lighthouse Board had had enough and ordered the erection of a caisson-type lighthouse at Sharp's Island.

Caisson-type lighthouses began with huge iron tubes that were dragged into the water and seated in the sandy bottom. Cement and/or rubble was poured into the tube to hold it in place; on top of the tube the builders erected a lighthouse.

In the 1880's, the caisson-type structure came more into use. In early 1882, a caisson lighthouse was lighted at Sharp's Island, and another one was begun with the placing of a caisson at Bloody Point on Kent Island. The following year saw the start of another one at Sandy Point and the lighting of the lens on top of the brick house on October 30, 1883.

The caisson-type structure did not halt the building of the screwpile lighthouse, for where the Board thought it feasible, it continued to recommend and erect these structures. Indeed, it was during this period that the Drum Point lighthouse was built and lighted — on August 20, 1883. In the same year, work began on the pile lighthouse on Great Shoals at the mouth of the Wicomico River and, in less than a month, it was lighted. And, in 1886, a new screwpile lighthouse at Old Plantation Flats exhibited its light for the first time. Three years later, similar screwpile lighthouses went in at the entrance to the Great Wicomico River and at Holland's Island Bar. Each of these lighthouses received a fourth order lens that exhibited a fixed white light.

The continued building of these screwpile lighthouses was pretty much limited to the southern part of the Bay where the danger of ice was minimal. But the winter of 1892 - 93 produced severe ice conditions in the southern part of the Bay and ice floes pushed over the Wolf Trap light and the one at Solomon's Lump and broke the lens at Old Plantation Flats. The Board, consequently, decided to erect caisson structures at the two destroyed lighthouses and determined "that only caisson structures should be used where (ice) dangers exist . . ." The Lighthouse Board was becoming less and less enamored of the screwpile structure, and it appears now that the last such new structure to be erected was the one at Maryland Point up the Potomac River. It was lighted in December, 1892. Thereafter, the lighthouses erected in the Chesapeake Bay were of the caisson type.

Ice continued to be a problem, and as late as 1936, floes carried away a lighthouse — the Jane's Island light near Crisfield.

Although it is not precisely clear at this stage of research, it is apparent that in building the caisson and screwpile lighthouses in the Chesapeake Bay in the latter part of the nineteenth century, the Lighthouse Service did not just haul brick, iron, and wood to a site and erect a lighthouse, but rather it prefabricated portions of the structure at its Lazaretto Supply Depot near Baltimore before hauling the material to the site of a new lighthouse. The evolving role of the supply depot needs more illumination.

The lights in the Chesapeake Bay usually had fourth order and fifth order fresnel lenses. Harbor lights had sixth order lenses. Over the years, these lights used whale oil, lard oil, kerosene, and incandescent oil vapor lamps. Electrification of the lights began in 1916 with the running of wires to the one at Lazaretto Point which was near the generating plant at the Lighthouse Supply Depot. Automation came early to Bay lighthouses. The Poole's Island light, for example, was automated in 1917. Over the years, automation continued and today the lighthouse keeper is rare. Today, only three lighthouses in the Bay have keepers.
Sail On The *Dee Of St. Mary’s*

The Calvert Marine Museum is offering a free educational opportunity for 50 people to learn about dredging for oysters on the skipjack, the *Dee of St. Mary’s*. On Sunday, October 23, Captain Jack Russell will take out two groups of 25 people each for a tour and demonstration on his skipjack. Since this date is just one week before the opening of oyster dredging season, the boat will be outfitted with all of the gear used for dredging. Each tour will last approximately two hours, the first running from 12 noon to 2 p.m. and the second from 3 to 5 p.m. Tours will depart from Piney Point, St. Mary’s County.

Reservations are required and can be made by phoning 326-3719. Children under 16 must be accompanied by an adult. Call for details about departure times and transportation to Piney Point.

This program is part of a series concerned with Southern Maryland’s commercial seafood industries. The program series is made possible by the Maryland Humanities Council.

Commanding Officer of the Fifth U.S. Coast Guard District is Guest of Honor

The finale of a day filled with 100th birthday celebrations for Drum Point Lighthouse was a twilight cruise aboard the *Wm. B. Tennison*. Special guests of honor, Rear Admiral John D. Costello and his wife, Lynn, joined CMM sustaining and supporting members, corporate partners, and life members of the museum aboard CMM’s bugeye for the special cruise August 20, 1983. The group enjoyed a cruise to both the original site of Drum Point Lighthouse and to Cedar Point Lighthouse. CMM was greatly honored to have Admiral and Mrs. Costello aboard as he is the Commanding Officer of the Fifth U.S. Coast Guard District, the jurisdiction within which the Solomon’s area is located. The *Wm. B. Tennison* is the oldest U.S. Coast Guard certified passenger vessel in this district, adding another dimension to the already historic and memorable day.

Calvert Marine Society Members Eligible for *Tennison* Cruise

Again this year the *Wm. B. Tennison* will be traveling to Chesapeake Appreciation Days at Sandy Point. CMM members are welcome to either ride up to Sandy Point or back to Solomons; land transportation must be arranged by members (either the return to Solomons or the drive up to Sandy Point). Weather permitting, the *Tennison* will leave CMM on October 27 at 8:00 a.m. and will leave Sandy Point to return October 31 at 8:00 a.m. Call the museum as soon as possible to reserve your place on board; space is limited and reservations will be first come, first served.

**WORKBOAT MODELS**

Modelmaker Pepper Langley glues the bottom planking on a model of the workboat, *Prospector*, built by waterman Bill Trossbach. Pepper’s son Jimmy, also a modelmaker at the museum, constructs a model of the *Eleanora M II*, a workboat built by Herman W. Dixon. Both models are ½-inch to the foot scale, and will be on display in the forthcoming exhibit, “Built to Work: Boats and Boatbuilding in Southern Maryland,” scheduled to open at Calvert Marine Museum in December.
Fossil Facts

THE NATICIDAE
OR MOON SNAILS
BY SANDY ROBERTS

The Naticidae or Moon Snails are a fairly common occurrence in the fossil beds of Calvert Cliffs. Unless stained by matrix, their whorled, gobular, or moon-shaped shells have usually been leached by time and tide to a dead white.

*Polinices duplicatus* (Say) has a fairly thick shell with a heavy callus or thickening on the rim of its inner lip, the tongue of which completely covers the lower umbilicus, or navel-like swirl of the shell. With an approximate height of 45 mm and a diameter of 52 mm, it is relatively common in both the Choptank and St. Mary’s formations and does occur occasionally in the Calvert.

The slightly flattened ovate shell of *Lunatia heros* (Say) is larger than that of *P. duplicatus*. The callus on the inner lip is thinner and does not extend to the umbilicus. *L. heros* has a height of close to 65 mm and a diameter of around 60 mm. It is commonly found in all three formations of Calvert Cliffs.

*Lunatia hemicrypta* (Gabb) has a small shell. With its four whorls, its height is greater than its width — about 15 mm high and 11 mm wide. Its mouth is round and the tongue of its inner lip partly covers the umbilicus. *L. hemicrypta* is found only in the Calvert and Choptank formations. It is extinct, though both *P. duplicatus* and *L. heros* occur in present day faunas of the Atlantic Ocean.

These gastropods were, and still are, voracious carnivores that burrow into the sand and attack other burrowing mollusks. Holding their prey with a large mobile foot, they use a gland at the tip of a peculiar “tongue,” or tooth ribbon called a radula, to secrete a drop of acid onto the shell of their victim. While the acid softens the shell, numerous rows of transverse file-like teeth on the radula rasp and drill a perfectly round 1/8-inch hole into the mollusk’s shell. The radula then extends into the hole, becoming a combination straw and conveyor belt, carrying the juices and flesh of the unfortunate mollusk into the mouth and esophagus of the snail. Small tell-tale holes seen so often in fossilized shells are mute reminders of the unpleasant deaths suffered so long ago by those small animals.

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Patuxent River Appreciation Days

As in past years, the PRAD celebration on October 8 and 9 will include demonstrations by local people of water-related crafts and skills. Among the demonstrations scheduled for this year are crab-pot and eel-pot making, seafood cooking, wood carving, rope work, and net making. Learn about the current ecological status of the river by talking with representatives from the Chesapeake Bay Foundation, Patuxent River Park, Southern Maryland Audubon Society, and the Environmental Protection Office, NAS Pax River, among others. In addition, a new exhibit of photographs depicting life and work along the Patuxent will be on display.

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"Volunteering"

What kind of people work hard, like their jobs, and get no pay? Volunteers.

Volunteers are essential to the mission and vitality of the Calvert Marine Museum. The museum relies heavily on the efforts of its volunteer corps which is, in fact, much larger than its staff. Even so, more volunteers are always needed.

Right now, for example, we need volunteers to work in the gift shop and docents to conduct tours for groups of school children or adults. At many of the museum’s functions, refreshments are served and we can always use volunteers to make cookies or cakes for these events. There are any number of areas where your particular interest may fill one of the museum’s specific needs.

For some types of volunteers, such as docents, training is provided. In some fields volunteers provide the benefit of skills they already have. And in other pursuits, such as classifying or cataloging fossils, volunteers may find an opportunity to learn about something they are interested in.

Many of our volunteers are people who have interests, hobbies or professions in areas that are helpful to the museum. Among these talents are woodcarvers, typists, photographers, librarians, historians, scientists and teachers. You may have a gift for doing anything from speaking to groups to cleaning fossils to stuffing envelopes. And you might be surprised how often the museum simply needs some willing help.

We even have a volunteer in charge of volunteers. He is Tim O’Brien, our Volunteer Coordinator. If you would like to get involved in something that is interesting, fun, useful and rewarding, perhaps get together with some old friends or meet some new ones, why not give Tim a call at 326-3009 (Solomons). You two can try to match up what you would like to do with what needs doing. We can probably use as much or as little time as you care to make available. And we will always appreciate your help.
Selected Acquisitions

Through the cooperation of the Edith Marsh Harrison family (granddaughter of James T. Marsh) two half models from the James T. Marsh Shipyard were loaned. These models, one a round stern bugeye and the other a schooner, are important additions to the history of this Solomons shipyard.

Brian Hope, Maryland Bay Pilot and artist, presented a painting of the side wheeler steamboat Westmoreland backing down at the Solomons Wharf c. 1891. The museum plans to have prints made to be used as premiums in CMM fundraising activities.

Leroy “Pepper” Langley donated twelve Solomons business cards dating from the 1930's.

Donald and Sherman Smith donated a molding frame rig and a partially constructed skiff from their father's, U.W. Smith, boat shop. This acquisition will be used in our new boat building exhibit “Built to Work: Boats and Building in Southern Maryland.”

New Corporate Partners

Welcome Aboard! NEW CORPORATE PARTNERS (since the spring issue of the Bugeye Times) include:

- CALVERT MARINA
- CALVERT WELL DRILLING COMPANY
- LAURENCE W. B. CUMBERLAND
- DELOITTE HASKENS AND SELLS
- GLASCOCK INSURANCE AGENCY, INC.
- MUTUAL FIRE INSURANCE CO. IN CALVERT COUNTY
- PENN JERSEY
- PENWICK HOUSE, INC.
- PIER I
- MORGAN E. RUSSELL, INC.
- SOLOMONS ISLAND YACHT SALE
- H. B. TRUeman LUMBER COMPANY

CMM Corporate Partners now number twenty-two. We thank them all for their support.

If your business or organization is interested in supporting the museum through this program, contact Judy Allen at CMM.

Special thanks are due to

- Mrs. Joyce Stinson, who donated to the museum a 50 cup stainless coffee urn,
- Mr. Howard Buchanan, who built-to-order an attractive oak work table for the docent meeting room.

CALVERT MARINE MUSEUM

The BUGEYE TIMES is the quarterly newsletter for members of the Calvert Marine Society. Named for the traditional sailing craft of the Bay, the bugeye was built in all its glory at Solomons, the “Bugeye Capital of the World.” Membership dues are used to fund special Museum projects, programs, and printing of this newsletter. Address comments and membership applications to: Calvert Marine Museum, P.O. Box 97, Solomons, Maryland 20688. (301) 326-3719.