Hippocampus: The Strange Little Seahorse

By Ken Kaumeyer and Carin Stringer

The unusual appearance and remarkable life cycle of seahorses have captured our imagination for thousands of years. The graceful swimming and “dancing” of mature pairs is fascinating to observe. In addition, they provide income for fishing families, and they are used by Asian communities to treat a range of ailments. Ironically, it is this popularity that places them in danger and in need of conservation.

All seahorses belong to a single genus, Hippocampus, which is derived from the Greek words for horse, hippocampus, and sea monster, hippocampus. They really are a very strange fish, with a horse-shaped head, eyes that move independently, skin that is stretched tightly over bony plates instead of scales, a monkey-like prehensile tail, and a long tubular snout for sucking in food. Worldwide, there are thirty-two species currently recognized, the majority of which are found in the Indo-Pacific area. They range in size from less than an inch to over a foot long. In North America there are four recognized species, of which only one, the Lined Seahorse, Hippocampus erectus, is found in the Chesapeake Bay.

Taxonomists have had a very difficult time classifying seahorses, with over a hundred species listed in the past. Their chameleon-like ability to change color and the capability of adding long filaments to their body has caused many researchers to believe that they had found a new species. This ability to change shape and color is an adaptation that allows seahorses to blend in with their surroundings and avoid detection. Seahorses collected in the Chesapeake Bay have often differed greatly in appearance even though they are the same species. In the lower bay, where there is much more eelgrass and filamentous algae, the seahorses’ color matches the grass, and they often have long filaments similar to the algae. Seahorses brought to the museum, where there is no algae and eelgrass, tend to lose the skin filaments within a few days. Their ability to change color was demonstrated rather dramatically when a Pacific Ocean seahorse changed its color to fluorescent orange matching a researcher’s marking tape.

So where do seahorses live and how do they move around? They are primarily found among sea grasses, mangroves, corals, and oyster reefs. These habitats provide them with two essential needs—something to hold on to and a source of food. They have evolved an existence that favors maneuverability over speed, swimming upright and slowly within the structure of the habitat, using their dorsal fins for propulsion and their pectoral fins for stabilization and steering. The lack of a caudal [tail] fin means that they are slow swimmers and cannot swim against strong currents. They stop often and use their tail to cling to grass and other structures.

Seahorses exist in habitats that are home to many small amphipods, isopods, other invertebrates, and larval forms of various fish species, all of which they actively prey upon. Their camouflage ability allows them to ambush their prey by quickly sucking it through their snout with a rapid snap of the head. If you were to put a microphone in the water, you would hear what sounds like a loud snapping of fingers as they feed.

Since seahorses have no teeth, they swallow their prey whole. For larger food, such as grass shrimp, they injure them with blows from the snout, and then suck out the soft tissue. Seahorses are voracious predators since they do not have a true stomach and must consume large amounts of prey to compensate for inefficient digestion.

By contrast, seahorses have few natural predators, since their hard bony structure makes them rather unpalatable, although such large pelagic fish as tuna eat the species that live in sargassum weed. Young seahorses, however, are devoured by many species of fish, and rely on the refuge afforded by the structure (shells,
MUSEUM BOARD CHANGES IN 2003

At the annual dinner in early December for the members of the museum’s Board of Governors, one new member — actually a returning member — was welcomed to the board: Robert L. Swann, former county commissioner and resident of Solomons. He replaces Carl M. Loffler Jr. All other board members will remain in 2003: John P. Cook, RoxAnne Cumberland, Ralph T. Eppard Jr., Richard H. Fischer Jr., John P. Ford, C. Bernard Fowler, Marshall S. Gibson, Marianne Harms, Michael L. Hewitt, Michael S. King, Constantine J. Pappas, Kirk L. Swain, Dawn M. Szot, and Edward Gregory Wells. CMM director C. Douglass Alves Jr. is an ex officio member, as well as a new county commissioner, yet to be named. The Board of County Commissioners has approved a change to the museum bylaws to allow an additional ex officio board member. Rear Admiral Tim Heely, Commander, Naval Air Warfare Center at Patuxent River Naval Air Station, will join the board representing the Defense Department and the strong military presence in the area.

Members of the museum’s Board of Governors also serve as directors of the Calvert Marine Museum Society, Inc., responsible for fundraising.

MUSEUM BENEFACCTOR

The museum, as well as other Calvert County organizations, were saddened by the recent death of Mary Marvin Breckinridge Patterson (Mrs. Jefferson Patterson) at the age of 97. Known especially for the gift of the Jefferson Patterson Park and Museum property to the state, Mrs. Patterson and her husband were also generous benefactors to the Calvert Marine Museum from its earliest days, supporting the museum’s founding in 1970, its renovation of the Solomons School in 1975, and later conservation and educational programs.

THERE’S STILL TIME TO SUPPORT BUBBLES!

The museum’s 2002 year end appeal is a follow-up to last year’s initiative to expand our otter exhibit habitat. Last year the museum raised approximately 41 percent of the expected budget for the 200 sq. ft. exhibit addition. An addition designed to enable the museum to add a second otter and provide both otters with enough dry land to protect themselves from the sun and weather. With a little extra help from our members we anticipate beginning work on the expansion this spring. Much of the labor will be done in house, but we still can’t complete the project without your tax-deductible donation. Please help Bubbles move into her new home by sending your contribution to: Calvert Marine Museum Society, P.O. Box 97, Solomons, MD 20688. For more information call 410-326-2042, ext. 18.

MUSEUM GUIDEBOOK

The museum now has a fine guide to its buildings, exhibitions, and activities. Consisting of twenty-four pages with many color photos, the guidebook is the work of a large number of staff members, with final editing by a new volunteer, Nancy McCabe. The design was by the staff of the publisher, The Creative Company of Lawrenceburg, Indiana. Copies are available for purchase from the Museum Store for $5.95, less membership discount. For a wonderful record of your association with the Calvert Marine Museum, pick up your copy today!
Ring in the New Year with Waterside 2003 Concerts

On Saturday, February 8, Ralph’s Dodge-Jeep and Cumberland & Erly, LLC, present Waterside 2003: a sultry evening with blues singer Deanna Bogart in the museum auditorium. Show time is at 7:30 p.m., with doors opening at 6:30 p.m. Tickets are $15, and go on sale beginning Friday, January 24, available at the Museum Store and via phone charge at 410-326-2042 ext 16 or 18. Drinks will be available. All tickets are general admission.

With her piano, saxophone, and band in tow, Deanna Bogart proves her mettle with an honest, entertaining, energy-to-spare show. About her latest release, Timing is Everything, the Washington Post said, “...she composed 10 tunes that rank among her best—lyrics that are poignant, pointed and reflective by turns. The ‘girl’ in the band is now the woman in mid-life looking back on crucial relationships and career moves, reflecting on fate and fortune, sorting out dreams and illusions. Granted, her band never sounds better than when she’s venting — and she vents a lot on ‘People Can Be Just Plain Wrong,’ ‘I’ll Be Missing You’ and ‘(I’d Rather Be Sad) in Las Vegas,’ arguably the finest blues she’s ever written.” The Washington Post may have best described Deanna Bogart with these words, “Luster, Sophistication, and Soul.” Her live performances are ones you don’t want to miss. She’s been the highlight of many festivals, including opening for the “Godfather of Soul,” James Brown at CMM in September 2001.

“The goal when we play live,” says Bogart, “is to create a fusion with blues and boogie genuinely at the core.”

Development Department Changes

Lee Ann Wright, director of development for the museum since 1994, resigned her post and moved to the Baltimore area with her family in October. During her eight years, the museum has seen many successes in the development field, most notably the nationally acclaimed performers in concerts that brought in significant funds for museum programs. A farewell party was held in her honor in late October.

Replacing her will be Vanessa Gill, membership/development coordinator since 1998. Her duties with museum/society members will now be taken over by Debra Strozier, public relations assistant since 1996. The museum will continue to benefit from the strong support of the development staff.

Get into the St. Patrick’s Day Spirit with Irish Fire - Live at CMM

On Friday, March 14, Waterside 2003 invites you to enjoy the music and dance of Ireland with the band Irish Fire. Tickets go on sale February 28 through the Museum Store or phone charge at 410-326-2042 ext 16 or 18. Ticket prices are $13 for CMM members and $15 for the general public. All tickets are general admission.

In 1999, Irish Fire was invited to the White House on St. Patrick’s Day to perform at a reception honoring the Taoiseach (Prime Minister) of Ireland. In the year 2000, they brought their show of music, dance, story, and song to a sold-out appearance at the Ram’s Head in Annapolis on St. Patrick’s night. That night — and the night before in The Birchmere in Alexandria — they were joined by members of the Kevin Brosler School of Irish Dance: Sean Conner and Maura Hodgetts, along with Maura’s elder sister, Catherine. Sean and Maura represented Maryland — and the Brosler School of Irish Dance — at the 2000 World Championships in Belfast. Maura then competed in the All-Ireland competition, and was the third-ranked American in the 2001 championships. Sean and Maura will be on the stage with Irish Fire again this year.

Sponsors for Waterside 2003 are Ralph’s Dodge-Jeep; Cumberland & Erly, LLC; Coors, Coors Light; and Killian’s; Dean Lumber & Supply Company; RadioShack- Prince Frederick/Dunkirk/Charlotte Hall; Solomons Landing; Papa John’s Pizza; DM Group; WKIK Country 102.9; Star 98; Morn’s in the Kitchen Catering; Southern Maryland Newspapers; Bay Weekly; Southern Maryland Electric Cooperative; Main Message Center; Comcast; and the Holiday Inn Select Solomons.
CMM ACTIVITIES THIS FALL

The annual festival celebrating the Patuxent River (PRAD) was held on October 12 and 13, with most of the event’s traditional activities – educational displays, waterfront programs, musical presentations, craft and food sales, and the parade on Sunday. Here are three of the unusual activities this year.

A “work in progress” was a sealhake mural, shown here with CMM designer Tim Scheiner (extreme right) being assisted by young visitors. The finished mural is currently mounted on the west exterior end of the Small Craft Shed near the museum entrance. CMM photo by Robert Hurry.

The museum boat basin was the scene of several boat activities in which PRAD visitors could participate. These activities included trips (not shown here) on the Wm. B. Tennison, the skipjack Martha Lewis, and the Solomons-built auxiliary ketch Lady Patty. CMM photo by Robert Hurry.

The Mattaponi Reservation was on hand to present a Powhatan Village of the seventeenth century. CMM photo by Robert Hurry.

Work was well under way this fall on the extension to the Small Craft Center, near the Drum Point Lighthouse (at rear in photo). The contractor is Hegarty and Associates, Inc. CMM photo by Robert Hurry.

Museum members enjoyed the annual Yule Party on December 8, with new and attractive seasonal decorations with a Candy Land theme. CMM photo by Bob Hall.
CMM HOSTS 2002 VINTAGE TRADITIONAL WATERCRAFT REGATTA

On September 27 through 29, the museum, the Solomons Island Model Boat Club (SIMBC), and the Great Schooner Model Society hosted a regatta of model boats. During the three-day period, over two dozen captains and over fifty model boats participated in events that involved both sailing races and static judging of hulls for hull fairness, finish, construction details, sails and rigging, and impact on the eye.

The races were held on Saturday and Sunday at the museum's boat basin on a course laid out with buoys set to precise GPS positions. Of the five classes of models raced, the skipjacks were the largest, with thirteen entries. From the competitions for both static models and racing, trophy winners included several from SIMBC.

Although the competitions were the chief events of the weekend, there were plenty of opportunities for socialization. The museum held a reception in the Small Craft Shed on Friday evening; the Solomons Island Yacht Club had a grill-your-own steak dinner on Saturday evening; and a barbecue lunch was held at a local restaurant on Sunday. Spouses had behind-the-scenes tours of the museum, and even the children were provided with a pond near the Exhibition Hall were they could build and sail their own models. All in all, it was a great event. (Annie Michnowicz and Richard Rogers, SIMBC newsletter staff.)
Hippocampus

(Continued from page 1)

algae, aquatic vegetation) of their habitat to avoid predation.

Social interaction and reproduction are two of the more interesting aspects of their biology. In most species, seahorses establish small home ranges and do not move around very much. The range of a male may only be about one square meter, with females staying within an area perhaps a hundred times as large. Species of seahorses that have been studied appear to form pairs that last throughout the breeding season, and they produce numerous broods. They will only mate with each other, and sperm advances from other individuals. It is unknown whether they continue to mate with the same seahorse in successive years.

During courtship, they perform an elaborate series of movements where tails are intertwined and they “dance” up and down in the water column. Mating pairs synchronize their production of egg and sperm. The female hydrates her eggs by pumping water into them (sort of like inflating a beach ball with air) just before mating. As the twirling seahorses rise in the water, she deposits her eggs in his brood pouch where they are fertilized. The male then undergoes a true pregnancy which, depending on the species, will last anywhere from ten days to six weeks. The pouch seals after mating and tissue surrounds the embryos. Capillaries develop within the tissue which brings oxygen and nutrients throughout the pregnancy. The hormones produced by male seahorses during pregnancy are similar to those produced by females of mammals. In fact, the hormone prolactin, which is produced by pregnant mammals to regulate milk production, is also produced by male seahorses to regulate their pregnancy.

During the pregnancy, the male remains within his small home range and the female moves about within hers. Each morning the female returns to renew the bond. Within seconds of her arrival they both change color and with tails linked begin a slow “promenade” and twirling. After about ten minutes the female leaves, and will not return until the following morning. This greeting only occurs between pairs.

At the end of the pregnancy, the male goes through what humans would call labor pains, contracting and twisting as he expels the babies. He gives birth, depending on the species, to anywhere from ten to as many as 1,500 young. The Lined Seahorse found in the Chesapeake produces about 150. Almost immediately after birth, the female readies another batch of eggs, the cycle is repeated, and he becomes pregnant again. Research has shown that the male is very eager, and somewhat aggressive, in his desire for another pregnancy. Physiologically, this is hard on the males; but they regain their strength during the winter when breeding does not occur.

In the Chesapeake, seahorses start moving from the shallows as the water cools in the late fall. Exactly where they go is unknown, but there is anecdotal evidence from old records made by the Chesapeake Biological Laboratory nearly fifty years ago. The June 1955 issue of the Maryland Tidewater News described some winter collections. One specimen was dredged in the deep-water channel of the Patuxent River; another was collected in November on a shell bed in forty feet of water near Point Patience; a drift net caught another in eighty feet off Cove Point. Hildebrand and Schroeder, in their Fishes of Chesapeake Bay, published in 1928, reported collecting them at 150 feet. Thus it appears that they over-winter in the deeper waters of the bay, where temperature swings are less severe. They still need structure to grasp onto, and possibly provide occasional food, so deep oyster reefs are the likely over-wintering grounds.

This raises the question: since oyster reefs have essentially disappeared in the bay and the aquatic grass beds are not as extensive as in the past, is the seahorse population in decline from loss of habitat? There are no population estimates for seahorses, past or present, in the Chesapeake, so it is impossible to test this hypothesis directly, but it is logical that the loss of these habitats would reduce seahorse survival.
Worldwide, seahorses are listed as "vulnerable" on the World Conservation Union's Red List of Threatened Animals. This means that there are significant conservation issues or population trends that are threatening the survival of a species, but precise information and data have not yet been gathered to assess the situation fully. Unfortunately, data collection is very difficult with seahorses, as it is almost impossible to quantitatively estimate their population trends. Most researchers, however, believe that seahorse populations are in decline throughout the world from habitat loss, pet trade, capture for drying, sale as curios, and use in oriental traditional medicines. Dr. Amanda Vincent, a Canadian seahorse researcher investigated the worldwide seahorse trade and estimated that over twenty million are caught (mostly in the Philippines) each year, with most being caught for use in traditional medicine. Several hundred thousand more are captured for use in aquariums or dried for curios. She reported that seahorse fishermen everywhere reported diminishing numbers and smaller specimens, a classic indicator of stressed and declining populations.

Maintaining the worldwide seahorse population will undoubtedly require habitat conservation, reduction in the curio trade, and management of harvests for traditional medicine.

We are often asked how to keep locally caught seahorses alive in home aquariums. Although they are beautiful to watch, we generally discourage people from trying to keep them. They are very difficult to maintain because of the need for specialized facilities and a large supply of the correct food of varying size to support their voracious appetites. Unfortunately, seahorses soon die in home aquariums, and when pregnant males give birth, the young will also die, which results in a substantial loss of young seahorses. It would be best, therefore, to admire a recently caught seahorse in a bucket of water for a few minutes, and then return it to where it was found.

Habitat destruction, popularity as an aquarium specimen, and the belief that they can be used medicinally as a cure for many ailments, such as baldness or impotence, has threatened their future survival. There is an excellent website called "Project Seahorse" that has a wealth of information for those interested in learning more about seahorses and how to become involved in the effort to conserve them. (Note: Ms. Raumeyer is curator of estuarine biology and Ms. Stringer is one of the museum's aquarists.)

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**VOLUNTEER SPOTLIGHT**

(Continued from page 8)

hand at rowing a skiff around the boat basin. This has proven to be a most popular weekend event during warm weather. There are also plans for Al Rondena to offer in 2003 a similar experience with sailing the museum’s sailing skiff *Wonderful*.

Perhaps one of the guild’s finer accomplishments has been the rebuilding and relaunching of the Sewell draketail, a gift from the family of the builder. For a number of years, club members worked to restore this wonderful boat. Finally in the spring of 2000, she made her maiden voyage from Calvert Marina to the museum. George Surgent, first and past president of the guild and current staff boatwright, and Jim Wilson, maritime history liaison, were at the helm for this historic occasion. On a few weekends and during special events, visitors often are invited to join Richard Rogers or Jim Wilson, who captain this thirty-six foot workboat, for a jaunt around our local waters.

Be it the amused look as Bill Lake watches a four-year-old instruct an overly enthusiastic parent on how to put together a model boat, the glow of pride when Richard Rogers puts the key in the ignition to start the draketail’s engine, or the general work ethic and dedication of each guild member, our museum community is extremely fortunate to have such a group as the Patuxent Small Craft Guild. It hardly seems enough to give them the Volunteer Group Achievement Award and a one-time evening sail aboard the Wm. B. Tennison, even with beer and wine flowing. Perhaps it’s because I’m a girl, who before the fateful meeting never had an inkling about small craft and the hard work it takes to maintain them, but this group continues to astound me. Somehow, I don’t think it has anything to do with me. I think their achievements speak for themselves.

[Image] Carin Stringer working with CMM's seahorses "behind the scenes." CMM photo by Jimmy Langley
VOLUNTEER SPOTLIGHT

The Patuxent Small Craft Guild

By Leslie King, Volunteer Coordinator

Over six years ago, a bit blander and much younger, I found myself the only female in the middle of meeting with a group of men. These were not your average everyday sorts, by the way. They were a diverse group with varying professions, retirement dreams, and ages. As I sat, coffee in hand, amongst the members of the Patuxent Small Craft Guild, I felt a small amount of delight to be invited to their annual winter meeting. They talked of upcoming events, toy boat hulls, and the legendary Oyster House Row. Through the guidance of Bill Lake and Al Lavish, club president and treasurer respectively, the meeting was organized and interesting, even to me. It formed the framework for a long-term relationship with this group that I cherish.

There is no favoritism, however, when it comes to selecting the Volunteer Group Achievement winner, so when they were nominated in the spring of 2002 by several staff members, it was a pleasant surprise. The Patuxent Small Craft Guild has many achievements of which to be proud. Keeping the museum small craft collection maintained is a daunting enough task. They help winterize the collection as well as scrape hulls, replace worn and rotting parts, paint, and clean the various boats. Throughout the year, they cut out toy boat hulls for the ever-popular children’s model boatbuilding during Family Discovery Day and Patuxent River Appreciation Days. During these two events, club members orchestrate the boatbuilding and offer assistance to those in need of a little extra help. Donations collected for the boats are put back into the guild or into the small boat collection.

Another museum event started in 2002 for visitors was the Row-Our-Boat project. With the steady supervision of volunteer Bill Boxwell, people of all ages have the opportunity to try their

Continued on page 7
Dear Member,

Thanks to friends like you, the museum exceeded its funding goal in FY2002. With your help, we’ve made substantial improvements to our beloved Cove Point and Drum Point Lighthouses; we’ve hosted two national performing artists in our own backyard; we’ve held another successful year of Education events and programs; and we’ve constructed the popular temporary exhibit, *Sirens & Sireniens* (Mermaids and Sea Cows). It’s been another exciting year at Calvert Marine Museum. With your continued support, next year looks even better.

Sincerely,

C. Douglass Alves Jr.
Director

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*Our Mission*

The Calvert Marine Museum is a public non-profit, educational, regionally oriented museum.

Our mission is to collect, preserve, research, and interpret the cultural and natural history of Southern Maryland.

We are dedicated to the presentation of our three themes: regional paleontology, estuarine life of the tidal Patuxent River and adjacent Chesapeake Bay, and maritime history of these waters.
Paleontology

Working in conjunction with the Exhibits Department, Paleontology dedicated much time and effort to completing the exhibit, *Sirens and Sirenians* (Mermaids and Sea Cows). The fossilized sea cow bones sometimes found in Calvert Cliffs sparked an interest in these marine mammals and their curious relationship with mermaids. The Dryden Endowment provided funding for the exhibit and companion guide.

Through the efforts of fossil preparation lab volunteers, CMM Fossil Club members, and generous donors, fossilized shells, crabs, shark teeth, various fish, turtle, crocodile, bird, land mammal bones, and partial dolphin skulls from extinct species were added to our permanent collection. Our mandate to preserve this fossil resource would not have been possible without the support of state and private landowners granting permission to remove fossils from their land.

The Paleontology staff also worked on an unusual project with the Smithsonian Institution's scanning electron microscope to photograph the fossilized remains of feathers preserved in two coprolites (fossil dung), the only ones known to science.

Maritime History

The Maritime History Department dedicated much of the past year to the upkeep of Drum Point Lighthouse. Work included exterior painting and the installation of custom-made shutters and shutter hardware. Langley Construction Co. completed extensive repairs to the cantilevered wooden beams supporting the walkway, as well as replacing walkway decking. Two of the lighthouse's original screwpile augers also underwent conservation treatment.

In conjunction with the civil engineering company COA, work continued on developing a site plan for the Small Craft Center expansion. After hearings before the Board of Appeals and Department of Planning and Zoning, the necessary permits were issued to begin the project.

Departmental resources were also utilized in the preparation of a manuscript by author Harry Knott detailing the former commercial fishery at Flag Ponds. The publication was a cooperative project with Battle Creek Nature Education Society. Copies of the book are available for purchase at the Museum Store.

Additionally, the registrar led an effort to document the former premises of the Calvert Packing Company, located near Solomons. After hiring an architectural historian to produce field drawings and measurements, the department undertook historical research which resulted in a Maryland Historical Trust Historic Sites Inventory submission and an article in the *Bugeye Times*.

Estuarine Biology

With the help of the Exhibits Department, Estuarine Biology staff spent many hours during the past year planning for the otter exhibit extension. Plans include constructing a 200 square foot terrestrial habitat with a log for climbing, sandy and grassy areas for preening and drying, and a den for security and protection from inclement weather. The habitat design was used to initiate the Year End Appeal fundraising campaign.

Department staff, including the curator and aquarists, also did their share of television time throughout the fiscal year. The group was used in the production of an estuarine ecology film given to grade school students worldwide. Maryland Public Television also filmed a feature on the museum's seahorse program.
Throughout FY2002, the Education Department hosted several programs featuring the museum’s themed areas of Maritime History, Estuarine Biology, and Paleontology.

After many years of highlighting the estu-arium, the CHESPAX program changed gears as students studied the Miocene era and learned to identify and catalogue shark teeth.

The Elderhostel program expanded its cur-riculum by featuring lighthouses of the Bay. Offered to senior citizens, the five-day program led participants on land and water to 18 different lighthouses, including Thomas Point and Sharps Island. The Education Department continued with new initiatives as they joined forces with the JNROTC program at Calvert High School for both on- and off-site work. Museum staff and volunteers taught local military history at the school, while eight students have joined the Ship’s Company of the Amphibious Training Base, a living history group that portrays the 1940s naval personnel that served here in Solomons.

The Cove Point Lighthouse site received much-needed attention from Physical Plant staff in FY2002. Major improvements included the installation of new perimeter fencing and protective concrete slabs (Bayside). Additionally, the keepers’ quarters received exterior paint, new copper gutters and downspouts. The septic system received a major refurbishment.

Back at the museum, handicapped auto-matic door openers were installed on the Exhibition Building, while the North Annex and Museum Store interiors received a fresh coat of paint. Electrical outlets were also installed in the parking lot for special events.

In September 2001 and June 2002, physical plant staff provided site management and security for the Waterside Music Series outdoor concerts. Their oversight included participating in the year-long Waterside planning committee, organizing pre and day-of security meetings for civilian recruits and Sheriff’s Department representatives, and coordinating logistics with concert vendors and artist management.

The Exhibits Department proudly opened their feature exhibit - Sirens & Sireni-ans- at a public grand opening celebration on April 6, 2002. In addition to the cake, cookies, crafts, and live mermaids, several hundred visitors toured the exhibit’s mermaid figurehead, Florida Manatee skeleton, and a full-size life-restoration of the extinct Calvert Cliffs sea cow.

Other popular exhibits displayed at the museum during FY 2002 included a feature on CMM volunteers; the John Digby exhibit; a WWII exhibit on the Evansville Shipyard; a model boat exhibit; a holiday art show exhibit by Our Lady Star of the Sea, as well as photo features from the American Chestnut Land Trust, the United States Lighthouse Society, and the Cradle of Invasion event.

Inside the paleontology hall, the Exhibits Department completed the mural in the permanent whale skull exhibit.

At the Cove Point Lighthouse site, the department designed interpretive panels detailing the region’s flora and fauna for the Cove Point Natural Heritage Trust. Updates were also finalized at the Lore Oyster House Exhibit.

In addition to participating in many Calvert County projects throughout the year, Exhibit’s staff also initiated the “Seahorses By The Bay” interactive school program with Anmarie Garden.
Volunteers... "Giving is the secret elixir that gives life meaning."

Always ready to lend a helping hand, 240 volunteers, including 23 new recruits, logged in 17,689 hours for CMM in FY2002. Volunteers participated in many museum events during the fiscal year, including the volunteer-driven Yard Sale, which raised $2,214; and the Waterside Music Series, which utilized more than 125 volunteers.

At CMM's annual Volunteer Recognition Ceremony, Dave Peterson was honored as the Volunteer of the Year for his efforts in maintaining our historical structures, while the Patuxent Small Craft Guild received the Group Achievement Award.

Calvert Marine Museum Society

Waterside Music Series struck gold playing host to the legendary James Brown in September and rock icons Chicago in June. The two sold-out concerts brought 9,000 people to Solomons and raised more than $160,000 for CMM.

Membership figures remained constant over the past year, yet income rose three percent. The Year End Appeal reached the public's hearts with its focus on the otter habitat expansion. With funds reaching $17,300, it exceeded its goal by 17%. The Cove Point Lighthouse Brick Campaign had a successful kick-off, raising $2,150 for the lighthouse's preservation. The 22 bricks purchased for $75 each will be permanently installed on the lighthouse grounds.

The Museum Store ended its year successfully with gross sales totalling $282,613 and a net profit of $63,169. The Sirens and Sireniants exhibit opening boosted sales as manatee and mermaid memorabilia proved to be very popular.

Administration

CMM WELCOMED 66,008 VISITORS IN FY2002

Administration Department staff continued to provide information and answer questions for the thousands of people inquiring via phone about the museum and local area. Additionally, they provided much-needed administrative support to other departments, as well as financial guidance through the Business and Accounting offices. A synopsis of revenue and expenditure figures for FY2002 follows and reflects both Calvert County government support as well as CMM Society funds raised with the help of the private sector. Figures are based on an annual budget of $2.7 million.

Revenue & Support

Expenditures

For concise and detailed financial statements regarding Calvert Marine Museum's Fiscal Year 2002, please call our business manager at 410-326-2042 x 12, or email at weasekr@co.cal.md.us.