During the first three months of 1993 some significant changes are expected at the museum. According to present plans, the renovation of the Administration Building — the former Solomons School — will be completed in February, allowing the move of the museum offices from the North Annex into larger and more efficient space. During this period it is also expected that most offices now in the East Annex will be moved into the Administration Building: the museum's library, archives, and photo collections, as well as the paleontology office and collections. Visitors to these activities in CMM during the next few months may want to check ahead for current locations.

As reported in earlier issues of the Bugeye Times, the renovation of the Solomons School for use as the Administration Building will complete Phase III of the museum's Master Development Plan, a plan that began with the creation of the boat basin in 1984 and proceeded into the second phase with the construction and opening of the new Exhibition Building in January 1989. Funds for the renovation of the Administration Building were raised during the period 1984-87, when a challenge grant was received from the National Endowment for the Humanities and members and friends met the matching requirements. The delay in starting work on this building — deferred until after the new Exhibition Building opened in 1989 — resulted in inflationary increases in construction costs that have been met by support from the Calvert County government. The county has also supported the furnishings and equipment for the space in the renovated building. Completion of this important museum facility has been made possible to a significant extent by private support, for which the museum is extremely grateful.

Museum members and visitors familiar with this building when it was used as the principal museum facility will find a major difference in the orientation of the renovated building. Although the portico facing Solomons Island Road will remain in place, it will no longer be an entrance to the building. Visitors are expected to enter the museum complex from the parking lot where they can easily reach either the front (north) entrance of the Exhibition Building or the south entrance to the renovated administrative offices. A ramp has been added at the entrance for handicapped access. Inside, a short stairs will lead up to the offices and library. (Handicapped access will be by means of a lift inside the entrance door.)

The floor plan on page 3 shows the major features of the offices on the main floor of the Administration Building, as well as the space assigned to the library and archives. In addition to the director and his administrative staff, there are offices in this area for the curators of maritime history, education, estuarine biology, and paleontology. A conference room will provide space for meetings of the staff, the Board of Governors, and other groups by prior arrangements.

To the front of the building will be the library and archives, with the reading area between the two stack areas. The card catalog, microform reading machines, a copier, reading tables, basic sets of reference materials, and selected current magazines will be generally accessible. Access to the collections, however, will be limited to those times when staff or volunteers are available. Built-in exhibit cases, separating the reading room from the stack areas, will provide pleasant research workspace.

The lower level of the building will be devoted to behind-the-scenes activities: offices for the curator of exhibits and the museum registrar, the exhibit work rooms, collections cataloging space, a photographic facility, and collections storage for paleontology, maritime history, and estuarine biology. Staff amenities — lounge and rest rooms — are located on this floor. In the building attic will be located secure storage for other collections,

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FOSSIL FACTS

Epiphysis: A Diagnostic Tool

By Sandy Roberts

Bony discs sticking out of the cliffs or on the beach are not uncommon finds at Calvert Cliffs. These discs are called epiphyses, a Greek word meaning "growth or growing upon." Epiphyses are produced as part of the growth of some bones in mammals. All the long bones in the human arms, hands, legs, and feet have epiphyses, as well as the vertebrae that make up the backbone. At a mammal's birth, the epiphysis is separated from the shaft of the long bone or from the drum-shaped centrum of a vertebra by a layer of cartilage. As the animal grows, its development slows and part of the cartilaginous layer is converted to bone. When adult size is reached, the epiphysis fuses with the main bone. If an animal dies before reaching adult size, bacteria and rot destroy the cartilage between the bones and the epiphysis falls away from its host. When a fully grown animal dies, however, no separation takes place: the two bones are ossified and remain so even in death.

It is this characteristic process that makes an epiphysis so useful for ascertaining the age of an animal when it died. A fossil vertebra found without its two epiphyses would have come from a juvenile animal; a vertebra with both epiphyses in place would have belonged to an adult beast; and a fossil vertebra found having one epiphysis in place and missing the other would indicate a Miocene "teenager."

Paleontologists use fossils as diagnostic keys to unlock the mysteries of prehistoric life. The large numbers of whale epiphyses and juvenile vertebrae found at Calvert Cliffs have been used to argue that the area was the site of a "nursery." Occasional dugong or seal epiphyses are also found. Epiphyses vary in size and shape depending on the animal and bone they came from. They are mostly round, oval, or in the case of dugongs, heart-shaped discs. The outside (anterior) surface of epiphyses from vertebrae are smooth and flat with rounded edges and a slight dip in the center. The inside (posterior) surfaces are rough and covered with deep wrinkles and ridges. The centrum of a juvenile vertebra exhibits this same rough surface.

Use this "tool" the next time you find a bony disc.

The Bugeye Society: A New Opportunity for Supporting CMM

Spearheaded by a loyal group of museum supporters who have each given or pledged $1,000, a campaign for membership in a new Bugeye Society is now under way with a goal of $75,000 for 1992-93. Support from The Bugeye Society, now and in the future, will provide funds for special projects on an annual basis. This year's dollars are dedicated to the completion of the estuarine exhibit, "Estuary Patuxent: A River and Its Life," and the preparation of plans for the new fossil hall.

In addition to all the usual benefits of membership in the Calvert Marine Museum Society, there are special benefits for Bugeye Society members — Bugeye Ball tickets and invitations to special events just for Bugeye Society members, to name two. All museum members and friends are invited to become members of this special society — CMM's first organization dedicated to significant philanthropic support — by signifying their intention to contribute $1,000 as an annual membership gift.

For more information about joining The Bugeye Society, please call Patricia Tower in the Development Office.
CMM ON THE MOVE!

Continued from page 1

as well as the mechanical equipment for the building. This building will have modern climate control throughout.

Plans are under way for a formal dedication of the Administration Building in the spring. Watch your next Bugeye Times for details.

Other Changes

When moves of the administrative offices are completed this spring, further space changes are planned. The development, membership, and volunteer offices, now on the upper level of the Exhibition Building, will be moved to the North Annex. The space those offices vacate will be assigned to the education department which is currently crowded into space on the mezzanine level. Because of the extremely poor condition of the present East Annex, it is planned that this building will be razed when it can be completely emptied of staff and collections.

Visitors this winter and spring will find progress in the creation of the paleontology exhibit, "A Window in Time: Maryland in the Miocene," in the future Paleontology Hall. A new route to the aquariums has been developed, allowing both access and a view of the exhibit-in-progress. There may be times when visitors are routed through the Maritime History Hall to reach the aquariums, but signs will advise of the changed route. Work on the paleontology exhibit is expected to take two years.

All of these changes will make the Calvert Marine Museum stronger and better able to serve the needs of visitors. Staff and board committees are looking ahead to other ways to enrich the museum experience and to enable the museum to carry out its mission. Suggestions from members and visitors are always welcome.

Annual Changes in CMM's Board of Governors

Two members of the museum board have left at the end of 1992, following the practice of changing five of the fifteen appointed board members each year. (Some members carry over from a previous three-year term.) Those who left in 1992 were J. Matthew Gambrill and F. Ross Holland. Mr. Gambrill owns the Calvert Marina and is developing The Harbor at Solomons; Mr. Holland is known to many CMMS members for his interesting descriptions of Chesapeake Bay lighthouses during trips on the Wm. B. Tennison.

Reappointed for three-year terms are C. R. Bailey, Robert Jeffries, and L. G. Raley. A new member will be William B. Glascock II, a local Solomons businessman. (There is one vacancy at the time of writing.) Board members continuing include: J. Patrick Collins, Phillip S. Hughes, Harold J. Kahl, Jodie Lee Marinelli, Linda A McGilvery, W. Lee Phillips, Carey O. Randall, George C. Tilghman, John W. Williams, Jr., and Thomas H. Williams, Jr. County Commissioner Mary M. Krug and CMM director C. Douglass Alves, Jr., are board members ex officio: C. D. Bare serves as board treasurer.

The Board of Governors is a volunteer group appointed by the County Commissioners to guide the museum's policies and to raise funds to augment county support. Under present policies, members of the museum board serve also as directors of the Calvert Marine Museum Society, Inc., the non-profit corporation also engaged in raising funds for the support of the museum.
Bugeye Times

Volunteer emeritus status, with badge, was awarded to volunteer Martha Tongue by Volunteer Council president Paul Adams during the annual meeting of the council on September 23. Photo by Richard Dodds

CMM staff and family members at the Patuxent River bulkhead in Solomons during the annual beach cleanup September 27. This is undertaken annually as a gesture of civic support. Photo by Layne Bergin

Santa renews his CMM membership during December 5.
ic Power Company, presents PEPCO's corporate exhibit to John W. Williams, Jr., member of CMM's (right): Patricia B. Tower, development director, (left): curator of estuarine biology.

Visitors during Patuxent River Appreciation Days (PRAD) in October enjoyed the live animals in the "Scales & Tales" exhibit of the Maryland Department of Natural Resources.

University of Maryland Cooperative Extension agent Ruth Miller demonstrates heart-healthful cooking of Maryland farm-raised catfish, during Patuxent River Appreciation Days. A tasting session followed!

Santa was popular during the annual Solomons Christmas Walk on December 5.

The annual Solomons Christmas Walk on December 5.
Did you ever wonder what kinds of plants grew in Calvert County in Colonial times? Thanks to the efforts of a early Anglican minister of Christ Church, the southern of two parishes established in Calvert County in 1692, not only do we know what plants grew here, but hundreds of specimens, dried and neatly pressed, survive in the British Museum. The man we can thank for this is the Reverend Hugh Jones (1671-1702) who rightly deserves the title of “Maryland’s First Naturalist.”

Young Reverend Jones arrived in Calvert County in July 1696, when the ship John dropped anchor in the Patuxent River. Before assuming his duties at Christ Church, Jones and an unnamed assistant first rode to the new capital in Annapolis and spent five weeks as guest of Governor Francis Nicholson. What was Annapolis like in those early days? As he described it in a surviving letter,

There are in it about forty dwellings houses, seven or Eight whereof Cann afford good lodging and accommodations for strangers. There is alsoe a Statehouse & a free schoole built with bricke, which make a great shew among a parscell of Wooden houses, & the foundation of a church laid, the only bricke Church in Maryland. [January 23, 1698]

Some years later the early Maryland “poet laureate” Ebenezer Cook would joke that Annapolis was “A City Situate on a plain/Where scarce a house will keep out Rain....”

As part of his duties, Jones began already that fall collecting acorns and fossils, no doubt along the nearby cliffs just south of Parkers Creek. Most of his plant collecting was done during the 1698 growing season, but continued the next few years until his death from tuberculosis in January 1702. In the summer of 1696 two other botanists, William Vernon and Dr. David Krieg, also collected Maryland flora. Besides pressed plants and fossils, Jones and his contemporaries also shipped back seeds which were later planted in English gardens, as well as small dead mammals, fish, insects, and birds. The recipients were assorted English naturalists, professional and amateur, fascinated with the creatures of the New World. We must thank these botanist-collectors, for it was they who recruited the young Jones as clerical-naturalist. In truth, Hugh Jones was not well educated either as cleric or an naturalist when he arrived, and was still on a learning curve when struck down by tuberculosis.

Christ Church parish itself had been in existence at least by 1672, since the parish register records a birth for that year. Bits of charcoal recently discovered below the present church are all that remain of the original wooden structure that succumbed to fire early in the eighteenth century. The exact location and appearance of the early church building remains uncertain, but the general area of the present church in Port Republic seems logical. Since the parish covered the entire southern half of Calvert County, Jones preached in two locations: Christ Church itself and Middleham Chapel in what is now Lusby.

Hugh Jones was about the eighth rector of Church of England. Although the Calverts who founded Maryland were Catholic, Lord Baltimore lost his governmental control of Maryland in 1689 during the colony’s Protestant Revolution. From this followed the Establishment Act passed by the assembly in 1692, empowering the vestry of Christ Church to collect forty pounds of tobacco from each of the over five hundred “taxables,” regardless of faith, living in the parish area. While this “tithe” angered other denominations, tobacco grown locally must have helped pay Reverend Jones to collect plants.

After a few decades of interest by early eighteenth-century botanists, the surviving Jones material languished forgotten in the British Museum for some 250 years until its rediscovery, starting in 1972, by Professor James Reveal, a botanist of the University of Maryland. Reveal led a research effort to reexamine vascular plants in the collections. The team’s findings, plus surviving letters by Jones, were published in the journal “Huntia” in 1987. In March 1983 many of these pressed representatives of the Colonial flora, including some from Jones’s contemporaries Vernon and Krieg, were displayed at the Old State House in Annapolis, the University of Maryland, and of course at Christ Church, where county residents had a chance to view plants that grew in Calvert County almost three hundred years earlier.

Sadly, a number of the species Jones collected, particularly herbaceous woodland wildflowers, can no longer be found in our area. In fact, five of Calvert’s Colonial species are now extremely rare anywhere, and one (Chaff-seed, or Schwalbea americana) is now close to extinction. Tree species have fared better; except for the white cedar, all of the trees sampled by Jones still grow in the county, albeit not the majestic specimens he would have seen in what remained of the ancient forests in his day. The curious omission of loblolly pine (Pinus taeda) and red maple (Acer rubrum) from Jones’s specimens seems to imply that these American species — now common in southern Maryland — spread into the area as a result of land clearing and later abandonment. Calvert County is currently near the northern limit of the loblolly’s natural range, so perhaps its post-Colonial advance was helped by the slight climatic warming, in addition to the creation of suitable habitat in the form of abandoned fields. It seems likely that the white cedar (Chamaecyparis thyoides) once grew in the freshwater swamps of the upper Patuxent; today most of the remaining white cedars in the state grow in the southern Eastern Shore and a few swamps near Annapolis, but even there these aromatic evergreens are uncommon. The demise of the white cedar is easy to understand: it was the wood of choice for siding, being, as Jones observed, easy “to rive into boards, that being the freest from Knots.”

Already in Jones’s day, the Chesapeake seen by John Smith in 1608 was much changed. Southern Maryland’s Indian population had dropped from about thirteen hundred to ninety, and the remaining ancient forest was being rapidly cleared. Eurasian species already comprised almost ten percent of the collected flora (now about twenty-five percent). In a letter dated January 23, 1698, Jones described the local land as low and...
very woody like one continued Forrest, no part clear but what is cleared by the English... Indeed in a few years we may expect it otherwise, for the tobacco trade destroys abundance of timber, both for making of hogheads & building of tobacco houses, besides clearing of ground yearly for planting.

This passage may be the earliest recognition that the vast New World forests are finite. Were Jones to step out of his grave, perhaps on the grounds of his church, he would see his prophecy come true. The ancient forests where he collected wildflowers are long gone.

That the ensuing second-growth forests and farms would themselves be fragmented by subdivisions and paved with asphalt and concrete Jones could not have envisioned in his worst nightmares. But neither could he have foreseen the special preservation of land just for the flora and fauna. Had it been in his power, Reverend Jones would surely have saved us a square mile or two of the ancient forest, but then land trusts were still 150 years in the future.

Jones’s distant successors, current and recent rectors of Christ Church, have established a special parish arboretum containing some of the tree and bush species sampled by Jones. Hugh Jones would be honored by these plantings and by the rediscovery and study of his collection. And he would no doubt be enthusiastic that some of his old collecting grounds have been set aside by the American Chestnut Land Trust and county and state parks to become once more “very woody like one continued Forrest.”

Peter Vogt is a marine geophysicist with the U.S. Naval Research Laboratory. His article appeared first in the fall 1992 Newsletter of the American Chestnut Land Trust, and is reprinted here (with some modifications) with permission. A copy of Huntia, with a full article on Jones, Vernon, and Krieg, is available for consultation in the museum library. This and other articles in the issue were the work of James L. Reveal, George F. Frick, C. Rose Broome, and Melvin L. Brown.

YULETIDE 1992

The holiday season came early in December with the Solomons Christmas Walk festivities lighting up the town the first weekend of the month. Santa Claus made three appearances in the museum lobby, holding court beside a live fir tree decorated by the museum staff. Children's artwork, representing the spirit of a Solomons Christmas, was on display. Entertaining jugglers, a school choir, and a winter solstice celebration by "Kindred Spirits" were all in keeping with the season. As in the past, volunteers assisted with the Sunday Yule Party arrangements—shopping, decorating, serving, and welcoming fellow members. The museum hosted nearly four hundred at the annual celebration, all joining together in the traditional Weems Steamship Line eggnog toast.

Festive holiday arrangements dressed up the Drum Point Lighthouse for special openings in December, thanks again to Mr. and Mrs. Philip Lines and talented volunteers. A cedar tree, lots of holly, and other decorations appropriate to a turn-of-the-century home were used.

Thanks are due to all who helped make this season especially memorable.

Children’s Model-Building Class

The museum’s woodshop was even busier than usual this past October. For the first time, the museum offered a class in building model sailboats for children. Usually the shop is the haunt of adult moldmakers and woodcarvers, but this fall the museum was able to schedule some time in the woodshop to allow children to enjoy this pastime. The three-day program included instruction on model-building techniques as well as on how sailboats function, ending on the final day with a series of races in the boat basin. Enthusiastically received by the children, the program was a success due to the work of museum modelmaker Jimmy Langley, with special support from volunteer Alex Eichholz who helped design and teach the program. Some model kits are still available at the museum store. (Craig DeTample)

THE MUSEUM’S ANNUAL APPEAL FOR UNRESTRICTED FUNDS

Among the greetings and other correspondence of this season, museum members received in late November or early December the annual Year-End Appeal letter from the director. This appeal is to provide members with an opportunity to support CMM through a donation of unrestricted funds. This type of support augments the budgeted funds and makes possible a number of projects and purchases not otherwise supported.

In last year’s appeal, members and friends contributed $13,000, and it is hoped that donations will reach the $20,000 level this year. The Year-End Appeal campaign closes on February 12, 1993. Names of those who contributed will be listed in the spring issue of the Bugeye Times.

Please help CMM grow with your unrestricted gifts!
VOLUNTEER SPOTLIGHT —

Don Brown, Volunteer Council President

The CMM Volunteer Council exists to promote the effective use of volunteers. Its new president has already done much to put words into action. Elected in September as council president for the 1992-93 term, Donald A. Brown, Captain USN Retired, comes to the job with experience in and out of the museum volunteer field. A native of Kansas, who retired after thirty-one years of active duty, Don is one of CMM’s “across the bridge” supporters. He and his wife Angela live in St. Mary’s County overlooking the Patuxent. It was Don’s love of the river and the region that led him to the museum. “I had some extra time and it looked like the place to learn more about the area,” says Don. He remembers being encouraged to volunteer by demonstrator Paul Grisso who often greets museum visitors and gives them a chance to learn a nautical knot. As Paul told Don: we need more men as volunteers. What military officer could have resisted that rallying cry?

Since 1989, Don Brown has served as museum host, worked on the ad hoc committee that developed the Volunteer Council bylaws, lent a hand with volunteer training and special events, served as council vice-president, and is still active as membership chairman. His talents lie especially in his ability to share his enthusiasm for the museum with volunteer recruits, appealing to their desire to learn more.

Don is equally supportive of the council and its effectiveness. “We are providing a more professionally trained volunteer across the board,” someone who has a “broader scope of what’s going on at the museum.” Don also holds board and executive positions with the Retired Officers Association, the American Red Cross, and, with strong political interests, serves as chairman of the St. Mary’s County Republican Central Committee. So which does he prefer — working at Republican Party headquarters or at the Calvert Marine Museum? “It’s much more pleasurable to work here,” is Don’s politically correct response.

Interested in supporting the Calvert Marine Museum and in learning more about the Southern Maryland area? Join the crew and become a museum volunteer. Call Layne Bergin, volunteer coordinator, to receive a volunteer application or to just chat about the program.

LIGHTHOUSE LOVERS:
Wanted for new exhibit in the Drum Point Lighthouse
An apothecary (nineteenth-century medicine chest) If you can help, call Tom Ostertag,
CMM Education Department, at (410) 326-2042.