The Anatomy of an Exhibit:
The New Paleontology Entrance Hall

By Sherrod Sturrock, Stephen Godfrey, Jim Langley

When you visit a museum and walk through the exhibits, you are experiencing the culmination of hundreds of hours of thought, planning, and development by many people. Like the human body, an exhibit is made up of discrete but interdependent components that are all essential to ensure successful functioning. Here at the Calvert Marine Museum, we are in the process of working on the new entrance hall for the paleontology exhibit and thought this a good opportunity to share something of our exhibit development process with you. After reading the “Anatomy of an Exhibit,” perhaps you will approach your next museum experience with new insights about the bones, muscles, organs, and systems that lie beneath the “skin.”

In considering a new exhibit, the first question we ask is “why?” Exhibits don’t come out of nowhere – they are designed to respond to a specific need. It might be to generate higher attendance (think blockbuster art exhibit), or to update information, or to explore new ways of fulfilling the mission, or to renovate an outdated exhibit. In the new paleontology hall, we want to address what we perceive as an essential weakness in the existing paleo gallery. The vast majority of the fossils we exhibit are from Calvert Cliffs (the thirty-five-mile stretch of sea cliffs along the western shore of the Chesapeake Bay in Calvert County). The cliffs are comprised of sediments that were laid down in a relatively small slice of geologic time referred to as the Miocene epoch. Unfortunately, the “Miocene epoch” is meaningless to most people, and when we refer to “fossils,” many people think of dinosaurs. In the new entrance to the paleontology hall, we want to illustrate and answer two fundamental questions: (1) how old is the earth; and (2) where does the Miocene epoch fit into this prehistoric past?

Let’s begin by introducing the key players in any exhibit development process. First, there is the subject expert, usually the museum curator, who provides the information. In this case, that role is filled by the Department of Paleontology, whose job it is to decide the “what.” Next, there is the exhibits team who takes this information through a design and production process and presents it in a visually engaging and exciting way. They work out the “how” aspects. And finally, there is the education staff that is responsible for interpretation.

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MUSEUM BOARD MEMBERS FOR 2008

The museum Board of Governors will have four new members in 2008. Roxanne Riddle Cumberland returns to the board after an absence of three years. She is active in a number of local and national associations. Wanda W. DeBord of Lothian is a consultant with real estate organizations and also serves with other local and national organizations. Mark A. MacDougall is the vice president for external affairs and general counsel of the Southern Maryland Electric Cooperative, and serves with local and state legal organizations. The fourth member is Raymond J. Wernick of Leonardtown, the chief operating officer for Cherry Cove, a regional leader in the delivery of hospitality, development, and property management services in the three Southern Maryland counties, and he is also on the boards of community organizations in St. Mary’s County. These new members were welcomed at a board dinner at the museum on December 5, and four retiring board members were recognized for their service: Marshal S. Gibson, Michael L. Hewitt, Constantine J. Pappas, and Kirk L. Swain.

Board members who will continue in 2008 are Anthony J. Benn, David E. Butler, Pat G. Carpenter, Robert S. Crum, Robert S. Currie, Karen Everett, Dennis M. King, Marvin E. Oursler, James B. Perkins III, Jeannie C. Stone, and Robert L. Swann. Ex officio members include County Commissioner Gerald “Jerry” Clark, CMM director C. Douglass Alves Jr., and Rear Admiral Timothy Heely, Commander, Naval Air Warfare Center, Aircraft Division, at the Patuxent River Naval Air Station.

The Board of Governors also serves as the Board of Directors of the Calvert Marine Museum Society, Inc., responsible for fundraising.

A PLAN TO CLEAN UP THE PATUXENT

On Friday, October 5, to introduce the Patuxent River Appreciation Days weekend, a large audience in the CMM auditorium heard the plan for cleaning up the Patuxent. This forty-eight-page draft plan was developed by the Patuxent Riverkeeper organization and reviewed by the Patuxent River Commission. Commenting on the plan were representatives of several state and county governments, as well as interested citizens. This plan is just the beginning of the current effort to improve the river’s water quality, an effort that will take many years and involve a great number of participants. This year’s meeting was a follow-up to the “State of the River Summit” held on October 6, 2006, an event that was similarly well attended at the museum.

From the left, former State Senator Bernie Fowler, Charles County Commissioner Gary Hodge, and President of the Calvert County Board of County Commissioners Wilson Parran, listened to the presentation and the comments from other state and local officials. CMM photo by Bob Hall.
ANNUAL APPEAL – Donations still Needed For Cove Point Lighthouse

Members – Your support is still needed for our annual appeal to restore Cove Point Light Station. Already, 120 members have generously donated over $14,000 for this historic beacon. Renovation plans include restoring the lighthouse tower and revitalizing the keepers’ house for future use as a weekly rental. Watch your mail at the beginning of the new year for a special postcard. If you’d like to make an online donation to Cove Point Lighthouse, please visit our website at www.calvertmarinemuseum.com. Donations are tax deductible.

COVE POINT BY CANDLELIGHT

Enjoy the magical beauty of lights on Saturday, January 5, 2008, as CMM presents the popular Cove Point by Candlelight at the Cove Point Lighthouse from 6:00 p.m. to 8:00 p.m. Decorated with candles and twinkle lights, this unique event provides the only public opportunity to visit the Cove Point Lighthouse at night, and one of the few opportunities to gather in the interior of the keepers’ house.

Cove Point by Candlelight will offer heavy hors d’oeuvres, a cash bar, live entertainment by maritime musician Bob Zentz, and a floral art and design show by Dickson’s Fields of Flowers. The event will also feature a showing of the Cove Point Lighthouse historical documentary in the fog bell mini-theater building. Tickets are $55 each. Space is limited. For tickets, contact Melissa Carnes, 410-326-2042, ext. 17. Proceeds from this event will support renovations to the Cove Point Lighthouse and the keepers’ house.

“Beatlemania LIVE” In Concert

The Calvert Marine Museum kicks off its winter concert series on Saturday, January 19, 2008, with BEATLEMANIA LIVE, a Beatles tribute event. Show times are at 6:00 p.m. and 8:30 p.m. Tickets are $32, and are available at www.calvertmarinemuseum.com. A $2.50 service fee will be charged per order.

BEATLEMANIA LIVE uses the original model guitars and drums as used by the Beatles, in combination with theatrical make-up, original costumes, and stage choreography to authentically re-create the image of a live Beatles concert!! Broadway lights and sound, with multi-media production, featuring: rear-image projection, strobe lights, and clouds of billowing fog to present a dazzling ninety-minute show!!

FIFTH ANNUAL SPRING BASKET BINGO EXTRAVAGANZA

Happy Anniversary to the Society’s Basket Bingo Extravaganza! On Saturday, April 26, the Society will hold their five-year anniversary Spring Basket Bingo Extravaganza at the St. John Vianney Family Life Center. Doors open at 4:30 p.m. and games begin at 6:00 p.m. This will be our biggest and best bingo event yet. Over $15,000 in prizes will be up for grabs. All baskets will be filled, and more surprise games will be added to this anniversary-edition bingo.

Tickets are $20 each and can be purchased by calling Melissa Carnes at 410-326-2042, ext. 17. Everyone must have a paid admission, including all children; no admission to anyone under the age of 6. A prize list and flyer will be available on February 1 at the museum’s website – www.calvertmarinemuseum.com.

First Free Friday!

In an effort to extend hours and to diversify our audience, we have introduced a new initiative: First Free Friday. On the first Friday of every month, the museum will be open free to the public from 5 p.m. – 8 p.m. This is a pilot program that began in October and will extend through April 2008. In our first three months, we have already seen a dramatic increase in participation.

Each month, in addition to our usual museum offerings, we will have something special. In January, we will show the documentary film “Around Cape Horn,” and host a concert by well-known maritime musician, Bob Zentz. In February, the Kindred Spirits will lead a Sea Chantey Sing-Along, and you are invited to come dressed in your best nautical attire to join in the fun. In March, we will have local storytellers plying their trade, and special sessions in reading the stars. And in April, we will be hosting some of our premier high school musical performing groups.

Family activities at First Free Friday are being supported by the Benning Foundation for Education, and the entertainment is sponsored by M&T Bank. It’s a great opportunity to meet friends, drop by after dinner in Solomons, or just say “hi” to the horseshoe crabs. Mark your calendars – it’s First Free Friday. 🎼
FALL 2007 EVENTS

It was a busy fall season at the museum, with the largest event being Patuxent River Appreciation Days in early October, preceded by the Patuxent River Summit reported elsewhere. There were other events for visitors presented by the education department, as well as the Bugeye Ball fundraiser.

On October 13, the Bugeye Ball, an elegant seated dinner in the museum’s galleries, opened with an auction and hors d’oeuvres in a large tent outside the museum. The event raised funds for the Cove Point Lighthouse restoration. CMM photo by Bob Hall

A popular PRAD activity was building model boats, located this year in a tent, again sponsored by the Patuxent Small Craft Guild. CMM photo by Bob Hall

The Calvert Soil Conservation District provided interesting PRAD booth. CMM photo by Bob Hall

The Southern Maryland Oyster Cultivation Society had one of the many booth exhibits during PRAD on October 6 and 7. CMM photo by Bob Hall

Pirate Day on November 12 gave young visitors, led by Pirate Queen Lori Cole, an opportunity to dress up and relive the swashbuckling, buccaneering life. CMM photo by Bob Hall

The reproduction of the 1768 schooner Sultana provided educational programs for Calvert County students in October in partnership with CMM educators. CMM photo by Diane Milgrim

On October 6 and 7, The Southern Maryland Oyster Cultivation Society had one of the many booth exhibits during PRAD. CMM photo by Bob Hall
The Anatomy of an Exhibit

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of the information. Their role is to represent the visitor’s perspective and address the “why.” There is a natural creative tension among these three key roles that, when successful, results in a dynamic and well-balanced end product that functions like a healthy body. As an exhibit moves through the process, there are many other players who cycle in and out: the development department staff finds the money to fund the project; the administrators oversee the budget and procedural issues; the facilities staff assists with electrical or other building requirements; and the marketing team tie in store merchandise, publicize the exhibit, and help promote it with donors. But initially the three core components are information, presentation, and interpretation working together.

We start by brainstorming how to best address the two essential questions we have identified. As you might expect, the paleontologist wants to show how impressively long geologic time was; the curator for exhibits focuses on what it should look like and how it should flow; and the education staff argues for hands-on components and clarity to ensure that visitors of all ages will understand the message. Clearly we need some kind of timeline that will show visitors how old the earth is and where the Miocene epoch fits in. Easy enough — our skeleton will consist of a timeline. We also decide very early on that we want to use technology to provide the information, thereby avoiding too much wall text.

Skeleton in place, we consider the muscle or shape. In this case, we need to mold our concept into a specific space and make it work. This multifaceted exhibit has to fit into a hallway that opens to the museum lobby at one end, and feeds into the rest of the paleontology hall at the other; an alcove with fixed benches is tucked off to one side. We quickly agree that the timeline should go along the long wall, exploding the Miocene period out on the end wall for greater exposure, juxtaposed to the existing section of recreated cliffs. This presents an interesting challenge, as westerners normally read left to right; but our timeline, of necessity, must curl out from right to left. Next, we need to identify the key components — the exhibit’s “organs.”

The major organs are those elements that will provide the information needed in a visually stimulating way. The heart of this exhibit is the fossils on the timeline itself. We agree that a two-dimensional graphic is too limiting; we want it to provoke visitors into seeking more information by creating something dynamic and surprising. The exhibit team begins to sketch designs of how to graphically depict 4.5 billion years of time. The brain of our exhibit is the information that will go on three touch-screen computers facing the timeline, enriching the body of information and fossils presented there. We identify a videographer, Mike Goggi, to shoot necessary footage and the computer team of Studio Up to pull all of the digital information together. The lungs that move the action forward will be a large plasma screen video in the alcove. This video will incorporate three computer-generated “geoanimations” showing: (1) the breakup of North America from Africa starting about 180 million years ago; (2) the formation of Calvert Cliffs sediment layers — with their famous fossils — by the advances and retreats of the Atlantic Ocean across our region; and (3) the formation of the present Chesapeake Bay by rise of sea level after the last Ice Age. Having been introduced to the work of Professor Tanya Atwater at the University of California, Santa Barbara, by Dr. Peter Vogt, a local marine geophysicist who has studied the formation of the Atlantic Ocean and the geology of the Chesapeake Bay region, we want to find a way to incorporate her work. Dr. Atwater’s deceptively simple animated approach to explaining

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very complex geologic changes is ideal for what we are trying to do.

Skeleton, muscles, heart, brain, lungs … we still need a nervous system to connect all these pieces together. Enter John Veverka. Shortly after work started on this project, Veverka had come to help us develop an interpretive master plan for the museum. Over four days, we wrestled with the overarching vision of the museum, what sets us apart from other museums, how to tie our three distinct subject areas together in ways that will resonate with a variety of audiences, and how to engage visitors in our message. We also ask Veverka to review the initial conceptual design for the timeline. He urges us to test the design with the public. In response, exhibits posts a scaled down version in the paleo hall for visitor comment.

The comments suggest that the design needs refinement. On a second visit, Veverka helps us rethink our approach and we come up with a better design. When we test the new timeline, public response is much more positive and everyone clearly gets the point. He also helps us think about how to present the new information in ways that will relate clearly to the existing paleontology exhibit, and how to introduce the content in all three galleries so that they relate better to the overall theme, which is to “explore how our prehistoric past, natural environments, and maritime heritage come together to tell a unique story of the Chesapeake Bay.”

In tying the exhibit elements together, the “nervous system” is particularly important. Just as the body’s nervous system communicates from the brain to the muscles resulting in action, we need to link what people see with what they understand about the information we are trying to communicate. To achieve this, we begin to move beyond the essential questions, and our timeline begins to grow deeper and more textural. Using measurements provided by the paleontology staff, exhibits lays out each geologic period to represent proportionately the correct amount of prehistoric time. We decide to add a series of images of what the landmass that now includes the United States looked like at different times in Earth’s long history — information that definitely puts a new perspective on climate change and will help visitors relate to this distant prehistory. Following up on another Veverka suggestion, exhibits adds silhouette images of representative flora and fauna in the different periods. Every element is researched, vetted by the team, tested, and refined before being finalized.

Simultaneously, our paleontology staff has been identifying and collecting fossils — both actual and cast replicas — to illustrate some of the iconic life forms that characterize different periods of prehistoric time. Many of the selected fossils come from private collectors and amateur fossil hunters who have proven to be invaluable allies in our efforts to present a more comprehensive picture of Earth’s history and the Miocene epoch. Every image, fossil, artifact, and piece of information has to be researched, written up, edited, graphically illustrated, and packaged for digitalization. The animation script is drafted and put through multiple rewrites. Dr. Vogt invests months in
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VOLUNTEER COUNCIL OFFICERS FOR 2007-2008

Museum volunteers, all of whom are all members of the Volunteer Council, met in September and elected the officers for the coming year. Shown here are (from the left): Diana Waring, vice president; Harry Childers, treasurer; Peggy Hovermale, president; Anne Harrison, corresponding secretary; and Teddie Watts, recording secretary. There is a council meeting on the first Tuesday of each month in the museum lounge, and all volunteers are welcome to attend.

CMM photo by Bob Hall

meticulous research to develop maps of prehistoric shorelines and processes. He then forwards these animation “raw materials” to Dr. Atwater, who creates the actual computer animations. Mike Goggi joins a paleo staff field expedition to film the excavation of a dolphin skull from the cliffs, adding to the video clips that will be incorporated on the computers.

Meanwhile, the exhibits team is busy working on the “skin” for our creation. An early decision, selecting a color palette — which sets the tone for the whole exhibit — causes more than a few sleepless nights. Should it be bold and vibrant or warm and earth-toned? A pallet of pastels is chosen. Once the design is set, the graphics technician lays out the spiraling timeline on the computer to use in transferring it to a wall painting. As quickly as the paleo team provides selected fossils, exhibits begins the tedious process of building jewel-like mountings for each and ordering cases to protect the more valuable fossils. The team wants the exhibit to have immediacy for visitors, without noticeable barriers, but the curator is concerned about the security of the artifacts. The exhibits curator designs a low Plexiglas wall that serves multiple functions, including protection of valuable fossils. Lighting is a critical component of any exhibit, and the timeline needs to jump off the wall. New lighting requires new wiring — and an electrician briefly joins our team. Education staff lobbies to allow visitors to touch fossils; the curator objects, due to the difficulty and expense in replacing them. The exhibits team devises a compromise — islands with fossils imbedded in them for visitors to touch. The computer islands represent another set of challenges: what kind of computer is needed and what software? What should it look like? What wiring will it require? The graphics technician plunges in to research these issues, while the paleo staff identifies the fossils to be used. And so it goes — a hundred questions requiring multiple and interlocking answers. The skin is the first thing the visitor perceives when entering the exhibit: the look, the feel, the tone communicated through color, textures, spatial arrangements, lighting, sound, font size and style, and graphics. It is the crucial component that opens visitors’ minds to experience and to learn, or not.

If you have visited CMM in recent months, you have witnessed the messy and convoluted evolution of this new exhibit. When it is finally brought to life in February, we will invite you in to experience the newest member of our exhibit family. Come look, listen, touch, learn — and tell us, have we succeeded? Do you find it engaging? Do you want to learn more? Are the information, presentation, and interpretation well integrated? Does this new section flow into the older part of the exhibit? Do you know how old the earth is and where the Miocene epoch fits into the grand scheme? The anatomy of an exhibit, if successful, represents the harmonious functioning of its many parts and creates a synergy that just might change the way you perceive the world. ✡

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Sherrod Sturrock is the museum’s deputy director, Stephen Godfrey is the curator of paleontology, and Jim Langley is the curator of exhibits. Funding for this exhibit was provided by the National Park Service Chesapeake Bay Gateways Program, the Clarissa and Lincoln Dryden Endowment for Paleontology at the Calvert Marine Museum, and from all those who supported the museum’s 2005 annual appeal.

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CMM photo by Bob Hall
VOLUNTEER SPOTLIGHT —

**Farewell to the Kings and an Honor for Paul Berry**

On October 19, 2007, CMM had to bid a fond farewell to Frank and Dede King who are leaving the area for a new home in Hampton, Virginia. The Kings began their volunteer work at the museum in 1985, Frank as an interpreter for the Drum Point Lighthouse and Dede in the museum store. Dede was elected as the first Volunteer Council president in 1991 and continued volunteering until recently. Frank gave his last tour of the lighthouse on October 19, 2007. Their dedication, knowledge, and experience will be missed by all of the staff and volunteers whose lives they touched very deeply. Frank plans to volunteer at The Mariners’ Museum in Newport News, and they have already welcomed him with open arms. We wish them well in their new home. They will be missed!

On Saturday, November 17, museum colleagues and friends came together at a dinner at Asbury-Solomons to recognize Paul Berry’s contributions to the Calvert Marine Museum over the past twenty-five years and to acknowledge his outstanding accumulation of over 21,000 volunteer hours. During those years, Paul has maintained the museum library, edited the newsletter, *Bugeye Times*, for twenty-three years, and served on the museum Board of Governors, including a period as board chairman. Among the honors were a resolution from the Calvert County Board of Commissioners and a certificate from the Maryland State Senate. Capping the event, Director Doug Alves announced that the museum’s library will be renamed the Paul L. Berry Reference Library. A suitable carved sign will be made and hung over the entrance to the library facility in the Administration Building. Thank you Paul for all of your volunteer work at CMM. (Paul is not leaving the museum and will continue to assist readers in the library and edit the *Bugeye Times.*)