

The ECPHORA



The Newsletter of the Calvert Marine Museum Fossil Club

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Florida Manatee Found In Patuxent River

On April 12th, Calvert Marine Museum Exhibits Meister, **Skip Edwards** discovered a dead Florida manatee below one of the low bluffs along the Patuxent River. The male manatee, about 9' long, was probably the one that was spotted in the Patuxent River last September and October, but then vanished! If this is the same individual, then it did not migrate back to Florida and probably died of hypothermia (manatees can't tolerate cold water). (As an aside, plant material was found in an intact section of its intestine, so it probably did not starve to death). It likely drifted ashore once the river warmed up where it really began to decompose. Buzzards had been feasting on the smelly mess as evidenced by all the foot prints seen around the carcass at low tide. Florida manatees have been known to migrate northward and enter the Chesapeake Bay. John Nance and I assisted Dr. Cindy Driscoll and her team from the Maryland Department of Natural Resources with their necropsy on this ill-fated sea cow. The skeleton is currently being prepared at the Smithsonian's osteology cleaning facility in Silver Hill, MD, and it may eventually be put on display at CMM. ☀



As it was found - a belly-up Florida manatee along the Patuxent River. Buzzard footprints surround the deflated body and partially scattered skeleton. Photos by S. Godfrey.



Skull of the manatee, the lower jaw is mostly visible because the animal came to rest on its back. In the upper left quadrant notice the finger/flipper bones.



But Wait There's More...

Human Leg Washes Ashore at CRE

You won't see this everyday. On Saturday, March 19th, I received a phone call from **George Oliver**, a resident and fossil collector who lives in the Chesapeake Ranch Estates. He announced to me that he and his daughter (**Brandy**) had just found a human leg that had washed ashore. To add to the mystery, clayey sediment had "glued" it to the side of a wooden plank, presumably the remnants of the old coffin in which the human was originally buried.



Divers from Calvert County's Search and Rescue team (under the direction of **Detective Ray**) spent several hours combing the local sandy bottom of the Bay, but no other related parts were found. Although **Dr. Ed Chaney** (Jefferson Patterson Park) and **Kirsti Uunila** (Calvert County Historic Preservation Planner) came up with a couple of possible scenarios for a burial ground on the floodplains in the area, no conclusive site of origin has been identified yet. Over the years, other collectors have found human remains as they have been looking for fossils. Just when you thought you were alone on the beach...you just never know who might be out there with you. The leg will be studied by State and local Archaeologists. Photos by George and Brandy Oliver.



Notice the foot bones in the lower right-hand quadrant of the photograph. Notice also the line below the foot, presumably marking the remnants of some sort of foot covering. Photos by George and Brandy Oliver.

Stephen Godfrey ☼

Large *Otodus obliquus* Found



At Purse State Park in late October, **Pam Platt** gleefully displays a relatively large *Otodus obliquus* that she found partially submerged beneath a large tree in the Potomac River. The tooth measures close to 2.5 inches in length. The cusps are in excellent condition, although the tip of the blade was broken. Doesn't she look disappointed with her find? Photo and text submitted by B. Hargreaves. ☼

Phenomenal Blue Marlin

The following pictures show what can happen when a blue marlin rams head-long into the floating load-hose of an oil pipeline. The bony snout of the blue marlin pierced the thick industrial-strength floating hose of the FPSO Girassol (the name of a huge oil platform) in Angola, Africa.



The FPSO Girassol (the huge oil platform off the coast of Angola, Africa). Image from: <http://www.offshore-technology.com/projects/girassol/girassol2.html>



*Here you can clearly see the marlin imbedded in the floating load-hose on the FPSO Girassol. Load operations were shut down for a few days while they replaced the hose. This loading hose is approx 24 inches in diameter, through which the terminal pumps about 250,000 barrels of oil a day. Image courtesy of **Dave Hart**.*



*An excised section of the load-hose shows that the blue marlin rostrum rammed through 5-6 inches of the dense rubber hose. Imagine what that rostrum would do if impacting lesser creatures. What CMMFC members need to find now is a fossil billfish rostrum imbedded in the skull of a Miocene or Pliocene whale or dolphin. Image courtesy of **Dave Hart**. ☀*

Ecphora Shell Survives Injury



*Since the name of this publication is The Ecphora, it only seems fitting to have another vignette about our favorite shell. During the growth of this snail it suffered an injury or developed a growth abnormality that caused disfiguration along the costae (i.e., the prominent shell ridges). Whatever the nature of the trauma, it did not end the life of this resilient critter. Scan and text by **John Nance**. ☀*

Tim Miller on Display



Here **Tim Miller** displays a suite of fossils and modern bone - on behalf of the CMMFC - at the Gem, Lapidary and Mineral Society of Montgomery County (the show is held in March each year at the Gaithersburg fairgrounds). He and **Mike Ellwood** have been setting up display cases and the hands-on exhibit for over 20 years. That club has been taking field trips down to Calvert County and Lee Creek for years and they get to help young families with children learn of the fossils in this area, and where/how they can collect them for themselves. Photo and text submitted by Mike Ellwood. ☼

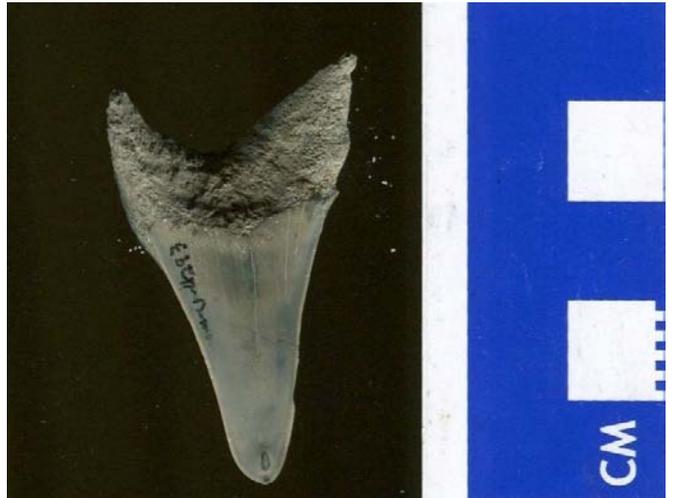
Fossil Fox Tooth?



Pam Platt found this small carnivore tooth as float along Calvert Cliffs. It is a bit of a puzzle because in both its size and shape, it nearly matches that of a living fox, but foxes are not yet known from the Miocene of Maryland. Or is it just a recent tooth that looks a lot like it is fossilized... Scan by S. Godfrey.



Mako Tooth Pierced



During the formation of this *I. hastalis* tooth (CMM – V – 4293), and almost certainly before the tooth was fully mineralized, something pierced the lingual (i.e. tongue) side of the tooth causing a slight compression and swelling of its tip. My guess is that a fish fin spine impaled the baby tooth when the extinct mako bit down onto the fish. Scan by John Nance. ☼

Collection Spotlight Series

In the first of this series, I will highlight some of the late **William J. Holliman Jr.** collection that was donated to the Calvert Marine Museum in 1994. This series is designed to showcase the fossils donated to the museum that are now housed in our permanent collection. CMM deeply appreciates any and all donations and this is a way for us to thank all those people who have been a part of building the collection into what it is today.



Ten specimens of *Abertella aberti* (Sand Dollars) were part of his collection that came to CMM (CMM-V-1405). Of all the specimens that were collected from the Choptank Formation along Scientists Cliffs, these are some of the most exquisitely preserved specimens currently in the collection. These 12 million-year-old shells provide a paleo-environmental glimpse into the continental waters of the Atlantic's past because sand dollars are shallow water invertebrates that prefer to live on the muddy and sandy sea floor.

In the next incarnation of this series we will showcase some of **Wally Ashby's** collection. Thanks to his efficacious and meticulous field records and collecting techniques he contributed a great deal to the Calvert Marine Museum and to paleontology.

Submitted by John Nance. ☀

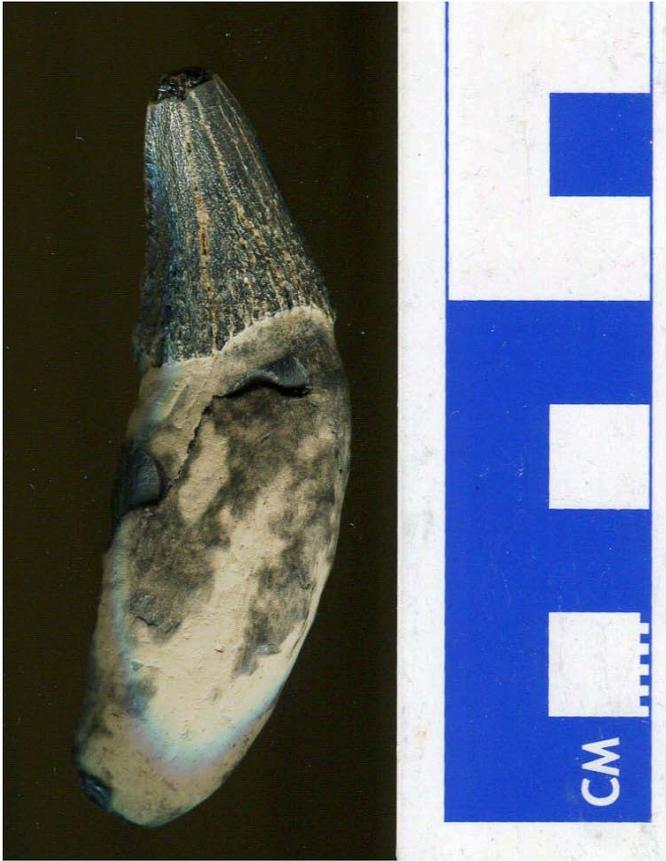
Major New Donations

In late February, **Stephen Godfrey** and I met with **Aaron Alford**, **Jason Osborne**, and **Katya Derzon**. They were interested in seeing our current collection of fossil shark teeth, whereupon, they offered to donate specimens from localities and geologic times that are poorly represented in our collection. During their first visit they donated shark teeth from a number of rare species. Furthermore, they donated shells and other vertebrate fossils from locations along the bay and its tributaries. Thanks to their dedication to, and interest in furthering the science of paleontology, they were able to provide accurate stratigraphic and geographic information with these specimens; the value of this kind of data can not be overstated. We look forward to collaborating with them for many years to come.



Katya Derzon explores some of the Calvert Marine Museum's shark tooth collection; Stephen Godfrey looks on with his usual scientific demeanor. Photo by Jason Osborne. Submitted by John Nance. ☀

Large Squalodon Tooth Found



A large Squalodon tooth measuring almost 3" was collected along Calvert Cliffs. Scan submitted by John Nance. ☀

Upcoming Events

July 10, 2010. Saturday. SharkFest at the Calvert Marine Museum. Volunteers are needed to help with the Paleo Department and our Fossil Club exhibits. Please contact Stephen Godfrey at Godfresj@co.cal.md.us or by calling 410-326-2042 ext 28.

September 11, 2010, Saturday. CMMFC Meeting at 1:00 pm. Free public lecture will follow at 2:30 in the auditorium.

October 9-10, 2010. Saturday and Sunday. 10:00 am – 5:00 pm. Patuxent River Appreciation Days at CMM. Please contact Stephen Godfrey at Godfresj@co.cal.md.us or by calling 410-326-2042

ext 28, if you will be able to lend assistance for the event or wish to display some of your collection on one or both days.

November 13, 2010. Saturday. Pizza Party...CMMFC Meeting at 12:30 pm. Free public lecture will follow at 2:30 in the auditorium. The November public lecture will be given by **Dr. Jeffery Halka**, Acting Director of the Maryland Geological Survey. He will speak on local geological processes that have shaped the Chesapeake Bay.

CALVERT MARINE MUSEUM FOSSIL CLUB MINUTES

The CMM Fossil Club Meeting was held Saturday, February 12, 2010 in the Exhibition Building at the Calvert Marine Museum.

Treasurer **Grenda Dennis** called the meeting to order at 1:16 p.m. She welcomed all members and guests.

The Membership Report was given by **Pam Platt**. The Club has 56 paid members (out of 80.) She will send postcards to remind them that in order to go any trips they must pay.

The Treasurer's Report was given by **Grenda Dennis**. She did not have an updated report but as of November '09, the club had \$5489.00 in its bank account.

Bob Ertman was absent, so no field trip report was given.

Dave Bohaska was absent, so there was no Smithsonian report.

Stephen Godfrey suggested that if the Club decided to send out its newsletter in a PDF format via email to most club members, then perhaps there would no longer be any need for membership dues, since those funds went to pay for the production costs (photocopying and mailing) for the newsletter. He suggested club members discuss this possibility at a future meeting. If this were to happen, this would certainly make the membership chairperson's job much easier. Club members would continue to be members of the Calvert Marine Museum Society. Another advantage would be that all Museum Society members would receive *The Ecphora* at the time of publication. Paper copies would still be

mailed out to those who do not have a computer or to those who specifically request a paper copy.

There would still be a liability form to sign in order to go on all field trips.

At the April meeting there will be more information about field trips.

The CRE suit against CMM court case will take place April 6 in Prince Frederick. CRE is suing CMM for digging out a whale skull from the cliffs. This will be open to the public.

Someone questioned about a display case for members to show some of their finds. Stephen answered that there is a display case, it now houses the "finds" of **Jeff Sparks**. (Editor's note: The shark-bitten coprolites are now on display in this table-top exhibit case). Exhibits in this case are usually there for about 4 months.

Our club is looking for someone to volunteer to be in charge of hospitality at club meetings. **Christa Conant** suggested that we have a sign up sheet and get different people to provide for each meeting. Someone else suggested that a note to that effect could be put in the next *Ecphora* to ask for a permanent one.

Stephen said the Museum's web page is being completely redone, but it will not be ready until September or October.

Grenda has contacted some Virginia fossil clubs to try and arrange joint field trips.

President **Bruce Hargreaves** sent a report about upcoming field trips.

- Saturday, March 20 Drum Cliff or Jones Wharf (Bob Ertman)
- Saturday, April 10 Red Hill, PA (Bob Aereem)
- Saturday, April 24 Cove Point (Christ Conant)
- Saturday, April 28 Plum Point (Judi McKay)

Remember to contact Bruce H. or Robert E. for details on field trips.

Paul Murdock announced that Lee Creek will not host fossil clubs this spring. He also noted that all their fossil guides are being given detailed training, so this he took to be a good sign that PCS Phosphate is not planning on closing the mine permanently to fossil collectors. He asked if the club wanted to host a picnic. He suggests a place where

we can hunt for fossils, maybe Long Beach which has a community house. A time and date will be decided.

On February 19, a free public lecture by **Dr. Peter Krantz** on Maryland dinosaurs was given at the Navy Academy in Annapolis.

Several members brought fossils and projectile points to show.

After the meeting most went to the auditorium for a public presentation by Stephen Godfrey who provided an update on his research activities.

Submitted by **Flo Streaan** ☀

Summary of the April 24 Meeting

1. After deliberating for several minutes, the members in attendance voted unanimously to contribute \$400 to the CMM to help offset the cost of purchasing a new laser printer to replace the current one which needs recurring maintenance. The \$400 figure was decided upon by roughly dividing the projected cost of the printer (\$2,000) and dividing it by the approximate number of clubs affiliated with the CMM (canoe club, woodworking club et al), a number estimated to be around five.
2. The existing slate of officers was reelected to another one-year term by unanimous vote.

- President--Bruce Hargreaves**
- Vice President--Marc Griffin**
- Secretary--Flo Streaan**
- Treasurer--Grenda Dennis**
- Membership--Pam Platt**

Our next meeting will be held on Saturday, Sept. 11 beginning at 1 p.m.

Submitted by Bruce Hargreaves ☀

CMMFC
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Secretary	Flo Streaan	N/A
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Spring Trip Leader*	Kathy Young	N/A

The Ecphora is published four times a year and is the official newsletter of the Calvert Marine Museum Fossil Club. **The Editor welcomes contributions for possible inclusion in the newsletter from any source. Submit articles, news reports of interest to club members, field trip reports, and/or noteworthy discoveries.** All opinions expressed in the newsletter are strictly those of the authors and do not reflect the views of the club or the museum as a whole. **Copyright** on items or articles published in *The Ecphora* is held by originating authors and may only be reproduced with the written permission of the editor or of the author(s) of any article contained within.

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