



JANUS

The Newsletter
of the
North Carolina
Fossil Club
www.ncfossilclub.org

2011 Number 4

2012 Spring Calendar

January

15 NCFC Meeting - NCMNS, 11 West Jones Street, Raleigh.
1:30 pm, Level A conference room. Speaker: TBA

February

4 Schiele Museum Fossil Fair - 1500 East Garrison
Blvd., Gastonia. 9:00 - 4:00 Saturday, 1:00 - 4:00 Sunday,
General contact: 704-866-6900.

March

18 NCFC Meeting - NCMNS, 11 West Jones Street, Raleigh.
1:30 pm, Level A conference room. Speaker: TBA.

April

28 Norwood Arbor Day and Fossil Fair 9:00 - 4:00 Contact:
Ruffin Tucker at 704-784-1672 or paleotck@netscape.net.

Our complete Spring calendar will be in *Janus* 2012#1, in
March.

Officers for 2012

With new Board members elected at the annual meeting in
November our officers for 2012 will be:

President	Rick Bennett
Vice President	Jonathan Fain
Immediate Past President	Mary Boulton
Treasurer	Trish Kohler
Secretary	Joanne Panek-Dubrock
Membership Chairperson	Mike Bruff
Editor, <i>Janus</i>	Richard Chandler
Board	Jeff Cohn (2013)
	Katie Graves Dodson (2012)
	Joy Pierce Herrington (2013)
	Jim Mahoney (2013)
	Tracey Mayo (2012)
	Jodie McDaniel (2012)
	Eric Sadorf (2012)
	Diane Willis (2013)

Last Issue of 2011

This is the last issue of *Janus* for 2011 so it is time to renew
your membership in the North Carolina Fossil Club. Trish
Kohler, our Treasurer, has asked me to implore you to send the
correct amount for renewal. If you have **ever** been a member of
the NCFC (not simply last year) you can renew your membership
for \$15 (Individual) or \$20 (Family). If you have **never** been a
member, the fees are \$20 (Individual) or \$25 (Family). Trish tells
me that each year 8 - 12 members add an extra \$5 to their dues. It
is such a nuisance (and expense) to correct that it was decided not
to correct it and simply add the extra \$5 to the Treasury.

Time to Speak Up

Can you imagine our fossil fairs without representatives
from the Smithsonian? Think about it...can you even imagine
it?

Who would help us, and the hundreds of community
residents who bring treasures, identify what we have found?
Who would have pertinent literature or sample specimens to
put our treasures in perspective? How would we ever know
that we had found material worthy of scientific study? Who
could help us develop in ways that strengthen us as we relate
to others in our common interest in paleontology?

Authorization for Smithsonian staff members to participate
in field activities and future fossil fairs is not a sure thing!
There is strong competition at the Smithsonian for funding
dollars.

It could be easy for the Smithsonian staff to deem off-
campus service provided by their staff members as less
important and expendable unless we speak up. All of us,
including the Museums who participate, local educators, and
fossil collectors in various locations across the Carolinas that
host our fossil fairs need to let the Smithsonian hear that we
all reap incredible benefits!

The Smithsonian benefits also. Their staff needs to know
our fossil-bearing formations and they need to see what
is being collected. Here is one example. Whale skulls
collected from the beach in Onslow County, NC were
brought to the Smithsonian's attention by local collectors,
the Meffords. In late 2008, Dr. Mark Uhen described the new
Odontoceti family, new genus, and new species, *Albertocetus*
meffordorum, as the first time a whale from the Oligocene
Epoch had been collected outside the Charleston area. A new
tool - strontium testing - indicated the formation and expanded
what we know about North Carolina's fossil record. For those
of us interested in whales, that was huge but that was not the
end of this story. At the 2011 North Carolina Fossil Fair, I
watched as the Meffords brought in another - but different
from *Albertocetus meffordorum* - whale skull which they
donated to the Smithsonian.

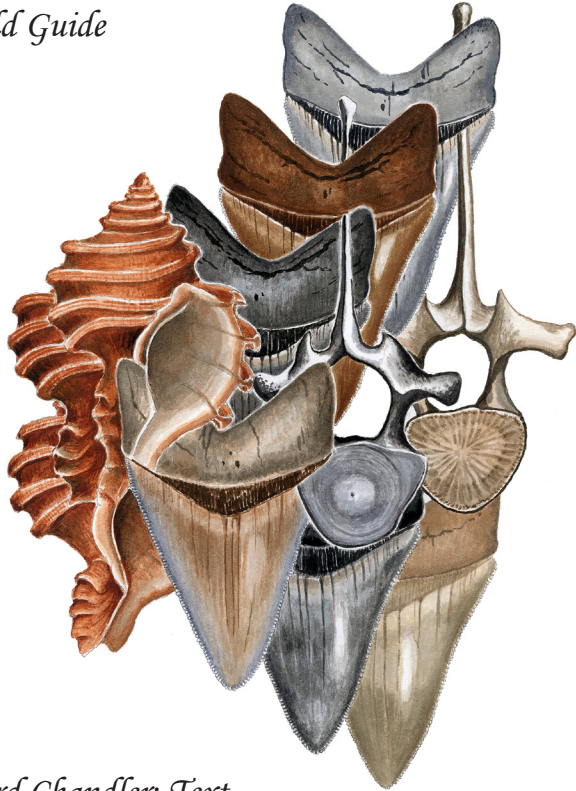
Support for the trips to North and South Carolina has come
through the Kellogg Fund. We in our various communities
look for ways to help them defray costs by providing housing
and meals but most costs are born by the Kellogg Fund. Dr.
Nicholas Pyenson, Curator of Fossil Marine Mammals at
the Smithsonian decides how the Kellogg Fund is used. You
can contact him directly by email or through the post office.
Ask him to continue this educational outreach that touches so
many. Invite him to come join us.

His email address is pyensonn@si.edu. And his snail mail
address is Dr. Nicholas Pyenson, Department of Paleobiology,
Smithsonian Institution, PO Box 37012, MRC-121,
Washington, DC 20013-7012.

Joy Herrington

Neogene and Quaternary Fossils of North Carolina

A Field Guide



Richard Chandler: Text

John Timmerman: Illustrations

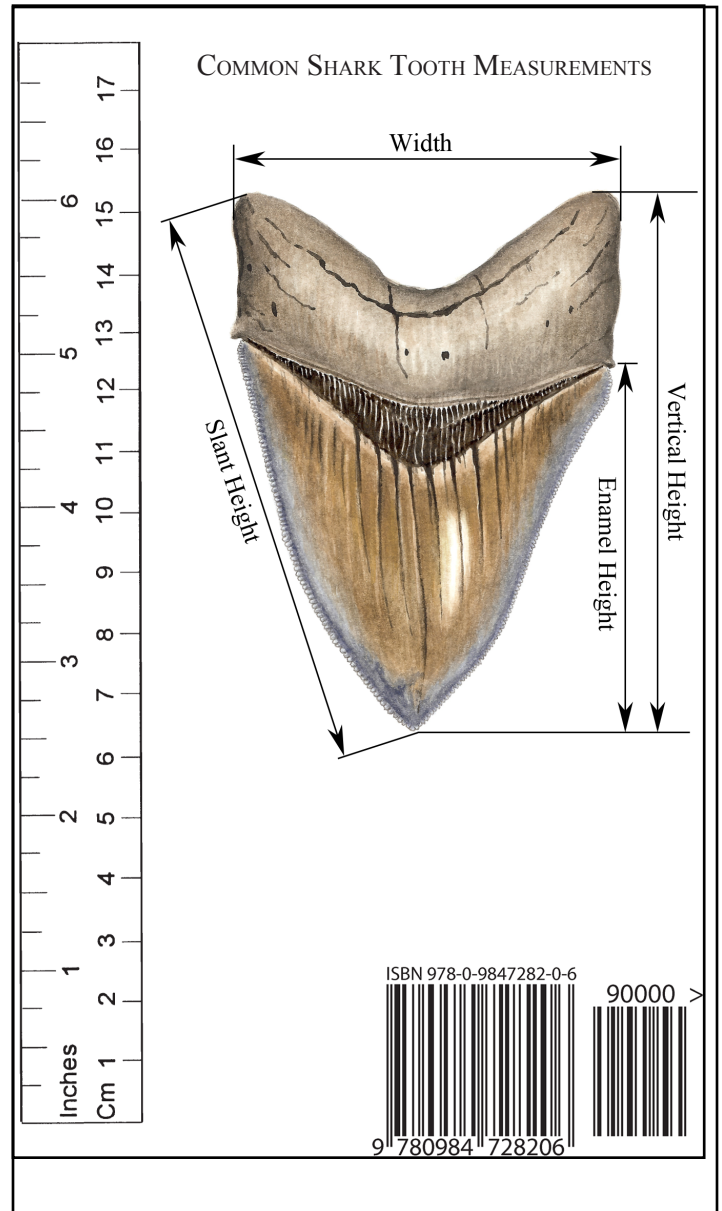
The North Carolina Fossil Club

Revised and Expanded: 2011

As you can see from the above picture, John and I have produced a new edition of our popular field guide, *Neogene Fossils of North Carolina*. When originally published in 1994 it contained vi + 42 pages; the new edition contains vi + 58. The 16 new pages are mostly drawings of invertebrate fossils although there is a new page devoted to ray teeth. There is a new table of included mollusks (~75 species), similar to the old table of included shark and ray teeth (32 species). As you can see if you are viewing the .pdf version of the newsletter, the cover is in full color. The back cover now contains a guide for shark tooth measurements, similar to the back cover of *Cretaceous and Paleogene Fossils of North Carolina*. The difference is that it is also in color and has a drawing of a spectacular, heart-shaped *Carcharocles megalodon* tooth.

Another difference is that the new edition will have an assigned ISBN barcode as will our other two books (see next page for illustrations of their front covers). This means that they will be listed in *Books in Print* and should be more attractive to mainstream book sellers.

Regardless of appearances here, *Neogene* and *Cretaceous* are each 5½" × 8½" while *Seal/Dolphin* is 8½" × 11".



Joy Herrington will continue to handle book sales. The Field Guides are \$5.00 each if purchased in person from Joy. The mail order price is \$7.00 each. Seal/Dolphin is \$10.00 each (\$13.00 by mail order). Joy brings books to our meetings so you can purchase them there. If you cannot attend, a mail order form is on the next page; a full-sized one is also available on the Club's web site:

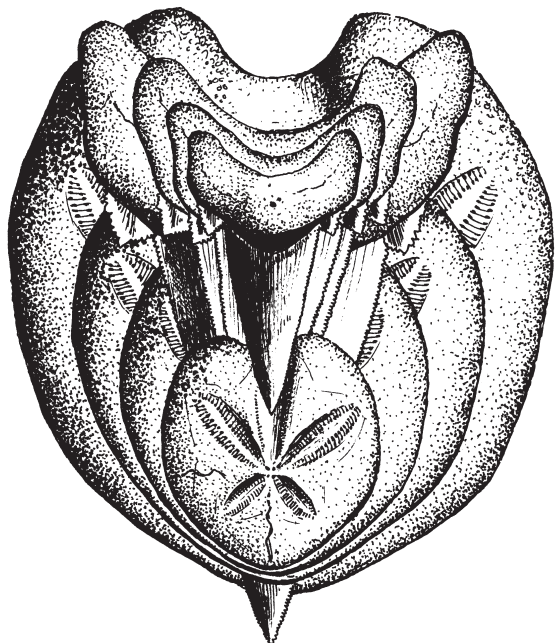
www.ncfossilclub.org

Speaking of which, if you haven't visited the Club's web site in the last several months, you are in for a treat. It has been completely revised by a committee chaired by Diane Willis (also: Mike Bruff, Richard Chandler, Jeff Cohn, Joanne Panek-Dubrock, Alan Freeman, and Linda McCall). There is an up-to-date calendar of events, a **complete** inventory of back issues of *Janus* which can be downloaded by members, an extensive photo gallery of NC fossils, and trip reports, just to hit the highlights. We owe this group a profound THANK YOU!! for a

GIGANTIC amount of work.

Cretaceous and Paleogene Fossils of North Carolina

A Field Guide



John Timmerman: Illustrations

Richard Chandler: Text

The North Carolina Fossil Club

Corrected Edition: 2008

Seal/Dolphin



Phoca/Stenella

A Skeletal Comparison of Two Marine Mammals

John R. Timmerman



Book Mail Order Form

Neogene and Quaternary Fossils of North Carolina – A Field Guide

_____ @ \$7.00 each (includes postage and handling) \$ _____
 _____ @ \$5.00 each for bulk order of 10 or more copies \$ _____
 (postage and handling waived)

Cretaceous and Paleogene Fossils of North Carolina – A Field Guide

_____ @ \$7.00 each (includes postage and handling) \$ _____
 _____ @ \$5.00 each for bulk order of 10 or more copies \$ _____
 (postage and handling waived)

Seal/Dolphin, A Skeletal Comparison of Two Marine Mammals

_____ @ \$13.00 each (includes postage and handling) \$ _____
 _____ @ \$10.00 each for bulk order of 5 or more copies \$ _____
 (postage and handling waived)

TOTAL \$ _____

To place your order:

Send your check, money order or agency's purchase order payable to the North Carolina Fossil Club to:

North Carolina Fossil Club
 PO Box 25276
 Raleigh, NC 27611-5276

Tell us where to send your order:

Name: _____
 Address: _____

Phone or email if we need to contact you: _____

Thank you!

Fossil Collecting

(from the perspective of “I hate to cause her so much aggravation, but this sure is fun”)

Pam and I got married in 1971. In '74 and '77 the two girls came along. Sure we were living in a mobile home and knew we were “trailer trash,” but love sustained us and life was good. We saved enough money to get into a house and things were looking better...and then 1996 happened. I never meant to hurt her. I should never have been reading those d---n magazines. National Geographic...you know, the ones with the sexy, glossy pictures. The summer of 1996 was full of sexy pictures of dinosaur bones and eggs. I got drawn in. I never meant to hurt Pam, and she never saw it coming, but in the summer of 1996, I took a mistress. Her name was Fossil.

Some wives leave when a mistress shows up. Others stay and try to work things out. Pam chose to stay, believing, I think, that Fossil would be a passing fancy and that she would soon leave. After fossil digs to central Mexico and to South Dakota, it was beginning to be obvious to Pam that Fossil was not going to leave. Then I suggested that we join this club called the NC Fossil Club. Pam thought that my having this mistress was bad enough...did she want to get involved with a whole bunch of folks with this same affliction?

Well, she found out that the Fossil Club folks were really a nice lot...actually some of the nicest people you'd ever want to meet. Meeting these nice folks was enough to keep Pam's interest for a while, so in 2000 we went to Bynum, Montana, to the Two Medicine Dinosaur Center and took a 10-day course in Amateur Field Paleontology. Although Pam was participating, it must be remembered that this was still mostly my interest. As we sat in a laundromat about a week into the course of study, helping each other cram for the end-of-course test, Pam suddenly said, “What am I doing here in Montana, sitting in a laundromat, studying for a test? I'm supposed to be on vacation. I'm not going to do this anymore. I didn't come out here to spend my time like this!”

Uh, oh...got to do some quick thinking! We had been traveling together...living together...really. I thought Pam had accepted her, but no, Pam was apparently about to kill my mistress, Fossil. I decided to appeal to her teacher instincts. There were about five of us taking the 10-day course. I told Pam...”That's OK, just forget about studying anymore. Since we're already enrolled in the course though, we have to take the test. Since you're not really too interested in fossils, I'm sure Dave (Dave Trexler—the paleontologist teaching the course) and the other folks will understand when you flunk the test.” Pam just looked at me a long time with that glare that says “you're gonna pay for this.” Then she picked up her study material and began her preparation again. Pam ended up with the second highest score on the end-of-course test. Whooh!...mutiny averted...Fossil was allowed to live. The affair continued.

Multiple trips back to Montana have netted Pam and me many interesting experiences collecting dinosaur fossils as volunteers for the Two Medicine Dinosaur Center. These trips have also given me the opportunity to purchase fossils from Dave Trexler's step father, John Brandvold. I purchased a set of hadrosaur foot and leg bones from John and then Dave mounted them for me. The problem then, is where do you put a 9 ½ foot tall dinosaur leg?

The answer, of course, is up to Pam! She says there's no place for it in the house. We do have a sunroom with a ceiling high enough. I can always hope she'll let me put it there. Folks have different addictions...alcohol, other drugs...and then for some of us, it's our fossils. I am very fortunate that Pam tolerates my mistress by the name of Fossil.

Charlie Causey

The Joy?...of taking a 9 ½ ft tall dino leg to the Fossil Fair

(from the “good wife's” perspective)

You want to do what? Who's going to help you carry that 90-lb femur? How are you going to hoist that femur up into the air on top of the tibia?

Living with someone who has an obsession with fossils and especially dinosaur fossils can be quite interesting! For example, what do you say when he shares his dream to have a complete hadrosaur leg... mounted and standing tall...possibly ten feet high? Where do you put something like that? Well, I dismissed the idea thinking that's not likely to happen. Just a dream... and everybody can have a dream! Wrong! With fossil lovers and dreams...they can find a way!

Fast forward a few years and along comes a paleo friend who has a plane needing the skills of an aircraft mechanic and an aircraft mechanic seeing a paleo friend with the skills of mounting a collection of dino leg bones—femur, tibia, toe bones, etc. So what do we have? After several months of both working their own skills, we ended up with a complete hadrosaur leg, museum-mounted, delivered to our house.

Okay! Now...where do you put a 9 ½ ft. tall dino leg in your house? What are you going to do with that thing? This is kinda like a dog chasing a car. Does he know what he'll do with it if he catches it? I don't think Charlie thought about where he would put a hadrosaur leg if he actually had one. It was ok when it was a dream, but now that it's a reality, what do we do? “No problem,” he says, “looks like it'll have to go in the middle of the sunroom (where the ceiling peaks at ten feet).”

“Not in the sunroom,” I plead. “Where will we put the Christmas tree? What if the leg falls on the grandchildren? That leg doesn't fit my décor! Maybe it is deep time design according to Fung Shui, but I really don't want to give up sunroom space to a 9 ½ ft. tall hadrosaur leg. Yeah, maybe we could put some of the plants around it?” Uh...I don't think so. What's a “good wife” to do?

The “good wife” has limits to her goodness. The dilemma... how do you support your beloved in the things that bring him joy and alleviate the stress of work? Finally the answer ... and both of us can benefit! “Okay...I think it's time we built a hobby/ storage building for the fossil lover as long as I can have some storage space for all our other stuff that the attic won't hold! Dilemma resolved...for the time being!

All is well...until...November Fossil Fair planning time! You can't be serious! How are you going to load, unload, set-up, etc. that 9 ½ ft. dino leg? You expect me to help transport, set-up and be a happy, supportive wife? Of course...I load, unload, set-up, and smile all the while...because it gives him so much joy? Well yes, because I'm the “good wife” (but also because I have a little more space to put “stuff” in the new storage building he built to house his 9 ½ ft. tall hadrosaur leg!) *Pam Causey*

See the back cover for a photo of the Montana dig which led up to
The Leg.





Trip Reports

Tar River Petrified Wood

The Tar River is one of my favorite hunting grounds for petrified wood. I probably have 50 pieces or more from here, with some of them weighing hundreds of pounds. Most of the wood ranges in age from the Pliocene to Miocene epochs. However there is one spot only a few hundred feet in length that appears to be Pleistocene to recent in age. I have several pieces that are half stone and half lignite from this site.

When Hurricane Floyd came through in 1999 it washed many trees into piles on several places along Tar River, Fishing Creek and other streams in eastern North Carolina. I think the same thing happened sometime during the Pleistocene. One of these piles of trees apparently got covered with sand pretty quickly. Over thousands of years the wood began to petrify.

Then Hurricane Floyd came along and washed out the sand bar, which exposed the logs once again. A few years later a couple of old rock hunting geezers came along and discovered the piles of petrified wood. After collecting several large pieces they noticed that these pieces of wood were different than other pieces found along the river. It was then that they decided to share the site with other people.

And so began the Tar River petrified wood trip on October 8, 2011. We had a total of 9 people to show up for the trip. We gathered our collection of boats, kayaks and canoes and chucked them in the river pretty quickly, then proceeded to splash our way up the river. About 45 minutes later we came across the first piece of petrified wood. It was about 6 feet long and probably weighs about 550 pounds. Since that is too much weight for this old geezer to pick up, I left it alone and splashed up the river a couple hundred more feet.

Finally we made it to the main collecting area, where there are very many large pieces of wood with one piece probably weighing over 1000 pounds. Everyone beached the boats and started poking around in the mud to find smaller pieces of wood. I think everyone found at least a couple pieces, and I know for sure that everyone found plenty of mud.

The day warmed nicely as soon as we started finding petrified wood. There were several pieces large enough, that I had to struggle to direct the people how to get them in the boat. After all that directing I was getting hot and tired so I sat on my kayak to rest a few minutes. I looked down in the edge of the river and thought I saw a large fossil. My heart started racing immediately, but after a few seconds I realized it was just my reflection on the water. As I reflect back on the day now, I think everyone enjoyed being out on the river and away from the crowds. Can't wait to go back again.

Rufus Johnson



Martin Marietta – Rocky Point

Eighteen members of the North Carolina Fossil Club gathered on September 23, 2011 for the annual Fall collecting trip to Martin Marietta Limestone Quarry at Rocky Point, NC. Many members had trouble driving to the quarry due to heavy rains and road closures. After the usual paperwork and a safety orientation, the group caravanned through very heavy mud to the usual collecting site. Anticipations ran high due to several previous weeks of rain, which left the collecting area well-weathered with a lack of footprints. Members slowly spread in all directions as the collecting began. The day turned out hot and humid, with the rain holding off until after 3:00. The group collected the entire day.

Although Eocene echinoids are common, Linda and Bruce McCall's *Linthia harmatuki* in matrix was certainly an uncommon find and one that excited the entire group. The *Carcharocles auriculatus* shark tooth has long been a prized tooth of Rocky Point. During the course of the day, four were recovered by the group. Eric Sadorf's was outstanding and one that would bring a smile even to a veteran collector as he. Two were also collected by Earl Guertin and one by Jill Mitchell. Both of Earl's "ricks" had beautiful bourlettes and nice serrations. The rarest tooth find of the day was Tracy Mayo's *Brachycarcharias lerichei* along with her comatulid crinoid and sawfish rostral cartilage. There were many beautiful Cretaceous echinoids found with an astonishing ten *Hardouinia kellumi* reported. Chris Mayo found one while Todd Powers, Debbie Young & Billy Palmer team and Eric Sadorf each found three! The fossil collecting duo's of Chris and Tracy Mayo as well as Debbie Young and Billy Palmer spent a good deal of time collecting in the Cretaceous. Their efforts afforded them a bounty of the smaller *Hardouinia mortonis* echinoids. Roxada Story's labor of the day was an exceptional *Hardouinia mortonis* in matrix. Other finds included Ralph Brinton's Mako, a sawfish rostral tooth and disc found by Jill Mitchell as well as an assortment of spinal disks and shark vertebrae by Charlotte and Oscar Jones. Don & Theresa Muller as well as George Marrier found a nice assortment of teeth and echinoids. All-in-all, everyone seemed to have a good time. To top things off at the end of the day, we had a very fortunate encounter with nature ... a beautiful rainbow. Our thanks goes out to the generosity of Doug Pope and Martin Marietta.

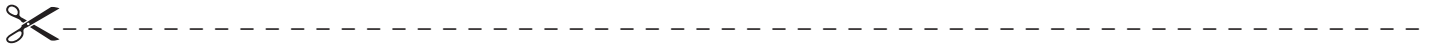
David Sanderson



NORTH CAROLINA FOSSIL CLUB, INC.

(Founded 1977)

PRESIDENT	Rick Bennett	(919) 609-9205	Raleigh, NC
VICE PRESIDENT	Jonathan Fain	(919) 518-1591	Raleigh, NC
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	Tracey Mayo (2012)	(252) 445-4781	Enfield, NC
	Jodie McDaniel (2012)	(910) 455-5179	Jacksonville, NC
	Eric Sadorf (2012)	(919) 466-8484	Cary, NC
	Judy Stiles (2011)	(252) 249-2817	Arapahoe, NC
	Diane Willis (2011)	(919) 967-1008	Chapel Hill, NC



2012 MEMBERSHIP APPLICATION - NORTH CAROLINA FOSSIL CLUB

NAME(s) _____

ADDRESS _____

CITY, STATE, ZIP _____

PHONE(s) (INCLUDE AREA CODE) _____

E-MAIL ADDRESS _____

SELECT ONE TYPE OF MEMBERSHIP	<input type="checkbox"/> INDIVIDUAL (NEW)	\$20.00
(ENCLOSE CHECK OR MONEY ORDER	<input type="checkbox"/> INDIVIDUAL (RENEWAL)	\$15.00
FOR THE INDICATED AMOUNT.)	<input type="checkbox"/> HOUSEHOLD (NEW)	\$25.00
	<input type="checkbox"/> HOUSEHOLD (RENEWAL)	\$20.00

Children of NCFC members who are dependent minors and living at home may accompany parents on any trip *EXCEPT* PCS–Lee Creek or where otherwise noted.

Memberships are effective from January through December of the year (or portion of the year) of the date of application. For example, persons joining in August will need to renew their membership 5 months later in January.

The Fossil Club's newsletter, *JANUS*, is mailed out four times a year and is available online for members. Please let us know how you'd like to continue receiving *JANUS*. If you choose to download it from the website, you will receive an email when a new one is published.

☐ I will download *Janus* from website (www.NCFossilClub.org) ☐ please continue to send a paper copy via US Mail

NCFC Liability Statement

The Undersigned hereby acknowledges his/her understanding that fossil collecting is an inherently dangerous activity which can result in serious bodily injury or death, and/or property damage and hereby confirms his/her voluntary assumption of the risk of such injury, death or damage.

The Undersigned, in return for the privilege of attending field trips Related to the collection of and/or study of fossils, or any other event or activity conducted or hosted by the North Carolina Fossil Club (NCFC), hereinafter collectively and individually referred to as "NCFC Events", hereby releases the NCFC, NCFC Board members and officers, NCFC Event leaders or organizers and hosts, landowners and mine or quarry operators from any and all liability claims resulting from injury to or death of the undersigned or his/her minor children or damage to his/her property resulting from any cause whatsoever related to participation in NCFC Events.

The Undersigned agrees to comply with any and all rules and restrictions which may be communicated to the undersigned by the NCFC Event leader and/or landowner and mine or quarry operator and acknowledges that failure to comply will result in immediate expulsion from the premises.

The Undersigned acknowledges that this release covers all NCFC Events and will remain in effect at all times unless or until it is revoked by written notice to the current President of the NCFC and receipt of such revocation is acknowledged.

The Undersigned further attests to his/her intent to be legally bound by affixing his /her signature to this release.

Name _____ Signature _____ Date _____

Name _____ Signature _____ Date _____

MAIL To: NORTH CAROLINA FOSSIL CLUB, P.O. Box 25276, RALEIGH, NC 27611-5276

North Carolina Fossil Club
P.O. Box 25276
Raleigh, NC 27611-5276

A dig in
Montana
which Pam
and Charlie
Causey
participated
in. See their
articles on pp
4 - 5 for the
experiences
which
culminated
in their
aquisition of a
9½' hadrosaur
leg.

