

# JANUS

THE NEWSLETTER OF THE NORTH CAROLINA FOSSIL CLUB

1997 NUMBER 1

# SPRING, 1996 CALENDAR

# March

- 8 ◆PCS Phosphate Mine Aurora, NC Contact: John Timmerman (910) 452-0943
- 20 ♥Martin Marietta Quarry Rocky Point, NC Contact: John Everette (919) 847-4485

# April

- 4-6 Tarheel Gem and Mineral Club Show Kerr Scott Building, N.C. State Fairground
- 12 ★Boren Clay Products Gulf, NC Contact: Ashley Davis (919) 782-7890
- 17 ♥Martin Marietta Quarry Castle Hayne, NC Contact: John Everette (919) 847-4485
- 26 ◆Beachcombing Liverpool Point, MD Contact: George Fonger (301) 977-0318

#### May

- 24-25 Aurora Fossil Festival, Aurora, NC Contact: Candace Holliday (919) 322-4238
- 31 Martin-Marietta Quarry Belgrade, NC Contact: Richard Tellekamp (910) 347-6361
- 31 New Jersey Collecting Trip Contact: Joy Pierce (919) 489-8149

#### June

Green's Mill Run – Greenville, NCContact: Doug Meier (919) 872-0529

# July

Check for possible calendar revisions when the membership list comes out in late March.

- ↑ PCS Phosphate Trip: Members 18 and over only! Reservations are absolutely required!! Call-in date: February 22. Do not call before 8:00AM. Non-North Carolina members are limited to no more than 15 positions.
- ♥ The Rocky Point and Castle Hayne trips start at 11:30 AM. It is possible however, that entry to these quarries may be delayed by their blasting schedule. Hard hats required.
- ♦ Those who go on the Liverpool Point trip should meet George by 9:00 in the McDonalds restaurant at the

intersection of US 301 and MD 225 in La Plata, MD. George is willing to visit other sites in the area on April 27 for those who want to make it a two day trip.

**★** Boren Clay Quarry - Triassic plant fossils - ferns, cycads, cycadeoids, and conifers. The quarry is located approximately 9 miles west of Sanford (US Hwy. 1) just north of HWY. 421 that runs between Greensboro and Sanford. Take dirt road 2139 for ¼ mile to the quarry entrance (see map). Park along the dirt road. The site is about a 50 minute drive from Raleigh.

This was a very popular trip last spring when about 75 people showed up. The fossils are in siltstone and are best extracted with shovel, pick, chisel, and hammer. A broom is handy to brush away dirt. Cardboard boxes and paper towels are helpful to carry and protect finds. Some rare phytosaur teeth and bones as well as other amphibian remains may be found.

Important: Boren Clay requires signed releases to be in their possession <u>before</u> the trip. Confirm with me at (919)782-7890 and I will Fax you a release that can be Faxed back to me at (919)782-2134 or fill out and send me the release included later in this issue. <u>I must have your signed release no later than Saturday, April 5.</u> My address is 5809 Chelsea Place, Raleigh, NC 27612. There are no bathrooms at the quarry and no rain date has been scheduled.

Ashley Davis

- The New Jersey Paleontological Society has invited us to a Devonian collecting trip in northern New Jersey on May 31 followed by a museum trip to view Russian dinosaurs and more collecting on June 1. Give Joy a
- All trips begin at 9:00 AM at the site. Exceptions: Rocky Point and Castle Hayne trips begin at 11:30 AM. NCFC meetings begin at 1:00 PM.
- Guests and children (if accompanied by a responsible adult) are welcome on any trip except Texasgulf.
- You are expected to inform the contact person if you plan to go on a trip, even those with no restrictions on the number of positions.
- If your plans change it is imperative that you let the contact person know; several trips a year are delayed waiting for no-shows.

mailing address and she will send you more details.

★ Steve Ames will lead a trip sometime in July to a site near Goldsboro, NC to collect Cretaceous amber. This trip is limited to 7 persons. We cannot be sure of the date at this time because fluctuating water levels sometimes make this site inaccessible. If you are interested contact Steve late in June to learn details of when and where to meet.

Hurricane Fran caused some communication problems relative to last fall's PCS-Lee Creek trip and persons on the waiting list could not contact John to see if space had become available. In case of similar disasters in the future, Vince Schneider ((919) 779-9338 or (919) 233-8214) will be a back-up to John. <u>Under no circumstances should members contact officials at PCS regarding the status of a collecting trip.</u> The less PCS hears from us regarding fossil collecting, the better. John or Vince will know the status of the trip and will contact you if necessary. Also, if you have not secured a position from John, <u>do not</u> appear in the parking lot hoping to get a position from a last second no-show. There is always an extensive waiting list for this trip and all positions will be filled.

Note: by virtue of their participation in last fall's Fossil Fair the following persons have first refusal for the March 8 PCS-Lee Creek trip.:

Steve Ames, Thelma Bennett, David Campbell, Matthew Campbell, Richard Chandler, Don Clements, Rebecca Clements, Chris Cole, Candace Holliday, Becky Hyne, Frank Hyne, Trish Kohler, Doug Meier, Mike Milton, Joy Pierce, JoAnne Powell, Judy Schneider, Vince Schneider, Barbara Shaw, Janie Smith, John Smith, Judy Stiles, Nancy Timmerman, John Timmerman.

Persons on this list should contact John Timmerman (910) 452-0943 sometime prior to the Feb. 22 call-in to reserve your place on the trip. If you do not call before Feb. 22 you will lose this reservation. Note: you may not sign up a relative or friend who did not participate.

MY APOLOGIES to Judy Schneider for missing one of the Eocene crabs named for her (see *Janus* 1996 #4). Here is the photo and etymology in the Blow and Manning paper for *Lophoranina ranorae*:



"This species is named for Judith Ranor Schneider, of Garner, North Carolina who collected the type material and brought this unique new crab to the senior author's attention."

# President's Message – John Timmerman

The North Carolina Fossil Club is looking forward to a productive and busy spring season. The Fossil Fair last fall was a success. This spring we are looking forward to a greater, more visible participation in the Aurora Fossil Festival.

For the past three years North Carolina Fossil Club has informally participated in the event through individual effort of a few regular (same) members. The North Carolina Fossil Club, being the premier fossil club in North Carolina, needs a higher profile in this North Carolina event. We all visit or wish to visit the phosphate mine near this town at one time or another. The club should show greater support of this town's festival. In years past the most visible clubs have been from states other than North Carolina such as American Fossil Federation or Grand Strand Fossil Club.

The organizers of the festival have promised the club its own store-front exhibit space and permission to display the club banner. Although many of the exhibit spaces at the festival leave a lot to be desired, I know this space and it is far from the worst. We will need exhibitors to fill the space of 15 to 20 tables for Saturday and the afternoon on Sunday. I would like to see the club make a good showing for this event with enough exhibits to fill the space both days. You do not need to participate both days. I am prepared to offer active participants the same encouragement we gave exhibitors at the fall Fossil Fair: NCFC members who actively participate in our exhibits at the Fossil Festival will be eligible for first refusal on the fall 1997 PCS-Lee Creek trip. Whether the participant went on the spring trip with the NC Fossil Club (for whatever reason, by Fossil Fair participation or through the call in) will not effect your eligibility for the fall trip. If you are part of the North Carolina Fossil Club participation at the Aurora Fossil Festival you will qualify for the fall trip. For more information on exhibiting and/or assisting contact: John Timmerman

# **Editor's Postscript**

John is too modest to give you another good reason why we must be much more visible at this year's Fossil Festival: he is the Festival's Grand Marshall. Last year George Powell had this role and the American Fossil Federation strongly supported him with many more exhibitors than we had, in spite of the fact it has 50 members compared to our 300+.

The **N.C.F.C. Board Meeting** was held on January 25, 1997 at the Belgrade Quarry, chaired by president John Timmerman.

# **Old Business:**

- Vince Schneider reported that the screens for the N.C. Museum, financed by the N.C.F.C. have been received.
- · Joy Pierce will place an order for additional T-shirts.

- Doug Meier has Butvar available to members.
- Richard Chandler presented the Treasurer's report (for Trish Kohler) of a balance on hand as of last year of \$4,909.70.
- Joy Pierce will order 50 copies of David Ward's book on Eocene material for sale to members.
- Trish Kohler has ordered and received Fossil Sharks of Chesapeake Bay Region, available to members at \$7.00 on trips (no mail order).

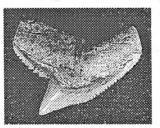
# **New Business:**

- Participation in the Aurora Fossil Fair, set for May 24 and 25, is encouraged for members.
- Trip sites and dates were discussed and will be presented in this issue of *Janus*.
- Richard Chandler will obtain shark teeth to be "raffled" (to children) at the next Fossil Fair.
- Vince Schneider requested financial help for a NCSU Ph.D. student working in Alabama on southeastern dinosaurs. Materials collected will go to the Raleigh Museum. An amount of \$1,000 was approved.
- Robert Story has volunteered to check with coastal stores on the possible sale of N.C.F.C. books.
- Vince Schneider will chair a March meeting on the Fossil Fair to encourage involvement of university people, promote programs and involve grant participants.
- John Timmerman's book of seal and porpoise material is progressing and should be available at the Aurora Fossil Festival. Initial printing will be 1000 copies.

Meeting Adjourned. Judy Stiles, Secretary

#### NEW SPECIES OF TIGER SHARK

The NCFC Board met on January 25 primarily to deal with the Spring collecting schedule (see Minutes above). Because Richard Tellekamp has had to do so much traveling to attend Board meetings in the past, John Timmerman decided to hold this one at Belgrade. This meant a great sacrifice for those of us who live in the Research Triangle area (to say nothing of Richard Aultman who comes from the Hickory area). To make it up to us. John asked Richard if we might be allowed to collect after the meeting ©. It had rained quite a bit the evening before and I had no enthusiasm for digging in the (wet) stream pebble layer. So I wandered around, picking things up from the surface. This is not nearly so productive as the pebble layer but the fossils are generally in better condition. I found several rather nice shark teeth, including two Pristis fajumensis (sawfish) rostral teeth. My best find was a first for me (and perhaps for North Carolina as well): an excellent tooth of Galeocerdo mayumbensis. This middle Miocene tiger shark has been found in Florida (as well as originally in the Belgian Congo) but seems to be pretty rare worldwide. Of our common tiger sharks it resembles a cross between G. cuvier and G. aduncus. It is generally between them in size. In the following photos, you can see the main difference quite easily: in cuvier and aduncus the distal cutting edge is convex and turns into the root as it joins the main cusp while in mayumbensis the distal cutting edge is concave, bending away from the root as it joins the main cusp.





G. cuvier

G. mayumbensis

This species *might* occur in the Pungo River material at PCS-Lee Creek. The time frame is about right and many (top-end predator) shark species range worldwide. I have checked all my Pungo teeth and so far it has not turned up there for me. If you are able to find any in your collection let me know.

Richard Chandler

# Rocky Mountain Fossil Adventure by Ashley Davis

In the final issue of *Janus* for 1995 there was an article by Judy Stiles describing a summer vacation trip out West that included trips to two fossil quarries. I read the article with intense interest not only because of my aspirations to fossil hunt the Rocky Mountains, but to take a family vacation of scientific value for our children. After discussing my idea with my sharp eyed fossil hunting wife, I contacted Judy and got information to assist in planning our summer vacation.

We first decided that to coordinate our trip with school schedules and summer camp, we would leave on June 5 and return on June 15. I contacted the Departments of Tourism for the States of Utah, Arizona, and Wyoming and had them mail information and maps and items of interest. High on our list was seeing the canyon lands of Utah and Arizona as well as a white water rafting trip. I was beginning to find it difficult to work in all the tourist details with my primary ambition of fossil hunting. With another call to Judy to confirm where to go and what to expect, I started to make reservations for the best vacation we have taken to date!

On June 5th after an invigorating game of United Airlines roulette, we left RDU for Salt Lake City, Utah, aboard American Airlines. After picking up a necessary four wheel drive rental car, we headed for a convenient Sam's Club in Provo to purchase cases of bottled water, ample snacks, packing boxes, and bubble wrap. With snow topped mountains in the background we trekked out across high desert for our first fossil hunting adventure

near Delta, UT.

My wife suggested we get off the 75 mph interstate and take a more scenic route through old mining towns like Dividend, Eureka, Silver City, and Jerico Junction. One side trip was to find Paul Bunyan's Wood Yard which is a geologic formation of volcanic chimneys. When you see an off road sign in the West that says 6 miles, automatically double that, check your gas gauge, tighten your seat belts, and put it in four wheel drive. We never found the wood yard but got a real taste of the off road. I can understand why rattlesnakes rule the sage brush and scrub cedar covered desert.

Our second day was spent in the U-Dig Fossils quarry about sixty miles outside Delta. For a modest fee the quarry furnished rock hammers, buckets, and a hillside of material for you to crack open and look for 550 million years old trilobites which were abundant. These are the same trilobites that you can find in The Nature Store and other rock shops. We collected buckets full and true to Murphy's law of fossil collecting, our eight year old son, Bo, found the largest - a two inch specimen. Back at the quarry shack we sorted out the best, wrapped in bubble wrap, packed in the boxes, and readied for UPS shipping (fifty-five pounds!). We were digging at and elevation of 6,200 feet and set off on a scenic four wheel excursion to 7,200 feet to Sinbad by way of Death Canyon. Get the idea of why the snacks and bottled water. That day we traveled for over 100 miles off highway and saw only three other people (two of which were the quarry operators and one a raw boned desert camper) and never met any other cars. I did take along my cellular phone for security.

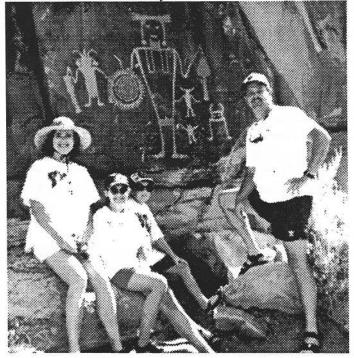
Since most of the land is managed by the Bureau of Land Management, we were reluctant to just stop and prospect for fossils along the roads. We heard at a rock shop that there was a public area north of Delta where you could hunt trilobites. After getting directions (remember to double whatever distance they tell you) we set off but it was too dark when we found it. We did manage to find an enormous volcanic chimney that was about ten rut path miles off the highway and watched the sunset over the mountains.

In mid February I had managed to get three nights of reservations in a wilderness cabin on the North Rim of the Grand Canyon. On our way we toured through Zion National Park, which was splendid. One of the highlights of the trip was an accidental stop at an antique shop called "Johnston's Primitive Arts" in Kanab, UT. Andrew Johnston, the owner, delighted us all with his knowledge of the area and his unique archeological and fossil specimens.

The North Rim was spectacular. We rose before sunup (not hard to do since Arizona is on Pacific time) to watch the sun rise over the canyon. We hit the road

before breakfast to go to the scenic overlooks and hiked out before the crowds to see the amazing views. That afternoon my wife, Margaret, and the children enjoyed a mule ride part way into the canyon. I had to hike down because a capricious briar eating mule decided that I exceeded the weight limit for bony back transport. It was hot. Extra water was a necessity.

We canceled our third night's reservation and struck out for Bryce Canyon, UT. This would put us about one third way to our next destination of Vernal, UT and Dinosaur National Park. Bryce was nice, but there is a point of canyon saturation. The ride was beautiful and the obligatory rock shop stops intensified our fossil fever. Off road in Huntington we went to the Cleveland - Lloyd Dinosaur Quarry. No digging allowed, just looking. Then on to the College of Eastern Utah Prehistoric Museum in Price, which had impressive displays of fossils and archeological artifacts. Finally we were in the dino-rama of Vernal to stay at the Dinosaur Inn.

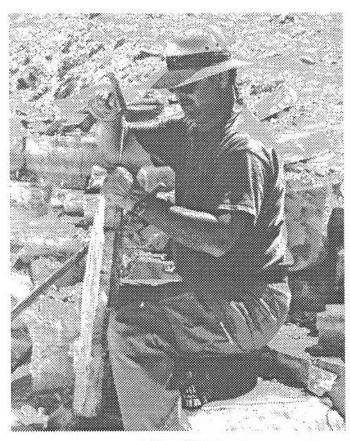


The next day we headed out for white water rafting down the Green River through Dinosaur National Park. We stopped and walked to view Indian Petroglyphs (photo above) before unloading the rafts for a rapid trip through a geologic videorama called the Green River. The water was freezing. Little did we know but Flaming Gorge had five inches of snow two weeks before and we were rafting on snow melt. After the rafting trip we visited Dinosaur National Monument and several rock shops. Another must stop is "Remains to be Seen" in the town of Vernal. Lace Honert, the owner, had great fossils on display. My daughter, Landy, bought several nice leaf fossils in slate. Bo got a T-Rex claw cast which he used to intimidate his sister. Here we received excellent information on what to expect in Kemmerer,

WY at the fish fossil quarry. Her son was working in the quarry for the summer.

Wyoming bound, we went to the Flaming Gorge Dam and took the winding geologic drive through the ages. Wildlife was abundant. Eagles, elk, antelope, and small game were everywhere. The scenery again was magnificent. We stopped in Mountain View, WY to visit Fort Bridger Historic Site on the Oregon Trail and then on to Kemmerer.

Kemmerer has several rock shops (ever hear of the "Wishy Washy Car Wash and Rock Shop?") that specialize in fossil fish from the Green River formation. They are around 55 million years old. Our destination was the Warfield Quarry. Twelve miles of high altitude (6,800 feet) desert and we were ready to split the oil shale of an ancient lake bed that yielded many small *Knightia* and luckily a disarticulated *Phareodus*. It may not be perfect but it is artistic! This fifteen pound piece of stone raced with me through several fine airports.



Ashley fishing.

With the help of our excellent quarry manager, Robert, we filled three boxes with fossil fish all wrapped in bubble wrap and dirty clothes. These we packed for return on the airplane. Afterwards we made a visit to Fossil Butte National Monument to view the impressive display of fossils from the area.

We finished our touring by visiting the Mormon Temple area and going west to Saltair on the shore of Salt Lake. During our ten days we put almost 2,000 miles on our rental car. The four travelers of this family each heartily concur that this was our best vacation ever. The plans for the next trip West began to form as we returned east. Should anyone be interested I will be glad to share our itinerary and any helpful information.

# New Kids on the Block Ray Smith

My wife Trish and I are new members of the Fossil Club and new (10 months) residents of the Tar Heel State.

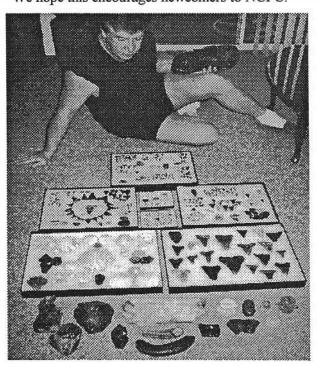
We knew nothing about fossils until I picked up a bone on the beach and was lucky enough to meet Richard Tellekamp who identified it as a Sea-Cow Rib. He then introduced us to the North Carolina Fossil Club. our thanks to Richard and Bill Little for their encouragement and guidance.

At present we have 7 display cases of sharks' teeth, fossils, also whale ear bone, jaw bone, vertebra etc. But our most recent "Eureka" find we thought we would share with the club members.

We found a Woolly Mammoth Tusk (portion) 14" long and 15" in circumference. It's jet black, on the ends it has the classic cross hatching. At the Fossil Fair we had it identified by Bob Purdy of the Smithsonian Institute. On the same day we found the tusk we also found a beautiful piece of Amber, (palm size), with remains of fossil leaves still in it. When you shine a flashlight through the Amber its color is a wonder to behold.

Most of our finds are from the beaches and Belgrade Quarry. We're just average novices and found the world of fossils to be a fascinating and interesting endeavor.

We hope this encourages newcomers to NCFC.



Ray with some of Trish and his finds.

# Books, Butvar, T-Shirts and Boxes

#### Joy Pierce

Chandler and Timmerman, Neogene Fossils of North Carolina, 1994. Cretaceous and Paleogene Fossils of North Carolina, 1995. \$5.00 each at club functions. Can be ordered by mail to 4309 Abbey Place, Durham, NC 27707 for \$7.00 each, including postage. For bulk orders (10 or more copies) books are \$5.00 each. Make checks payable to NC Fossil Club.

Butvar, used to chemically preserve fossils, is a powdered product to which acetone is mixed. Bags contain 8 ounces. Mixing instructions are enclosed. Doug Meier handles this on club trips or through mail order. 6024 Spring Valley Dr., Raleigh NC 27604. \$2.50 plus \$2 postage.

T-Shirts \$10.00 on club trips; \$12 by mail order to 4309 Abbey Place, Durham NC 27707. Designs and color choices change often. Write for selection in your size.

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#### Other Books ONLY available at club functions:

Fossil Sharks of the Chesapeake Bay Region by Brett Kent.

An Illustrated Guide to the British Middle Eocene Vertebrates published by David Ward in London in 1990.

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# **Display Boxes**

Special prices have been offered again this year for club members who want to purchase display boxes. From what has been reported, those who placed orders last year were well pleased. However, it should be stressed that the NC Fossil Club, its officers or members, are not responsible for arrangements or transactions of orders based on this offer. Offer good until May 1, 1997.

Clear plastic boxes, \$1.00 each. Hingeless Design. 3x4x1 or 3x4x2.

Black chipboard frames, polyester fillers, glass lid

manual exception	in a remained, por court rimers,
12 x 16 x 2	3 for \$21.00 + shipping
$8 \times 12 \times \frac{3}{4}$	4 for \$14.00 + shipping
$8 \times 12 \times \frac{3}{4}$	24 for \$72.00 + shipping
6 x 8 x 3/4	6 for \$15.00 + shipping
$3 \times 4 \times \frac{3}{4}$	\$1.25 each + shipping

10% Member discount on regular prices. Call about other products and bulk-order prices. Shipped UPS. Harold Phillips, Personal Treasures 4980 Oakdale Road, Smyrna, Ga 30080 (770) 431–1689.

# Available:

Pliocene Mollusks from the Yorktown and Chowan River Formations of Virginia, by Lyle D. Campbell. This is a large soft-bound volume with many photographs. Professor Campbell is on the faculty at University of South Carolina at Spartenburg and is the father of NCFC members David and Matthew Campbell. To order make your check of \$12.50 payable to The Virginia Division of Mineral Resources, P. O. Box 3667, Charlottesville, VA 22903. (Telephone: (804) 293-5121).

# NORTH CAROLINA FOSSIL CLUB, INC.

December 31, 1996 TREASURER'S REPORT - END OF YEAR

BALANCE BROUGHT FORWARD: 12/31/95		5040.82
INCOME		
Dues	3920.00	
Neogene Fossils Books	2195.80	
Paleogene Fossils Books	1592.00	
T-Shirts	1156.00	
Vinac	37.00	
		8900.80
TOTAL INCOME		13941.62
EXPENSES		
Club Meetings, Speakers	505.50	
Fossil Fair	368.79	
Miscellaneous (Supplies, PO Box)	92.22	
Picnic Tables & Umbrellas	248.72	
Printing (Janus, Membership Lists)	273.88	
Stamps, Postage, Mailings	829.30	
Fossil Vertebrates Books	375.00	
T-Shirts	910.89	
Neogene Fossils Books	1163.50	
Paleogene Fossils Books	1346.79	
Vinac	150.00	
Fossils Sharks of Md Books	194.25	
Telephone, Bank Charges, etc.	28.08	
Whale Cast for NC State Museum	500.00	
Royalties - Neogene/Paleogene Books	1245.00	
Maritime Museum for Fossil Fair	200,00	
Cast/Mold Supplies - State Museum	600.00	
TOTAL EXPENSES		9031.92
BALANCE ON HAND: 12/31/96		\$4909.70

Trish Kohler, Treasurer

# NORTH CAROLINA FOSSIL CLUB, INC., 1997 (FOUNDED 1977)

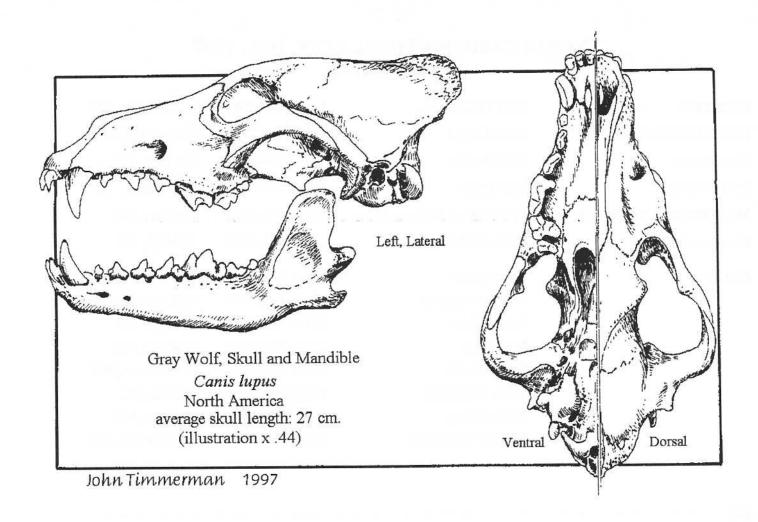
PRESIDENT	John Timmerman	(910) 452-0943	Wilmington, NC
IMMEDIATE PAST PRESIDENT	Mike Hogan	(919) 942-2877	Chapel Hill, NC
TREASURER	Trish Kohler	(919) 383-6328	Durham, NC
SECRETARY	Judy Stiles	(919) 479-4327	Rougemont, NC
MEMBERSHIP CHAIRPERSONS	Mike Milton/Barbara Shaw	(919) 471-6361	Durham, NC
EDITOR, JANUS	Richard Chandler	(919) 851-2153	Raleigh, NC
BOARD	Steve Ames	(919) 735-3585	Goldsboro, NC
	Richard Aultman	(704) 396-7444	Granite City, NC
	Doug Meier	(919) 872-0529	Raleigh, NC
	Joy Pierce	(919) 489-8149	Durham, NC
	Sam Schmidt	(919) 494-1128	Franklinton, NC
	Vince Schneider	(919) 779-9338	Garner, NC
	Robert Story	(919) 544-2017	Durham, NC
	Richard Tellekamp	(910) 347-6361	Jacksonville, NC

1997 MEMBERSHIP APPLICATION - N. C. FOSSIL CLUB				
NAME(S)				
Address				
CITY, STATE, ZIP	A			
PHONE(S) (INCLUDE AREA CODE)				
INDICATE TYPE(S) OF MEMBERSHIP(S)	INDIVIDUAL (NEW)	\$20.00		
	INDIVIDUAL (RENEWAL)	\$10.00	4	
	Spouse (NEW OR RENEWAL)	\$ 5.00		
	TOTAL ENCLOSED	\$		
SIGNATURE		DATE		

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. Only 15 positions on the PCS-Lee Creek trip are available to members who reside outside of North Carolina.

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.

MAIL TO: NC FOSSIL CLUB, P.O. BOX 2777, DURHAM, NC 27715



NORTH CAROLINA FOSSIL CLUB P. O. BOX 2777 DURHAM, NC 27715