



JANUS

THE NEWSLETTER
OF THE
NORTH CAROLINA
FOSSIL CLUB

1998 NUMBER 2, 3

Fall, 1999 Calendar

The Fall, 1999 collecting season at PCS-Lee Creek has been canceled by the company "due to mining operations".

September

- 26 ♦ Green's Mill Run, Greenville, NC
Contact: Doug Meier (919) 872-0529

October

- 3 NCFC Board Meeting, N.C. State Museum of Natural Sciences, Raleigh - 1:30
7 Martin Marietta Quarry, Castle Hayne, NC
Contact: John Everette (919) 847-4485
9 ♣ Liverpool Point, MD
Contact: George Fonger (301) 977-0318
16 * Blue Circle Cement, Harleyville, SC
Contact: Joe Magura (919) 460-8725
24 ✕ Fossil Repair and Restoration Workshop, 1:30-4:30
Powell Drive Community Center, Raleigh, NC

November

- 6 ▼ NCFC Fossil Expo, Museum of the Cape Fear, Wilmington, NC 9:00 - 5:00
7 ★ Onslow Beach, Camp Lejeune, NC
Contact: Mark Goodman (910) 355-9911
11 Martin Marietta Quarry, Rocky Point, NC
Contact: John Everette (919) 847-4485 11:00
21 ● Martin Marietta Quarry, Belgrade, NC
Contact: Richard Tellekamp (910) 347-6361

- All trips begin at 9:00 AM at the site. Exceptions: Rocky Point, Castle Hayne - 11:30AM.
- Guests and children (if accompanied by a responsible adult) are welcome on any trip except PCS - Lee Creek Mine.
- The Rocky Point and Castle Hayne sites require (and do not provide) hardhats.
- 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.

♦ Note Sunday Date. Fossils are collected in Green's Mill Run by sieving material you dig out of the streambed. You will need a screen (1/4" mesh), a long-handled shovel, and sturdy shoes which will get wet (waders are best).

♣ Those who go on the Liverpool Point trip should meet George no later than 9:00 in the McDonalds restaurant at the intersection of US 301 and MD 225 in La Plata, MD.

* Blue Circle Cement: This trip is tentative. Call Joe Magura not before 8:00PM on Sept. 15 to see if the trip is definite and to reserve a spot. Persons without a reservation will be denied admission to the quarry.

✕ I (Richard Chandler) will conduct a workshop on shark tooth dentistry at the Powell Drive Community Center in Raleigh on Sunday, October 24, 1:30 - 4:30 (see map). If you want a hands-on experience, bring a tooth which needs root repair and I'll tutor you. I would be pleased to share the limelight: if any of you are willing to demonstrate restoration methods, or any other tips or techniques, please feel free to participate.

▼ Fossil Expo, 1999. Plans are under way for the 1999 Fossil Expo to be held at the: Cape Fear Museum, 814 Market St., Wilmington NC 28401. Meet other fossil collectors, see their collections, share "war" stories and talk to the professionals. Show off your collection to the public. Most exhibitors have found it to be a very rewarding experience. The public has what often seems like an insatiable interest in fossils and loves seeing and hearing about what others have collected.

Features:

- Exhibits; by North Carolina Fossil Club members: contact Doug Meier to reserve space. 19 six foot and 7 five foot tables are available for displays. If you have a large exhibit, sign up early so that you can be fit into the room layout.
- Raffle: Large *Carcharocles megalodon* teeth, one each hour until they are gone. Free to enter raffle, must be present to win.
- Speakers: New this year! Two professional Paleontologists will give presentations. 1. Vince Schneider, Curator of Paleontology, NC state Museum of Natural Sciences. "The Triassic in North Carolina: An Ecosystem Reconstruction." The presentation outlines original research used to recreate a Triassic diorama for

the new NC State Science Museum in Raleigh, North Carolina. 2. Robert Purdy, Fossil Fish Specialist, National Museum of Natural History (Smithsonian) . "Evolutionary Importance of Fossil Shark Teeth" ("The Phylogenetic Importance of Fossil Shark Teeth" to the collectors out there).

- Fossil Dig: Over 20 tons of "reject" from the world famous PCS Phosphates operation, near Aurora NC. With the mine closed to collecting this season it is a way to collect PCS fossils.
- Fossil Identification: by Paleontologists from NC State Museum of Natural Sciences and National Museum of Natural History Bring in your mystery fossils, your prizes (to show off and learn more about them. Club books and T-shirts: on sale at Cape Fear Museum Gift Shop.

Contact: Doug Meier to sign up to exhibit, volunteer to help and for information. Following the Fair there will be a short business meeting for the purpose of electing a President and half the Board. **Please plan to come.** This is our major event of 1999.

★ Persons planning to come on the Onslow Beach trip contact Col. Goodman (email: colgood@gibraltar.net) prior to the trip to verify that it is still available. Camp Lejeune does close Onslow Beach occasionally for maneuvers. If the trip is on, meet at the entrance to Camp Lejeune, off NC 24 in Jacksonville (see map).

● The **Martin Marietta Belgrade** quarry has been so busy the best accommodation is on Sunday. This is **the** trip for a beginner and also the best trip for children. Guests are welcome, just let Richard know what to expect.

Belgrade Trip Report

Forty eight members and guest attended the June 6th NCFC fossil trip to Belgrade NC. The weather was a little on the warm side to say the least, but the day was a happy one for most everyone. Some of the fossil finds are as follows:

- Will Olsen - found a 3½" *C. meg.* Slightly worn but in good cond.
- Rita McCabe - found an excellent *C. auriculatis*, which made her day.
- Jack/Val Gallahan - 3½" *C. meg.* in excellent cond
- Mark Hobbs - 3½" *C. meg.* in excellent cond.
- Debbie Burdette - Croc.Tooth 1¾"x½" Dia., plus a bag full of assorted fossils. Catch Debbie's WEB SITE www.peacetech.com/flipper/images/camera/final/belgrade.jpg Her finds at Belgrade are shown there with some of her other fossil finds.

There were lots of other finds but not reported for one reason or the other. Most likely they couldn't find me as I was all over the place. The Belgrade site is a perfect place for a family picnic which is what we had. The hot dogs

were just great as were all the trimmings that went with it. I'm sure every one had a great time around the picnic tables. The quarry manager has provided us with a Porta John at the digging site because of all the school children on their field trips that attend Belgrade. He is just a great guy and a humanitarian. Drop him a thank you note if you'd like: Jerry Frazier, Plant Manager, PO Box 99, Maysville NC 28555

Hopefully see you all in NOV. *Richard Tellekamp*

Helpers Needed

Richard Tellekamp needs helpers to assist him with the large numbers of children who visit Belgrade. He has groups coming to the quarry on October 16 (9:30), and October 26 (10:00). You do **not** need to be a fossil "expert" to be of great assistance to Richard. And when the kids leave, the chances are pretty good that you will be able to do a little collecting for yourself.

Aurora Fossil Festival

When she informed me that I was to be "Fossil Master" for the sixth Aurora Fossil Festival, Candace told me that my responsibilities included riding a float in the parade Saturday morning, helping with the fossil auction Museum benefit, drawing the winning raffle ticket for the huge shark tooth cast, and generally behaving myself in a "masterful" manner. When I arrived Friday afternoon, I had a bedroom awaiting in a house which PSC owns in Aurora (making everything very convenient).

After a make-do supper (Aurora still seems to lack a restaurant), Candace invited me to the contest for Miss Aurora. The first thing I was asked was if I wanted to assist the judges. Being overwhelmed by such a dazzling display of feminine pulchritude, I graciously declined. Watching was interesting, although the 'music' was a bit loud for these ears.

Saturday morning I had very little to do until the parade (at 11:00), so I wandered around (looking masterful ☺), visiting the exhibits (the North Carolina Fossil Club and the American Fossil Federation were the primary exhibitors), and visited the few persons seriously selling fossils. Our own Ramona Krailler and Joe Magura had the most interesting and most extensive inventory by far.

The parade began shortly after 11:00, and I want you to know I was third (after a marching band with banners and flags and a clown throwing goodies to the kids). I was even in front of Miss North Carolina. There I was, all alone on my very large float looking masterful, and there she was, all alone on her very large float looking lonely (see below). Needless to say, I had a few words later with Candace concerning efficient use of resources. Mercifully,

the parade took only fifteen minutes or so; I mostly waved to the little kids.

At 1:00, I gave a wonderful talk entitled "Miraculous Concatenations" to a huge crowd of about ten persons. ☺ Afterwards, I wandered around, looking masterful as usual. The auction at 5:00 was a big benefit for the Museum, clearing almost \$3000. The auctioneer, Dr. Jay Gould, was exceptional in getting big bucks from a rather small, very knowledgeable crowd. That evening a group of us from NCFC went to quite a nice restaurant on the Washington waterfront. I was a guest of John Smith and his three sons, Joshua, Jeremy, and Jared. (Thanks to the four "J's".) After dinner, we had a very pleasant stroll down the waterfront as far as The Estuarium.

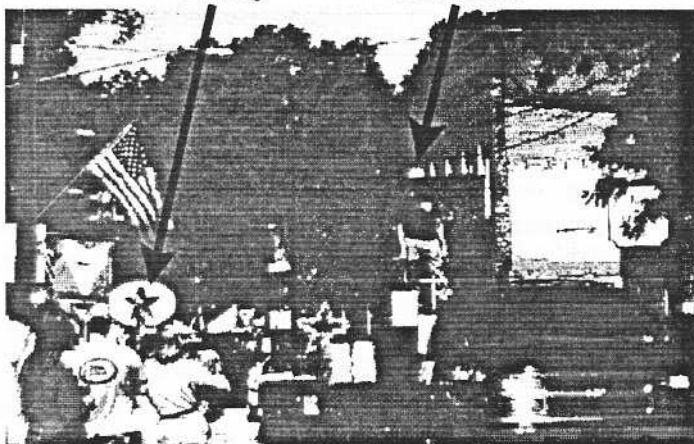
Sunday morning, having no duties, I wandered around, looking masterful. Lunch was a skewer of Vietnamese chicken (absolutely first-rate). I gave another fantastic talk, this time entitled "Fossil Sawfish", to a huge crowd, estimated by the Aurora Police Department to number at least six and maybe even as large as eight. Rather than wander around for the rest of the afternoon looking masterful, I decided to exhibit the items I had brought, so the few who had not been to the talks could now see them. So looking masterful, I joined the remnants of the NCFC exhibitors for the rest of the afternoon.

My final duty was to draw the winning raffle ticket for the cast of the HUGE Peruvian shark tooth. There was a remarkably large crowd, mostly local, which had assembled to hear the gospel sing in front of the museum. The winning ticket belonged to Phil Trueblood, grandson of Raymond and Ola Douglas. I doubt many of you know Raymond, long-time employee at the mine, now retired. He is one of about six Aurora residents whom I know. Immediately before the drawing, I had been talking with him and his wife and daughters. I can't tell you how pleased I was to draw his grandson's name. I trust I did so in a masterful manner.

Richard Chandler

Lonely

Masterful



(Photo courtesy Roxada Story)

Fossil Preservation and Restoration

Written by Joy Pierce, using Fred Hahn's notes and supplementary information from Roxada Story. Photos courtesy of Fred and Adrienne Hahn.

North Carolina Fossil Club members were invited to the NC Museum of Natural Science laboratory on July 11, for a workshop presented by Vince Schneider, Paleontologist. The good attendance for the workshop filled up all the open space around the lab's worktables. Many made a two-hour trip to come to the Cary location. The good attendance is another indication of the serious interest hobbyists have in identifying and preserving their finds following scientifically acceptable methods.

The fact that Vince gave us his Sunday afternoon and additional time in preparing, and that the Museum opened its laboratory to us as visitors, certainly indicates their willingness to assist the hobbyist in reaching that goal. Speaking on behalf of the club membership, THANK YOU, Vince!

Serving as a volunteer at the lab is a way to learn even more through hands-on experience. Call Vince at the Museum if you would like to volunteer.

I didn't take notes but some club members who could not attend have asked me about the workshop so I got busy finding some note takers. Fred Hahn has supplied wonderful notes and photographs. Roxada Story and I have added to his notes and we all pass this along to the club. Thank you so much Fred for doing most of the work.

You will notice that Vince first talked about preservation, then discussed reconstruction and identification. Questions and comments from the members were interjected as the program progressed so that's how the notes flow. Vince is on vacation and notes are pooled without his review.

Product names and telephone numbers are included. That doesn't mean that the NC Fossil Club or its officers or members, or the Museum or its staff endorse these products as superior to other products or that you will have perfect results using them.

- * Safety is important in working with chemicals. Although acetone is common and used a great deal in working with fossils, it is a carcinogen and should be handled with gloves. Follow label instructions to work away from flames, including pilot lights, when working with flammable chemicals, like acetone.
- * Never use nitro - based compounds. The material tends to form nitric acid over time.
- * Butvar is good for bonding but it is primarily a surface treatment. It does not penetrate the fossil material. Neither does it mix well. Allow 4-5 hours for mixing.

- * Water base glues are generally good only for surface bonding.
- * Vinac is polyvinyl acetate and penetrates well - as do all acetate base bonding compounds.
- * As a service to members, our club sells small bags of Vinac with mixing instructions. See Doug Meier. He brings the Vinac to club functions and sells it for \$3 a bag. The ratio of Vinac to acetone can be varied to suit your needs. A usual mixture would be about 1/2 cup Vinac to a 32 oz juice jar. You know that the glue mixture has permeated a submerged specimen when all bubbles disappear. If submerging a specimen is not feasible, Vinac can also be applied in a slow drip. Allow the specimen to dry slowly. Acetone on a cloth will remove an unwanted, surface shine.
- * Acetate bonding compounds are reversible and allow rework of the fossil (important for temporary repairs) or scientific study of the specimen in the future.
- * Paleo-Bond is similar to "Super Glue" and requires an activator. There are a number of products associated with Paleo-Bond such as penetrants, activators, and debonders. Supplies are available through Uncommon Conglomerates, Inc, 287 E 6th Street, St. Paul, MN, 55101. Starter kits of Paleo-Bond (\$35) have also been found through the Internet.
- * Arclor works better on a wet specimen. Arclor also comes as a powder and is mixed with acetone. It can be ordered through Palos, NYC 212-736-7744. The last order price was \$45 for five pounds. Pool an order.
- * Salt residues in marine fossils draw moisture and can cause cracks. Soaking specimens in several chemical-free water baths leeches the salt. Salt removal can be confirmed when a water bath tested with silver nitrate remains clear. Drops of silver nitrate (used in developing photos) will cloud when dropped into salty water.
- * To repair a large specimen, use 2-part epoxy like that used by taxidermists.
- * 2-part epoxy is good for sculpting and repair. There are several products available, each with particular characteristics that may be appropriate to specific requirements. Some products such as "Bondo" may be sanded, colored, or molded.
- * For color, mix in the powdered pigment used to color cement. A wide range of cement colors can be purchased at the hardware store.
- * Urethane foams are rather expensive but mold well. The process involves building a frame and forming a mold of the object. It may be necessary in complex objects with undercuts, to build three or more forms with multiple mating surfaces. Each part will need a means of registering position with respect to the adjacent surfaces. Because of the force of expansion during curing, the mold may need to be reinforced. Use a release agent prior to casting.
- * There are different approaches on dealing with missing parts. If the item is to be later researched, differentiating between original and recreated material is important. If the object is to be displayed, then weight, color and texture of the recreated material may be more important.
- * Dental restoration techniques may be appropriate to fossil teeth, however, this is probably cost prohibitive unless one happens to be a dentist.
- * To make repairs on the root of a shark's tooth, for example, an inexpensive epoxy putty named Durham rock hard putty works well. It can be purchased at the hardware store. Acrylic paint can be mixed with the putty to change the orange-brown color to your desired color. Rubbing with quarry sand produces a rougher, more realistic texture. This putty does not shrink when it dries and it handles best when handled least.
- * In cleaning fossils, the least aggressive procedure is usually the best. Often a water wash will be adequate. A gentle brushing with a tooth brush and water may work.
- * If you have to use acids, use only mild acids and only after a test with similar material. When using acid like diluted white vinegar, frequently check progress to avoid dissolving both matrix and fossil. Fossils from Castle Hayne limestone are examples of material that will dissolve in acid.
- * When using acetic acid, it is advisable to add a buffer. The buffer is rather expensive. Whenever acids or chemical cleaning is used, the fossil should be washed thoroughly with clean water to remove all chemicals. Some have used soda as a buffer.
- * Remove as much matrix mechanically as is practical. Vibrating engravers are reasonably priced and seem to work best. Hardened points are probably more durable and less brittle than diamond tips. Rotating abrasive drills are not very precise and may damage the fossil.
- * Pyrite Disease is a fairly common problem in Cretaceous and wet fossils. In drying, or in changing humidity, pyrite crystals form within the fossil, breaking it apart. There is often no cure but the process can be retarded by keeping the fossil wet until preservation, cleaning as much visible pyrite from the fossil as possible, and soaking the fossil in glue. Do not store pyrite "contaminated" fossils in sealed containers but in well ventilated cabinets or drawers. Rapid drying in an oven may accelerate crystal formation.
- * Fossil preparation and conservation is continually changing and new materials are being developed.
- * There is no rule for leaving some matrix around the fossil. Usually, fossils that are to be researched or studied will be fully cleaned while fossils that are to be

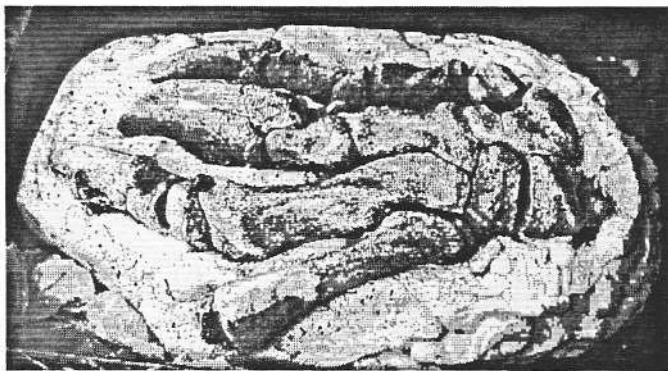
displayed may have some matrix left for support or context.

- * Aluminum foil can be used to temporarily stabilize a specimen instead of plaster of Paris.
- * Identify specimens. Identification numbers on fossils do not detract from their value and are important for establishing provenance. The most important piece of identifying information is the exact location where the fossil was found.

The following photos taken at the workshop are courtesy of Fred and Adrienne Hahn:



Fred Hahn, Doug Meier, ?, ?, and Vince Schneider around a preparation table.



Giant Sloth Claw



Giant Sloth Jaw

Fall Board Elections

The offices of President, Vice President, and Four Board members will be filled by election at the Business Meeting following the Fossil Fair. Any of you who are interested in running for any of these positions are *strongly* encouraged to contact members of the Nominating Committee, Mike Hogan (919) 942-2877, or Richard Olsen (252) 247-4762, to put your name into consideration. Nominations may also be presented at the meeting, subject to seconding by four members.

The North Carolina Fossil Club Board meeting was called to order at 1:30 PM on Sunday, August 8th, 1999 by President Doug Meier. Distress over the PCS Trips cancellations was expressed by all present. Suggestions were made for additional club trips but plans were not finalized. Vincent Schneider offered NCFC a room at the new museum to hold meetings. A motion was made to discontinue the inclusion of a questionnaire with the first newsletter to new members. Richard Olsen and Mike Hogan volunteered for the nominating committee. A reminder that the Fossil Fair will be held at the Cape Fear Museum on November 4. Richard Tellekamp has given the following dates for the children's field trips to Belgrade:

August 28 at 9:30 AM - 20 Girl Scouts

October 16 at 9:30 AM - 20 to 25 Church members

October 19, 20 & 21 at 9:00 to 12:30 - Summerville School

October 26 at 10:30 - 40 to 45 from Weaver School

Club members are needed to help - call Richard at 910-347-6361.

The meeting was adjourned and refreshments were served.

Joanne M. Panek-Dubrock



Show and Tell provided by Troy Lee who has made splendid finds in his three years of fossil collecting in North Carolina. We were jealous enough when he produced the first one. Now he's bringing them in sets. Most of us wouldn't want to be asked how many years we have collected in a comparison. Congratulations Troy!



Fifth graders Janet Steigerwald and Eric Kremer look at fossils with Richard Tellekamp, who guided Sand Ridge Elementary students on a fossil hunt March 22 at Belgrade Rock Quarry.

THE FOSIL FINDER

**Look what happens
to sharks
that quit fossil**

... that some amateur
... to collect some types
... that teeth are from
... responsible for
... public school
... fossils from
... market
... later

Fossil hunter thrills students with ancient history

BY CAROLE MOORE
DAILY NEWS STAFF

What did you want to be when you grew up? Thirty years ago, children had similar answers: fire fighters, nurses, police officers or teachers. When that same question is asked today, chances are the answer is "paleontologist." They can spell it right, too.

So a group of dinosaur-savvy third-graders easily tosses educated questions at a guest speaker who happens to be an amateur paleontologist.

"How big was the shark that tooth came from?"

"What kind of animal does this one belong to?"

"Is that really a whale bone?"

In response to the Southwest Elementary students' questions, the lanky man in front of them smiled and shot one back.

"Did you know whales have ears?" Richard Tellekamp asked. He paused for a beat while the children digested this unexpected tidbit of information. "They swim together in pods and have families just like we do. And they talk together under water. And sing songs, too. Each pod has its own language."

He held up a small object he identified as the inner ear bone of a whale. These ears have actually heard songs 6 to 8 million years ago, Tellekamp said as he handed a whale "ear" to one of the children before it was passed around.

The kids buzzed with excitement while Tellekamp selected another object. He chose from the table behind him, covered with dozens of fossils — including a whale's rib. He was just getting warmed up. The retired Marine had a treasure chest of wonders from the ancient past. He has

his presentation down to a science. After all, he had done it before.

"This is what keeps me going," he said later, absently stirring a cup of coffee on a rare morning he wasn't booked to speak to school children or take someone on a fossil hunt. Free time is at a premium for an amateur paleontologist.

At age 68, the New Jersey native has found happiness digging around rock quarries in search of the perfect fossil. Finding a large fossil on one of his earliest expeditions helped motivate him.

A friend, Red Dwyer, helped get him started in 1980.

But he wasn't really sold until he found half of a large fossilized tooth. He kept digging, determined to find the other half.

"And I did," he said, holding up the shark tooth, which has been glued together and given a protective coating to prevent additional damage.

By far the most common fossil found in these parts, shark teeth adorn many a beachcomber's dresser.

Shark teeth are so common because this part of the world was under water for millions of years. Sharks have lots and lots of teeth; just ask anyone who's ever seen the movie "Jaws." And those teeth fall out regularly.

Since sharks rate pretty high with 9-year-olds, Tellekamp's lectures capture their attention from start to finish.

They like to hear about the ancient sharks that were as big as modern whales and could swallow something the size of a small car.

They're particularly happy to learn those sharks have joined the dinosaurs on the extinction list.

"The movie 'Jurassic Park' really opened up our interest in dinosaurs and paleontology in general," Tellekamp said. Children are endlessly fascinated. They're drawn to the size and ferocity of the beasts. In fact, kids are Tellekamp's best audience.

"I like to dwell on the size (of extinct creatures)," he said. Tellekamp finds relating size to kids is easier when he compares creatures to objects with which they're familiar.

They also like hearing about some of the odder creatures that once roamed eastern North Carolina. Take, for instance, the camel bone that Tellekamp unearthed. Tellekamp said horses and camels roamed in this area in the very distant past.

"That's the oddest thing I've ever found around here," he said.

Where does he unearth his local treasures?

Beaches provide an excellent source for fossils, particularly shark teeth. And, with permission, he has productively searched rock quarries because there's already been a lot of digging through the many deep layers of earth.

But dinosaur bones are found farther inland. You can start looking in Wilson for evidence of

those big brutes.

"This part of the world was under water when the dinosaurs roamed," he said, referring to eastern North Carolina.

The N.C. Fossil Club, to which Tellekamp belongs, has found other interesting bones in our area, including a giant sloth skeleton discovered near Wilmington. The sloth was donated to a museum.

But new finds like the sloth do little to quench the desire to search for fossils. Instead, they only fuels the fever.

"Fossil hunting is a disease and there's no known cure," Tellekamp said with an unapologetic grin.

What keeps people digging for hours in the hot sun or bitter cold, just for the chance they might find a piece of living matter that's been turned to rock over time?

"When you find that first big tooth, it just builds up your morale," Tellekamp said.

The first time fossil hunters find something large or significant, they're bitten; the hobby becomes a habit.

At least, Tellekamp said, it's not an expensive habit. Gas is his biggest expense — and time. But he's not stingy with his time.

In addition to speaking to students, the former Marine helicopter maintenance chief also takes groups to look for fossils at cooperating rock quarries, and he has been known to drive across the state to go fossil hunting with friends, colleagues and guests.

He also volunteers at the Onslow County Museum in Richlands.

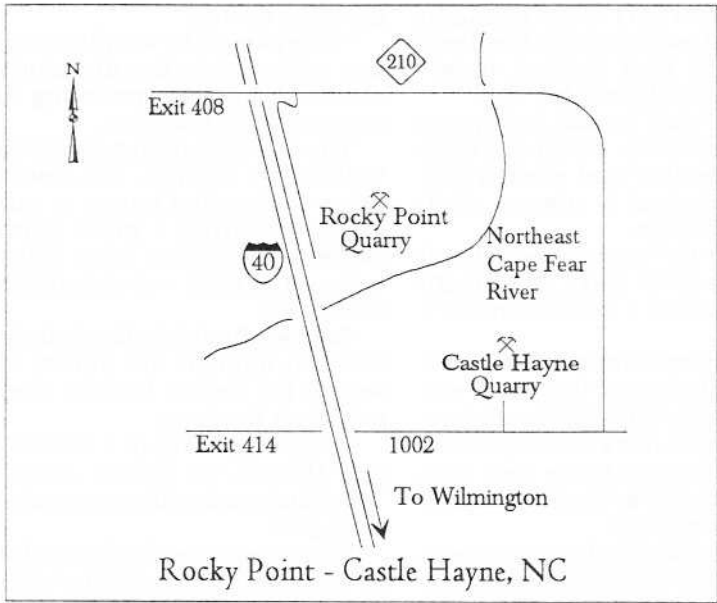
"It's a terrific museum," he said, adding that he's looking forward to the April 16 opening of a new exhibit, "Water and Wood," which will feature some locally discovered fossils.

Tellekamp has two unfulfilled wishes regarding his hobby.

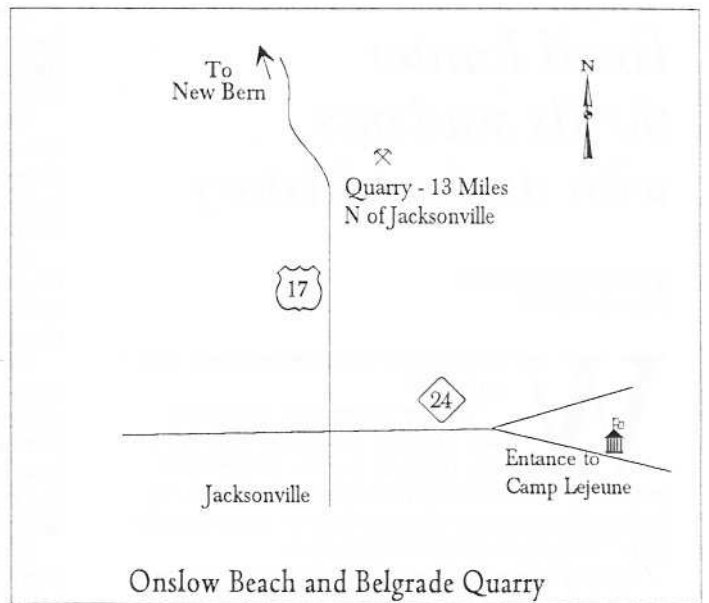
First, he'd like to meet his hero, Colorado paleontologist Jack Horner, whose philosophy Tellekamp admires. Horner doesn't care how the dinosaurs died; instead, he wants to know how they lived.

He'd also love to find a 7 $\frac{3}{4}$ -inch *Carcharoles megalodon* shark's tooth.

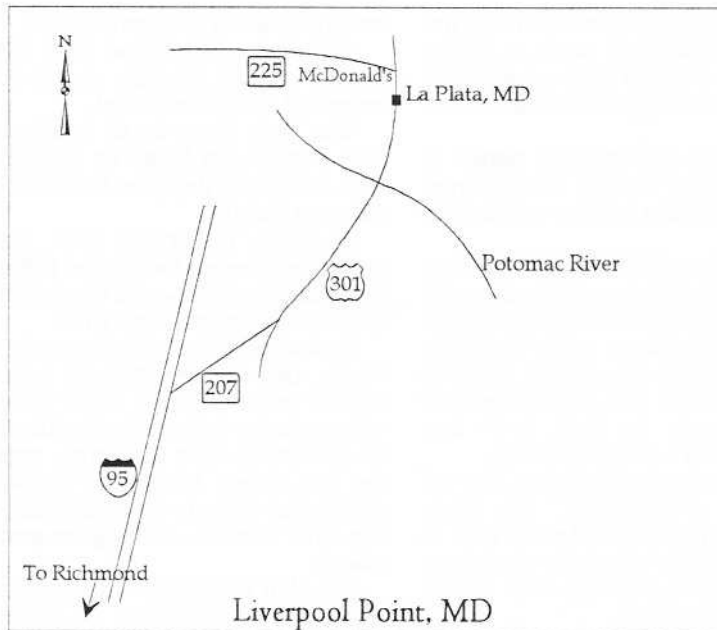
"It would be the biggest one found on earth, and that's the one I'm looking for," Tellekamp said. "And I'll find it."



Rocky Point - Castle Hayne, NC



Onslow Beach and Belgrade Quarry



Liverpool Point, MD



West Raleigh: Powell Drive Community Center



Wilmington and Cape Fear Museum



Greenville, NC

NORTH CAROLINA FOSSIL CLUB, INC.

(FOUNDED 1977)

PRESIDENT	Doug Meier	(919) 872-0529	Raleigh, NC
VICE PRESIDENT	Ramona Krailler	(919) 460-8725	Morrisville, NC
IMMEDIATE PAST PRESIDENT	Richard Tellekamp	(910) 347-6361	Jacksonville, NC
TREASURER	Trish Kohler	(919) 383-6328	Durham, NC
SECRETARY	Joanne Panek-DuBrock	(919) 362-6392	Cary, NC
MEMBERSHIP CHAIRPERSONS	Roxada/Robert Story	(919) 544-2017	Durham, NC
EDITOR, JANUS	Richard Chandler	(919) 851-2153	Raleigh, NC
BOARD	Richard Aultman (2000)	(828) 396-7444	Granite Falls, NC
	Mike Hogan (1999)	(919) 942-2877	Chapel Hill, NC
	Joe Magura (2000)	(919) 460-8725	Morrisville, NC
	Richard Olsen (2000)	(252) 247-4762	Atlantic Beach, NC
	Joy Pierce (1999)	(919) 489-8149	Durham, NC
	Adair Poole (2000)	(919) 829-0142	Raleigh, NC
	Sam Schmidt (1999)	(919) 494-1128	Franklinton, NC
	Vince Schneider (1999)	(919) 779-9338	Garner, NC



1999 MEMBERSHIP APPLICATION - N. C. FOSSIL CLUB

NAME(S) _____

ADDRESS _____

CITY, STATE, ZIP _____

PHONE(S) (INCLUDE AREA CODE) _____

E-MAIL ADDRESS _____

INDICATE TYPE(S) OF MEMBERSHIP(S)	INDIVIDUAL (NEW)	\$20.00	_____
	INDIVIDUAL (RENEWAL)	\$10.00	_____
	HOUSEHOLD (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.

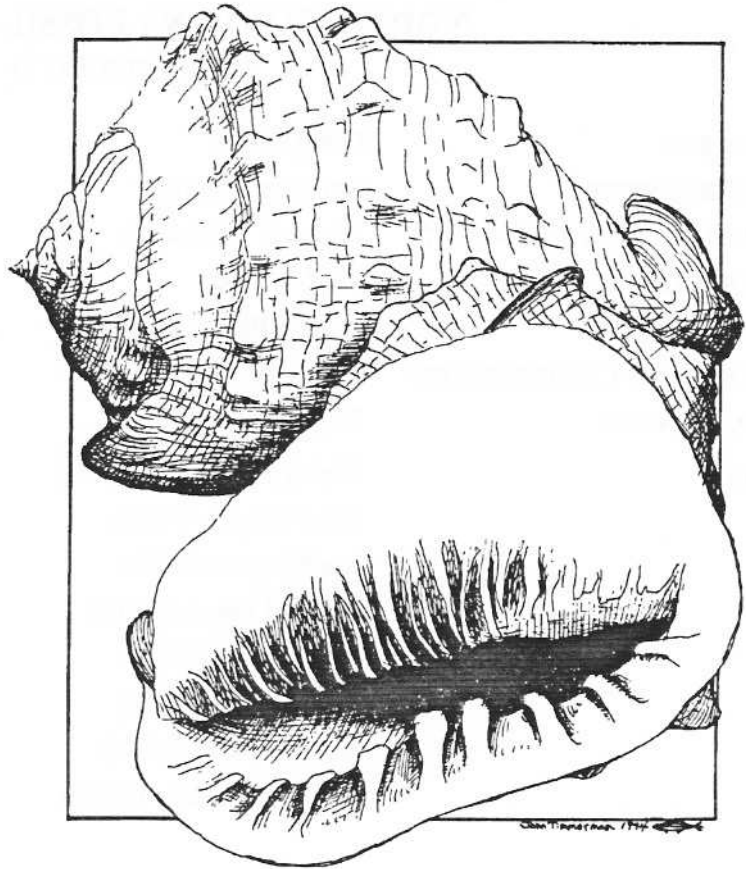
MAIL TO: NC FOSSIL CLUB, P.O. BOX 13075, RESEARCH TRIANGLE PARK, NC 27709

Emperor Helmet

Cassis madagascariensis

Pleistocene - Present

Found on the central and southern
beaches of North Carolina, particularly
Core Banks. John Timmerman



NORTH CAROLINA FOSSIL CLUB
P. O. BOX 13075
RESEARCH TRIANGLE PARK, NC 27709