



NARG NEWSLETTER

Official Publication of the North America Research Group

Winter 2014

Volume 3 Number 1

*Courtenay &
District Museum
& Palaeontology
Centre* 1-3

*Bernie the Ich-
thyosaur Update* 4

NARG Library 5

*Fossil Collecting
Tip* 6

*The "High Five"
Crab* 7

*On Donating
Fossils to Muse-* 8-9

*Return to the
Dinosaur Grave-
yard, Como Bluff,
WY—Summ 2014* 10-11

*NARG Newsletter
Index 2005-20013* 12-15

*Walt Wright Pet
Wood Identifica-* 16

Courtenay and District Museum and Palaeontology Centre Courtenay, Vancouver Island

A group of NARG members (Robert Rosé, Michael Santino, Jim Scheirbeck, Tim Fisher, Rick and Peg Johnson) traveled to Courtenay, BC, Canada on Vancouver Island in May 2007, for a fossil symposium hosted by VIPS (Vancouver Island Paleontology Society) at Courtenay, BC. One of the main attraction was the *Courtenay and District Museum and Palaeontology Centre*. Courtenay is located in the Comox Valley about halfway up Vancouver Island on the east coast along the Strait of Georgia.

Permanent Exhibitions are located both on the main and top floors and encompass palaeontology, exploration, First Nations and settlement history of Comox Valley.

Visit the museum's web site, there is lots of information about the museum and field trips to search for fossils. You can do some exploring on your own through vimeo, facebook, twitter and others. You will find these links on the main page at: <http://www.courtenaymuseum.ca/>.



This fish fossil is *Coelacanth* the living fossil. This is a fossil from Wapiti Lake in Northeastern B.C. The coelacanth is still alive in the depths of the Indian Ocean.

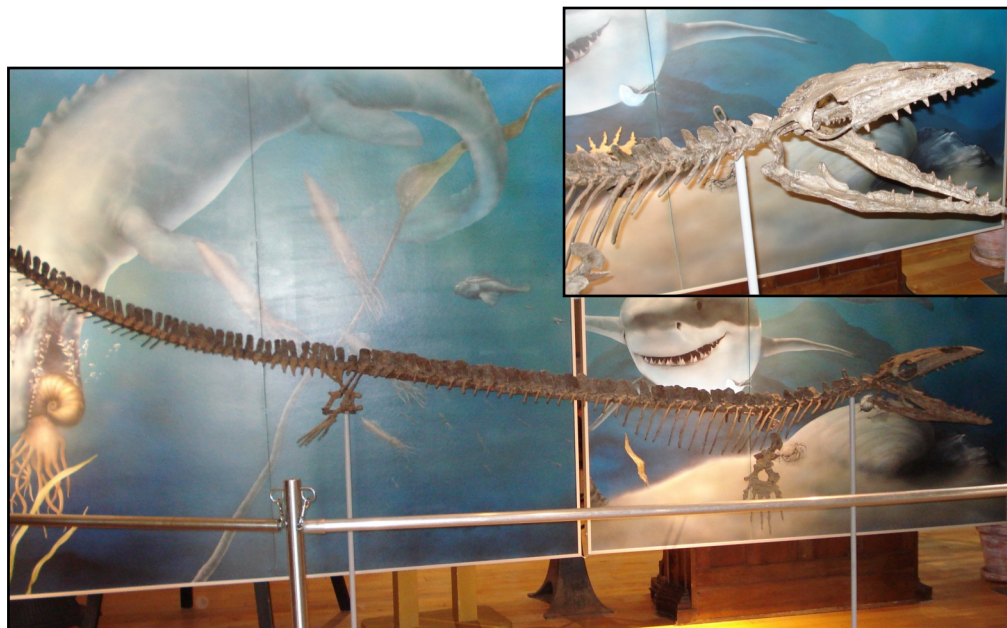


Ornithomimus a replica from Alberta. It is called the bird mimic, head like a bird, long legs for running, it also had feathers but could not fly.



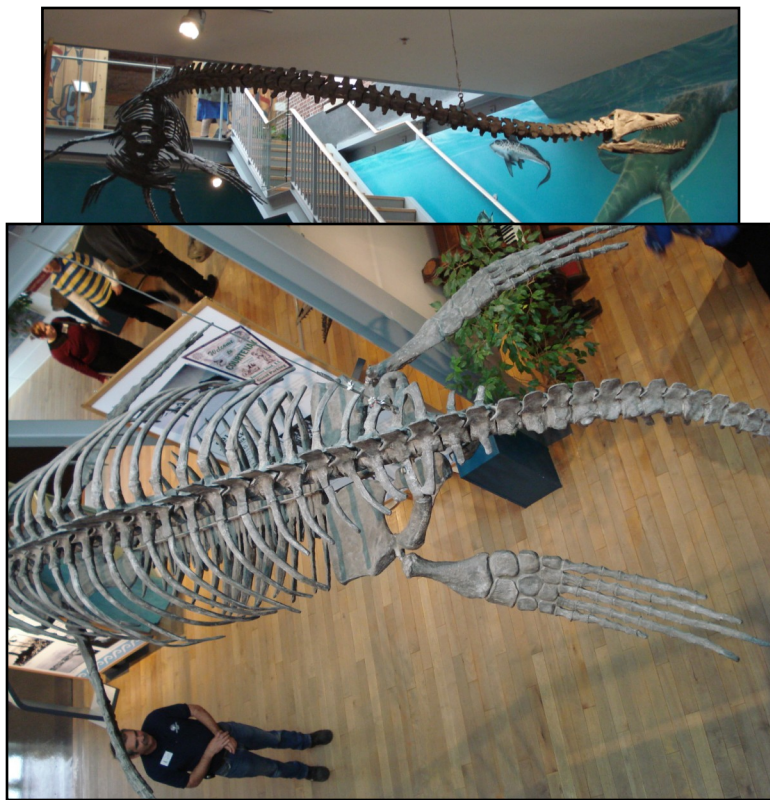
heteromorph ammonite
Bostrychoceras elongatum

Mosasaur



Elasmosaur cast

The Elasmosaur was found on the banks of the Puntledge River in the Comox Valley. It was the first one found west of the Canadian Rocky Mountains. It is 14 meters long. (46 feet) The original fossil bones are on display in a long case at the museum.





Replica of a turtle aspiderites, it was found in Alberta.



Some of the many ammonites housed in the museum.



The ammonite Titanites is one of the largest ammonites found in Canada. It is from Tech Coal near Sparwood in Southeastern B.C. It is about 4 1/2 feet across.

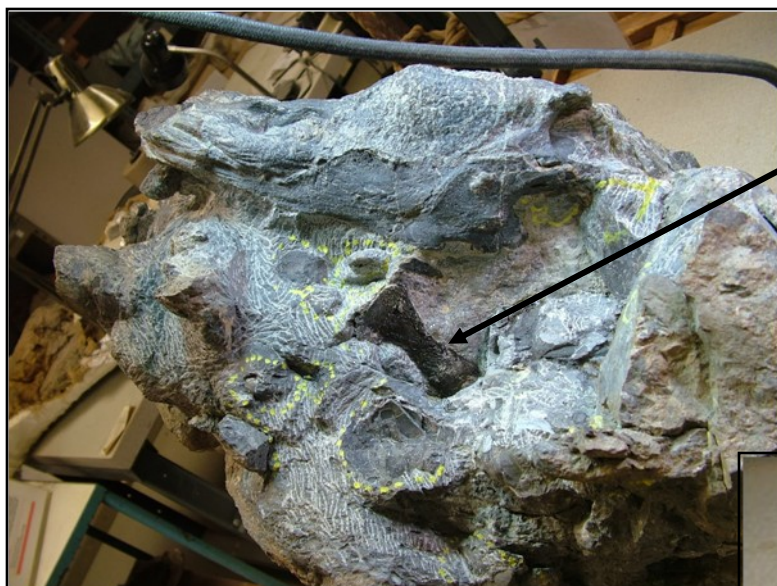


The bottom jaws of Tylosaur was found in the Comox Valley. The fossil was saved during road construction in the 1990's.

Bernie the Ichthyosaur Update

<http://www.bernietheichthyosaur.blogspot.com/>

Greg's team at OMSI have been busy uncovering more bones out of the big block. There is too much happening to include in our newsletter. They now have three limb bones of different size. Are they from the same animal, perhaps a humorous or femur? It could be from two or three animals of different sizes.



Limb bone in big block just below the skull which was uncovered.

Limb bones of different sizes.



Also, being found are jaw fragments with teeth different shape and size. Two animals?



The NARG Library

NARG has opened its doors to a member's library. It consists of approximately 360 books, DVDs, VHS tapes, and journals including *Journal of Vertebrate Paleontology* (since 2009) and *Quaternary International* (since 2013). Access to these books is one of your membership privileges. We currently loan out two or three books per member and ask that they be returned within two meetings so that others may enjoy them. Twice a year the library is inventoried and a list is sent out to members. Checkout is as easy as sending an email to danolough@aol.com. Place the word "library" in the subject line so that you are not spam filtered. Dan O'Loughlin will notify you if the requested books are available and bring them to the next meeting for you.



Fossil Collecting Tip

How to protect your fossils in the field.

One method is to use aluminum foil, the cheapest you can find. Just tear a piece off and wrap it around the fossil. The foil is easily damaged in your backpack or just carrying it around making it hard to unroll the foil. The box it comes in doesn't last in wet or damp weather. One way of protecting the foil is to use 2" thin walled tubing which is used in your house as central vacuum systems. You can find it at your local hardware store. I like this tubing, because it is light weight. Regular PVC pipe is much heavier. Cut a length of tubing a little longer than the foil. They will also have the 2" PVC end caps which fit on this tubing.

How to put it together.



Glue the bottom cap to the tubing. Insert a piece of foam in the bottom of tubing as a pad, to protect the foil.



The paper center in the foil should be about 1 inch across.



2" PVC end

The “High Five” Crab

by Bruce Thiel

Here is a female *Pulalilus vulgaris* crab from the Lincoln Creek Formation, approximately 30 MYO that is too fragile to bring in for the “show-and-tell” portion of the NARG meeting. It was collected in 2011, in the Grays River area in Washington. The concretion was probably the size of a large bowling ball, but after many years in the creek, the water had eroded the top 2/3 of it away. The top



carapace was gone, portions of the side legs and the left claw were all eroded away. When the concretion was broken open, there was the large intact right claw—which is always the larger of the two and part of the ventral—or underside showing.



I originally planned on having it lie on its back, but when I was trimming it with a rock saw, I cut off the round underside of the concretion and it made a nice level stand and figured it could stand upright, once the top-heavy matrix around the claw was removed. Even though I went extremely slow in removing the matrix with air tools, the large claw broke in two places, but the breaks were clean and at the natural leg joints. All the other three small free-standing side legs also broke during preparation—one in two places, so I continued to finish the entire preparation in pieces, and assembled them when completed. I used a tub of pea gravel to hold the base at just the proper angle so I could position the part that I was gluing so it would sit perfectly balanced when upright, and drying. I glued it back together, one piece at a time, which necessitated repositioning the base several times over a couple of days to balance the pieces while they each dried, until it was reassembled. You can see traces of pyrite on the abdomen.

On Donating Fossils to Museums

Eric P. Gustafson

Museums and amateur collections have a long history of intimate connections. Many museums started as the hobby of one enthusiast. Of those museums which continued after the death of their founder, their collections tend to grow because of two sources of new specimens; professional researchers and amateur collectors. The longer the museum has existed, the more specimens and secondary collections they gather, in a kind of snowball effect. And the larger, more varied and more documented a museum collection is, the more scientifically valuable it is. In 1976, a national survey of major invertebrate fossil collections found that among museums, as many as 65% of the collections were donated. Many of these donations were by collectors—amateur paleontologists—who had no professional credentials.

Amateurs versus professionals

The amateur paleontologists have a number of advantages over their professional compatriots, for example:

- They have more time to spend collecting,
- There are more of them,
- They often have more field experience, because of more hours on the outcrop,
- They can spend their money as they wish,
- They are seldom restricted to a detailed research plan,
- They don't answer to administrators or bureaucrats and can ignore many paper restrictions.

Professional paleontologists, on the other hand, have some real advantages, for example:

- They have specialized knowledge and training,
- They have access to information sources, such as specialist colleagues, libraries, or collections,
- They more easily get government recognition,
- They have access to permanent storage and curation of collections, and
- They have the ability to publish their findings.

It seems to me obvious that the ideal is for both to work together to maximize their advantages.

In some cases the division between amateur and professional paleontologist becomes blurred. An early example of this is Thomas Condon, founder of the major collections at the University of Oregon, who started as an enthusiast while working as a preacher and ended up as Professor of Geology. A more recent example is Ross Berglund, who as an enthusiast collector of fossil crabs ended up collaborating with a number of professionals as an equal and who published some of his own work. One feature both had in common; their collections ended up in publicly-owned museums, where their specimens would be available to future researchers. These people (and many others who frequently lack academic degrees) I would call paleontologists, using my own favorite definition: A paleontologist is a person who does not have enough fossils.

“Fossils are Forever”

But why should you personally want to give your hard-earned collection of fossils to a museum? I have given most of what I have collected in the last 60 years to one museum or another for several reasons. You could say that, in one sense, “fossils are forever” because they have lasted millions of years already, and, properly cared for, they can last indefinitely into the future. But people are definitely not forever. We only last so long. Also, the sources of fossils are not forever. The rocks erode, the fossils in place weather, things get paved over, and any fossil locality has a finite lifetime. So what we collect is unique, because of our activities and because of what happens to be available to us during our lifetimes. My prejudice is towards the information value of my fossils, and I would like to see my work—my unique collection of fossils—maintain its scientific and educational value past my own lifetime. A museum is the only human institution which offers even the possibility of anything like permanence.

There are other reasons to donate. Often a researcher may ask for one or more specimens for very specific research reasons. It might be the only known or best specimen of a particular fossil animal, and needed as a type. Or the researcher may need more specimens to demonstrate variation in a species. If the researcher is to publish anything about the specimen, it must be in a public museum collection with its own specimen number, so that future researchers can get access to the information it provides.

A more prosaic reason to donate specimens to a museum is simply to make room for something new. Storage is often a problem, especially for an energetic collector. If a museum is interested in the specimens, you can increase your storage space while at the same time improving the museum's research collections. Have your interests changed? The specimens may still have interest to others.

All right, let us presume you decide to give your collection (or any part of it) to a museum, what then? Giving to a museum is not like giving most gifts. You are handing the museum a responsibility, expecting it to assign resources to your specimens. The specimens will get an accession number, for a start. If the collection is to be immediately curated (the name given to the process of numbering, documenting, identifying and storing your specimens), some person must be assigned this task. The specimens will be laid out in trays, and locality numbers will be assigned. The specimens will be individually marked, often with a spot of white paint upon which are written numbers for the locality, individual specimen, or both. A specimen label is printed and placed in a small box or tray with the specimen. The specimen number and other data will be typed into a cataloging program in the museum computer system. Finally, a place will be made for each specimen in the collection storage facility.

Choosing a museum

Have you chosen a museum that you would like to hold your specimens? There are many public museums, run by government agencies, universities, community organizations and foundations, scattered all over the country. Most people prefer to donate to an institution in their own area. Not all such institutions have the ability—or the expertise, or the space, or the personnel—to properly care for collections of fossils. Some may even accept a collection, but then have difficulty knowing what to do with it. They may not have adequate curation procedures in place. Unfortunately this situation often results in the loss of information about the fossils, or even the total disappearance of the collection. The worst offenders are often small colleges and small community museums, many of which have only one or two people protecting their collections and may have a high turnover of personnel. Long-term prospects for preservation of relatively esoteric fossils are not good in many of these places.

Three Rules for donating

So, my RULE 1 is, **look for a museum which will preserve, potentially use, and appreciate your specimens.** Larger and older natural history museums are often the best choice. They are more likely to have expertise and be looking to improve their collections.

RULE 2 is pretty obvious—**make your collection desirable.** For a museum, that means first of all having information about the specimens. First priority; where is it from? A specimen with no information about geographic and stratigraphic source is not useful for research, and even really good-quality specimens may have little value to the museum without this information. The more precise the locality data, the better. If you can number your localities and put your number on the specimen, do it. Don't worry about trying to hide your favorite collecting locality, as competent researchers in your area probably already know about it, and are unlikely to have time to go look at it anyway unless you want to lead them there. And if the locality is a new one, this may increase the desirability of your collection. Other information, such as dates, collector's names, and anything else which may have been recorded, should also be kept with the specimens, either written on it or on a paper label. Often lower-quality specimens are just as desirable in the museum's research collections as the spectacularly nice ones, and almost anything which can be identified can be useful.

RULE 3: **Get to know somebody at the museum.** It can be a curator, collections manager, administrator, volunteer, faculty, or a relative or friend who knows one of these and can point you in the right direction. This will make your donation process much easier. Discuss your collection with one or more of the responsible people. They love to talk about fossils, or they probably wouldn't be there. **Negotiate**, to be sure what happens is acceptable to you. Do you insist that the collection be put on display? Few museums can fulfill this demand, but many can put up temporary displays of parts of your collection, or can eventually use the specimens in a regular display program. Even fewer can give you money for your specimens, as taking a donation of specimens also means adding to their expenses. Don't propose too many conditions, or the museum will reject the donation and your carefully gathered, prepared and displayed treasures are likely to end up as doorstops or decorating someone's rock garden, or as a moldy pile of boxes in a basement or garage.

Donating specimens to museums is one of the easiest ways to participate in the scientific process and in the advancement of knowledge in Paleontology. I hope you see this as an opportunity to be a serious contributor.

Return to the Dinosaur Graveyard

Como Bluff, WY- Summer 2014

Jerry Dodson



I know, I know! It's much too early to be thinking about the 2014 dig season in Wyoming.

Well, I don't think so albeit the detail of planning an event for NARG members may be put off for a while. Say, till March 2014. Oops! That's only 4 months away.

I talked with Anita Colin, who now resides in Florida, who in turn talked with Jim Seigwarth, who actually controls or let us just say, decides who can or can't dig for dinosaurs on the Carlin Ranch. Hmmm! Approximately 40,000 acres.

Whew! That's a lot of real estate. Hot (in summer), dry (most of the time but not without summer thunderstorms and perhaps a few twisters from time to time) and situated between Medicine Bow and Rock River. The dig site is at 7000 feet elevation

and a geologists as well as a paleontologists (amateur or professional) dream. Geologic layers are clearly visible and the Morrison Formation bumps right up against the Cenozoic (the pastureland of today which must be driven across to reach these badlands and the dead dinosaurs).

Dig season begins in earnest in early June and continues thru September. I suppose there are a lucky few who are permitted to go to the site whenever they can and the weather permits. Heck, I don't know.

I plan to be there sometime between mid-July and mid-August. That is also one of the times that Anita will be there. We have to coordinate with her and she plans to be on site with us as long as we are there. Anita and her husband (both retired) have condos in both Florida and Boulder, CO thus she is able to spend the Wyoming summer dig season out West then return to FL for the winter. Great planning, huh?

So here is what I would like to hear from you: Are you interested in participating? Anita has capped the head count at 10 including herself. She has a huge dino femur which has to be further stabilized before she can get it out. Probably she and other groups will have removed it before we get there.



And yes, think about the time of mid-July to mid-August. I will be meeting family in Park City, UT for a brief outing but my main goal and purpose is digging at the Nail quarry.

Dry weather camping is anticipated. We have to put together means to cook (collectively is best), work out travel plans, and coordinate travel. Both Greg Carr and Debbie Shannon-Jackson know the routine. Me too of course and Bruce Thiel. Note: With some planning on your part, you can find hotel/motel rooms at either Medicine Bow (remember Debbie's Virginian Hotel pictures at our November meeting?) or Rock River. Very limited groceries and café prepared meals are available. Both towns are close enough for a daily commute and I bet the showers are lovely. Anita has suggested we put together a camp shower. Greg, got any ideas?



Let me know if you are interested. Respond to this article. My email is jdodson01@msn.com. We will work out the details later but please, let's put together a NARG dinosaur dig group. You will enjoy the sunrises, the sunsets and the solitude. Plus you will have the pleasure of working with fellow NARG members.

So consider this one of your bucket list to do's. But get in touch with me. I will answer any questions you have or get answers for you. Let me know your interest. You have plenty of time to set aside time for the dig. Remember: Mid-July to mid-August.

We have time too to schedule lab prep time at the Tate Museum in Casper, if you are interested. I know they need the help and all of the bones from Como Bluff/Ridge go to the Tate.

Tool Tip



Some of the larger and more powerful air scribes and tools generate vibration that can affect your hands after hours of repeated use. Paleotools makes a gel grip that slips on over the tool and lessens the vibration. This one kept sliding down so was secured with a snap tie. Grainger also sells anti-vibration gloves that have extra rubber padding in the palms and fingers that hold the tool.).

NARG Newsletters Index

January 2005

NARG's Inaugural Newsletter.....	pg 1
The Taxonomy Report.....	pg 1
Why "Just Crabs".....	pg 2
Trip Report for 2004.....	pg 3
Paleontology and Geology of Oregon.....	pg 4

April 2005

An Alaskan Fossil Adventure	pg 1
The Taxonomy Report #2.....	pg 2
Trip Report for 10/04	pg 2

August 2005

An Alaskan Fossil Adventure (cont from last issue).....	pg 1-3
Trip Report for 6/05.....	pg 4
What a trip - (short neck pleisiosaur)	pg 5
NARG's Research Projects	pg 6

November 2005

Significant Fossil Find in Oregon.....	pg 1
Up the Creek: An Alaskan Fossil Adventure II.....	pg 1-5
Metasequoia: Oregon's State Fossil.....	pg 6
Washington Paleontology and Geology.....	pg 7-9
Taxonomy Report #3.....	pg 10-13
Fossil Preparation.....	pg 14

April 2006

Oregon Fossil Fest Recap.....	pg 1
Snow Crabs - An Alaskan Mis-Adventure.....	pg 2-3
Oregon Paleo Project.....	pg 4
Paleo Kids - Cephalopods in a blanket.....	pg 5
Family Friendly Collecting.....	pg 6
Books & Publications.....	pg 8
Fossil Preparation - <i>Anadara devincta</i>	pg 9
Featured Formation - Birdsong Outcrop.....	pg 11
Taxonomy Report #5 Marine Mamals.....	pg 12-16
Fossil Collecting Rules and Regulations.....	pg 17
Introductions to Trilobites.....	pg 18

July 2006

The Bone Wars.....	pg 1
Radiocarbon Dating.....	pg 2
Trip Reports - Oligocene Shoreline.....	pg 3
Woodburn Dig.....	pg 10
Northwest Fossil Fest.....	pg 4
Fossil Gallery.....	pg 8
Featured Fossil.....	pg 10
Happy Birthday NARG.....	pg 12
Trilobites - Ecology & Environments.....	pg 15

January 2007

NW Fossil Fest Recap.....	pg 1
Radiocarbon Dating Fund.....	pg 3
John Day Fossil Beds National Monument.....	pg 3
Taxonomy Report #6.....	pg 5
What is "Fossil Search and Rescue?".....	pg 6
Oregon Fossils - Plants of the Jurassic Period.....	pg 7
Trilobite Morphology.....	pg 8

April 2007

Marine Reptile - <i>Metriorthynchus</i>	pg 1
Oregon's Jurassic Crocodile.....	pg 1
NW Fossil Fest.....	pg 3
Tuscon Fossil, Gem and Mineral Show.....	pg 5
Dating using Invertebrates.....	pg 5
The Trilobite Eye.....	pg 6

September 2008

Royal Tyrrell Museum.....	pg 1
Pathological Cephalopod Specimens.....	pg 5
Cephalopod Convergent Evolution.....	pg 8
Oregon's Jurassic Crocodile.....	pg 11

September 2009

Preparing Fossil Leaves.....	pg 1
Kid's Corner: Swimming with Trilobites.....	pg 6
Never Turn Your Back on the Ocean!.....	pg 9
Insects and Aquatic Taphonomy.....	pg 10

June 2011

Northwest FossilFest August 13, 2011.....	pg 1
Crab Preparation Techniques: A summary of the May NARG meeting lecture by Bruce Thiel.....	pg 2
Did We Kill The Big Animals? A summary of the June lecture by Danny Gilmour, submitted by Larry Purchase.....	pg 3
2010 Field Trip Excursion, A summary of NARG's six-state, two-week search and rescue effort submitted by Aaron Currier, Robert Rosé, and Tim Fisher.....	pg 4 - 8

Spring 2012

State of Washington Field Trip by Robert Rosé.....	pg 2
My Story by Aaron Currier.....	pg 3
Preparation & Collections Symposium.....	pg 4
Hunting for Concretions.....	pg 5
Air Manifold for Fossils by Dan O'Loughlin	pg 6-12
Fossil Fest 2012, Newport, OR.....	pg 13
Adhesives & Consolidates for Paleontology part 1.....	pg 14-15
NW FossilFest, 2011.....	pg 16-17

Summer 2012

Oregon's Recent Ichthyosaur Finds.....	pg 1-2 6-7
Past to Present: Living Fossil Experiment.....	pg 3
NARG Fossil Fest. Aug 11, 2012.....	pg 19-21
Fossil wood & Volcanics in the Pacific North-west	pg 5
The Collecting Philosophy of Jim Goedert	pg 8-9
'Crab Camp' Number '10'.....	pg 10-11
Willamette Valley Pleistocene Project &	
Mike Full Visit	pg 12-13
Radiographing Concretions.....	pg 14-17
Fossil Prep Tip	pg 21

Fall 2012

Oregon's Recent Ichthyosaur Finds.....	pg 1, 8,9
Glasses for the Beach.....	pg 2
My First Year with NARG.....	pg 3
Salamander Discovered in the Lyons Formation.....	pg 4
Carinaranina willapensis Found in Arago Formation.....	pg 5-6
Rogueus orri, Crab found near Agness, OR.....	pg 7
Bruce's Crabs on Display at Tate Museum.....	pg 6
1st Report on report of Bernie.....	pg 1, 6
Newport Fossil Fest 2013	pg 2, 6
Be on the lookout for Pteropods	pg 4
Removing Lichens from Specimens	pg 5
Check Out this Cool Website.....	pg 6
How to Store Chesils.....	pg 7
Fossil Collecting at Knapton, WA	pg 8-9
Public Land Regulations & Paleontology.....	pg 10
Tips for Finding Fossils	pg 11

Winter 2013

1st Report on Prep of Bernie.....	pg 1, 6
Newport Fossil Fest 2013.....	pg 2, 3
Be on the lookout for Pteropods	pg 4
Removing Lichens from Specimens.....	pg 5
Check Out this Cool Website.....	pg 6
How to Store Chisels.....	pg 7
Fossil Collecting at Knapton, WA	pg 8-9
Public Land Regulations & Paleontology.....	pg 10
Tips for Finding Fossils	pg 11
Lincoln Creek Formation Fossil.....	pg 12-14
Field Trips to the Yaquina Flora.....	pg 15
Collecting Fossils on Oregon Beaches	pg 16-17
Crab Fossil Prep.....	pg 18-19

Spring 2013

Bernie the Ichthyosaur Prep Update #3.....	pg 1 ,4-6
Paleobotany at Oregon State	pg 2, 12
Stones for Estonia.....	pg 3
Fossil Prep Symposium at Royal Tyrell Museum.....	pg 7-14
Dinosaur Hunting at Nail Quarry.....	pg 12
Simple Air Dryer for Air Tools & Sand	pg 13
Proper Collecting Footwear	pg 14
Dinosaur National Monument Visit	pg 15
Handy Fossil Preparation Technique by Temporary Support with Disposable Mold.....	pg 16-17

Summer 2013

NARG's Croc is Named!.....	pg 1-2
Crab Camp 2013... A Huge Success.....	pg 3-5
Heat Stroke...Nothing to Mess Around With.....	pg 6-7
NARG's Mammoth Tusk.....	pg 8-10
Western Wyoming Community College Natural History Museum.....	pg 11-13
More Macroaena.....	pg 14
Bernie's Got Teeth!! and Other Finds.....	pg 15-16
An Embarrassment of Riches.....	pg 17-18
NARG's 8th Annual FossilFest.....	pg 19-21
How to Produce a Bench.....	pg 22-26

Fall 2013

Bernie the Ichthyosaur Update.....	pg 1-2
Maeandricampus triangulum Crabs vs Palalius vulgaris & the Race Against Erosion.....	pg 3
U of Wyoming Larimie.....	pg 4-5
Two Raninidae Type Crabs.....	pg 6
NARG Radiometric Dating Project.....	pg 7
Kent Gibson Donates Skulls to the Smithsonian.....	pg 8-10
Cetacean Cervical Vertebrae.....	pg 11
Portland Regional Gem & Mineral Show.....	pg 12-15
Bernie the Ichthyosaur.....	pg 16-17
NARG Upcoming Activities.....	pg 18

Fossil Insect

Recently we were able to photograph some of the insects that Bob Manley collected. Here is one of the mystery critters. Do you know who I am?

Walt Wright's Petrified Wood Identification Seminar

**Hillsboro, Oregon
August 10, 11, 12, 2014**



Join the North America Research Group in welcoming Walt Wright to the Rice Museum for his acclaimed petrified wood seminar following NARG's NW FossilFest. Walt will introduce you to the wonders of wood, its petrification, and identification including use of microscopic structures. This customized workshop will focus on examining characteristics of wood of the region, as well as popular worldwide specimens.

Walt is a Botanist, Ecologist, Geologist, and Paleobotanist with professional experience working for the U.S. Forest Service, University of California, and as a consultant to government agencies in the field. He draws from a life-long passion for petrified wood to deliver an exceptional series of lectures that guide attendees through a unique learning opportunity.

Walt will give an introductory lecture during NARG's NW FossilFest on Saturday, August 9th, followed by the three day workshop. The \$110 workshop fee includes lunch and admission to the Rice Museum where one the most incredible petrified wood displays resides. An optional field trip to Hollywood Ranch will follow on Wednesday. To register or for more information, visit the workshop website hosted by NARG.

<http://www.nargpaleo.org/seminar>
NARG message phone # 503-364-2979

NORTHWEST FOSSIL FEST

**Celebrating the
10th Anniversary of**



North America
Research Group
nargpaleo.org

Inspire. Inquire. Interact

In addition to NARG's significant discoveries, an exquisite collection of petrified wood from the Pacific Northwest will be on display.

Plan to attend lectures on paleontology, including world-renown wood identification expert Walt Wright (see back for details).

Fossil identification help.

Observe and participate in fossil preparation demonstrations.

And, many educational activities for kids!

August 9, 2014

Saturday, 10:00am to 4:00pm

Rice NW Museum of Rocks and Minerals
26385 NW Groveland Drive, Hillsboro, Oregon

NARG message phone #: 503-364-2979

nargpaleo.org

NARG Up Coming Activities

- * April 16, Wednesday - Science Expo, Willamette University, Salem, Oregon (NARG exhibit and outreach)
- * April 18-20, Friday-Sunday -- Willamette Agate & Mineral Society Rock Show, Polk County Fairgrounds, Rickreall, Ore. (NARG exhibit, outreach, and identification).
- * April 26, 2014, Saturday - Fossil Fest Newport, OR (**re scheduled**)
- * April 27, 2014, Sunday - Newport, OR-- Beach Field Trip (**rescheduled**)
- * Spring - Date TBA— Chucanut Formation—Fossil leaves, fossil foot prints.
- * Last week in May or first week in June - East Birch Creek (Plant Fossils) near Pendleton, OR
- * Wallawa Mtn. NARG Fossil (possible Trip)

Dates: Possibly the last week of July to 1st week of August may be chosen. The 9,000 foot Wallowa Mtn. peaks can cause the area to be snowed in during spring.

Part 1. Black Ammonites & Cycads, possibly late Permian, from near Wallowa Lake at Black Marble Quarry (north end of Wallowa Mtns.)

Part 2. From Martin Bridge, creek side, camp ground, plan to visit:

1. Summit Point's Triassic age sponges, algae, mollusks, sea urchins, corals, sponges, & pelecypods.
2. Spring Creek's corals, sponges, & pelecypods.
3. Excelsior Gulch's Jurassic clams, belemnites, & trace fossils.
4. Eagle Creek has more of the same.
5. Possible other sites.

- * NARG Annual Campout (Crab Camp) July. Date to be determined.
- * NARG FossilFest - August 9, 2014
- * Walt Wright's Petrified Wood Workshop - Aug 10-12
- * Holleywood Ranch Fieldtrip - Aug 13

NARG Officers:

President: Aaron Currier (503) 364-2979
 Vice President: Robert Rosé (541) 367-2052
 Secretary: Tami Smith (503) 620-5317
 Treasurer: Peg Johnson (253) 370-8892

Directors:

Bill Sullivan (503) 429-6707
 Larry Purchase (360) 254-5635
 Dan O'Loughlin (503) 866-5997
 Michael Santino (503) 981-8902
 MacKenzie Smith (503) 403-8941

Committees:

Newsletter: Peg Johnson
 Aaron Currier
 FossilFest: Linda Harvey
 Dan O'Loughlin
 NARG Auction: Linda Harvey
 Portland Regional: Dan O'Loughlin

NORTHWEST
FOSSIL FEST

August 9, 2014

*A Celebration
of Paleontology in
the Pacific Northwest*

at the Rice Museum
in Hillsboro, Oregon



presented by the
North America
Research Group

FREE ADMISSION

nargpaleo.org