NARG NEWSLETTER

Official Publication of the North America Research Group Fall 2017

Volume 6 Number 3

Portland Regional Gem & Mineral Show

By Dan O'Loughlin

Growing up in a trade show producing family, I am critical of how shows are produced. Are they professional looking? Do they move the crowd through well? Are vendors getting enough walk by? I have to say, this year's show was the most professional show I have seen in a long time. As part of the Regional board, we made some decisions that seemed to work out well.

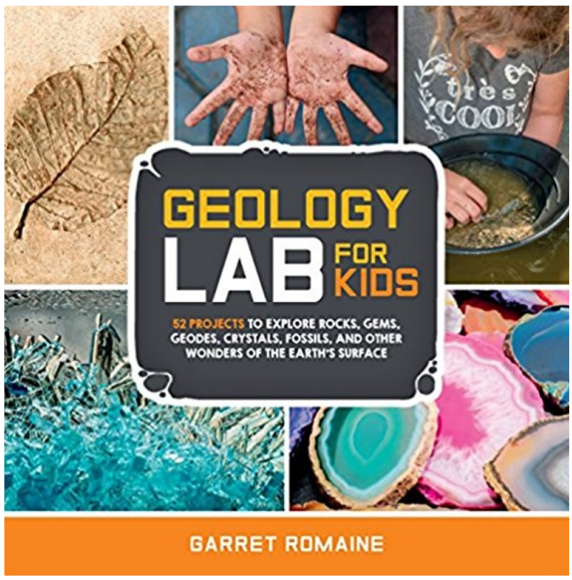
We limited the exhibit cases to 80 rather than 100. This was because we found it was quite difficult to fill 100 cases leaving us with a partially full exhibit area. As it was, NARG was asked to fill an additional 4 cases to complete the needed 80. This then allowed us room for 2 additional vendors and show speakers. Of special note: Of the 80 exhibit cases provided this year 27 featured fossil material. NARG members filled 20 of those cases. I should note NARG once again received ana- ward for the most exhibit footage per club membership.

Linda Harvey received the President's award for her display of petrified wood knots. This was part of a collection she obtained from longtime collector Don Schattauer.

Our full lineup of speakers this year captivated their audiences. Guest speakers included: Garret Romaine (NARG) , Pat McMahan, K. Myers, Leslie Moclock (Rice Museum), and Cindy Proctor. Garret presented his new book, *Geology Lab for Kids*. While Leslie spoke on Oregon Gems. With a continued need for new club members, the Portland Regional allowed me to group the demonstrators according to their club affiliation in order to promote the five sponsoring clubs. Banners were displayed behind each group announcing their affiliation. I also constructed an information station where show guests could pick up membership applications and see where the various clubs met. In addition, we had two special guest demonstrators. Dick Pugh, with The Cascadia Meteorite Laboratory (PSU), came on Sunday to show off some of his meteorite collection. Carol Cimolino, with Marysville Rock & Gem Club, returned this year to demonstrate her world-class Intarsia. NARG members Cindy Yablok (wirewrapping), and Herb Bastuscheck (bonseki) both lent their talents to the demonstrator tables

Linda Harvey did a great job of keeping the vendors varied in their products. She had a waiting list of others who would like to have participated if we had more floor space. This also is a good indicator of a successful show. Vendors seemed to have done well again this year. Cindy Yablok, with some assistance from Julian Gray, did a fantastic job of utilizing the internet for advertising the event. This produced an active crowd of rockhounds for the show.

I would like to thank Linda Frenette for her last two years of being President of Portland Regional. Her two years at the helm have been the most successful yet. In addition, Cindy Yablok does our advertising, Linda Harvey is in charge of the vendors, Bill Harvey Jr. draws our floorplans, and Greg Gentry represents Mt Hood as an advisor to the group. This show was a success because of these people. A long list of volunteers from NARG helped set up, monitor, staff, and tear down the event. We should all give ourselves a pat on the back.

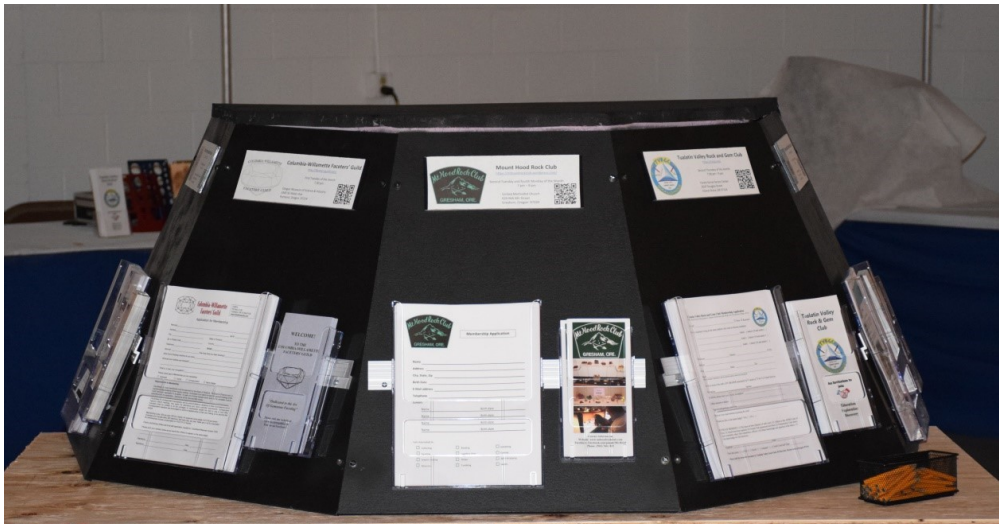


Herb Bastuscheck demonstrating Bonseki

An unidentified fossil brought to the NARG table

Dick Pugh and his meteorites

Peg Johnson answers questions.



Club information and membership application station

Tami Smith guarding the Halloween candy

Demonstrators arranged in groups

Tim Fisher enjoys the demonstrators

Linda Frenette explains how to join a group

Bill Harvey Jr. pestering the demonstrators

Robert Rose examines one of the many woods

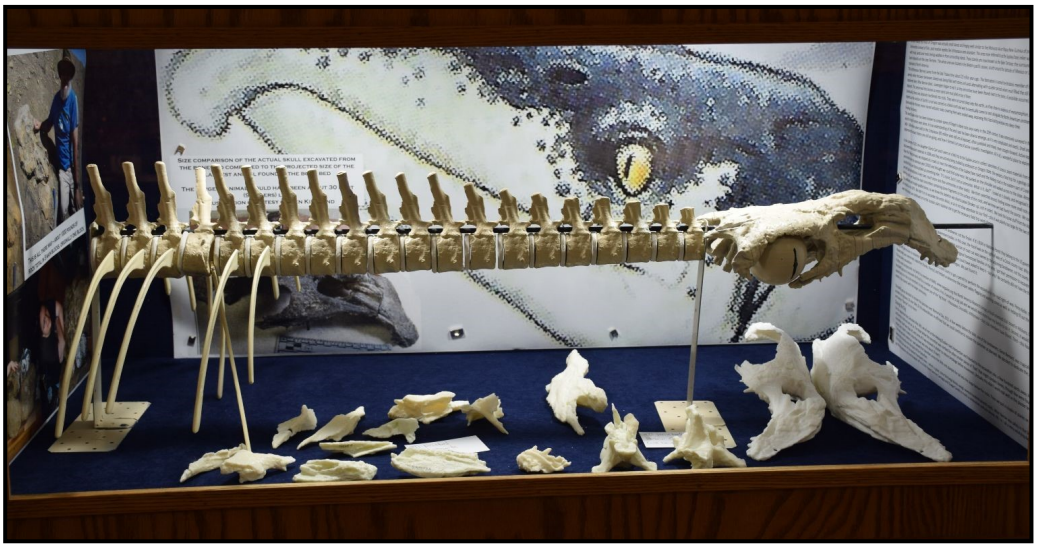
Joe Cantrell and Pat Jordan exploring rocks

Greg and Rick entertain guests

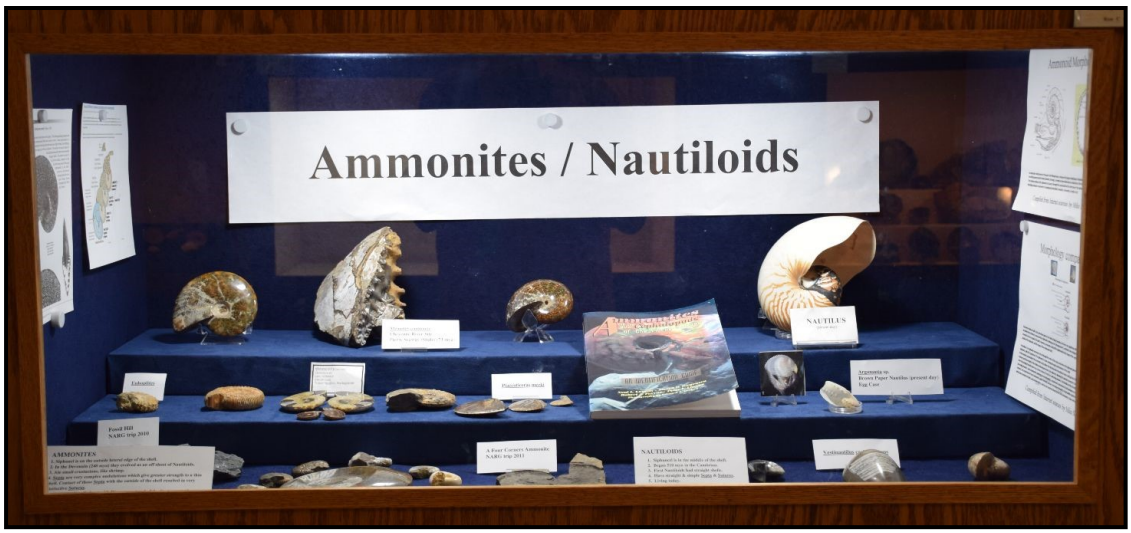
Joe Cantrell photographing an opal

The kids corner is always popular

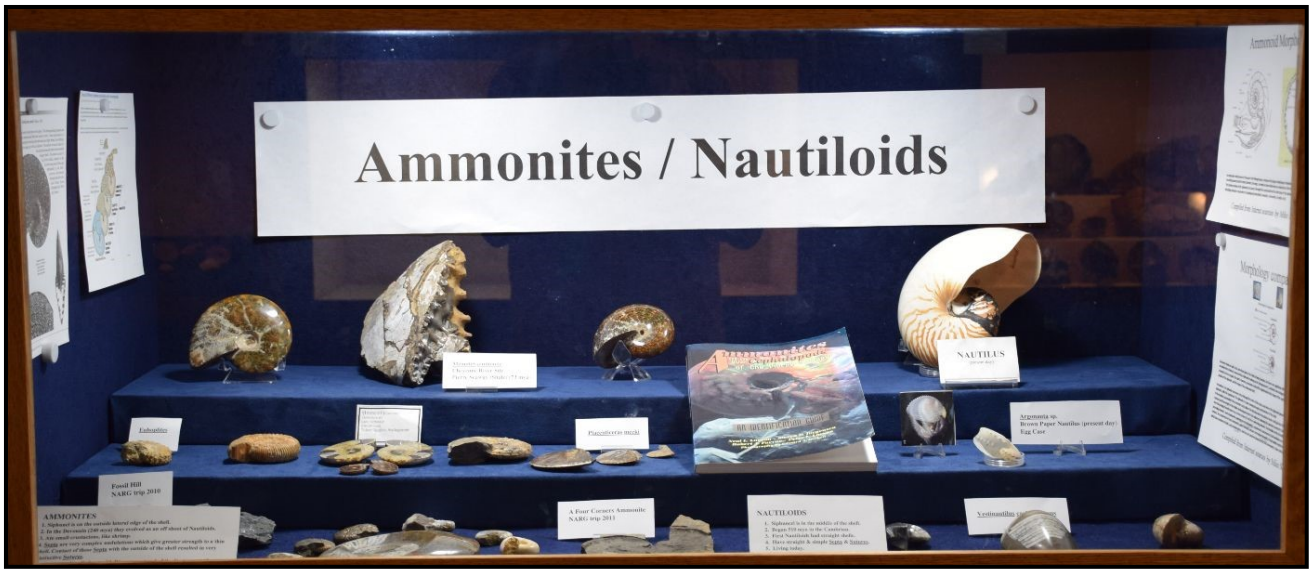
Portland Regional Cases



3D print of Bernie the Thalattosaur.




Ammolite


Ammonites / Nautiloids
NAUTILUS
AMMONITES
NAUTILOIDS


Belemnites / Baculites
BELEMNITES
BACULITES

Petrifed Wood from Hollywood Ranch, Sweethome, OR

Fossil Metasequoia

In Memory of NARG's Past President Bill Sullivan and NARG member James Scheirbeck.

Fossil Coral

Discovering Tertiary Crinoids in the Keasey Formation

By Tara L. Baker, Ph.D.

On Septemper 9, 2017, eleven members and friends of NARG met at the Natal Grange north of Vernonia, Oregon within the geologic Keasey Formation. It was our hope to extract crinoids from a newly discovered area rich in crinoid fossils discovered by Greg Carr and his daughter, Gloria Carr. Greg, a long-time NARG member, organized and led this field trip looking for crinoid fossils in the bedrock at the bottom of a Nehalem River tributary. Our group was excited to explore the area and find our own fossils.

We traveled via caravan approximately one mile up Highway 47. We slid down a steep six foot embankment to the river, then proceeded to carefully wade through cool water about a foot deep to the west bank. A cliff looms over the river on that side. It was evident right away that others had worked the soft rock there, as loose scree covered the base of the cliff. Other areas of the cliff had been dug-out and had questionable hanging rock shelves overhanging the indentations. Some of us began chipping away in this cliff wall. From the wall itself, we were rewarded with some fossils of sea urchin and mollusks. Additionally, we found several solitary coral fossils in the loose rock at the base of the cliff.

Eleven members and friends of NARG who met at Natal Grange on September 9, 2017 for a field trip looking for Tertiary crinoid fossils in the Keasey Formation

Greg and some others worked in the bedrock at the center of the river. With hammers and chisels, large rocks were removed, some 10-20 pounds. Looking at the soft, wet rock, we could see slight holes in layers that indicated probable crinoid molds within the rocks. Additionally, sandy layers atop the rock contained many bits of crinoids stems in what Greg termed “crinoid hash.” This was another clue that whole crinoids might be in another layer of the rock. Many of us left after a couple hours with obvious fossils or larger rocks to prepare at home.

I lugged home my own large 15 pound rock from the river and let it dry for a few days before working on it. As a complete beginner, my fossil preparation was rough, using a hammer and some narrow chisels, as well as a simple wood carving set. I was lucky, as the rock was easy to split and chip away. I found several external molds of large crinoid fossils, approximately 4-8 inches long, in my sample from the river. I was able to observe stem, arms

(brachials) and feather-like attachments (pinnacles) in my samples, though I did not have a complete crinoid fossil. These were exciting and satisfying results from my first NARG field trip. The fossils from our field trip are beautiful examples of organisms that thrived long ago here in Oregon.

Modern crinoids can also be called “sea lilies.” They are a member of the Echinoderms, along with sea stars and sea urchins. Many crinoid fossils have been found throughout the world, because most species had hard sectional stems that preserve well. They are so common in the American Midwest, where I am from, that most road gravel contains stem segments. However, the Mist, Oregon-area crinoid fossils are unique. They are some of the only examples of stem-bearing crinoids from the Tertiary age found in the Northern hemisphere, and very rare in North America. Most other North American crinoids are older, from before the Late Cretaceous. The Mist-area crinoids are some of the only examples of these organisms from this younger time period and can be used in evolutionary studies as links between the older fossils in the rest of the world, and modern examples alive today. Hopefully some of the samples found in September might be used in future comparison studies.

A solitary coral fossil found in the cliff on the west-side of the river

An example of a prepared crinoid from a 15 pound rock extracted during the field trip.

An external mold crinoid fossil complete with stem and crown. Found and shown by Greg Carr at the September 2017 NARG meeting.

Greg Carr, field trip organizer, showing members what to look for in bedrock

An example of the rocks and tools used on the field trip.

Crab Concretion Is Actually a Bird Skull

by Bruce Thiel

Terry Iversen from Bremerton, WA, was collecting in the Jansen Creek Member of the Makah Formation, exposed along the Strait of Juan de Fuca west of Sekiu, Washington, when he came upon what he thought was a poorly preserved crab carapace inside a concretion. He later showed it to NARG advisor Jim Goedert who said:

"It did resemble a crab the way it was exposed, being symmetrical, but I could readily see that the delicate surface was very thin bone and not the carapace of a crab."

Suspecting it was a bird, Jim sent it to fossil bird expert Dr. Gerald Mayr in Germany. Jim went on to say:

"The specimen is being prepared in Germany, but as exposed when Terry found it, a number of nerve canals and other features were observable. It is very small, and while true at the moment that it cannot be identified, I am fairly certain that once it is prepared it will be an important specimen."

Dr. Mayr has already described one small bird from the Jansen Creek Member, Makahala. Other birds described from the same rock unit are several kinds of plotopterids, and others being studied, to be published soon, according to Jim. Jim has found several birds himself, including an albatross from Knappton, WA, a pelagornithid, or bony-toothed bird, from the Nye Mudstone, near Newport, OR, and several Plotopterid remains from both Oregon and Washington. Pelagornithids are from the group that includes some of the largest known birds.

References:

Mayr, G. (2016a). Avian Evolution: The Fossil Record of Birds and its Paleobiological Significance. Wiley-Blackwell, Chichester, UK.

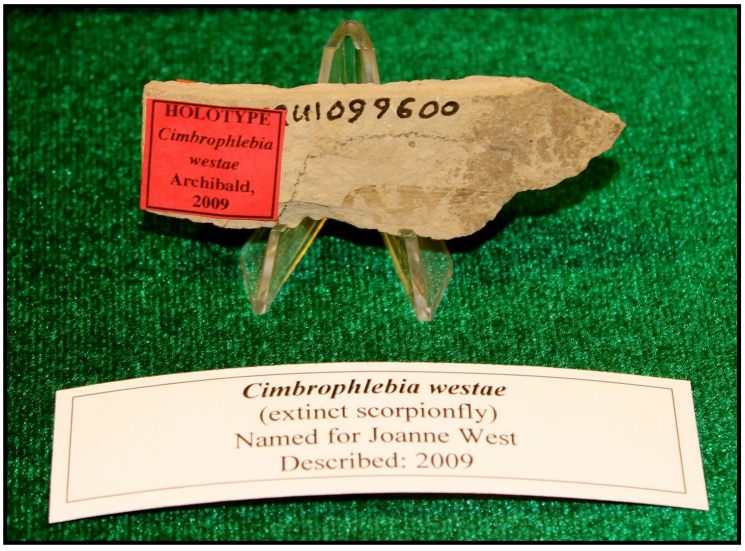
Mayr, G., and J. L. Goedert (2016). New late Eocene and Oligocene remains of the flightless, penguin-like plotopterids (Aves, Plotopteridae) from western Washington State, U.S.A. Journal of Vertebrate Paleontology 36:e1163573.

Goedert, J. L., and J. Cornish (2002). A preliminary report on the diversity and stratigraphic distribution of the Plotopteridae Pelecaniformes) in Paleogene rocks of Washington State, USA. In Proceedings of the 5th symposium of the Society of Avian Paleontology and Evolution, Beijing, 1–4 June 2000 (Z. Zhou and F. Zhang, Editors). Science Press, Beijing. pp. 63–76.

Goedert, J. L., and Mayr, G. (2017). Oligocene and Miocene albatross fossils from Washington State (USA) and the evolutionary history of North Pacific Diomedeidae. The Auk, American Ornithological Society. 134(3):659-671.

Juvenile Mammoth Tooth Found

Juvenile Mammoth tooth plate found by a farmer outside Albany in Linn County. Confirmed Willamette Valley origination and species identification by Dr William Orr. Presently Guy Di Toricce is stabilizing the specimen with poly-vinyl acetate (Butvar-76) for eventual placement in a Linn County museum.



The wing of a new species of scorpionfly, *Cimbrophlebia westae*, was found by NARG member Joanne West at Republic, Washington in 2009. It was described by Dr. Bruce Archibald in *Zootaxa* 2249: 51-62 (2009), and is one of the first occurrences of the extinct family Cimbrophlebiidae in the Western Hemisphere.

Knappton Site Update

By Bruce Thiel

An article mentioning NARG and featuring NARG advisor James Goedert and Bruce Thiel was published in the Columbia Land Trust magazine about their Knappton site.

This came about after Bruce heard that a PhD student of Drs. Feldmann and Schweitzer from Kent State was studying fossil crabs embedded in volcanic ash. Bruce sent them samples from several localities including Knappton. When they asked about coming out to take geologic samples, Bruce asked the Columbia Land Trust for permission on their behalf. He was surprised that they were denied to even remove small rock samples for geologic testing for scientific purposes.

The Trust seemed not be be aware of the importance and fossil history of Knappton. Bruce contacted Jim Goedert, who has collected in Knappton for almost 40 years and discovered several important new species. Fossils from Knappton reside in museums around the world, including The Burke, LA County, Condon Collection, Smithsonian, Royal Tyrrell and in Poland.

Bruce then contacted museums and tried to put together an inventory of all the fossils that had been taken from the site over the years to compile a listing of discoveries from Knappton to share with the Land Trust. Everyone he contacted was supportive, agreeing that the site should be available for scientific inquiry. After several emails, The Land Trust wanted to meet Jim and Bruce at the site to see the property. They showed up with a camera person and reporter and were shown fossils and given a very convincing argument. They indicate that they would now allow limited permitted collecting for educational purposes, partnered with an educational institution, with the caveat that any finds go to a Washington state museum. A final clarification is still forthcoming.

It was too late for the Kent State professors to visit the site, however they were able to visit another site in Washington State, after the Seattle GSA. (Porter/Brooklyn) that had fossils entombed in ash that Bruce had also sent them. Jim Goedert was able to get permission and access to gated land belonging to Green Diamond. They spent two days exploring and collecting samples. They found about 5 or 6 small quarter-sized crabs not in concretions but embedded directly in an ashen matrix that they will thin section for microscopic analysis and testing. They are hoping to determine whether the crabs died as a result of the ashfall, or were dead and later buried.

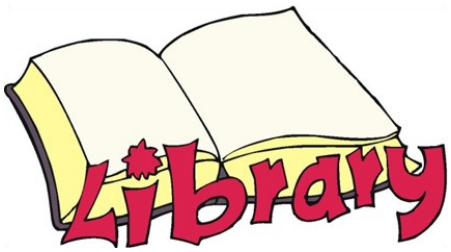
To see the final article go to https://www.columbialandtrust.org/fieldbookwinter2017/ and click on “viewing the digital pdf"

Crinoid Prep Workshop

Greg Carr's class on prepping Mist Crinoids. At top, second from left is Greg Carr. At bottom second from left is Debbie Shannon-Jackson. Larry Purchase seated with binoculars. Right front is Lanny Kittleson, N. W. Rock Hounds Seattle shop. Garret Romaine is behind Lanny. Photo taken by Pat Jordan on Nov. 18, 2017.

Larry Purchase

NARG



The NARG library has just become easier for members to use. The 430 books can be viewed by using the link below. Once you find a book you want, click on it and find its "index" number. Requests for books using the index number are made to danolough@aol.com. He will notify you if the book is already checked out. If it is not, he will bring it to the next NARG meeting. Members can check out 2 books at a time and should return them at one of the following 2 meetings.

http://cloud.collectorz.com/danolough/books

NARG Membership

NARG's membership dues for 2018 are due January 1, 2018

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Individual Membership = $25

Family Membership = $40

Student Membership = $10

You may pay for your membership by:

* Bring your money to our next NARG meeting..

* You can mail your payment to:

NARG
Margaret Johnson
2220 179th Ave E
Lake Tapps, WA 98391

* You can pay your dues thru Pay Pal. You don't need a Pay Pal account to pay this way. You can pay using a credit Card.

Fossil Calendar

Dino Days Burke Museum	Seattle, Washington	March 3,4
WAMS Show	Rickreall, Oregon	April 13-15
Newport Fossil Fest	Newport, Oregon	April 21
Stonerose member's dig	Republic, Washington	April 27-29
Association for Materials & Methods in Paleontology	Lincoln, Nebraska	April 24-28
Northwest Federation of Mineralogical Societies Show	Yakima, Washington	April 27-29

For a listing of local gem and mineral shows check out: http://www.mineralcouncil.org/shows.pdf

http://orerockon.com/ Click on Portland Area Rock Clubs, includes PNW Clubs)

NARG Officers:

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