

American Rockhound®

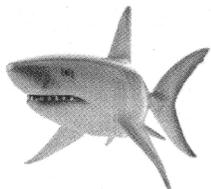
Jan/Feb/Mar 2015
Volume 2, Issue 5

The Magazine Written by Rockhounds for Rockhounds



Rocks from Space

Gerard R. Case
 Palaeontologist
 Specializing in Fossil Selachians



(843) 390-1645
 foss shark@sccoast.net

P.O. Box 664
 Little River, SC 29566

Heart Rocks
 Rob and Vicki Sting
 "Rock Hounds"

803•971•2407

wobandwickiwocks@hotmail.com 

ROCKS ROCK
 GEMSTONE JEWELRY

Lapidary Cabachons Wirewrapping

Donna Delong da.mammy@hotmail.com 417-699-8694
 Ken Sexton rockmanken@gmail.com 417-699-8707

205 E. 4th Street Galena, MO 65656

SPECIMENS

Backwoods Prospector
 Shaun Shelton



(336) 406-5797
 sheltos08@gmail.com

www.EagleGems.com
 608-774-9961
 gstaller@yahoo.com

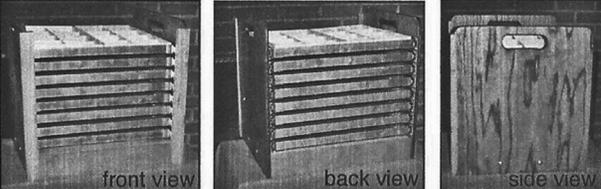


- Unusual Shapes
- Great Prices
- Huge Selection
- Locally cut



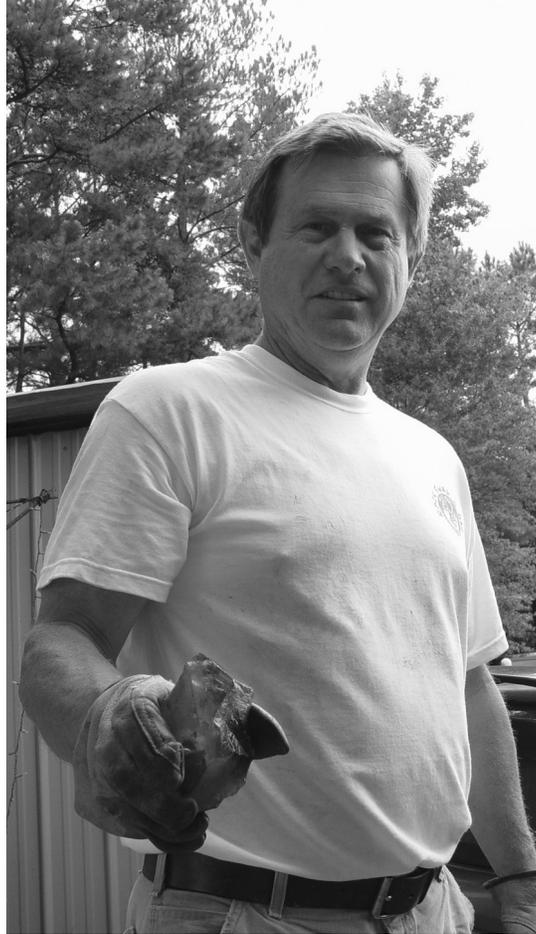
Great for wire wrapping,
 silver smithing or bead embroidery

LG Displays
 www.LGDisplays.com • gstaller@yahoo.com
 608-774-9961

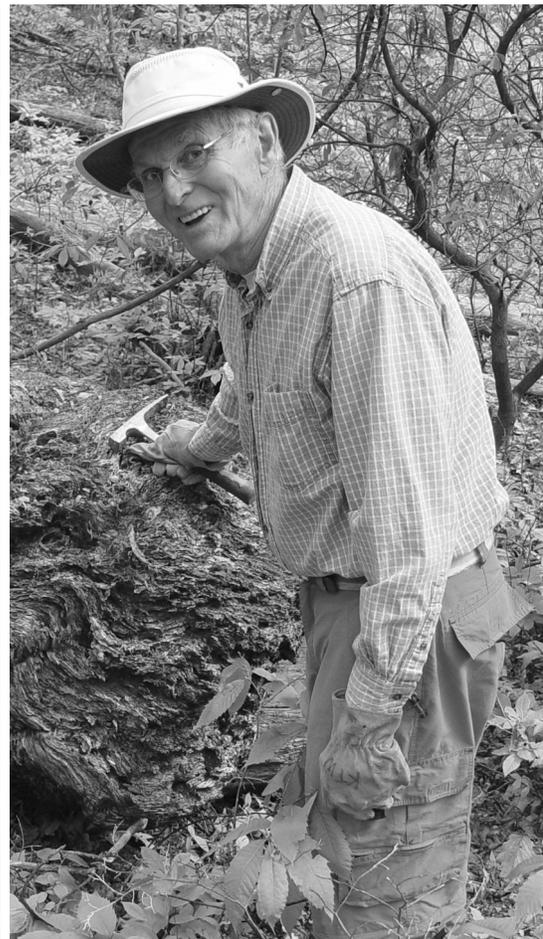
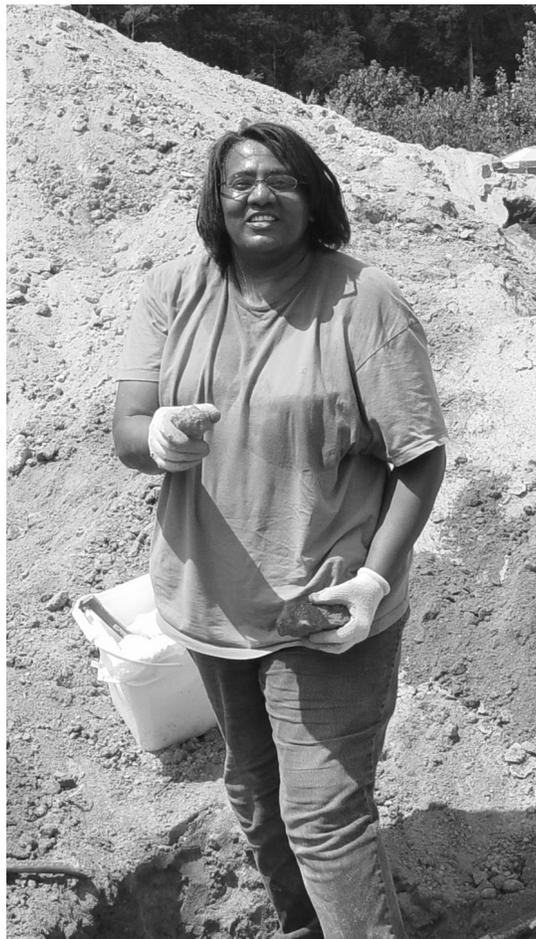


- Smart & Attractive Space Saving POP Displays
- 4 different models to choose from • Made in the USA





AMERICAN ROCKHOUNDS



Based in Asheville, North Carolina, **American Rockhound** is a quarterly magazine focused on promoting the hobby of rock, gem, mineral and fossil collecting. Featuring the latest information on North Carolina mineral collecting and rockhound news across the country. Sponsored by the **Mountain Area Gem and Mineral Association (M.A.G.M.A.)** and **Jacquot & Son Mining**, we have a wealth of information and content supplied by our members and independent rockhounds from all over the United States.

The publisher of this magazine has made every effort in the preparation and layout of content to ensure the accuracy of the information provided by the various contributors. However, the information in this magazine is sold without warranty, either express or implied. The publisher, editors and employees of **American Rockhound Magazine** will not be liable for any damages caused or alleged to be caused directly, indirectly, incidentally, or consequentially by the information in this magazine.

Copyright © 2015 **Jacquot & Son Mining and Publishing and American Rockhound Magazine**. Reproduction and translation of any part of this work beyond that permitted by Sections 107 and 108 of the United States Copyright Act without the permission of the copyright owner is unlawful.

American Rockhound Staff

Richard Jacquot

*Owner, Managing Editor,
Cover/Interior Art, Page Layout*

Sandy Jacquot

Senior Editor, Art Director, Page Layout

Regular Contributors

Rick Jacquot, Rob Whaley, Jim Landon, Steve Barr, Sandee and Carl Barton, Gary Nielson, John Lichtenberger, John Sinclair, Dan Cathey

American Rockhound Logo

*Sandy Jacquot, Richard Jacquot,
Tony Elwood*

Photo Credits

*All photos by Richard Jacquot
unless otherwise noted*

Contributors

Richard Jacquot, North Carolina



Rick began collecting rocks and minerals at an early age. For the past 26 years he has been mining and collecting in the southeastern US, specifically in the area of Western North Carolina. In 2006, he took up SCUBA diving for fossils and artifacts to expand his collection even further. Rick has had numerous articles and books published on mineral and fossil collecting. Today he is the Owner/Operator of Jacquot & Son Mining, President of the Hiddenite Gems Investment Group LLC, President of the Mountain Area Gem and Mineral Association (MAGMA) and the Owner/Editor of American Rockhound magazine.

Rob Whaley, North Carolina



Rob began collecting minerals in 1967 in Franklin, NC. He became a serious digger in 1980 by striking a major quartz/anatase pocket at Shingletrap Mountain in Montgomery County, NC. For the past 34 years he has made significant finds in Montgomery, Randolph, Stanley, Catawba, Guilford, Rutherford, Chatham, Henderson and Cleveland counties in North Carolina as well as Anderson, Union and Abbeville counties in South Carolina. Rob is a member of MAGMA and the Hiddenite Gems Investment Group LLC.

Steve Barr, North Carolina



Steve is a well known cartoonist and author. His cartoons have appeared in a wide array of publications, including the Complete Idiot's Guides and the Chicken Soup for the Soul series. It may sound crazy that someone who earns his living with his hands would risk injury to them by constantly digging for rocks and gems, but he just cannot help himself, he's addicted! Whenever he can slip away from his drawing table and computer, you'll find him out digging for minerals and searching for new locations to explore. Steve is a member of MAGMA and his art and wit is present in each issue of American Rockhound on the *Rockhound Kids' Pages*.

Jim Landon, Washington



Jim began rockhounding at the age of five or six when he used to pick through the gravel on the streets near his house, or explore a creek where he would find random cow and horse bones to drag home. As the years passed, his interests centered on mammal fossils that are so abundant in Nebraska. Infrequent trips to the University of Nebraska State Museum fueled this growing passion with their extensive displays of vertebrate mammals. Later, trips to the White River Badlands in NW Nebraska gave him the opportunity to roam the ravines and gullies in search of a whole range of fossils. When he started his teaching career in Seward, Nebraska, he established close ties with researchers from the vertebrate paleontology department at the University of Nebraska, which led to many opportunities to participate in digs they would conduct in the summer. Later still he developed an interest in collecting Fairburn agates. After moving to Washington State, his interests expanded to pretty much anything that dealt with rock collecting. When writing, Jim enjoys sharing the excitement of the hunt and telling stories about what it is like to experience nature at its best. Not only what can be found, but how it got there. Jim has been fortunate to be able to travel to many famous collecting localities in the US, with most being in the Midwest and Northwest. Jim has over forty published articles to date and is constantly on the search for more topics to write about.

Gary Nielson, Tennessee



Gary served in the US Navy Submarine Service for eight years. After the Navy, he attended Johnson & Wales Culinary Institute in Rhode Island for two years. He worked as a chef at the Hilton and Wyndham hotels in Orlando, Florida for four years. Currently, Gary is the Meat/Seafood dept supervisor (Publix Supermarkets) for thirty stores in the Nashville area. Gary and his wife Vickie started competing in professional BBQ competitions in 2010 as a "hobby". They did very well, and now they compete in KCBS (Kansas City Barbecue Society) sanctioned events in TN, GA, KY, and AL. They compete in approximately 6-8 competitions a year. They also cater BBQ as a side business, with 2 large smokers and a 20 ft enclosed BBQ trailer. They do a lot of outdoor cast iron/dutch oven cooking as well. Gary has been interested in and collected rocks and minerals since he was a child. His

AMERICAN ROCKHOUND

americanrockhoundmagazine.com
info@americanrockhound.com

Reader Services

Subscriptions

The annual print subscription rate is \$42.00, single print rate is \$12.00. Print orders must be received within one month of publication date. Annual subscription begins with the next published issue after payment is received.

The annual CD subscription rate is \$22.00, single CD rate is \$7.00.

Payment can be made by check, money order or paypal rick@wncrocks.com.

Send check or money order to:
American Rockhound
PO Box 542
Leicester, NC 28748

Gift Subscriptions

American Rockhound makes a great gift. Order by phone, e-mail, or on our website. A card is sent with each order, indicating who the gift is from and when the recipient should expect the first issue.

Change of Address

When calling or e-mailing us your change of address, please provide the old and new addresses. The post office will not forward **American Rockhound**, so please send us your new address quickly to avoid an interruption of service.

Back Issues

When available, back issues of **American Rockhound** can be purchased for \$12.00 (includes postage). Back issues on CD can be ordered anytime for \$7.00 (includes postage).

Bulk Orders

For information about discounted bulk orders of **American Rockhound**, call 828.779.4501.

Advertising & Marketing

For information about advertising or marketing, contact Rick Jacquot at info@americanrockhound.com or call 828.779.4501.

Contribute

Writers, photographers and illustrators may send queries and samples to Editor-in-Chief Rick Jacquot at info@americanrockhound.com.

americanrockhoundmagazine.com

Check us out on the web for a range of information and services, including current articles, subscriptions and advertising rates.



Pisgah Astronomical Research Institute



Where Science Excites the Imagination

Monday - Friday 9:00 am - 4:00 pm
1 PARI Drive Rosman, NC 28772
(828) 862-5554 www.pari.edu

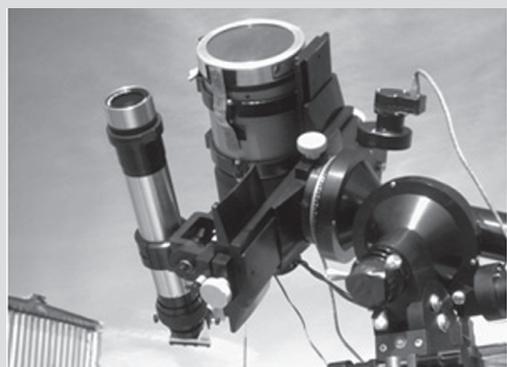
PARI is a public non-profit foundation dedicated to providing hands on educational and research opportunities in science, technology, engineering and math. Located in the Pisgah National Forest 30 miles southwest of Asheville, the 200 acre campus houses radio and optical telescopes and earth science instruments. For more information about PARI and its programs, visit www.pari.edu



[www.twitter.com/Astronomy_PARI](https://twitter.com/Astronomy_PARI)



www.facebook.com/Pisgah.Astronomical.Research.Institute



main collecting interest is in specimens from the Elmwood Mine, but he loves to find and collect anything, as he and Vickie love to be outdoors and camp. He also metal detects (mostly civil war sites), and loves old trains!

John Lichtenberger, Kentucky



Prior to retirement, John was engaged for over four decades in a wide range of R&D in aerospace, chemical, electrochemical, medical management, engineering, and consulting industries, including the National Radio Astronomy Observatory, Bell Aerospace, and several others. He formed his own company, Meta-Plate Inc. in 1976. He invented a process for electroplating radioactive technetium 99 for R&D biofouling and medical uses, and was granted patents for other work, including US Patent 6607614 - Amorphous non-laminar phosphorous alloys; US Patent 5032464 - Electrodeposited amorphous ductile alloys of nickel and phosphorus; US Patent 4801947 - Electrodeposition-produced orifice plate of amorphous metal. John's interest in rocks and minerals dates back to his childhood, when a neighborhood friend gave him some amazonite from Amelia, Virginia at the age of 8. At age 12, he found quite a bit of crystallized turquoise in Lynch's Station, VA. and has been hooked ever since. He still enjoys collecting and sharing with other rockhounds, though at a slower pace than in his youth. He and his wife, Sue, reside in Kentucky, where they are avid lapidarists and gemstone faceters.

Dan Cathey, North Carolina



Dan began his career teaching biology classes at Western Piedmont Community College in Morganton, NC. While there, he expanded a program in environmental science and was recruited to Raleigh to work with the Division of Water Quality. Dan spent a couple years there but it turned from a training position to one in which he gave state exams. He moved to the Division of Environmental Health and ended up developing tests again. Missing the classroom, Dan found that middle school science was an interesting challenge and taught seventh and eighth grade science for over a decade. Dan is now retired and spends all his time talking about rocks, at least that is what his wife says. Dan and his wife began collecting in Franklin, NC at the Gibson Ruby Mine about 30 years ago. From there, he has gone from sluicing for rocks, to mineral shows, to field collecting.

Carl and Sandee Barton, Virginia



Carl is a retired 30 year Navy veteran from Paul, Idaho. When he is not out in the field collecting, he is busy in his wood working shop making things for family and friends. Sandee Barton received her B.S. degree in Geology from the University of Wisconsin-

Oshkosh, her M.S. in Geology (micropaleontology) from Florida State University, and her Ph.D. from Southern Illinois. She is semi-retired and now only teaches during the "official" school year, for Saint Leo University and Tidewater Community College. Both Carl and Sandee spend their free time traveling the United States visiting National Parks and rockhounding for the treasures Mother Nature has to offer.

Tony Jones, North Carolina



Tony lives in the Sandhills of North Carolina, between the famous Pinehurst golf course and Ft. Bragg military base. He's had a fascination with rocks and minerals since being a little boy but wasn't able to act on it until finding the Mountain Area Gem

and Mineral Association in 2011. Tony brings his parents along on digs to enjoy the camaraderie and to maybe help carry some rocks back to the car. Mainly for the good times to be had out in nature (and to help carry rocks). Tony has dabbled in many hobbies. Current interests in the rotation besides rock collecting and lapidary work include mountain biking, caring for two pet carpet pythons and raising assorted carnivorous plants.

John Sinclair, North Carolina



As a native of North Carolina, John learned at a young age that the ground beneath him held natural treasures. He's been an avid gem and mineral collector since the 1980s and a meteorite collector, hunter and dealer since 1996. John has an IT degree from Guilford Tech and is

trained as a bench jeweler. He enjoys hunting for rocks and minerals most everywhere he travels and meteorites when he gets in a good area for them. John works at the Pisgah Astronomical Research Institute (PARI), just north of Brevard, North Carolina, as the Curator of Meteorites and Minerals. His current project is helping build a meteorite and mineral museum on the PARI campus.

Collect emeralds at the only
real emerald mine open to
the public in North Carolina!

Crabtree Emerald Mine

Managed by the Mountain
Area Gem and Mineral
Association

Open Year Round!



Come spend the day with family, friends and fellow rockhounds and try your luck at finding the rare gem emeralds the mine is famous for. You may also find black tourmaline (schorl), yellow beryl, green beryl, garnet, mica, feldspar, quartz, fluorite and more.

Adults: \$20.00 per day

M.A.G.M.A. Platinum members:
\$15.00 per day

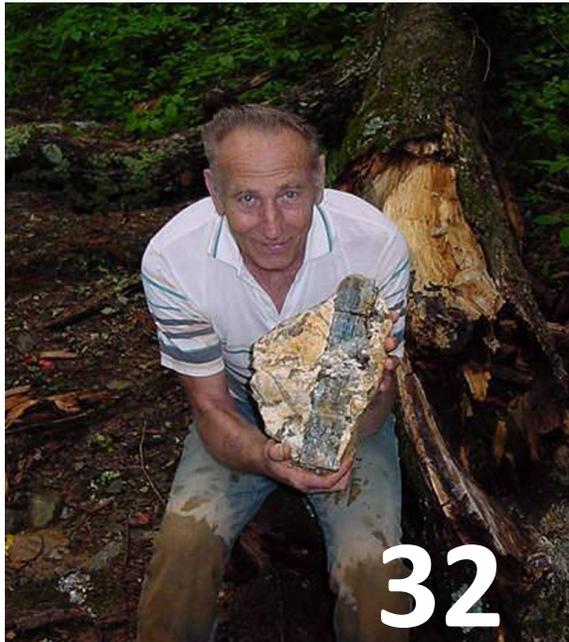
Children 12 years of age and
under are free

(828) 779-4501

www.crabtreemine.com

CONTENTS

JAN/FEB/MAR 2015 VOLUME 2 ISSUE 5



REGULAR COLUMNS

- 8 THINKING OUT LOUD: Have You Arrived?**
Richard Jacquot
- 32 AMERICAN ROCKHOUND: Billy Wayne Mintz**
Richard Jacquot
- 36 ROCKHOUND ART: Crafting the Cross of R.J.**
Richard Jacquot
- 48 ROCKHOUND REFLECTIONS: Road Tripping: Love at First Sight**
Sandee Barton
- 51 ROCKHOUND NEWS**
- 52 HIDDENITE, NORTH CAROLINA MINING DISTRICT UPDATE**
Richard Jacquot
- 55 COLLECTING SITE INFORMATION: North Carolina**
- 60 KIDS' PAGES**
Steve Barr
- 62 ROCKHOUND RECIPES: White BBQ Sauce**
Gary Nielson
- 63 ROCK SHOPPER & SHOWS**
- 64 CONTRIBUTOR'S GUIDELINES**
- 65 ADVERTISING GUIDELINES**

FEATURES

11

16

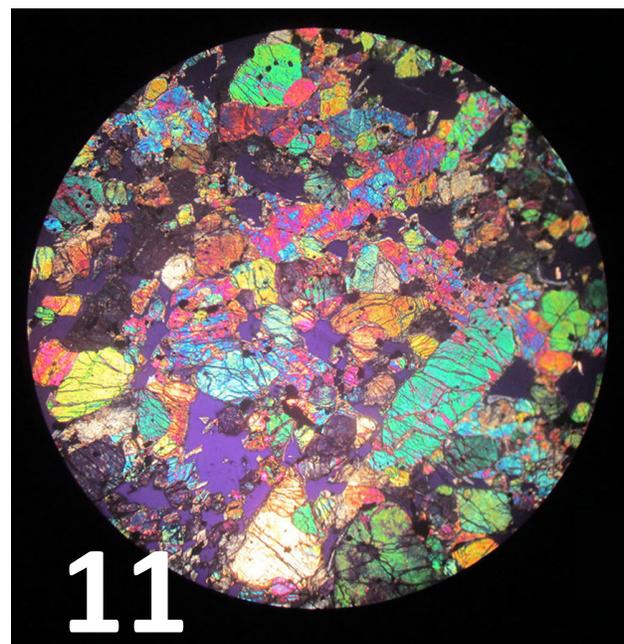
20

22

27

ON THE FRONT COVER: Close up of Widmanstätten crystal pattern, 388 gm meteorite slice from Henbury meteorite, Australia. Richard Jacquot photo, John Sinclair collection.

ON THE BACK COVER: December, 2011. Red moon over the Burgin Quartz Mine, Stanly County, NC. Richard Jacquot photo.



ASTERIODS, METEORS AND METEORITES

John Sinclair

CAROLINA METEORITE! WRONG? MAYBE...

Richard Jacquot

IMPACTITE, SANDHILLS REGION, NORTH CAROLINA

Tony Jones

TRINITITE, AMERICA'S ATOMIC IMPACT GLASS

Richard Jacquot

PRESERVING NICKEL/IRON METEORITES

Richard Jacquot

FIELD TRIPS

28 OREGON SUNSTONE, A GEMSTONE IN THE ROUGH

Jim Landon

40 POLAND MINING CAMPS, POLAND, MAINE

Dan Cathey

FAVORITE FINDS

39, 47

Thinking Out Loud Have You Arrived?

Richard Jacquot

They say that you have “arrived” in rock-hounding when you have a dig going on at some famous/historic location or mine, or maybe you have discovered a new or valuable mineral or gem. Some people look to others in the hobby as icons or experts because they are on TV digging rocks or appraising minerals, or writing books and articles for magazines. The truth is, once you decide to spend the majority of your free time out treasure hunting, you have arrived. You may not be in the exact spot you want to be, you may be a “newbie” or novice to the hobby, but you are there. I personally don’t like the word newbie as it can be misleading for some people that have just begun hunting for gems and minerals. A person may have been sitting at home for years reading books and learning everything there is to know about geology, gems and minerals, and now they are ready to get some field experience. I am the opposite, I have years of field experience and a moderate amount of book learning. I like to read about or research a location before I visit, so the trip is as successful as possible. I like to learn more about the specimens I find and other aspects of the hobby I am interested in, but most of my rockhound knowledge comes from the field.

I have a lot of respect for many people in this hobby that have achieved great things. Do I idolize them or follow them around and try to ride their coattails? No. I have been very lucky over my rockhound career to dig with and learn from many good people. I have tried to take the best of what they have shown me to use to my advantage in the field and on a professional level in the hobby. I use this information to help me get to where I want to be.

Bill Mintz was the first rockhound I befriended when I got into hounding in North Carolina. I had spent many years up north collecting, but knew nothing about Western North Carolina and the southeast area when I moved here in 1987. The first few years I hunted, I was on my own,

frequenting the Franklin, NC area a lot. I collected bits of information that the old timers in that area would share, but those bits were few and far between. I quickly learned that some rockhounds are a tight lipped bunch that cling to their secrets like a starved dog with a ham bone! One thing I learned from Bill was patience. When we would go dig, I was always wanting to be the first person at a site, to be sure we didn’t miss anything. Bill would tell me to pick him up at 10 or 11 am, then we would drive the hour or two to the dig site. We always found good stuff. If we were at the lake hunting sapphires, I would be walking the lakebed staring at the ground. I would find several nice pieces while watching Bill crawl around in one spot. At the end of the day, he would have a bag full of pink and red sapphires and rubies and I would have a small handful. He taught me that by taking my time, paying a little more attention and not rushing to beat everyone else to a spot, more could be found. I recall a trip to the Glendon Pyrophyllite Quarry (NC) back in the early 2000s. Back then, all clubs were invited to come once a year to visit. The scene was usually a group of 200-300 anxious rockhounds, all wanting to be the first person into the pit to be sure no one else got the best stuff. On one trip, I watched as the gate was opened, the cars went speeding through (one almost taking my front bumper off) and to the parking area. One man jumped out of his truck and began running down the hill into the pit as fast as he could. It had rained hard the night before the dig, and there was a muddy drainage ditch at the bottom of the hill that had to be crossed to get into the main digging area. As he approached the ditch, he took a giant leap to clear the ditch. What he did not count on was the super sticky white pyrophyllite mud that was leftover from the rain. When he hit the other side, he sunk up to his waist in the mud. I have to admit, it was amusing to watch the other rockhounds “patiently” walk around him and step on nearby rocks to get past

the muddy area. Eventually, his wife came to his aid, and after losing his boots and dignity, he was freed of the sticky mess.

Through Bill, I met gem hunting legend, Terry Ledford. Terry and his family had owned the Crabtree Emerald Mine as well as being involved in many other mining adventures. Over the years, as Terry became more successful, I watched him and learned that if you want to get ahead in the hobby, you need to be proactive, promote yourself and make your own way. Terry never needed anyone to get where he wanted to be, he did it on his own. Don't count on the success of others to get you somewhere, show some initiative. Another thing I learned is, unless you know someone, very well, don't believe a word they say when it comes to the status of a collecting site. I could tell you numerous stories of greedy rockhounds and the tales they will spin to keep people away from good dig sites. I'm not talking about mine owners trying to keep trespassers out of their mines. I'm talking about those who feel that every dig site that is public access should be their private playground. They will tell you anything to keep you away and smile at you while telling the lies. One instance that comes to mind is a site that I was diving for fossils in the Cooper River in SC. Every time I told my old dive partner I wanted to dive this particular area, he would claim that he had "wiped out" the area years before I began diving and that nothing was left to be found. Despite the fact that the river's current was constantly uncovering new material and I was routinely bringing up 4-5" megalodon teeth, bone and artifacts, he never wanted to hit this location. Did he tell me these things to keep me from diving that area? Who knows. This site turned out to be the spot where, two years later, I found a new species of Eocene mammal fossil.

After forming the Mountain Area Gem and Mineral Association in 2003, I was arranging trips for my club to various mines in the southeast. One miner we visited fairly frequently had opened and was developing numerous sites in the Georgia and South Carolina area for commercial mining and collecting. I asked him one day how he had access to so many sites. He said he simply asked property owners if he could dig, and more often

than not, they said yes. Then he asked me if I had ever considered accessing properties in my area to dig commercially or to turn them into club dig sites. This turned on the proverbial "light bulb" in my dimly lit mind, and the more I thought about it, the brighter the bulb got. Over the next few years, I, and a group of club members began researching and seeking out property owners to gain permission to conduct digs, and we have been very successful at it.

If you're only in this hobby as a past time or something to do to get out of the house every now and then, then none of what I'm talking about probably matters much to you. If you want to make the most you can out of rockhounding, then I have this advice: Don't idolize those that are on TV, watch and learn from them. Don't follow successful rockhounds around hoping they will let you into their secret spots, do some research and find spots of your own. Don't pay attention to the braggadocios hounds that have plenty of tall tales of all they have found and that all the good stuff is gone. Believe me, we are just scratching the surface. Make friends in this hobby that are honest and truthful and have similar goals, but don't befriend someone just because they have access to a mine or information you want. That is not fair to them or you.

I look at the rockhounding hobby as constantly evolving. There are great finds to be made wherever you go, it's not the mine you are in, it's the effort you put into it. When I am old, I want to look back and know I did my best to make the most out of every opportunity I had. I arrived in this hobby a long time ago, and I'm still working to get to where I want to be. 🦿



Bob Roth
Old Stock Collections: Buy & Sell
Specializing in Rare Minerals
Brevard, NC
561-271-6752
1bob.roth@gmail.com
www.erniesrockshop.com



Jacquot & Son Mining



rick@wncrocks.com

www.americanrockhound.com

(828) 779-4501



SPECIALIZING IN MINERAL APPRAISAL AND LIQUIDATION OF MINERAL COLLECTIONS AND ESTATES IN THE SOUTHEASTERN UNITED STATES.

We will appraise your collection for free and either make a reasonable offer for the collection, or help you sell your collection to other interested collectors. We offer fair market value for all collections.



OFFERING MINERALS FROM THE HIDDENITE, NC AREA AND FOSSILS FROM THE SOUTHEASTERN US.

SET UP AT SHOWS IN THE SOUTHEAST

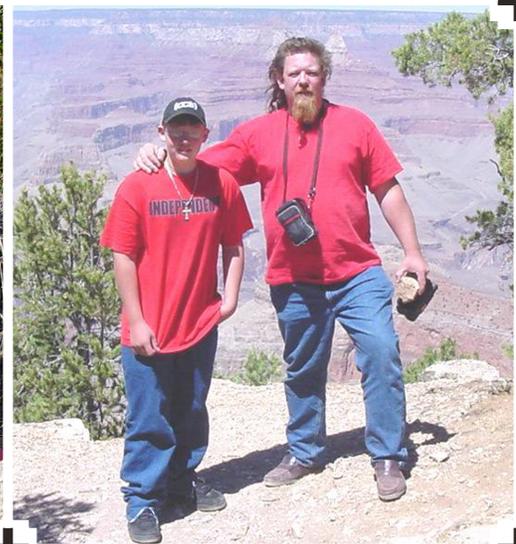
M.A.G.M.A. Gem, Mineral and Fossil Show

Hiddenite, NC - September

Asheville, NC - March

Graves Mountain Open House - October and April

Annual Rockhound Roundup - July



Asteroids, Meteors and Meteorites

John Sinclair

Most all of us have seen a streak of light flash across a dark night sky. It will last for an instant and be gone. Some call them “falling stars” or “shooting stars”. They’re meteors. By one definition a meteor is just that – a natural object creating a streak of light across the sky. We have annual meteor showers each year like the Perseids in August and the Leonids in November. This is when earth’s orbit passes through the debris field left by a passing comet and these small particles light up the sky as they pass through our atmosphere. The largest of these particles may be up to 10 mm in diameter. That’s less than half an inch. A particle this size can make a very bright light across the sky that is long in duration and it can even leave a long smoke trail from its passage. The meteors from meteor showers do not make it to the ground as meteorites. They are too small to survive their fast, 7 to 45 miles per second, trip through our atmosphere.

Most meteors that make it to the ground as meteorites originate from the asteroid belt between Jupiter and Mars. There is a debris field between these two planets made up of thousands of metal and stony objects. Some are so small that we cannot detect them and the largest, Ceres, is 590 miles in diameter. Ceres is actually considered a dwarf planet like Pluto. Meteorites also originate from other bodies in our solar system. Scientists from both NASA and universities that study planetary sciences have determined that some meteorites come from our moon and the planet Mars. It’s easy for us to see the many craters on the surface of the moon. Most of these craters are from impacts. When the moon is hit by a large meteorite, the force of the impact can throw material from the moon into space where it reaches escape velocity, a fast enough speed that the moon’s gravitational pull can no longer contain it. It can then cross earth’s path. When earth is impacted with this material and rocky objects are recovered, we have lunar meteorites. The same scenario can happen when Mars is impacted. We have landed on both the

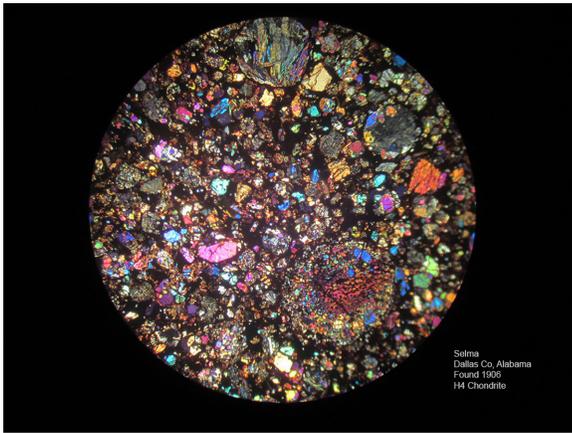
moon and Mars with space expeditions and have studied the atmospheres and surfaces of both places extensively. Through testing, some meteorites match what we know about the makeup of the moon and Mars like a fingerprint. These types of stone meteorites are very rare and can be some of the most valuable. In early 2015, one new type of Martian meteorite had an asking price of \$15,000.00 per gram.

There are three main types of meteorites: Stony, Stony-Irons and Irons. There are many sub-types.

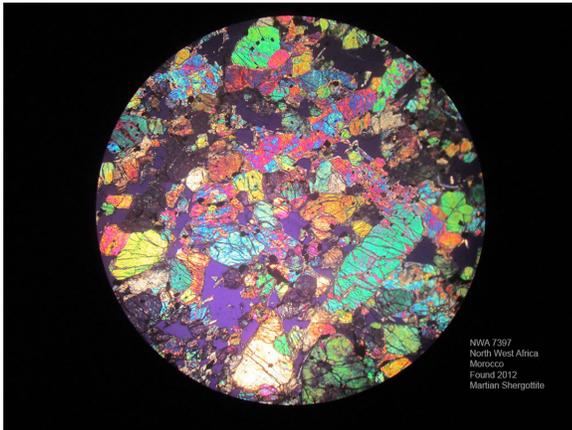
The most common type of meteorites are made mostly of stone with small amounts of nickel iron metal particles. They are called Chondrites. They are named by the minute spheres of previously melted material comprised of metallic iron, olivine and feldspar. The tiny spheres are called Chondrules. These are one type of stone meteorites. Another rarer type of stony meteorites are called Achondrites. They may or may not contain any metal. They do not contain chondrules. Both the Lunar and Martian and some meteorites from asteroids like Vesta are considered Achondrites.

The Stony-Iron meteorites are rare. They make up only 1 to 2% of all meteorite falls. They consist of nearly equal parts of both stone and iron. There are two sub-types of Stony-Irons - Pallasites and Mesosiderites. The pallasites are considered by some to be the most beautiful of all the meteorites. Thin slices of pallasites show a blend of olivine crystals in an iron matrix. Held to a light, the olivine crystals become translucent and glow in a yellow to green color. Once you have seen one, they are instantly recognized again as there is nothing else from space or earth quite like them. Faceted gemstones have been cut from the crystal olivine portions of these meteorites.

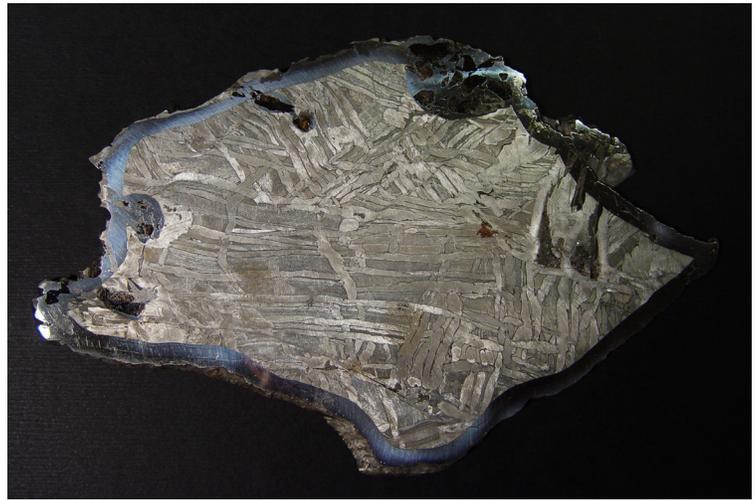
When one thinks of what a meteorite should look like, most often it’s an iron meteorite that comes to mind. They come in all shapes and sizes, from small pieces easily held in your hand to the world’s largest 60 ton Hoba meteorite still in place



Selma
Dallas Co, Alabama
Found 1906
H4 Chondrite



NWA 7397
North West Africa
Morocco
Found 2012
Martian Shergottite



Top left: Selma meteorite, found in Dallas County, Alabama in 1906. Thin section microscope slide magnified 30x through cross polarized filters. An H4 chondrite showing distinct round chondrules. John Sinclair photo.

Middle left: NWA 7397 Martian meteorite, thin section microscope slide magnified 30x through cross polarized filters. Found 2012, North West Africa. John Sinclair photo.

Bottom left: Tissint Mars meteorite, 120 gm, fell July 18, 2011, Morocco (RARE). Held by John Sinclair.

Top and bottom right: Two slices from a Seymchan, iron-pallasite meteorite. Both pieces are from the same meteorite. Found in the Magadan District of Russia in 1967. Top piece, mostly iron showing the Widmanstätten pattern, weighs 380 gm and measures 7³/₈" x 4⁵/₈" (18.7 cm x 11.75 cm). Bottom piece, iron-pallasite, weighs 242 gm and measures 6⁵/₁₆" x 4¹/₄" (17.6 cm x 10.8 cm). John Sinclair collection.



Top left: Murchison meteorite, fell 1969, Australia, CM2 Carbonaceous, 569 gm. John Sinclair photo.

Bottom left: Henbury meteorite showing Widmanstätten pattern. Found in 1931 in the Northern Territory of Australia – Medium Octahedrite, full slice. John Sinclair photo.

Top right: 165 lb Campo del Cielo iron meteorite. First discovered in Argentina in 1576. John Sinclair photo.

Middle right: Smith's Mountain meteorite, North Carolina, found 1863. End piece showing the Medium Octahedrite, Widmanstätten pattern. John Sinclair photo.

Bottom right: Dar el Kahal meteorites, found in Mali in 2013, H 5-6 stone chondrite. John Sinclair photo.



where it was discovered in Namibia, Africa. Iron meteorites always have traces of nickel mixed with iron. Depending on the type, the percentage of nickel can range from 4 to 30% and more. Although we think of iron meteorites as the most common, they are actually rare, making up about 5% of the known meteorite falls. There are three main classes of iron meteorites based on their crystal structure. These are the octahedrites, hexahedrites and the ataxites. An iron meteorite slice when etched with a mild acid will most often produce a crystal pattern. The octahedrites produce a pattern called the Widmanstätten structure, a beautiful crosshatched pattern. The octahedrites contain about 7 to 10% nickel. The hexahedrites when sliced and etched produce a pattern called Neumann lines which have a hexahedral structure. The hexahedrites contain about 6% nickel or less. The ataxites show no visible structure when etched but one can see a crystal pattern under magnification. The ataxites can contain 15 to 30% nickel making them the most nickel rich of the iron meteorites.

There is a rare class of stone meteorites called carbonaceous chondrites. These are normally very dark or black in color and when first seen, they don't appear to have much structure. They are some of the most primitive material known. Two important carbonaceous meteorites fell in 1969. One impacted a large area of northern Mexico near the village of Allende. The Allende meteorite was classified as a CV3 type. It was found to contain irregular shaped white inclusions that were made of calcium and aluminum called CAI's. The temperatures it took to form these inclusions were hotter than the temperatures that formed our solar system. It was determined this material was interstellar in nature and predated the formation of our solar system. This is some of the oldest substance known to man and is clearly visible in the Allende meteorites. That same year, another carbonaceous meteorite impacted the town of Murchison, Australia. It was classified as a CM2 type. Murchison was found to contain over 100 different amino acids. Some of these amino acids are recognized as the building blocks of life. There are scientists that believe that a meteorite like Murchison, under the right

conditions, could spark life on an early formed planet. Carbonaceous meteorites are some of the most studied and important meteorites to science.

Meteorites are named for the nearest town or post office in relation to where they fell or were found. This gives researchers and collectors a geographical location identified with the meteorite. There are some exceptions to this rule. There have been thousands of meteorites found in the Sahara Desert in Africa. Many of these meteorites have no geographical information provided with them. They are mostly named with letters and numbers like NWA 7397, a Martian meteorite found in 2012. NWA stands for North West Africa and 7397 is a sequential number meaning it was the 7,397 meteorite classified from that region. Meteorites that are found around the ice flows in Antarctica are named by location and also numbered. ALH84001 was the first (001) meteorite found in the Allan Hills region (ALH) in the 1984 collecting season. ALH84001 became a famous Martian meteorite when in 1996 a team of NASA scientists led by Dr. David McKay announced they had found microscopic structures they interpreted as fossils of bacteria-like life forms. If that theory proved true this would be the first solid evidence of extraterrestrial life. The theory was immediately debated by other scientists with some stating that what McKay had found was not evidence of extraterrestrial life but contamination from earth. The claim still creates controversy today but it also sparked a shift in perspectives. The science of Astrobiology is alive and well in NASA today. Many believe our first discovery of life outside of earth may be found in a meteorite.

When two asteroids collide with each other, the meteoroid may be thrown off its original orbit and be put on a collision course with earth. As it nears earth, it lights up as a fireball created by the friction of our atmosphere. As the friction and pressure increases, the meteor can explode and send meteorite fragments plummeting to earth. When this happens, it's possible to recover meteorites from the fall. Sometimes they are found soon after the event. Sometimes they are found thousands of years later. If a meteor

survives its passage through our atmosphere and makes it to the ground as meteorites, they will have a dark colored or black fusion crust burned on their surface. This is best seen in stony meteorites because there is a distinct contrast with the light gray stone interior and the black crusted surface. If a meteorite stays on earth's surface for an extended period, it can turn brown by oxidation and it's not as easily recognizable. Sometimes when a meteorite enters our atmosphere, it orients itself in flight and forms a nose cone shape. Oriented meteorites helped with the design of the front of the space shuttles because this shape was found to be the most resistant to heat and pressure. This was vital when the shuttles had to make the return trip to earth through our atmosphere. A fresh, oriented, stony meteorite that has flow lines along the fusion crust is strikingly remarkable in its shape and design.

Even if you live in a desert area, meteorites are hard to find. When they fall, they can create a strewnfield many miles long and wide. The meteorites will be widely scattered with the smaller ones found in the first part of the elliptically shaped field and the larger, heavier ones found at the end of the field. They may land miles apart. When a meteorite impacts a wooded or mountainous area, hunting them can be very challenging. Even so, your best chance of finding a meteorite is searching an area just after they fell or hunting an area where meteorites have been previously found. If you are hunting iron meteorites, a metal detector will be needed. If you are hunting stone meteorites, you can find them visually. A smaller stony meteorite hitting hard ground will not penetrate it. If it's a stone chondrite meteorite, it will contain a small amount of iron and a good magnet on the end of a walking stick can be used with excellent results. I personally found over 30 stony meteorites just days after they fell using one of these sticks with an attached magnet.

Meteorites give us clues about the early formation of our solar system. Some are very primitive material and older than the hills, dating back over 4.5 billion years. When I first started collecting meteorites, like many, I was drawn

to the irons. I thought they looked like what a meteorite should look like and I might convince others that I actually owned a rock from space. Now, nearly 20 years later, I enjoy collecting and studying all types and find the more I learn about them, the more I appreciate them. I once thought meteorites were unattractive and not very interesting. I have found that if one takes a closer look, they are remarkably fascinating and strikingly beautiful. 🦋

GRAVES MOUNTAIN OPEN HOUSE, ROCK SWAP & DIG

Graves Mountain, Lincolnton, Georgia

April 24th - 26th, 2015

8 am - 6 pm each day



All clubs and rockhounds are welcome to attend!

Fee: Donation

Golf cart shuttle available to and from the mine

Numerous vendors with gems, minerals and fossils for sale and trade

Food and drinks available for purchase

Clarence Norman Jr. (706) 401-3173

Carolina Meteorite!

Wrong?

Maybe...

Richard Jacquot

The Madison County Meteorite, North Carolina

Over the years, I have hunted just about every gemstone and mineral there is to hunt in North Carolina, but one thing I have never found is a North Carolina meteorite. I always wanted one, I just never knew where to look. In the mid 1990s, I used to frequent a rock shop in Asheville, NC. One day when visiting and talking rocks with the owner, I noticed a metal lump sitting on the shelf. Upon closer inspection, I recognized it as a meteorite. I asked where it came from, and this is the story I was told. The owner had obtained the specimen from a local gold hunter of shady character. By shady, I mean this collector claims to have found all his gold in the teeth he pulled from the skulls of the deceased, when he robbed their graves in the Western North Carolina mountains! I never met this person, although I would have been interested in meeting him as I was a police officer at the time and I had all sorts of questions for him! Anyway, this person told the shop owner that he was walking a plowed field in Madison County, when he came across this meteorite. This was around 1995.

I tried to buy the specimen, but the owner would not sell it, he wanted to keep it for his personal



The "Madison County Meteorite". Still with no positive identification, my last resort may be to cut the piece in half to get a better look at the interior and etch the surface for signs of the Widmanstätten pattern. 2" x 2" x 1¾" (5.08 cm x 5.08 cm x 4.45 cm).

collection, so it sat on the shop shelf for the next few years. One day, I was visiting and told the shop owner of a gun I had recently obtained from another officer at work. He was very interested in the gun, it turned out, he loved guns, so I traded the gun for the meteorite, finally, I had a North Carolina meteorite in my collection, or did I? The specimen measures 2" x 2" x 1¾" (5.08 cm x 5.08 cm x 4.45 cm) and weighs 11.4 oz (323 gm). It shows the typical habits of a meteorite and has mild "regmaglypts" or

thumbprints on the surface. I showed the piece to friends and fellow collectors, they all agreed it was a meteorite, but one thing kept nagging at me. It did not attract a magnet at all. I had read numerous books and articles about meteorites. All said that nickel/iron specimens were strongly magnetic, and the ones that weren't were extremely rare. What were the chances I had one of the rare ones? I would often take the space rock out to look at it. It made its rounds to rock shops and gem shows. It even did a six month stay at the Mineral and Lapidary Museum of Henderson County in Hendersonville, NC in the early 2000s, in a special meteorite display they had set up. The museum curator and president at that time, Larry Hauser, also believed that it was a meteorite.

After a few years, a friend looked at this



Side view of the “Camden Meteorite”. The piece has been identified as slag (unknown metal). This view shows what could be mistaken for “flow lines” on the right side. On an actual meteorite, these lines are caused from intense heat as the meteor enters the earth’s atmosphere. 4½” x 3” x 2” (11.43 cm x 7.62 cm x 5.08 cm).

meteorite and another one I had traded for at a later date. I knew the later specimen was a fake. I had traded for it just for the story that went with it, we’ll talk about that one later. My friend asked if he could take the specimens to Arizona to be examined by an expert he knew out there. I agreed and he took them with him on his trip. One was determined to be a piece of metal slag. The Madison County piece was undetermined as I would not let them cut it up to do more testing. The two specimens were later sent to New England to experts there and again came back, one piece labeled as slag and the Madison piece was still undetermined. I recently met with John Sinclair at the Pisgah Astronomical Research Institute near Rosman, NC. John is considered an expert on meteorites and has been studying them for close to 20 years. At first look, John agreed it was a meteorite, until I told him the past history and test results. I had cut a small section off one corner of the piece a few years earlier, but never followed through with the etching process to see if the piece showed any crystal patterns. These crystal patterns are called the “Widmanstatten” pattern, consisting of crisscrossed nickel/iron crystals unique to meteorites. John applied the etching formula to the flat surface I had cut, no pattern was observed. Even though, he suggested more tests and maybe a larger surface to work with to be sure. So, today,



Bottom of the Camden Meteorite, showing what could be “fusion crust”, if present on an actual meteorite. 4½” x 3” x 2” (11.43 cm x 7.62 cm x 5.08 cm).

20 years after I first encountered and acquired the “Madison County Meteorite” I am no closer to confirming its identity. John made a good point, if it’s not a meteorite, what is it? That is a question I have yet been able to answer.

The Camden Meteorite, South Carolina

Another “meteorite” I have not identified is the “Camden Meteorite” from Camden, SC. This is the one I mentioned earlier that I obtained for the story that went with it. It was sent back to me twice as a piece of slag. On February 12th, 2002, I was in Pacolet, SC trading rocks with a local mineral collector from that area. One item he wanted to trade me was a “meteorite” that he had collected on a property in Camden, SC in 1992. To me, the piece looked nothing like any meteorite I had ever seen, but I had not seen many. I was entertained by the story he told me, so I traded him some small agates for the piece, mainly for the history that went with it. This is the story of the Camden Meteorite as told to the collector in 1992.

Mr. Lonnie Bowen of Camden (at the time, 1992, in his 70s) tells of a meteorite that fell on his family’s property in 1930, exact date is unknown. He stated that one evening his father heard a loud roaring noise outside. Thinking it might have been a truck coming up a hill on their property, his father went outside and saw a fireball in the sky. He says that an object hit the property

several hundred feet from the house. It made a crater about 15 ft in diameter and then dug a trench towards the house stopping a few yards from the house. Mr. Bowen stated that his father had him help fill in the trench and that they used the crater as a small landfill for the family trash. Mr. Bowen was asked if the property could be searched for meteorite fragments, he gave the rockhound permission to hunt. In 1992, using a metal detector, the area where the trench was located was searched and two metal fragments were found. The area where the crater was located was not searched as there was too much trash in the hole.

The piece I obtained in the trade weighs 1.9 lb (862 gm) and measures 4½" x 3" x 2" (11.43 cm x 7.62 cm x 5.08 cm). It shows what appears to be fusion crust on some areas and has "flow lines" which are seen on some meteorites. These lines are formed as the surface is heated as the meteor comes into and through the earth's atmosphere. It also has a rough crystal pattern on the surface that could easily be mistaken by an amateur to be the Widmanstätten pattern. I find it amazing that anyone would go through the trouble to make up such an outlandish story just to trade a rock for a hunk of metal. Still, I am glad I traded, I've had lots of fun over the years passing this story along to others.

The Hendersonville Meteorite, North Carolina

If you would like to see a meteorite that actually came from North Carolina, I suggest a visit to the Mineral and Lapidary Museum of Henderson County located in downtown Hendersonville, NC. I was there recently to take a look at the "Hendersonville Meteorite". The Hendersonville Meteorite was found in 1901 by a man named William Corn, on property about 3 miles northwest of what was the Hendersonville town center. It is unsure when the meteorite actually fell. Corn took the specimen to Captain Charles French Toms who displayed the piece in his retail store for the next two years. In 1903, Dr. W.H. Jarman of Nashville, TN obtained the specimen from Captain Toms and donated it to the Vanderbilt University as part of the Jarman Geology Collection. Professor L.C. Glenn

described the specimen in 1904 as a chondrite (stony) meteorite weighing 11 lb 6 oz (5.16 kg) and measuring 6⅛" x 5⅞" x 5½" (15.56 cm x 14.9 cm x 13.97 cm). In 1906, Vanderbilt University cut the meteorite and kept a 1½ lb (680 gm) piece for their collection. The remainder of the specimen was given to the Smithsonian Institute in Washington D.C. The specimen was then cut into more sections with pieces being distributed to the Smithsonian, Arizona State University, the American Museum of Natural History and the British Museum. Because the 1½ lb piece in the Vanderbilt University was not documented in the Smithsonian Catalogue, it is called the "lost piece".

In 1991, the Henderson County Gem and Mineral Society contacted the Smithsonian Institute and received the Hendersonville Meteorite, a polished slab, and the "lost" Vanderbilt piece to display at the 11th Annual Gem and Mineral Spectacular (which I used to be show chairman of years ago). In 1997, the Mineral and Lapidary Museum of Henderson County was opened. They asked the Smithsonian if they could keep the Hendersonville Meteorite pieces on loan for the new museum. They have been there ever since.

Today, you can visit the Mineral and Lapidary Museum of Henderson County to see the 1 lb (487.8 gm) polished slab and the 1½ lb (680 gm) "lost" Vanderbilt piece. The museum is located at 400 North Main Street, Hendersonville, NC 28792. Their phone number is (828) 698-1977. The museum also hosts an excellent collection of rare North Carolina minerals and gems as well as specimens from around the country and the world.

Other North Carolina Meteorites

You can learn more about North Carolina meteorites by visiting the North Carolina Museum of Natural Sciences in Raleigh, NC. They have samples of most of the meteorites that have landed in the state, thirty so far, but no new confirmed meteorites have been found in North Carolina since the 1930s. This website documents all the North Carolina meteorites: www.worldwidemeteoritemaps.blogspot.com/2013/07/north-carolina-meteorites-map.html.

I asked John Sinclair about hunting meteorites in Western North Carolina, he said it is hard to do because of the mountainous terrain. Hopefully someday I can positively identify the “Madison County Meteorite” I have. Until then, I’ll just keep sharing the folk lore and humorous stories to keep the rockhounds entertained. 🦋

References:

Mineral and Lapidary Museum of Henderson County

www.sites.naturalsciences.org/faqs/meteorite.html

My website, www.americanrockhound.com has a section for “Mineral and Gem Appraisals and Identification”. This section can be found under the “Jacquot & Son Mining” link. Over the years I have had dozens of e-mails with photos from people that think they have found a meteorite. So far, not a single one has been the real deal. Some examples I have seen are slag glass, slag metal, tektites, geodes, volcanic bombs, hematite, magnetite and more. I would suggest visiting a local museum in your area with experience with meteorites, or using the Internet to search for one of the dozens of meteorite identification websites available.



Top right: An old photograph of the main body of the Hendersonville Meteorite, before it was cut into several pieces. Found in 1904, it is a chondrite (stony) meteorite weighing 11 lb 6 oz (5.16 kg) and measuring 6 1/8" x 5 7/8" x 5 1/2" (15.56 cm x 14.9 cm x 13.97 cm).

Middle right: 1 1/2 lb (0.68 kg) piece of the Hendersonville Meteorite. On open ended loan to the Mineral and Lapidary Museum of Henderson County, Hendersonville, NC, from the Vanderbilt University, Nashville, TN. Because the piece was never documented in the Smithsonian Institution Catalogue, it is called the "Lost Piece".

Bottom right: 1.07 lb (487.8 gm) polished slab of the Hendersonville Meteorite. On loan to the Mineral and Lapidary Museum of Henderson County, Hendersonville, NC, from the Smithsonian Institution in Washington D.C.





IMPACTITE

Sandhills Region, North Carolina

Tony Jones

My dad was doing some work under his porch one day and placed his hand down on a rock. Immediately he recognized it as something unusual because, well, we live in the Sandhills and rocks aren't common. He has always had an interest in finding meteorites since watching one of those reality shows a few years ago. He hands it off to my mom to give to me at work (since we work together) to figure out what it is.

On first inspection, it appeared to be a tektite, but I could find nothing really resembling the "skin" like that found on tektites. Also, there is a preponderance of bubbles, which is contradictory to most tektite information available. This glass is a shade of green somewhere between tektites and moldavite, with little patches of rust and a few balls of rusty metal stuck in it. I knew it had to be from an impact, when it dawned on me the information I had read about trinitite (atomic impact glass from New Mexico). That gave me the idea to show it to an old paratrooper I work with.

Fort Bragg, North Carolina was originally created to be an artillery training ground during WW I. Today it is widely known as home of the Airborne and Special Operations Forces. The two groups were literally created here in North Carolina at Fort Bragg. Rather fitting for the state who was "first in flight" to also be the first to throw people out of planes eh? Back to the rock... The porch it was found under, is just a few miles from the current artillery impact zone. Fort Bragg is literally in my back yard. I regularly watch from my front door as paratroopers are jumping from planes. I'm less than two miles

from Sicily Drop Zone.

Anyway, it's conceivable that the area my house is in could have been getting shot at by heavy artillery at some point in the past 96 years. So I asked the grizzled old paratrooper if he had ever been to the impact zone and if he ever saw any glass out there. He told me that in his early days of being Airborne he was assigned to pick up a bunch of glass out at one of the drop zones. He could vividly recall the extra thick trash bags they were given for the job. Even after picking up all that glass, when it came time for his jump he managed to get stabbed in the arm with some. That is when I finally pulled the rock out and showed it to him. "Did it look anything like this?" He confirmed it was exactly the same as what he had picked up years before. He also told me how he was finding lots of it in his yard before they set up his house. He lives about 5 miles west of me. When tilling his yard for the first time, he even found metal shrapnel from shells along with some glass.

A peculiar feature of this piece are the little iron balls. There are also two spots of something white. While he didn't really pay much attention to this stuff back then, he most closely associates it with the white phosphorous munitions. White phosphorous doesn't get much publicity due to how nasty the stuff is, and the conventions currently restricting it's use, but it is still available in the military's arsenal.

Above: Green Impactite, Sandhills Region, NC, near Fort Bragg. This shot uses some backlighting to show the green translucent color of the piece. 2" x 1¼" x 1¼" (5.08 cm x 3.18 cm x 3.18 cm). Tony Jones photo.



Green Impactite, Sandhills Region, NC, near Fort Bragg. This shot shows iron "balls" on the surface and imbedded in the piece. 2" x 1¼" x 1¼" (5.08 cm x 3.18 cm x 3.18 cm). Tony Jones photo.



Green Impactite, Sandhills Region, NC, near Fort Bragg. This shot shows imbedded iron. Notice the white spot at the lower edge, left of center. This may be white phosphorous from the munitions used at the time. 2" x 1¼" x 1¼" (5.08 cm x 3.18 cm x 3.18 cm). Tony Jones photo.



Green Impactite, Sandhills Region, NC, near Fort Bragg. This shot shows the iron bits that are concentrated towards the "inside" where the bubbles are largest. 2" x 1¼" x 1¼" (5.08 cm x 3.18 cm x 3.18 cm). Tony Jones photo.



Green Impactite, Sandhills Region, NC, near Fort Bragg. This shot uses some backlighting to show the green translucent color of the piece. 2" x 1¼" x 1¼" (5.08 cm x 3.18 cm x 3.18 cm). Tony Jones photo.

So is it Fort Bragg Impactite?

Given the size and clarity of the glass, I think it's feasible that it could be from the Chesapeake Bay impact. The same impact that the bediasites are from, as well as the random tektites in Georgia and the Caribbean. It seems that the closer the material is to the impact zone, the cleaner and larger it is. Since it was bigger, it didn't travel as far? As an experiment to see if it was created from the ground in my area, I've been meaning to get some thermite

to see what that does to the sand in the area. That could be a good indicator of whether the impact glass is from local terra or someplace else.

I'm still waiting for someone to turn up a few more pieces. When my father's land was cleared, they scraped it all pretty flat. So finding the actual impact area this piece came from is pretty much a lost cause until some more floats to the surface. I think it would make an awesome cabochon that would make a great memento for one of the soldiers. 🏹

Trinitite

America's Atomic Impact Glass

Richard Jacquot



One of the most collectable things that results from the impact of a meteor, besides pieces of the meteorite, would be something called “tektites”. Over the years, there have been at least a couple of theories on how tektites are formed. One theory has them coming from the moon. In this scenario, a meteor hits the moon, the surface material of the moon is fused into a form of glass (the tektite) from the impact and then hurled into space. The theory is, the material is then captured by the earth’s gravitational pull and pulled into our atmosphere and to earth. The other, more probable theory, is that the tektites are formed when meteors hit the earth and the sand and rock at the point of impact is fused into a tektite and deposited in the area of the impact. Most tektites come in two colors, black and green of varying shades, such as green moldavites from the Czech Republic. Some tektites have a “tear drop” shape when found. The tektite glass is formed under extreme temperatures from the meteor strike and as the molten material is flung through the air, it resembles a drop of liquid, cooling quickly

and retaining its “tear drop” shape.

Something that is commonly mistaken as a tektite, is “Impact Glass” or “Impactite”. Tektites are formed from extraterrestrial objects (meteors hitting the earth). Impact glass is formed from the surface detonation or melting of man made things such as bombs, rockets, artillery shells, etc. Impact glass can come in a variety of colors, some of them being green and black similar to tektites, hence the confusion. Some impact glasses can so closely resemble tektites that it takes an expert to differentiate between them. The location where they are found can be a good indicator, if the piece is found near a known meteor strike, it is likely a tektite. If found near a military base or testing ground, it may be impact glass.

Probably the most famous of the impact glass group, is Trinitite. Trinitite (also known as Atomsite or Alamogordo glass) was formed when the United States Military tested the first atomic bomb on July 16th, 1945, near Alamogordo, New Mexico (Trinity Site). The bomb tested was the “Trinity Gadget” atomic bomb (Y-1561 Device),



Tektite from China showing a "tear drop" shape. This is called a "splash form" tektite. Sometimes confused with terrestrial "Impact Glass", tektites are formed from the impact of a meteor or other extraterrestrial object. 1½" x 1½" x ¾" (3.81 cm x 3.81 cm x 2.22 cm).

a sphere approximately 5 ft in diameter. It cost close to two billion dollars to build. The bomb consisted of a core of plutonium with high explosives and detonators. The military built a 100 ft tall steel tower to test the bomb. The tower had four legs that went 20 feet underground, with concrete footings. The bomb was dropped, and upon explosion, the steel tower vanished. The explosion created a 400 yd crater, the force was said to be equivalent to 21 kilotons of TNT. The intense heat from the explosion fused the desert sand, bomb components and tower into light green, red and black forms of impact glass. A minimum temperature of 1,470 degrees Celsius was needed to form the glass. The glass is made up of quartz sand, feldspar (microcline and plagioclase), calcite, hornblende and augite. One theory on the formation of the glass during the explosion, by scientist Robert Hermes and William Strickfaden, is that the sand was drawn up into the fireball upon detonation and rained down over the area in liquid form. Hermes stated that "Inside the glass, are bits of the first atomic bomb." There are different types of trinitite, green being the most common. Black is said to contain iron from the tower, red contains copper



Various sizes and colors of slag glass from Pennsylvania. Slag glass is sometimes confused for meteorites, tektites and impact glass. The small pieces in this picture are the first "rocks" I collected in the 1960s while camping with my family. They are actually slag from the Civil War furnaces in the area of Pine Grove Furnace State Park. The large piece was collected by my son R.J. in the late 1990s when I revisited the old camp with him and my dad. Large piece measures: 8¼" x 6¾" x 3½" (20.96 cm x 16.2 cm x 8.89 cm).

from the blast device and communications cables. Red and black trinitite are the rarest.

A few years after the detonation, the crater was filled in with desert sand. In the late 1940s and 50s, people began to acquire specimens of the glass for their collections. In 1953, the US Atomic Energy Commission bulldozed the site. Later, a monument was erected at the site and it was designated as a National Monument (White Sands National Monument). Today, collecting is illegal, but many samples are still in the hands of early collectors.

The bomb was being tested for use as a possible end to World War II. One of my club members, Ryan Kearney, put it, and its implications in perspective. *"That blows my mind... the US develops a bomb with the newly (and then, poorly) understood power of atomic particles, harnessing the most powerful source of energy in pretty much the universe, spends two billion dollars during a world war, and then after seeing the hellish catastrophe that ensues, decides, less than a month later, to drop two of them on urban centers in Japan. Then twenty years later, we outlaw and condemn the things. Plan "A" was the bomb. Plan "B" was a naval bombardment of Tokyo and*

then a ground invasion of mainland Honshu and Hokkaido. Those bombs that killed thousands of Japanese civilians likely spared an equal number of soldiers and civilians in the ensuing massacre had we actually invaded. When I said “poorly understood”, I mean the overall global and political implications of possessing that level of power. The effects of the post-bomb proliferation race, how devastating and long lasting the fallout would be, and how nasty the long term effects (on civilians) would be. Cancer was poorly understood as was radiation sickness. It was the effects suffered by the Japanese that taught us much on those topics. Some predicted the annihilation of earth’s atmosphere, and we still tried it!”

The scientists were taking bets on the results of the bomb test, from Wikipedia: “*Enrico Fermi (one of the viewing scientists) offered to take wagers among the top physicists and military present on whether the atmosphere would ignite, and if so whether it would destroy just the state, or incinerate the entire planet.*” The explosion was felt 100 miles away and the mushroom cloud reached a height of 7.5 miles. On August 6th, 1945, less than a month after the first test, atomic bomb “Little Boy” was dropped on Hiroshima, Japan. Atomic bomb “Fat Man”, which was similar in size to the test bomb

Top right: Top of trinitite specimen, light green in color, mostly smooth, with very fine grained dust that was deposited on the piece while still in a liquid molten state. This can be felt by rubbing your finger over the surface. 2¼" x 1¾" x ⅞" (5.72 cm x 4.45 cm x 1.43 cm). This specimen comes from the Ken Kyte collection and was acquired by him in the 1960s. I acquired it in 2000 while helping sell his mineral collection.

Middle right: Bottom of trinitite specimen, rough with globs of fused material made up of quartz sand, feldspar (microcline and plagioclase), calcite, hornblende and augite. The sand was drawn up into the fireball upon detonation and rained down over the area in liquid form. 2¼" x 1¾" x ⅞" (5.72 cm x 4.45 cm x 1.43 cm).

Bottom right: Side view of trinitite specimen. Many fakes are on the market today. Some indicators of real trinitite are, light green color, the glass formed as a layer 1 to 2 cm thick. The surface (top) will be smooth with a thin layer of dust. The bottom of the layer is rougher with blobs of fused material. 2¼" x 1¾" x ⅞" (5.72 cm x 4.45 cm x 1.43 cm).



"Trinity Gadget" was dropped on Nagasaki on August 9th. The result was the end of World War II and the ultimate deaths of approximately 246,000 Japanese citizens. My uncle, Charles Vess, was in the military during WW II and helped load one of the bombs on the plane to be sent to Japan. He later died of Leukemia, possibly from exposure to the bomb.

There are many unscrupulous people today that are selling fake trinitite at rock shows and shops. Usually what they have is simply green slag glass which is very common. Some indicators of real trinitite are varying shades of light green color (rarely black and red). The glass has been described as a layer 1 to 2 cm thick. The surface (top) will be smooth with a thin layer of dust that fell on it while still in the molten state. This can be felt by rubbing your finger over the surface. The bottom of the layer is rougher with blobs of fused material. I was fortunate to acquire a nice specimen of this material many years ago while working with the Ken Kyte collection in 2000. My specimen exactly matches the description I found while researching this article. It is a light green piece formed as a layer with a smooth top side and rough bottom. The piece came in a box with a picture of the bomb going off and a brief history of the bomb and specimen.

Owning a piece of trinitite means much more to me than just having a collectable piece of impact glass. This glass represents not only a historic piece of the first atomic bomb testing, it is also a reminder of what led up to the final attack on Japan that ultimately ended World War II and changed the future of the entire planet. It represents a time in our history when the men and women of the United States of America came together to defeat an evil, that, if not for us, could have ruled the world, and made slaves or worse of us all. In the end, our determination, and the quest for what is right, persevered. I think my friend John Lichtenberger summed it up when he said *"I think many understood all too well the power, theory, and what was at stake... 'Sieg HEIL' or overrun by the Japanese... as a new world order, or threaten annihilation to end the war. Hitler was working feverishly to develop the bomb too."* Good thing we developed it first! 

References:

- www.en.wikipedia.org/wiki/Fat_Man
- [www.en.wikipedia.org/wiki/Trinity_\(nuclear_test\)](http://www.en.wikipedia.org/wiki/Trinity_(nuclear_test))
- www.en.wikipedia.org/wiki/Trinitite
- www.www.wsmr.army.mil/PAO/Trinity/Pages/default.aspx
- www.en.wikipedia.org/wiki/Atomic_bombings_of_Hiroshima_and_Nagasaki
- American Rockhound talk forum, www.wncrocks.proboards.com, Ryan Kearney, John Lichtenberger*
- Information paper with Trinitite specimen from Ken Kyte collection*

The Trinity Site is only open to the public once a year. The Trinity Site Open House will be held annually on the first Saturday of April. For more information, contact the WSMR Public Affairs Office at (575) 678-1134.

Give Yourself A Little Character!

(A Rockhound Character, That Is!)

I AM A ROCKHOUND!

Feel Free To Bask In My COOLNESS.



I Smash Counters for FUN!

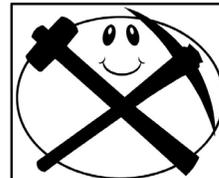


You might want to think about that before you give me a hard time...

I DIG



ROCKS!



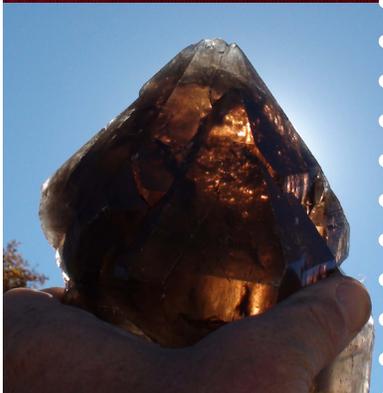
LADY ROCKHOUND!

If You're Looking For A Real "Gem"You Just Found Her!



Mugs - Shirts - Bumper Stickers & More!

www.zazzle.com/barrtoons



2nd ANNUAL HIDDENITE GEM, MINERAL AND FOSSIL SHOW AND DIG

Free Admission

Hosted by the
Mountain Area Gem and Mineral Association

September 25th - 27th, 2015

Friday and Saturday - 9 am to 6 pm

Sunday - 9 am to 5 pm

Featuring top vendors with gems, minerals and fossils
from North Carolina and around the world.

SHARPES EMERALD PROSPECT DIG

(1 mile from show)

Friday and Saturday - 8 am to 5 pm

Fee: \$25 per person, per day

Children 12 and under free

Hiddenite Education Center Hiddenite, North Carolina

From the US 64 Bypass East in Taylorsville, turn left onto
Old Mountain Road in Hiddenite. Go straight across
intersection with flashing light, cross railroad tracks. The
Hiddenite Education Center is on the right.

From I-40, take the Hwy. 64 West exit to Hiddenite, turn
right onto Old Mountain Road.

Rick Jacquot (828) 779-4501

rick@wncrocks.com

PRESERVING NICKEL/IRON METEORITES

Richard Jacquot

Preserving nickel/iron meteorites and iron artifacts can be a challenge depending on the level of deterioration of the item when found. I do a lot of diving in the rivers in the southeast and have found a few very old iron objects that were badly rusted, some literally falling apart. For some items, time has taken its toll and there is nothing much you can do to save them. The same can be said for iron meteorites. One easy way to restore them to a smooth, rust free surface, is to simply take a wire wheel attached to a drill or dremel and brush the rust away. Once the rust has been removed, apply a fine coating of oil, machine oil is best (3-In-One for example). Do not use things like WD-40, this contains water and will only help the rust to return eventually. Wire wheels work well on most surfaces, but for meteorites with dips, cracks and crevices, it is sometimes hard to remove all the rust.

Another, more thorough, inexpensive and easy way to remove rust and stabilize your meteorite is as follows: You will need to create a bath for the meteorite to sit in. Use a heavy plastic tub or glass container with a lid. Be sure that the specimen can be completely covered by the solution. The solution will consist of a 50/50 mixture of distilled water and 70% isopropyl alcohol. Add to this, Red Devil Lye and dissolve into the mixture. I use 9 oz (255 gm) of the lye with 2 gallons of the water/alcohol mix. Be sure to use distilled water, other types of water may have chlorine and will damage the meteorite. Red Devil Lye will create some heat, so be sure to use a heavy, heat resistant container. Be sure to wear proper safety apparatus (rubber gloves, breathing and eye protection) when working with the mixture. All of the ingredients for this mixture can be bought at your local grocery store.

Let the meteorite soak in this solution for a couple of weeks. Take it out and look to see if the rust has been removed, it may take longer



I have used the water/alcohol/lye mix on this 7 lb 2 oz (3.23 kg) Campo meteorite once in over 10 years. It has recently begun to show some rusting in the hard to reach cracks and crevices, so time for another treatment. 5 $\frac{7}{8}$ " x 4" x 3" (14.9 cm x 10.16 cm x 7.62 cm).

depending on how much rust is present. Once you are satisfied that all the rust is loose and has been removed, rinse the specimen thoroughly in distilled water. Once rinsed, the meteorite will need to be dried to remove any remaining water that may have accumulated in cracks and crevices. Place the meteorite in an oven on low heat for a couple of hours. Be sure to use low heat, as high heat can damage the internal Widmanstätten crystal pattern found inside nickel/iron meteorites.

Once the meteorite has cooled, it should be placed in a low or no humidity environment or display case. Coat the specimen with a thin layer of 3-In-One or similar machine type oil. Again, be sure not to use things like WD-40 as they contain water that can cause rust. Another good idea is to place silica gel packs in the container or display with the meteorite to help reduce moisture. This process will last up to 5 years if placed in a proper display. I used this formula on my large Campo specimen. I have had it for over 10 years and only had to treat it once.

I have seen other variations of this formula on the Internet over the years, you can experiment with different amounts of lye/alcohol/water to change the formula slightly to work better for your specimen. The formula provided here works on my 7 lb 2 oz (3.23 kg) Campo and smaller specimens. 🐉



Oregon Sunstone

A Gemstone in the Rough



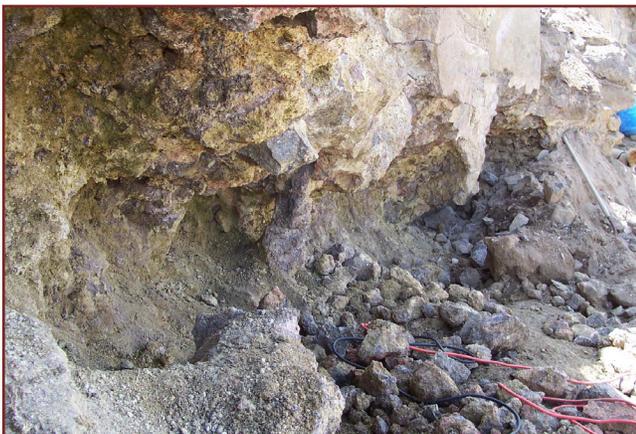
Jim Landon

Mixed colors and sunstones set in jewelry. Oregon sunstones set in jewelry are quite striking and unique and they facet into beautiful gems. Jenni White photo.

The high desert of south central Oregon has been known for many years as a source of gem grade plagioclase feldspar called sunstone. The sunstone deposits are found in the aptly named Rabbit Basin where sagebrush dominates the land and extreme weather conditions limit mining to a few short months in summer. The lack of rainfall, intense summer heat and geographic isolation

make this destination one that requires significant pre-planning with a bent toward self sufficiency. Dry lightning storms with fierce winds are not uncommon, creating choking dust and sand storms that can flatten tents and rock recreational vehicles.

In many ways the sunstone area and its rough and tumble assembly of miners resembles the



Palagonite "pillows" formed when molten basalt carrying the sunstones flowed into standing water. Miners prefer to dig in these areas because of the softer nature of the rock. Jim Landon photo.



Fee diggers at one of the active sunstone mines may use power tools to break up the hard basalt matrix. Jim Landon photo.



Mine run rough sunstones are sorted by size and degree of internal color. Clear and lighter colored stones have already been removed. Jim Landon photo.



Unlike most of the mining operations, the Dust Devil Mine has invested heavily in mechanized equipment like a trammel and optical sorter to increase production. Jim Landon photo.



This optical sorter was being used to increase production at one mine. It replaced a conveyor belt sorting system fondly named "the puker" because human sorters on the belt routinely became sick while watching rocks and sunstones fly by. Jim Landon photo.



Large clean sunstone rough is often carved freeform so that maximum carat weight can be retained and the color ranges that are usually found in large stones can be displayed to the fullest. Jenni White photo.



Red/green/schiller sunstone owned by Jerry Wickstrom and carved by Dalan Hargrave. This magnificent sunstone carving was cut from one of the larger pieces of rough ever recovered at one of the fee dig mines. Rough weight 155 carats. Finished weight 62.5 carats. Jenni White photo.

gold rush days of the American 1800s with its claim disputes and visions of striking it rich. Claims are filed and then lost, mines come and go and partnerships form and dissolve. Dirt tracks that crisscross the land disappearing into the short sagebrush and old prospect pits dug, abandoned, and then discovered anew dot the landscape.

There are currently around 360 sunstone claims in Harney County with the vast majority being inactive. They vary in size from 20 to 160 acres. There is also a 2,500 acre free public area in the center of the deposit that is open to anyone, but digging is restricted to hand tools. The land these claims are filed on is owned by the United States Government and is under the jurisdiction of the Bureau of Land Management.

Although sunstones have been found in several other localities in other countries, the material from Oregon is unique for the array of colors it comes in. They range from clear through shades of yellow, orange, red and green or combinations of the afore mentioned colors. They also come with a trait called schiller which displays bands and bars of bright copper that flash like lightening when turned in the sunlight. The play of color in Oregon sunstones is due to varying amounts of copper that is disseminated in the crystals. Clear sunstones have little or no copper in them. Greens have 30 to 50 parts per million (ppm); reds have 50 to 150 ppm; and schiller have upwards of 650 ppm.

The feldspar crystals from this deposit were formed at depth under high temperature and pressure and were conveyed to the surface during volcanic eruptions over 16 million years ago. Due to their high melting temperature, the feldspar crystals (phenocrysts) were able to remain stable over time while they were disseminated in molten basaltic magma. The molten basalt from this low energy volcanic event flowed across the relatively flat landscape into ponds or lakes where water reacted with the basalt, altering some of it into a yellow clay like material called palagonite. Miners seek out the palagonite rich areas to excavate because the host rock is more easily dug. There is considerable variation in the hardness of the basalt in the Rabbit Basin deposit. Parts are vesicular and crumbly due to high gas content

during formation while other parts are hard and dense. Large heavy equipment is needed to rip and break up the enclosing basalt to set the sunstones free. In some areas of the valley, the basaltic lava is exposed at the surface while in others it is buried under varying thicknesses of wind and water deposited silt, sand, and gravel.

Upon close observation, the basalt is found to be riddled with sunstones with the vast majority being small and clear. Larger crystals, some up to several centimeters in length are fractured and are thus recovered from the enclosing basalt as irregular chunks. Large sunstones rarely have uniform color throughout. Many will have a spherical colored core surrounded by a rind of yellow to clear material. These cores will occasionally have a halo of green around them and will yield bi-colored stones when cut. One theory suggests that initially the feldspar phenocrysts had uniform red color with high levels of disseminated copper in them. Before being deposited at the surface, copper was gradually leached out of the crystals when they were suspended in the molten magma body leaving most colorless. In the case of larger crystals the cores retained the highest concentrations of copper thus coloring them red, which changes to green and then clear as the copper concentration dropped.

Six criteria are used to determine the value of rough. They are size, color, color intensity, color distribution, inclusions or fractures, and clarity. Large stones are more valuable than smaller ones. Greens, reds, and bi-colored stones are of higher value than clears and yellows. Large clean stones are rather rare due to the tendency to fracture during deposition and ultimate recovery. Green colored stones are less common, and blue/green are very rare and thus command the highest prices. Because of the irregular shape of rough sunstones, the average yield after cutting can be as little as 12 to 15 percent of that of the rough. Rough that exhibits schiller is best cut as cabochons and large multi-colored stones are often carved freeform so as to retain the best play of color and also the largest possible size.

The array of colors that Oregon sunstone comes in gives it a versatility of use in jewelry that many other colored stones cannot match. The current

low production of rough from the deposits means that high quality stones will continue to be hard to come by. There is, however, a bright future for this material if mining can be conducted in a more purposeful and systematic way and if the process from mine to market can be better organized. ⚡

For more information on the public access sunstone collecting area, contact the Bureau of Land Management (B.L.M.) at: www.blm.gov/or/resources/recreation/index.php and search the recreation section.

Collect Fairy Crosses in North Carolina!

Mason Farm Staurolite Prospect

Brasstown, North Carolina (Near Hayesville, NC)

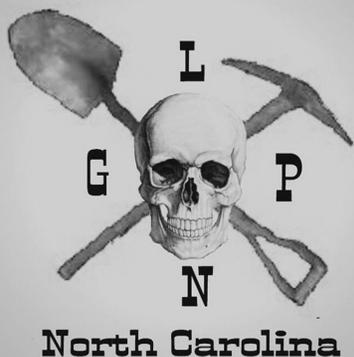
Open Year Round



Fee: \$25.00 per day, per person for adults
MAGMA Platinum Members: \$20.00 per day, per person
Children 12 years of age and under are free
Camping is permitted for \$5.00 per night.
Collecting Limit: 1 (one) 5 gallon bucket of material per person, per day.

(828) 779-4501 magma@wncrocks.com
www.americanrockhound.com at the "Mine Sites" link

Guided Gold Prospecting Trips



Little Nugget's Gold Prospecting

Find your own native North Carolina gold

Let Little Nugget's Gold Prospecting teach you all the basics of gold prospecting. You can learn to pan for gold, read streams and run sluice boxes in no time!

Guaranteed Gold Every Trip!

Contact Kayla Johanson to book your trip today
(336) 301-7419 Nugget2789@gmail.com
www.facebook.com/L.N.GoldProspecting

American Rockhound Billy Wayne Mintz

Richard Jacquot

If you have ever spent any time hunting the Western North Carolina mountains for ruby and sapphire, you have likely crossed paths with rockhound Bill Mintz. Born in Haywood County, North Carolina on April 12th, 1943, Bill has hunted minerals for decades. Bill was the first rockhound friend I made after moving to North Carolina in 1987. For several years, I hunted alone or with my son R.J. In 1995, I married Sandy and we started hounding together. I took her to my usual hunting sites, Wood Creek and Chunky Gal. My Aunt Anne told me about the campsite her and my Uncle Floyd had at Lake Chatuge, near Hayesville, NC, and of all the rubies people found walking the lakebed. One day, Sandy and I made a trip to the lake and that's when I first met Bill. Bill had a great influence on my rockhounding and even on the MAGMA club, but more on that later.

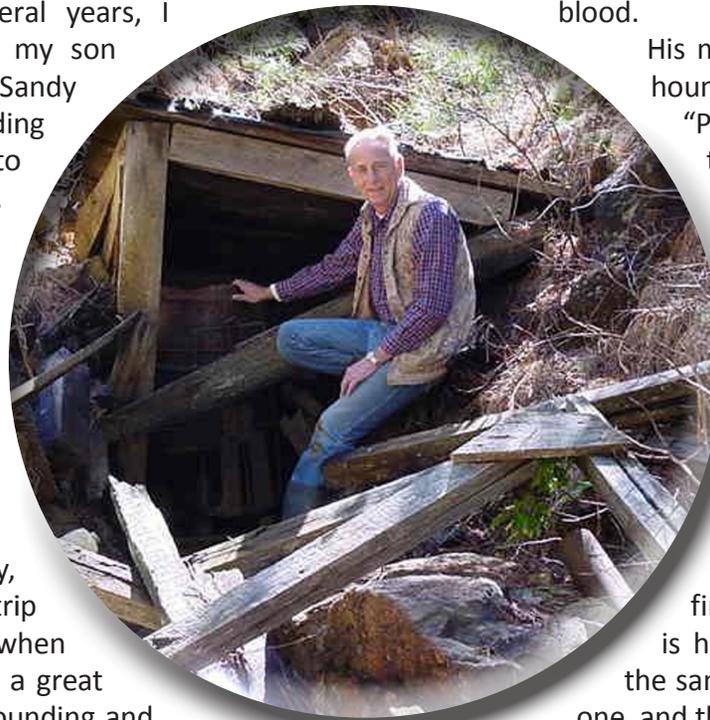
Bill began rockhounding at an early age, his family were mountain people and had a long history of prospecting for gold and gems. Bill's mother used to tell him stories of his grandfather, Nathan Reinhardt, going out for days to hunt gold. The family used to live near what today is the Waynesville water shed. Nathan would go off alone for three or four days, then return with enough gold to buy groceries and other things the family needed. Nathan never told anyone where the gold came from. Bill thinks he may have been hunting near Little Hogback Creek in

Jackson County or maybe Rutherford County. Nathan did take his son Dewey (Bill's uncle) with him on occasion when he was little, but when Dewey got older, he couldn't remember where they had gone, so the site was lost, at least for now. Nathan died in 1922. Bill never got to know his grandfather, but prospecting was in his blood.

His main inspiration for rockhounding came from his uncle "Penny Tom". Tom got this nickname because he was always giving the kids coins to buy candy. Bill said Tom drug him all over the mountains hunting rocks from the time he was 7 or 8 years old. Tom told him "When you're walking, never look up, always look down and you'll find something. If a rock is heavy, compare it to one the same size, keep the heavier one, and the ones with good color."

Thanks to the good advice from "Penny Tom," Bill has found a lot over the years! Tom took Bill to the first place he can remember digging. Located about a mile and a half from where Bill lives today in Haywood County, the site was called Eagles Nest Mountain. At Eagles Nest, they would dig for garnets that ranged from quarter to half dollar in size. Bill said they were pretty garnets and they would sell them at rock shops. He said it wasn't like it is now, back then if you sold a garnet for a dime, that was good money. This was around 1950.

Bill got his rockhounding from his mother's side of the family, grandfather Nathan, uncles





Just a few of the stones Bill has cut over the years, largest stone measures 20 mm x 26 mm. Top row, left to right: Lazulite mounted in gold, Graves Mountain, GA; Sapphire, Lake Chatuge, NC; Ruby, Chunky Gal Mountain, NC; Sapphire, Lake Chatuge, NC; Ruby, Lake Chatuge, NC; Sapphire, Lake Chatuge, NC; Sapphire, Shooting Creek, NC; Sapphire, Lake Chatuge, NC; Sapphire mounted in silver, Wood Creek, NC. Middle row, left to right: Sapphire, Wood Creek, NC; Sapphire, Wood Creek, NC. Bottom row, left to right: Sapphire, Wood Creek, NC; Sapphire, Propst Farm, NC; Lazulite, Graves Mountain, GA; Lazulite, Graves Mountain, GA; Sapphire, Carpenters Knob, NC.

Penny Tom and Dewey. His mother also had a sister that lived near Marble, NC. She collected staurolite crystals and garnets and sold them to local rock shops. As Bill got into his teens, the urge to hunt continued and he began collecting on his own. At first, he really didn't know what to look for. Bill learned rockhounding by field collecting. Using the knowledge that his uncle had passed on to him, looking for mica, color and heavy stones. Bill spent many years hunting for sites to collect, reading old geological surveys, books, anything with clues and information. Bill is a true prospector and a true rockhound and his efforts have paid off. At 18, Bill married his wife Lois. Lois wasn't a rockhound like Bill, but he kept collecting, and over the years made her some beautiful jewelry from the stones he had found. Bill made his living as a builder, specifically as a brick layer and rock mason, which is pretty appropriate.

Bill believes that every rock hunter has a favorite rock. His is corundum. Bill is fascinated with the rubies and sapphires that our mountains are famous for. I asked him what some of his favorite finds have been. He told me the story of the 13 pound sapphire he collected at the Wood Creek site

located in Haywood County, NC. For those unfamiliar with Wood Creek, it used to be a hotspot for corundum for many years but is closed today. It was one of my first hunting grounds and the first site I took Sandy to collect. Bill hunted it many years before me. Bill said he was hunting one day and was in a good pocket of small sapphires in the creek, some were black and various other colors. He was doing pretty good, then he hit a

dry spot, no sapphires for several screens. Another collector there that day told him he had "run out". Bill kept digging, he was still in good gravel and as he said, "I just had a feeling." He said he had about an hour left before it was going to get dark when he took his shovel and stuck it in the ground, and he heard a different sound, that special sound a shovel makes when it strikes corundum! Not being too optimistic, he first thought it might just be a big rock and began prying it out. The stone rolled out and landed in the creek, making a big splash. When the water ran off the top, he could see the parting planes of the corundum. Bill said that was a "good thrill". I say it ranks up there in the "find of a lifetime" department.

Another great find Bill made was at Lake Chatuge when he was collecting one day near the old Behr Corundum Mine. It was a good day, nice weather, and he was studying the lakebed to decide where he wanted to collect. He finally settled on an area he had not worked before and commenced digging. He got down about a foot and a half and was starting to hit the gravel layer. On the third screening, he flipped the shovel up and immediately saw a 3½" square ruby! After washing the piece in the lake water, the



A foot long kyanite crystal in matrix found at Walker Creek, Buncombe County, NC, in August, 2001. We were searching on a bank below the dig area when Bill rolled this piece out, it had a crystal showing on both ends of the 50 pound rock. We split it open and were thrilled to see the ends belonged to one long crystal running through the center of the boulder. This piece was on display in the Mineral and Lapidary Museum of Henderson County, NC for over seven years.

ruby revealed a deep red and pink color. Having collected at Lake Chatuge for many years myself, I can tell you that this was a fantastic find from this location. Those were not the only great finds he made. I was with Bill on many occasions as he pulled fantastic shelf specimens from the ground: Copper Basin, Graves Mountain, Diamond Hill, Little Pine, Shovel Creek, Grimshawe, Wood Creek, Chunky Gal, Walker Creek. The list goes on and on.

Bill has had some adventures in his rockhounding. One story he told me was of a trip he took with his son, Bill Jr., to the Grassy Ridge Mine. As they were hiking to the mine, Bill found a nice clear quartz crystal in a wash by the road and he told his son they might be able to find some amethyst. They got to the mine and began exploring; it was a big mine, so plenty to explore. While looking around in the mine, Bill jumped down into a pack of wildcats! A mother and cubs were in an undercut in the mine. Bill said he froze. He said "I've never heard so much spewing at me in all my life." He told his son to move back, that he had to come out of there because of the cats. Bill said the little ones were spewing and the mama was making a racket that he couldn't explain! I imagine it was like the sound my cat



Bill Mintz (right) and me taking a break at one of our sapphire hunting honey holes in the mountains. I learned more about hunting corundum from Bill than I could have ever learned from any book! August, 2003 photo.

makes when I try to give her a bath, only amplified about 100 times! Bill said he jumped up out of the hole and didn't look back till he was about 50 yards away. I think I would have just kept going. This is the mine where Bill found a sheet of crystal clear quartz, 3" thick and about 6' long. He said it was the prettiest quartz he had ever seen and he had never seen anything like it before. He tried to collect some of it but was unsuccessful. I would like to visit the site with him someday, armed with hammer and chisel.

I learned a lot about rockhounding from spending time with Bill: technique, locations, patience and most importantly, sharing. After spending several years of hunting alone, it was good to have a digging partner. I would take R.J. with me to meet with Bill and we would spend every spare day checking out a new site. Earlier I said that Bill had a big influence on the Mountain Area Gem and Mineral Association (MAGMA). When I first moved to North Carolina and got back into rockhounding, I was like any other hound. I read old books, reports, geologic papers, etc. to figure out where to go hunt. I can say from experience, there are many people out there that will use you for any information they can get, and give nothing in return. I recall many times, walking into various rock shops and asking basic directions to a dig site on Chunky Gal or elsewhere, only



My son, R.J. Jacquot III, Bill Mintz and his nephew Shawn. Getting ready for a day of amethyst hunting in the mountains of Western North Carolina. May, 2004 photo.



After a bit of digging, Bill pulls out the first amethyst of the day. May, 2004 photo.

to leave with nothing. Sharing was a little used tactic in those days. After spending time with Bill, learning from him and seeing his good nature and attitude towards others, I decided to share what I

had learned. Sharing is what prompted me to write my first book, so others could enjoy this hobby and it was the main reason for forming the club, that today, over 2,000 people enjoy yearly across the country. I sometimes wonder if the club would exist if I had never met Bill...

On March 28th, 2013, Bill's wife, Lois, died. They had been married for 52 years. Bill took some time off from rockhounding after that. Today, Bill is getting back out on the hunt. He says "I grew up in a good family, we were a happy family. My family life was the happiest days of my life, and that's what keeps me going today." His grandson Nickolas has taken up the family tradition of rockhounding. He has all the publications

that Bill has been in and, according to Bill, goes rock hunting regularly. Bill also plans to take his new girlfriend, Earlene, with him hunting to see if she will get interested in the hobby.

Bill has never been on the internet or gone to shows to sell rocks. He would occasionally sell some to a local rock shop or close friends that he collected with just to pay for his trips. So what is rockhounding about for Bill? I think he summed it up pretty good: "It's friendship, and having somebody that you can get out and enjoy what God has put out there in the earth. It's the thrill of having a friend there when you pull a stone out of the ground and you're the first human that's laid eyes on it, then hold it up to your friend and say, look here." In other words, it's about sharing the joy of rockhounding.

Thank you Bill for being such a good friend over the years. I look forward to many more collecting trips. 🏹

ROCKHOUND ART

Crafting the Cross of R.J.

Richard Jacquot

On the evening of Tuesday July 17th, 2012, I received a visit from the Buncombe County Sheriff's Department. When I got to the door, there was a deputy along with a Chaplain that worked for them. Being an ex-police officer, I knew I was about to receive some bad news. The Deputy and Chaplain were very professional as they informed me that they had found my son, Richard James Jacquot III, at his home in Fletcher, North Carolina, deceased from a gunshot wound. Like many people, I went through a range of emotions, for days, then weeks, then months. To be honest, I never have gotten over it, and I never will.

R.J. and I were collectors of a lot of things. He began collecting rocks with me when he was around five years old. I have said to many people, R.J. knew more about rocks and minerals than most adults I know. We made several trips to Cumberland Island in Georgia to hunt for fossils. We collected all sorts of bones, he inherited this odd fascination from me. As a kid, I would routinely try to get my parents to stop at the sight of every road kill I saw. Finally, one day, my mom told my dad to pull over and let me go look at the dead animal in the road. She thought it would cure me from ever doing this again, but, as I poked and prodded the dead (maybe rabbit?) with a stick, my fascination grew. R.J. was the same way, he was always coming home from his friends house dragging a pile of dog, deer, cat, cow or whatever bones he had found while out playing in the fields nearby. We live in the country, so there are plenty to choose from out here.

I decided to have R.J. cremated. I wanted to have him near me and I did not want to think of him being buried in cold ground. I wanted to keep him in our home, where he grew up. I went with the mortician to the crematory, and sat there for the 3-4 hours it took to cremate his body.

When the man was done, I watched as he raked the ashes into a container, then he placed them on a tray to cool. He then asked me something I thought was weird at first. He asked if I would like to go through the ashes and pick out a bone that may still be intact, he said some people do this before he crushes everything to put into the urn.

He left me alone with R.J. As I sifted through the still hot ashes and bone, instead of being sad, I began to collect. I picked out every bone I could find that was still whole. As I went through the tray, I remembered all the trips we had been on together and the fun we had collecting together. I filled a small cardboard box. When the man returned, he was a little shocked at all the bones I had set aside. I told him that R.J. and I were bone collectors, and these were the most valuable bones I had ever collected. They would not all fit into the urn, so I had to high grade and take only the best pieces. Having done that hundreds of times before, this time was the hardest. I finally realized I would still have them, in the urn. I took a dozen vertebrae and hand bones and kept them aside. Once the urn was filled, I placed the whole pieces inside.

I wanted to be able to take R.J. with me when I was on my collecting trips and out exploring. One day, I opened his urn and removed the bones. I went through them and picked out one of his finger bones that was complete. I picked this bone in particular, as it was part of his hand, the hand that hugged me as a child and greeted me with a handshake and hug when a man. I will never forget his voice and smile when we hadn't seen each other in a while, and he always had a hug for me. I tried to figure out what to put it in, I decided to have a cross made with the bone inside. I was raised to believe in a higher power, and I raised R.J. the same way. The cross was



Top left: The wax carved rough cross that Ron Koenig designed. It has a corundum watch glass used as a window in the cross. Ron used the "lost wax casting" process to create the cross. Ron is a master craftsman and can create many types of jewelry at his shop, Michaels Jewelry, in Columbia, SC. Call him at (803) 782-0808 if you would like him to create something for you.

Top right: The finished product. The cross is made of 14k white gold.

Left: This is the cross I designed, it was made by Paula Dawkins at "Jewels That Dance" in Asheville, NC (828) 254-5088. Paula uses a CAD computer program to create precision jewelry. The cross is made of sterling silver and measures 2¾" x 2⅛" x ⅝" thick (6.7 cm x 5.4 cm x 1.6 cm). This cross contains the cross Ron made and several other items that belonged to my son.

what represented that power to me, and to him.

This would have to be a custom job, as not many places have something like this, what I wanted was from the old world, not the flash of today. I called my friend Ron Koenig. Ron is a jeweler from Columbia, SC. Ron owns and operates Michaels Jewelry in Columbia. He is also a master metal smith, working with silver and gold all the time. I told him what I wanted, and he said he could do it.

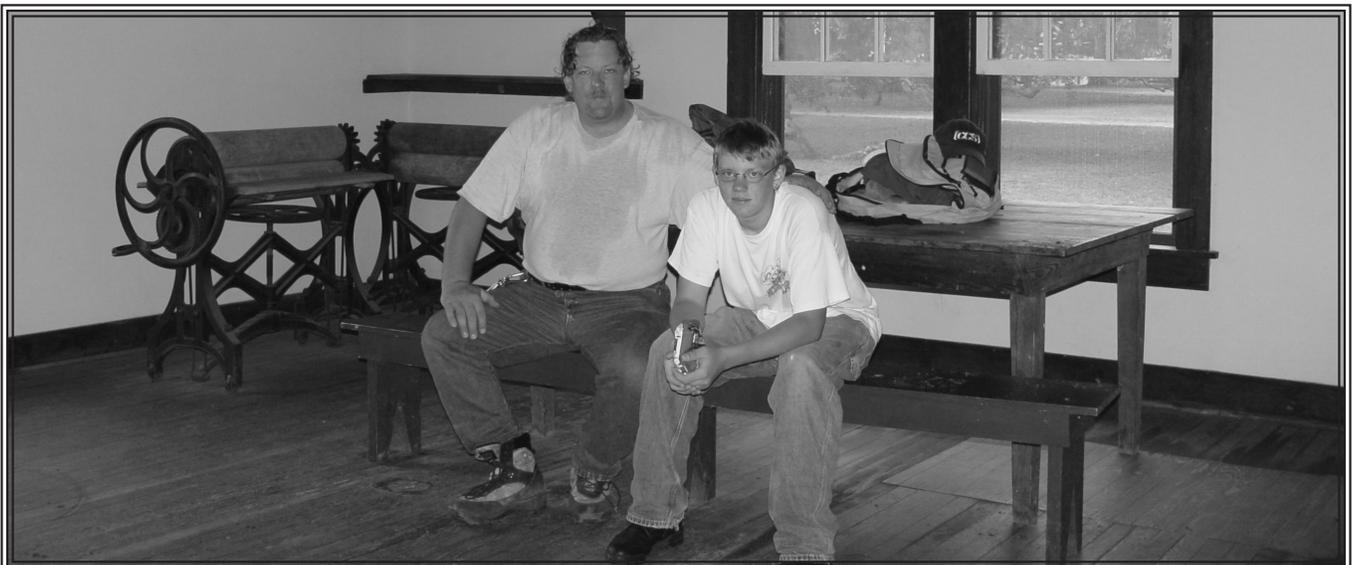
I drove to Columbia and brought the bone with me. Ron designed a cross and carved it out of wax. The bone would fit inside the cross and there would be a window that I could look through to see the bone. Ron used a watch crystal from an expensive watch for the window, as those glasses are made of synthetic corundum and would not scratch easily. Ron used the "lost wax casting" process to make the cross out of white gold.

I wore the cross daily as I went about my business, but once summer hit, I realized that there was too much moisture from heat and humidity building up in the cross. I didn't want to damage it, or what was inside, so I designed another cross, only this one was a bit bigger. This cross is more of a sarcophagus, it holds the cross Ron made, along with other items that belonged to my son, plus the first stone we collected together. I didn't want to burden Ron with another task since he had already done a fine job for me. I did some research around Asheville, NC and was given the name of Paula Dawkins. Paula owns a shop on Haywood Street downtown called "Jewels that Dance". I had drawn a rough design

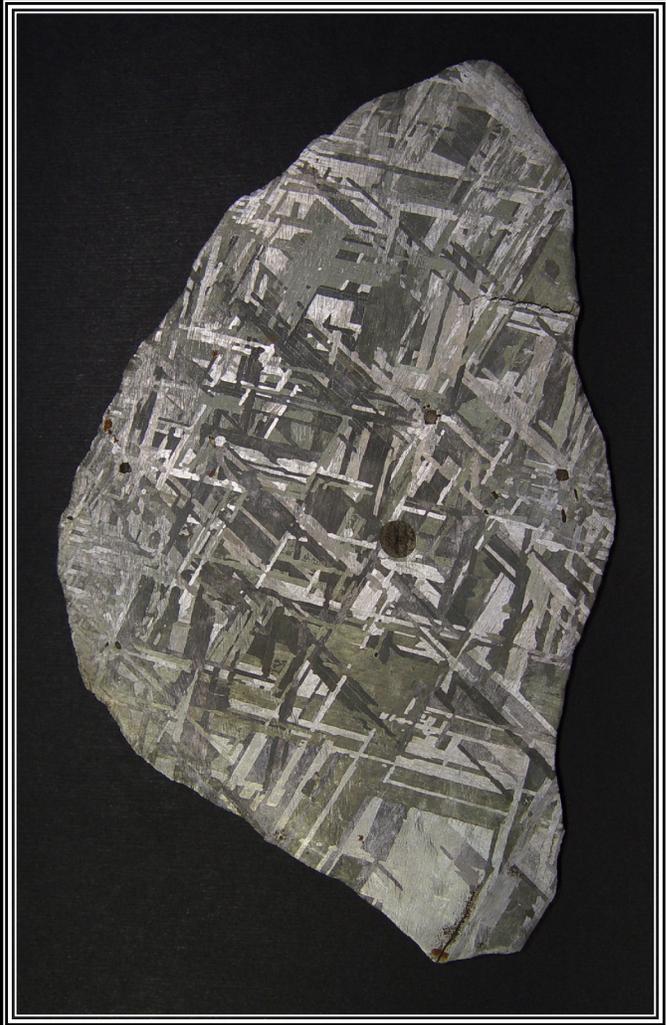
of the cross and how I wanted it to look and work. It would hold the original cross Ron made, along with room for other items. It would have a lid that I could remove when needed. She took my design and told me she would call me in a few days. When I returned to her shop, I was amazed at the precision she had created out of my rough drawing. She uses a CAD (computer aided design) system to create her jewelry. Within a month or so, I had the finished product.

My most prized possession, I wear this cross wherever I go. I know it is merely a material possession, but it is a link that keeps R.J. a part of my daily life, alive in my mind and heart. There are things in life that bring back memories for all of us, a smell, a taste, a picture or an object. Our senses are always aware of these things, and sometimes they stir an emotion or thought or memory that was buried long ago, a sort of déjà vu. Spirits are always with us, and away from us, in another plane, dimension, heaven, they are where you believe them to be, and where they are. But I believe they visit every now and then, I think R.J. watches me, and I think his spirit keeps me going when I am feeling down. I think it is always good to keep those you care the most about close, any way you can.

The mystery of our existence is undefined, much larger than man, and what he can theorize or explain. Whatever you believe in, never let go of the chance that there is something waiting for us on the other side. The only true answer is beyond the realms of death, a place that man, in mortal existence will never be able to describe. 🦋



FAVORITE FINDS



Top left: Tektite, Bédias, Texas. 2" x 1½" x 1¼" (5.08 cm x 3.81 cm x 3.18 cm). Ken Kyte collection.

Middle left: Nickel/Iron Canyon Diablo Meteorite, Barringer Meteor Crater, Arizona. 2¾" x 1⅝" x ½" (5.56 cm x 4.13 cm x 1.27 cm). Richard Jacquot collection.

Bottom left: Volcanic Bomb, Taos County, New Mexico. 1⅞" x 1¾" x 1⅜" (4.76 cm x 4.45 cm x 3.49 cm). Ken Kyte collection.

Top right: 388 gm slice of a Henbury Meteorite showing the classic Widmanstätten crystal pattern (close up shown on cover). These meteorites were discovered in 1899 in the Northern Territory of Australia. 8⅝" x 5⅞" (21.1 cm x 13 cm). John Sinclair collection.



POLAND MINING CAMPS

Poland, Maine

Dan Cathey

I visited a unique place in Maine last August. It's called the Poland Mining Camps. I was able to stay for four days and collect mineral specimens from several places in the area. The camp is run by Mary Groves and really should be a must visit for any pegmatite collector. To start the day off right, Mary fixes everyone a large breakfast. Then, each person packs their lunch for the field and then she fixes a huge dinner. If you are fortunate enough to be there on a Saturday night, dinner is fresh lobster. In this article, I included a brief history of the camp, written by Mary, and a daily log of what I was able to gather along with what other folks were finding.

History of the Mining Camps

Poland Mining Camps was conceived in the 1950s. Dudy Groves (Mary's late husband) was an avid mineral collector. Steve Perham and his wife Hazel were the inspiration. The Perham's and Groves met square dancing. Steve collected mineral specimens. He showed Dudy some of his specimens and Dudy was forever changed.

In those days no one stopped you from picking up rocks in their yards. Dudy was a very sharing person and he soon had more than enough. He put up a sign and soon travelers were stopping. They asked where they could stay and go collecting

with Dudy. Dudy was an industrious man, he started building cabins. He cut the logs and trees that he milled with an Alaskan mill. It took seven years, but the result was ten comfortable cabins with all the modern conveniences and fire places.



Poland Mining Camps Owner, Mary Groves, in front of the dining hall. If you are fortunate enough to be there on a Saturday night, the dinnertime meal is fresh lobster! Dan Cathey photo.



Pulsifer mine on Mt. Apatite. I did not get to see much of the deeper pit since Maine had a very wet summer and it was underwater. Dan Cathey photo.



Hole in the ground or Groves Quarry, the group searching the dumps looking for blue tourmaline. Dan Cathey photo.



Graphic Granite from Pulsifer quarry. Large piece measures approx 3½" (8.89 cm) wide. Dan Cathey specimen and photo.



At the Hole in the ground mine, Eric found this beautiful fluor-apatite cluster just lying on top of the ground. Dan Cathey photo.



Mineral collectors David and Eric looking at specimens in the dining hall at Poland Mining Camps. Dan Cathey photo.

In 1990 when he and Mary married, their combined interest led to expansion of the camp and business. The Eastern Federation's Maine Safari left enough funds for the beginnings of the dining hall. The dining hall has become the lab for learning, sharing stories and meals.

Day One

The day started with a large breakfast prepared by Mary and her daughter Amy. David and Manny were our guides. Collecting along with me, was Eric, Sally and their son Ben. Also collecting was Nancy and John. By eight o'clock we were on the road to Mt. Apatite. This is the home to several older quarries we explored. You come to the Keith dump first as you walk down the road, then the Pulsifer quarry, then the Wade quarry, and finally the Hole in the Ground mine, also known as the Groves quarry. The Groves is still mined at times and the Pulsifer has been listed as a world famous site of aquamarine and fluor-apatite.

At the Keith, I found several nice green and blue tourmalines in matrix. One of the previous visitors dug a fairly deep hole there and found a nice gemmy watermelon tourmaline. I also picked up a neat muscovite mica book.

At the Pulsifer, I collected some graphic granite which I have read about since college but rarely see in person. I did not get to see much of the deeper pit since Maine has had a very wet summer and it was underwater.

At the Hole in the Ground mine, we sifted for tourmaline and collected very pretty cinnamon colored almandine garnets. I ended up with some nice small pieces of dark blue tourmaline and some small green tourmaline. Eric found a beautiful fluor-apatite cluster just lying on top of the ground. His wife, Sally, found several small pieces of apatite while sifting. Their young son, Ben, was a lot of fun to have along collecting with us. He was very patient for someone his age.

As a side note, one of the best places to collect is actually at the camp. At the wash area outside of the dining hall, people leave amazing pieces. People have collected them in the field and then leave them there. I found very nice cleavelandite, nice garnets and even some nice tourmaline in matrix.

Day Two

After breakfast we headed out to Mt. Mica around 7:30 am. Our group consisted of myself, Eric, Sally, Ben, Dan (from Bangor) and our guides Diane and Butch. The mine itself is not a quarry but a true underground shaft mine. Since the mine is currently being worked, the mine dumps are added to all the time.

I started the collecting day by walking around the dump. I quickly found quite a few green tourmalines, not gemmy but nice display pieces. At around 10:30, I found a large aquamarine crystal on the outside of a chunk of feldspar. I managed to expose some gemmy small aqua crystals. In addition to the tourmaline and aqua crystals I picked up a large lepidolite specimen. After lunch, I spent a good part of the afternoon sifting debris on the top of the dump. I ended up with about twenty small pieces of green tourmaline. One of the odd rocks I picked up was identified by the guides as having triphylite and siderite in it. The triphylite is the bluish mineral in the rock. I also collected some rough looking columbite but did not send it home since I found



Mineral collectors Diane and Sally on the Mt. Mica mine dump. Dan Cathey photo.



Sally looking for tourmaline on Mt. Mica. Dan Cathey photo.



Large lepidolite specimen I collected from the Mt. Mica mine dumps. Approx. 9" (22.86 cm) long. Dan Cathey specimen and photo.

some much nicer specimens later in the week. We called it a day around 3:00 pm.

Day Three

After we all had a good breakfast we headed to the Orchard and Bennett mine dumps. This day's group consisted of David and Manny, Eric,



Eric's beryl crystal in matrix found at the Orchard mine. Approx. 10" (25.4 cm) long. Dan Cathey photo.



At the Bennett, Sally found the biggest beryl that I have ever seen outside of textbooks. It was in matrix and was approx. 5" (12.7 cm) in length and 6" (15.24 cm) across. Dan Cathey photo.

Sally, Ben, Richard and his wife and me. The mines are very close to each other but have different minerals in them. At the Orchard, we were looking for beryl in particular. Eric lucked out with a pencil sized beautiful green beryl in matrix. It came close to 10" (25.4 cm) in length. He liberated it with a hammer and chisel after seeing a small spot of green on the opposite side of the rock. Sally sifted huge amounts of debris and came away with some small pieces of beryl.

I found a rotten piece of feldspar that someone had broken apart and it was filled with vugs. In the vugs were small clear to orange albite crystals. The albite crystals looked like a miniature pipe organ. In addition to the albite, I found some pretty beryl crystals of a greenish color. I was very pleased with them.



Eric, Sally, Ben and mine guide David at Orchard mine dump. Dan Cathey photo.



1" (2.54 cm) Beryl from the Orchard mine. Dan Cathey specimen and photo.

We only got to spend about an hour at the Bennett, so I loaded up with manganese apatite. According to Mindat, it is a type of Mn enriched fluoroapatite. At the Bennett it occurs as dark green barrel shaped crystals. They are highly fluorescent, a pretty bright yellow. Interestingly, the apatites from the Orchard quarry do not fluoresce. The owner thinks that even though the mines are very close together that they come from different pegmatites. At the Bennett I did pick up some mica and some rock with schorl embedded in it. You can see the striations when the crystals are seen along the long axis. Sally found the biggest



Top left: Eric and Sally's finds of green tourmaline from the Havey. Dan Cathey photo.

Middle left: Green tourmaline on the quarry wall at the Havey mine. Dan Cathey photo.

Bottom left: Green tourmaline crystal in host rock, collected at the Havey mine. Specimen approx. 5½" (13.97 cm). Dan Cathey specimen and photo.

Top right: Chunk of green tourmaline Sally found at the Havey mine, laid on the tread of the excavator. Approx. 3" (7.62 cm). Dan Cathey photo.

Bottom right: Eric and Sally picked up green tourmaline crystals by the hundreds. Some of their finds from the Havey mine. Dan Cathey photo.





Top left: Collector Steve Bonney concentrated on micro minerals and vugs while collecting at the Havey mine. Dan Cathey photo.



Top right: Vein of lepidolite and black tourmaline at the Havey mine. Dan Cathey photo.

Middle right: Large specimen of lepidolite and tourmaline collected at the Havey mine. Approx. 5½" (13.97 cm) diameter. Dan Cathey specimen and photo.



Bottom right: A large lepidolite specimen collected at the Havey mine, shaped like a mountain with a base of cleavelandite. Approx. 7" (17.78 cm). Dan Cathey specimen and photo.



The excavator at the Havey mine with blast blankets to catch falling debris. Dan Cathey photo.

beryl that I have ever seen outside of textbooks. It was in matrix and was about 5" (12.7 cm) in length and 6" (15.24 cm) across.

Day Four

On my last day collecting we visited the Havey mine. Dave and Manny were our guides and Eric, Sally and Ben collected with me. Fellow club member (Mountain Area Gem and Mineral Association) Steve Bonney also collected with us this day. He had come up from Kentucky to collect. The owner of the Havey has a blog site that I would encourage you to visit and take a look at his video. I have never had a collecting experience like this before. The owner had recently blasted looking for gem tourmaline in pockets. Eric and Sally picked up green tourmaline by the hundreds of pieces. They concentrated on the tourmaline while I focused on the purple lepidolite. I picked up one piece that was rounded and about the size of a small bowling ball. When I washed it, I realized that a good part of the surface was covered in watermelon tourmaline. Another large piece was shaped like a mountain and had a base of cleavelandite. I have been looking to collect some columbite for some time and found two nice pieces at the Havey. Steve concentrated on micro minerals and vugs with tiny green tourmalines in them. He seemed very pleased with what he found. We packed it up around 3 pm and headed back to camp.

I can't say enough about the kindness and generosity of Mary Groves, her daughter and our guides: Dave, Manny, Diane, and Butch. They are a large part of the great experience of the Poland Mining Camps. 🐾



Eric sifting rocks from the Havey dumps looking for green tourmaline. Dan Cathey photo.



David and Manny at the Havey, taking a break and discussing the finds of the day. Dan Cathey photo.

If you would like to make arrangements to collect at the Poland Mining Camps, visit their website at: www.polandminingcamps.com.

Highlands Road Gem Show

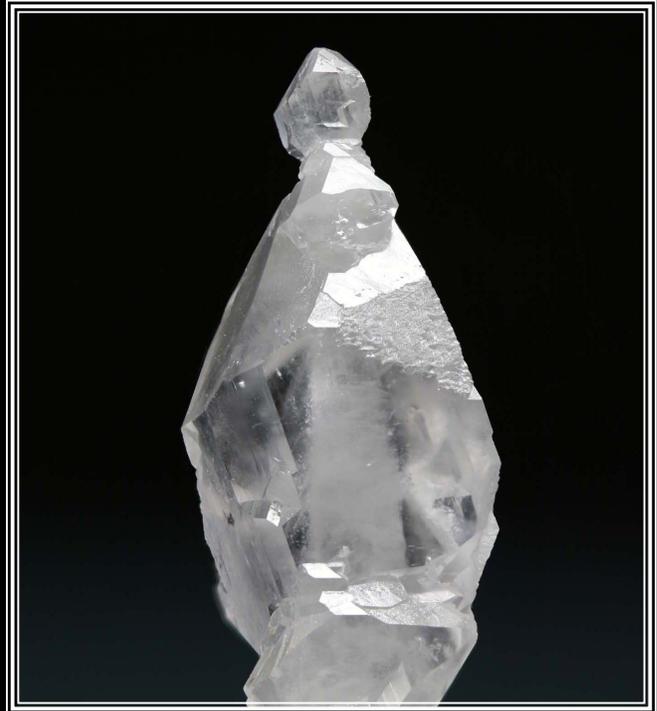
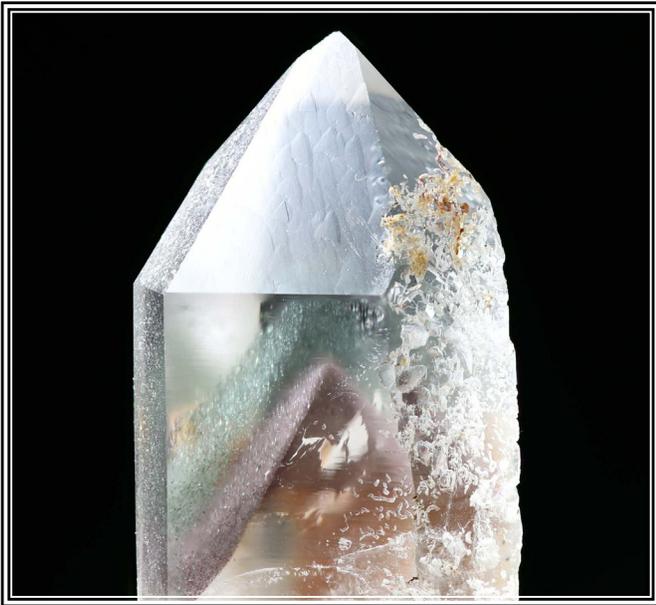
May 7th – 10th, 2015
July 22nd – 26th, 2015

Corner of Hwy. 441 By-Pass
& Highlands Road, Franklin, NC.

Both shows coincide with the G&LW wholesale gem show, the July show coincides with the annual Rockhound Roundup held in Asheville, NC.

For more information, contact Stephanie at (828) 369-6341

FAVORITE FINDS



Top left: Quartz crystal, construction site, Wake County, NC. 2" x 1" x 0.6" (5 cm x 2.5 cm x 1.5 cm).

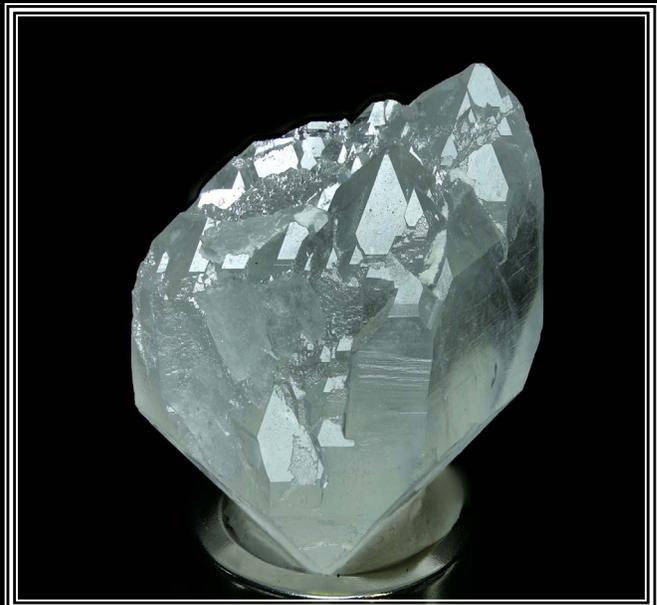
Middle left: Quartz crystal with phantoms, Coopers Ridge, Chatham County, NC. 0.79" x 0.39" x 0.28" (2 cm x 1 cm x 0.7 cm).

Top right: Close up of healed quartz crystal, Burgin Quartz Mine, Stanly County, NC.

Middle right: Quartz crystal, Burgin Quartz Mine, Stanly County, NC. 1.18" x 0.47" x 0.39" (3 cm x 1.2 cm x 1 cm).

Bottom right: Quartz crystal, Burgin Quartz Mine, Stanly County, NC. 1.38" x 0.98" x 0.79" (3.5 cm x 2.5 cm x 2 cm).

Scott LaBorde specimens and photos.



Rockhound Reflections

Road Tripping: Love At First Sight

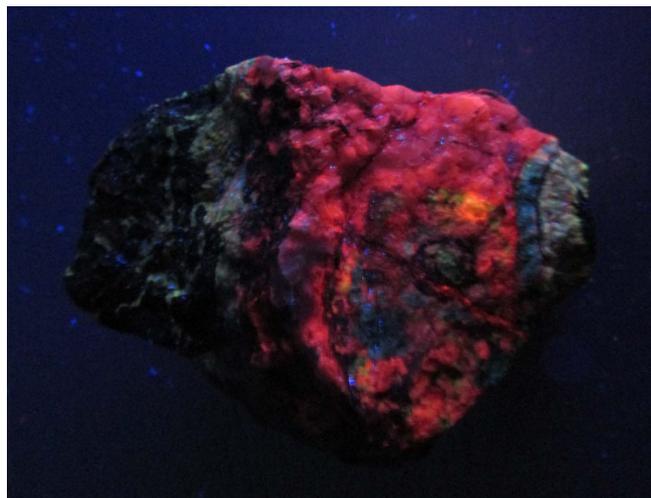
Sandee Barton

Oh my goodness. It all began so innocently. I bought my husband a membership to the club so he could go with me on a club sponsored function in Richmond (The Lora Robins Gallery of Design). I admit there was an ulterior motive. I wanted him to drive. Yup, and I wanted to make it an overnight trip. You know, visit the REI store for some camping gear, go out to eat, and just get away from all responsibility for a day. Who knew it would turn into this? I didn't have any warning.

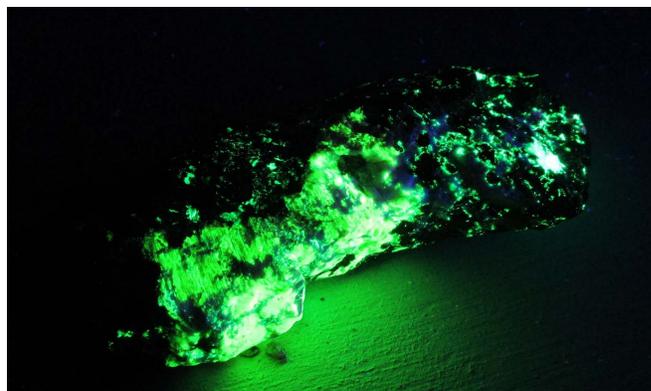
We went to the Stone Goddess and I was like the fourth person in the door, right after Jan and Sharon. I sure would have been first if I'd known

the door was unlocked! Anyhow, my husband poked his head in the shop, did his quick tour around and patiently waited for me (for a few hours). In fact, I was the last person to leave, even my sweetie left to eat dinner while I browsed until the very last moment possible. Thank goodness he keeps track of time for me.

We then went to the Lora Robins Galley. What a lovely time I had, although I didn't make it through the complete exhibit. That's ok... just another excuse to go to Richmond! I poked around, slowly meandering about, reading the cards, staring at the displays, wiping the drool off my chin, and generally just living in my own little



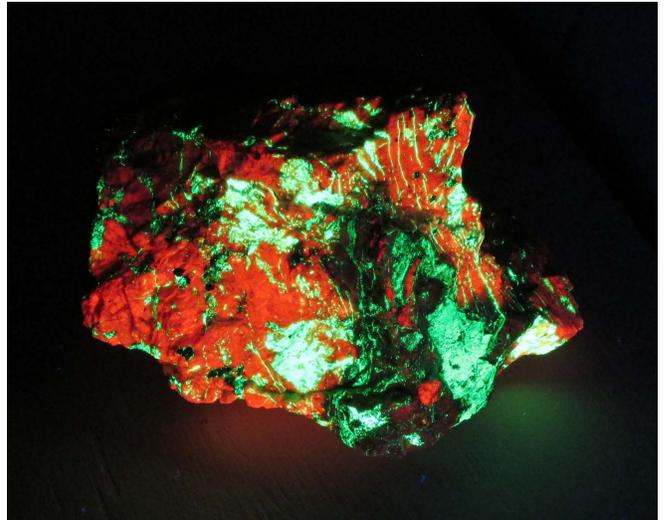
Willimite & Calcite, Puttapa Mine, Puttapa, North Flinders Ranges, South Australia, Australia. Shown in natural light and under short wave UV. Carl Barton photo.



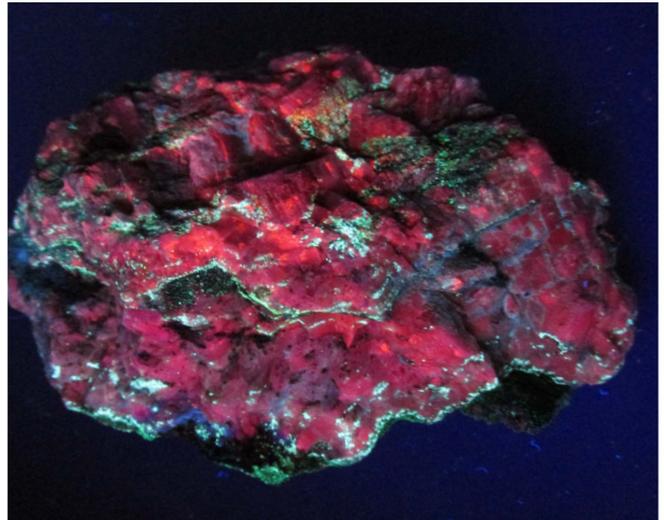
Espirite, Willimite, Calcite, Hardystonite, & Franklinite. This is one of my rarer pieces as Espirite and Hardystonite are very hard to find. This was found at Franklin, NJ in the Parker Shaft. Shown in natural light and under short wave UV. Carl Barton photo.



Humite, Calcite, Willimite, Diopside, & Norbergite, found at the Sterling Hill Mine in Ogdensburg, NJ. Shown in natural light and under short wave UV. Carl Barton photo.



Willimite & Calcite, found at the Sterling Hill Mine in Ogdensburg, NJ. Shown in natural light and under short wave UV. Carl Barton photo.



Calcite & Willimite, Purple Passion Mine, AZ. Shown in natural light and under short wave UV. Carl Barton photo.

rock world, while he did his “normal” quick trip up and down the aisles taking pictures. Every once in awhile he’d come around and check on me to see how far I’d gotten, remind me what time it was, and let me know that I hadn’t moved but a few steps. Honestly, nothing was out of the normal! Little did I know. I should have caught on since he told me he’d gone back to look at the fluorescents. Oh yes, I should have remembered how his eyes gleamed when we were at the Seaman’s Museum in the fluorescent room with the lights out...I thought it was just for me. But they say the wife is always the last to know.

Several weeks later, we went to the annual rock auction. I encouraged him to go. I did. So perhaps some of this is my fault. Everything was going quite smoothly, until **that** moment. The moment that Ken pulled out a big grey plastic beat up bucket of rocks. Nothing to raise my suspicions at all. Then, the lights went out, the black light went on, and that’s all she wrote. My husband, at that moment, turned into an official rock hound. It’s true. He bid with a vengeance and bought that bucket of rocks. He even bid against himself! When we got home, the first thing he did was carry that bucket into the house and proceed to wash those rocks, one by one, very gently. Oh yes indeed, in the kitchen sink, with the scrubber and toothbrush. This was serious, he was acting like me. It was at that moment, I knew that he’d have another love in his life: fluorescent minerals and rocks.

He’s enamored. Completely hooked. Did I mention it’s only the next morning and he’s already been online and bought a complete black light set up? Oh, and that he didn’t get much sleep last night since he was up sketching out the plans to build a display cabinet? Thank goodness he’s a woodworker! I also found out he’s leaving me (with my blessings) on the weekend of the TOTE show to visit the object of his affection: the Sterling Hill Mine. Oh yes, he’s already registered and has the hotel room booked. Since I have to teach, I’ll be sending extra empty buckets along for him to fill.

Hehehe...little does he know, my plan worked. It just took a little longer than I had figured, since I really thought it would be those shiny colorful Lake Superior agates (last year) that would catch his fancy and turn him into one of us!! 🦋

Mineral & Lapidary Museum of Henderson County

400 North Main Street
Hendersonville, North Carolina, 28792

(828) 698-1977

www.mineralmuseum.org



The Mineral & Lapidary Museum of Henderson County, the project and dream of Mr. Larry Hauser, opened on November 6th, 1997.

The museum contains one of the finest mineral collections in North Carolina. Many of the minerals on display are donated or are on loan from local rockhounds and members of the Henderson County Gem and Mineral Society.



Rockhound News

Jackson Crossroads (JXR) Amethyst Mine closed to collecting!

With the recent death of rockhound Terry Ledford (September 17th, 2014), his properties have been reorganized with his son, Ryan Ledford, taking the reins as primary owner of the JXR and other sites Terry owned. Ryan recently worked with the MAGMA club to organize a memorial dig for his father at the JXR site. The dig was a huge success with numerous beautiful crystals found by our members, and a fitting final tribute to a rockhound legend. Unfortunately, at this time, the mine has been closed to all collecting by rockhounds until further notice. American Rockhound magazine will stay in contact with Ryan Ledford and will have any updates on this site in future issues.

Cherokee Ruby & Sapphire Mine under new ownership!

After several years of ownership/management by MAGMA members Ray and Maria Montoya, the Cherokee Ruby & Sapphire Mine has been sold. Under the new management, the site will remain one of the only “all native stones” locations to collect North Carolina rubies and sapphires. The old Cherokee Mine website does not seem to be updated, but may be in the future, it is located at: www.cherokeerubymine.com/Home.php. The facebook page seems to be current with new information on the mine: www.facebook.com/pages/Cherokee-Ruby-and-Sapphire-Mine/210128582335872. American Rockhound magazine will keep you updated with news in future issues.

Mason Farm Staurolite Prospect, new limits on amount of material collected!

I was recently contacted by the owner of the Mason Farm site. He encountered a couple of out of state collectors who were filling the back of their truck with buckets of staurolite material. I agreed with him that this is totally unacceptable and downright greedy on the part of the collectors. There is plenty of material at this site, but it is now limited to 1 (one) 5 gallon bucket of material per person, per day. Any violation of this rule will result in the person(s) being removed from the property and all finds returned to the owner with no refund. It is sad that, once again, the greed of the few affects the hobby for us all! For more information, visit our website at: www.americanrockhound.com and go to the “Mine Sites” link.

T. Rex “Sue” visits the Florida Museum of Natural History!

A full size cast of the *Tyrannosaurus rex* “Sue” will be on display at the Florida Museum of Natural History located in Gainesville, Florida. The exhibit will run from Jan. 24th – Sept. 13th, 2015. Cost is \$7.50 adults, \$6.50 Florida residents and seniors, \$4.50 ages 3-17 and free for museum members and University of Florida students. Sue is the most famous *T. rex* in the world. She measures 42 ft long and 13 ft tall at the hips. This is one of the finest museums I have ever visited, if you love fossils, you need to visit this museum! For more information on this exhibit and others at the museum, visit their website at: www.flmnh.ufl.edu/exhibits/limited-time-only/t-rex-named-sue.

2 carat diamond found at Crater of Diamonds State Park!

Dean Filppula of Shreveport, Louisiana, found the yellow 2.01 carat diamond in February, 2015. News sources said the stone was the size of a pea. Filppula’s find is the largest so far this year. Once the stone is appraised, Filppula plans to sell it. The 37 acre Crater of Diamonds State Park was formed in 1972 and is the only site in the world where you can dig for diamonds and keep what you find. For more information and to plan a visit, visit their website at: www.craterofdiamondsstatepark.com

Do you have news to share with our readers? E-mail the details to: info@americanrockhound.com

HIDDENITE, NORTH CAROLINA MINING DISTRICT UPDATE

Richard Jacquot

SHARPES EMERALD PROSPECT

The MAGMA club visited the Sharpes Emerald Prospect for a two day dig on February 6th and 7th, 2015. We had 94 members show up for the weekend fun. I saw a lot of smaller nice pieces of facet grade and crystal smoky quartz, muscovite mica and a couple of pieces of beryl, but no really big finds. The Hiddenite Gems Investment Group LLC (H.G.I.G.) is planning to do more machine work at the site, hopefully sometime this spring. I will try to plan a three day campout and dig for the MAGMA club, after work has been done to expose more areas for collecting.

NORTH AMERICAN EMERALD MINES (N.A.E.M.)

Mark Randle informed me that they have been doing some blasting at the mine in search of productive pockets. Some nice material has been coming out and there will be more details in the next issue of American Rockhound. Pictured are a few of the tessin quartz pieces they have found so far. To inquire about purchasing material from the North American Emerald Mines, contact Mark Randle at (828) 514-9239.

Right: Rob Stine's latest creation, a painting of the Sharpes Emerald Prospect, Hiddenite, NC. To inquire about and purchase other Rob Stine "minescapes", contact him at email: wobandwickiwocks@hotmail.com.

Bottom: MAGMA club members search the Sharpes Emerald Prospect for gems and minerals, February 6th and 7th, 2015.





Top left: Tessin crystal with rutile, North American Emerald Mines, Shaun Shelton photo.

Middle left: Tessin crystal cluster, North American Emerald Mines, Shaun Shelton photo.

Bottom left: Tessin crystal cluster with rutile, North American Emerald Mines, Shaun Shelton photo.

Top right: Tessin crystal on dolomite/siderite matrix, North American Emerald Mines, Shaun Shelton photo.

Bottom right: Tessin crystal cluster, North American Emerald Mines, Shaun Shelton photo.



12th ANNUAL
WESTERN NORTH CAROLINA
ROCKHOUND ROUNDUP!

Camp Stephens
Clayton Rd. Asheville, NC 28806
July 20th – 26th, 2015

Daily Mineral Collecting Field Trips
Local Franklin, North Carolina Gem Shows
Indoor Show at Camp
Lapidary Instruction
Stone Cutting
Camping, Food and Fun!

rick@wncrocks.com

(828) 779-4501

www.americanrockhound.com



COLLECTING SITE INFORMATION

Collecting sites are organized by state and county. We will be covering different states and mines in each issue. Sites will be rated to help you decide if they are appropriate for you and your family. New and closed sites will be updated with each issue. If you have a spot in your state that you would like us to include in American Rockhound, you can email us at info@americanrockhound.com with the information (site name, location and contact information, owner's phone number, email and/or website). Only legally accessible sites will be included in our magazine. All information will be verified before addition to the magazine.

Level 1: Level 1 sites are commercial, usually pay to dig mines, that provide a washing flume and sifting screens to clean your stones. Typically, there will be buckets of mine run material for sale. Some offer all native material while others offer enriched buckets that have material in them from a foreign source. These sites are good for kids and beginning rockhounds to get them interested in the hobby. Some also offer "dig your own" from dump piles where you dig the material, fill your bucket and then wash it at the flume.

Level 2: Level 2 sites are similar to Level 1, with the exception that they are actual working mines, private property and quarries. These are not "salted" or "enriched". They offer the more experienced rockhound the chance to dig through dump piles generated by the mines owners. Usually collecting is restricted to the dump areas and access to mine pits and crystal bearing veins is prohibited or they are inaccessible to the casual collector.

Level 3: Level 3 sites are what most serious rockhounds/collectors are looking for. They offer hard rock mining with hand tools: pick, shovel, sledgehammer, chisels and other mining tools. Some of them may be up a mountain and require a strenuous hike. Some may require hammering and chiseling through hard rock to locate crystal pockets, or removing much overburden to access a vein. You may need to be an experienced collector to identify minerals at certain sites. Typically, sites at Level 3 require an assortment of rockhounding tools that most serious collectors have with them at all times in their vehicles. My advice is to research a location before visiting to learn what tools and equipment you need.

Before visiting any site, you should be aware of two things: PERMISSION TO COLLECT AND SAFETY WHILE COLLECTING.

PERMISSION TO COLLECT: Permission to collect should be the first thing you obtain when planning a field collecting trip. Property owners change. Having a copy of this magazine is not a ticket to collect on someone else's property without their permission. You must have the property owner's permission before collecting on their property! At the time of the writing of this issue, all the sites listed are open to rockhounding. This could change days, weeks, or months after publication, or not at all. The proper thing to do, is always obtain permission to collect. We will provide as much contact information as possible to make this easier for you. If you visit any site and see "NO TRESPASSING" signs, do not enter that property before making contact with the property owner.

SAFETY: Safety while rock collecting should be your number one priority. If an area has railroad tracks, old mine shafts, high walls with falling rock (quarries) etc., I would not bring any small children to that site. There are many locations listed where children will have fun and you will not have to worry (Levels 1 and 2). You should be aware of old vertical mine shafts in the woods or near dump piles. Some of these shafts are overgrown with trees and brush and can be hard to spot until you are right on top of them. Some of these shafts are very deep, some are full of water, so be careful. Always tell someone where you are going when visiting an old mine or collecting site. Give them directions to the mine and tell them when you plan to return. If you have a cell phone, bring it with you. Some of the locations listed have a variety of wildlife such as bears, mountain lions, snakes, wild boars, etc. I have encountered these animals on several occasions while rock collecting in the mountains and have never had a problem with them. Remember they are more afraid of you than you are of them, and remember, never try to pet a mountain lion or wild hog or try to wrestle a bear, they usually win! You should also keep a first aid kit in your vehicle. Some of the locations listed may be a long way from any hospital. Remember to always wear eye and hearing protection when breaking rocks. I am not telling you these things to discourage you from visiting these sites. I think you should visit any remote collecting area armed with as much information about that area as possible so there won't be any surprises. Happy hunting!

NORTH CAROLINA

The rules for collecting on Forest Service managed land are currently under review. Before collecting at a FS site, contact your local Forest Service ranger station for current rules and regulations.

BUNCOMBE COUNTY

Walker Creek Kyanite

(TVA OR FS SITE, NO DIGGING ALLOWED, SURFACE COLLECTING ONLY)

WHAT TO COLLECT: Kyanite, garnet, tourmaline (schorl), monazite, apatite

GPS COORDINATES: 35 45.212 N, 082 20.580 W

FEE: None

CLAY COUNTY

Lake Chatuge, Behr Corundum Mine

(TVA OR FS SITE, NO DIGGING ALLOWED, SURFACE COLLECTING ONLY)

WHAT TO COLLECT: Corundum, ruby, sapphire, quartz crystals, rutile, botryoidal hematite

GPS COORDINATES: 35.02350 N, 83.74085 W (Behr Mine) 35.02269 N, 83.74141 W (Hematite spot)

FEE: None

Lake Chatuge, Jackrabbit Limonite Cubes

(TVA OR FS SITE, NO DIGGING ALLOWED, SURFACE COLLECTING ONLY)

WHAT TO COLLECT: Limonite pseudomorph cubes after pyrite, rutilated quartz, tourmaline (schorl)

GPS COORDINATES PARKING AREA: 35 00.677 N, 083 46.107 W. You can drive to this site and park at the Jackrabbit campground, then hike to the collecting sites.

GPS COORDINATES COLLECTING SITE: 35 01.134 N, 083 45.986 W. The rutilated quartz and tourmaline is down the shoreline past the limonite approximately 100 yards.

FEE: None.

Lake Chatuge, Jackrabbit Mountain Corundum

(TVA OR FS SITE, NO DIGGING ALLOWED, SURFACE COLLECTING ONLY)

WHAT TO COLLECT: Corundum, ruby, sapphire

GPS COORDINATES: 35.00768 N, 83.75740 W

FEE: None

Chunky Gal Mountain

(TVA OR FS SITE, NO DIGGING ALLOWED, SURFACE COLLECTING ONLY)

WHAT TO COLLECT: Corundum, ruby, sapphire, kyanite, garnet, tourmaline (schorl), zoisite

GPS COORDINATES: 35 04.792 N, 083 37.656 W

FEE: None

Mason Farm Staurolite Prospect, Brasstown, NC (Level 2-3)

CONTACT INFORMATION: Rick Jacquot, (828) 779-4501

WEBSITE: www.americanrockhound.com (Mine Sites link)

WHAT TO COLLECT: Staurolite, crosses and Xs, rarely gold and corundum

GPS COORDINATES 101 CEDAR LANE: 35.02098 N, 083.95565 W.

GPS COORDINATES DIG AREA: 35.01733 N, 083.95066 W

FEE: \$20 per person, per day (Limit - one five gallon bucket per day.)

LINCOLN COUNTY

Propst Corundum (Level 2-3)

3696 Startown Road

Private property, collecting currently permitted.

WHAT TO COLLECT: Corundum, ruby, sapphire, magnetite

GPS COORDINATES: 35 33.275 N, 081 16.167 W

FEE: \$5.00 per day, per person (Put money in coffee can under porch/carport.)

MACON COUNTY, FRANKLIN AREA MINES

Bates Cabins (Old Jacobs Mine site) (Level 1-2)

CONTACT INFORMATION: Carl Bates, (828) 342-7764

WEBSITE: www.batescabins.com/index.htm

WHAT TO COLLECT: Native stones - ruby, sapphire

FEE: Varies

Cherokee Ruby Mine (Level 1-2)

41 Cherokee Mine Road, Franklin, NC 28734

CONTACT INFORMATION: www.facebook.com/pages/Cherokee-Ruby-and-Sapphire-Mine/210128582335872

WHAT TO COLLECT: Native stones - ruby, sapphire, rutile, moonstone, silliminite, garnet; rhodolite, almandine, pyrope

GPS COORDINATES: 35.27264 N, 083.35033 W

FEE: Varies

Mason Mountain Mine (Level 1)

5315 Bryson City Rd, Franklin, NC 28734

CONTACT INFORMATION: (828) 524-4570

WEBSITE: www.tjrocks.fatcow.com

WHAT TO COLLECT: Native stones - rhodolite garnet, kyanite, smoky quartz
Native and non-native gemstones and minerals

GPS COORDINATES: 35.24825 N, 083.39606 W

FEE: Varies

Masons Ruby and Sapphire Mine (Level 1-2)

6961 Upper Burningtown Road, Franklin, North Carolina 28734

CONTACT INFORMATION: (828) 369-9742

WEBSITE: www.masonsrubyandsapphiremine.com

WHAT TO COLLECT: Native stones - ruby, sapphire, garnet

GPS COORDINATES: 35.21436 N, 83.52969 W

FEE: Varies

Rose Creek Mine (Level 1)

CONTACT INFORMATION: (828) 349-3774

WEBSITE: www.rosecreekmine.com

WHAT TO COLLECT: Native and non-native gemstones and minerals

FEE: Varies

Sheffield Mine (Level 1)

CONTACT INFORMATION: (828) 369-8383

WEBSITE: www.sheffieldmine.com

WHAT TO COLLECT: Native and non-native gemstones and minerals

FEE: Varies

MADISON COUNTY

Little Pine Garnet Mine (Level 2-3)

CONTACT INFORMATION: (828) 649-3464, (800) 959-3513

WEBSITE: www.sandybottomtrailrides.net

WHAT TO COLLECT: Large garnet crystals

GPS COORDINATES: 35 46.200 N, 082 44.260 W

FEE: \$25 per person, per day

MCDOWELL COUNTY

Treasure Valley (Level 2-3)

Open by appointment only.

CONTACT INFORMATION: Richard Buchanan, (828) 460-2655

EMAIL: Richard@bucksfarm.com

WHAT TO COLLECT: Gold, gems, metal detecting at site of old, historic gold mine

FEE: \$25 per person, per day

MITCHELL COUNTY

Crabtree Emerald Mine (Level 2-3)

CONTACT INFORMATION: Rick Jacquot, (828) 779-4501

WEBSITE: www.americanrockhound.com (Mine Sites link)

WHAT TO COLLECT: Emerald, garnet, pyrite, tourmaline (schorl), beryl, fluorite

GPS COORDINATES: 35 52.477 N, 082 07.197 W

FEE: \$20 per person, per day

Emerald Village (Level 1-3)

Emerald village is a tourist mine. All of the native dump piles that surround the mine have recently been opened for the more serious collector.

CONTACT INFORMATION: (828) ROK-MINE, (828) 765-6463

WEBSITE: www.emeraldvillage.com

WHAT TO COLLECT: Garnet, tourmaline (schorl), beryl and more

GPS COORDINATES: 35 52.477 N, 082 07.197 W

FEE: Varies

Sinkhole Mine (Level 1-3)

Private property owned by Ed Silver. Collecting currently permitted.

WHAT TO COLLECT: Garnet, apatite, moonstone, amazonite, kyanite, mica

GPS COORDINATES: 35 58.534 N, 082 10.588 W

FEE: Varies

STANLY COUNTY

Burgin Quartz Mine (Level 3)

CONTACT INFORMATION: Waylan or Julian, (704) 699-2158, (704) 985-2651

WHAT TO COLLECT: Quartz crystals, quartz with inclusions

GPS COORDINATES: 35 13.493 N, 080 08.840 W

FEE: \$10 per person, per day (Minimum 2 persons/\$50)

YANCEY COUNTY

Ray Mica Mines

(TVA OR FS SITE, NO DIGGING ALLOWED, SURFACE COLLECTING ONLY)

WHAT TO COLLECT: Beryl crystals, aquamarine, apatite, garnet, tourmaline, mica, amazonite, thulite, elbaite tourmaline

GPS COORDINATES: 35 53.240 N, 082 16.728 W

FEE: None



American Rockhound **KIDS' PAGES**

By Steve Barr

Interesting Meteorite Facts

It's been estimated that anywhere from 5 to 300 metric tons of cosmic dust and meteorites enter Earth's atmosphere each day! Most are so tiny that they are about the size of a grain of sand, but others are much larger. I don't know who actually counts them, but I'm guessing those people are WAY better at math than I am.

The meteorite that formed Meteor Crater in Arizona was estimated to have been 100 to 150 feet in diameter, but it created a hole in the ground that is four fifths of a mile wide and 700 feet deep!

The International Space Station is covered with Kevlar that is a foot thick! Kevlar is the material that's used to make bullet-proof vests. It's necessary to protect the Space Station, because that orbiting structure is expected to be hit by nearly 100,000 meteoroids during its lifespan.

The Hoba meteorite in southwest Africa weighs roughly 119,000 pounds! It's so big, it was left where it landed and rows of rock seats were built around it so people could admire it.

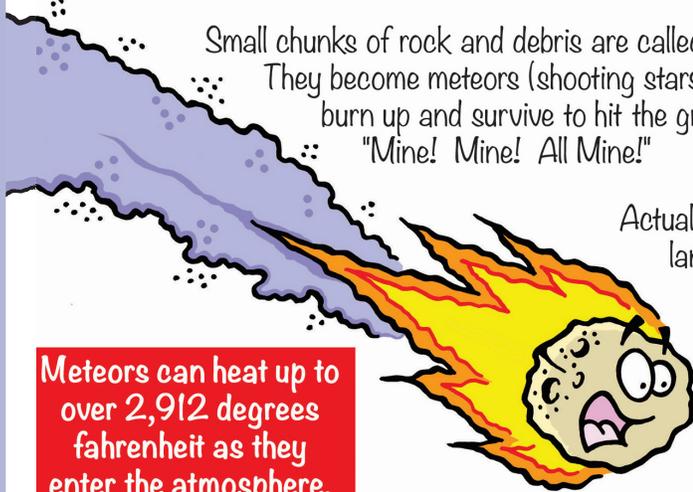
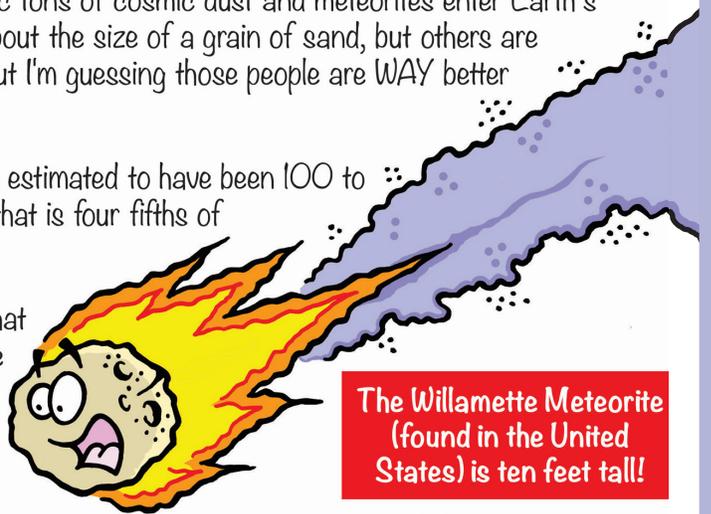
Small chunks of rock and debris are called meteoroids when they are drifting through outer space. They become meteors (shooting stars) when they enter the atmosphere. The pieces that don't burn up and survive to hit the ground are called meteorites. If I found one, I'd call it "Mine! Mine! All Mine!"

Actually, ownership of a meteorite is usually given to whoever's land it falls on. So if you go out hunting for them, make sure you have an agreement with the property owner first.

Meteors can heat up to over 2,912 degrees Fahrenheit as they enter the atmosphere.

When a meteoroid enters the Earth's atmosphere, it can be traveling up to 130,000 miles an hour! That's faster than my Mom used to drive when she was trying to get me to school on time.

Most of them burn up during their entry into the atmosphere, but many do survive and land on earth. Because over 70% of our planet's surface is covered with water, a majority of them are lost in the sea. I wouldn't recommend holding your nose and jumping into the ocean to search for them. The ones that land on the ground are much easier to find.



Meteorites Hitting People

It is very rare to hear of instances where meteorites have hit people. However, it does happen every now and then.

On November 30th in 1954, the Sylacauga meteorite crashed through the roof of a house in Oak Grove, Alabama. It bounced off a large wooden radio and slammed into Ann Hodges as she napped on her couch. She was badly bruised, but survived.

That meteorite is now commonly referred to as the "Hodges Meteorite".

After it hit Ann, the United States Air Force sent out a helicopter to confiscate the meteorite. Mrs. Hodge's husband Eugene hired a lawyer to try to get it back. Their landlord also claimed it, hoping to be able to sell it for enough money to repair the damaged roof. The court case took over a year to resolve, and eventually the meteorite was given back to Ann Hodges.

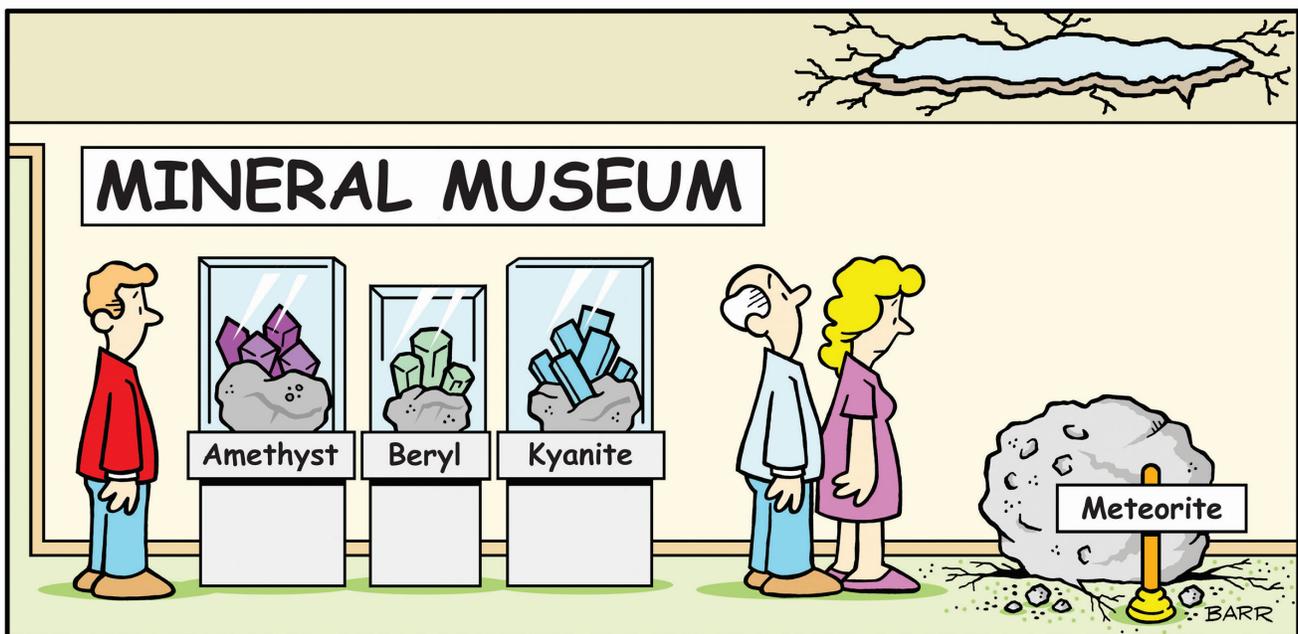
By that time, public interest in the meteorite had waned, and no buyers were interested in it. Ann donated it to the Alabama Museum of Natural History in 1956.

Mathematically, the odds are that you will never be hit by a meteorite. But, if you're worried about it, probably the only thing you could do is wear a suit and hat made out of very thick kevlar. Just be prepared for the other kids to laugh at you in school, because kevlar suits can be kind of funny looking.

Finding Your Own Meteorites

The best place on earth to find meteorites is in Antarctica. They're easy to see in the snow, and 90% of all confirmed meteorites were discovered there. The cold in that region also helps preserve them. But before you head out to Antarctica, make sure you get your parents' permission. And don't forget to pack your best pair of thermal underwear!

If a trip to Antarctica isn't a realistic option at this point in time, there are many places all over the country where you could possibly find your own souvenir from outer space. Do an Internet search for topics like "Meteorite Collecting Sites" or "Finding Minerals" and see what you can come up with. You never know, you might find one right near your own house!



Rockhound Recipes

WHITE BBQ SAUCE

Gary Nielson

Ingredients:

- 2 cups mayonnaise
- 1 cup distilled white vinegar
- ½ cup apple juice
- 2 tsp prepared horseradish
- 2 tsp ground black pepper
- 2 tsp fresh lemon juice
- 1 tsp salt
- ½ tsp cayenne pepper

Directions:

- In a large bowl, combine all the ingredients and blend well. Store refrigerated in an airtight container for up to 2 weeks.
- Can be used as a marinade, baste, BBQ or dipping sauce.

We won 1st place in chicken in our first BBQ contest using this sauce. If you never tried white BBQ sauce, you are missing out. It's great on chicken and grilled or fried pork chops. Also great for dipping fries and onion rings in!



15% discount to verified MAGMA members


Earthen Paradise
DARE TO LOVE

1130 Richmond Hwy, Appomattox, VA 24522
304.377.8553 Kerima@me.com
www.stores.ebay.com/earthen-paradise
www.facebook.com/EarthenParadiseInc

Over 60 varieties of bulk rough and tumbled!
Direct importers from all over the earth!
Tumbling, Cabbing and Faceting rough!
Faceted stones and museum worthy jewelry!

Hard rock mining tours -
amethyst in VA and crystal quartz in AR

Mine your own gemstones with a chance
at a 4-5 ct diamond in each bucket!



ROCK SHOPPER & SHOWS

Websites

KapsRocks

Custom Stonework, Jewelry, Knives and Specimens

Web site: www.kapsrocks.com
Email: keithphagan@gmail.com

Jacquot & Son Mining

Gem, Mineral and Fossil Sales.
Specializing in Gem and Mineral Estates

www.jacquotandsonmining.com
Email: rick@wncrocks.com or call
(828) 779-4501

Lapidary Rough for Sale

Retail/Wholesale Namibian Pietersite, Siberian Charoite, Afghan Lapis Lazuli, and more.
Slabs and Rough for sale.
Email: sales@barnhouselapidary.com
Phone: (909) 915-9561

Mine Sites

Crabtree Emerald Mine

Come dig for emeralds at a real emerald mine in the mountains of Western North Carolina!

www.crabtreemine.com or call
(828) 779-4501

Hogg Mine

Come dig for beryl and rose quartz in LaGrange, Georgia. For more info:
www.hoggmine.com

Mason Farm Staurolite

Hunt for Fairy Crosses in Brasstown, North Carolina!

www.americanrockhound.com
(Mine Sites link) (828) 779-4501

Treasure Valley

Group Outings, field trips, family prospecting vacations, & camping on private farm. Site of old historic gold mine in Western NC. Gold/Gems/Metal Detecting.

For more information contact Richard Buchanan at (828) 460-2655 or Email Richard@bucksfarm.com

Shows

2nd Annual Hiddenite Gem, Mineral and Fossil Show and Dig!

Hosted by the Mountain Area Gem and Mineral Association (M.A.G.M.A.) September 25th-27th, 2015, Hours: 9am to 6pm Friday and Saturday, 9am to 5pm Sunday. Free admission. The show is held at the Hiddenite Education Center in Hiddenite, NC. Numerous vendors with gems, minerals and fossils from North Carolina and around the world. Directions: From US 64 Bypass East (Taylorsville), turn left onto Old Mountain Road in Hiddenite. Go straight across intersection with flashing light, cross railroad tracks. The Hiddenite Education Center is on the right. From I-40, take the Hwy. 64 West exit to Hiddenite, turn right onto Old Mountain Road. We will also be conducting a two day dig (Friday and Saturday) at our Sharpes Emerald Prospect, the mine is located approx. 1 mile from the show. The mine will be open to collecting from 8am to 5pm each day. Cost is \$25 per person, per day, children 12 and under are free. For more information on the show and dig, call Rick Jacquot, (828) 779-4501 or email rick@wncrocks.com

Graves Mountain Open House, Rock Swap & Dig!

April 24th-26th, 2015, Hours: 8am to 6pm each day. Fee: Donation. The show is held at Graves Mountain, Lincolnton, Georgia. Food and drinks available for purchase. Numerous vendors with gems, minerals and fossils for sale and trade. Golf carts available to shuttle the diggers to and from the mine. All clubs and rockhounds are welcome to attend! For more information, call Clarence Norman Jr. at (706) 401-3173

The State Line Gem and Mineral Society 54th annual Jewelry, Rock, Gem and Mineral Show!

May 29, 30, & 31, 2015. Located at the Fulton County Fairgrounds, Junior Fair Building in Wauseon, Ohio. Show

hours are noon to 7 PM on Friday, 10 AM to 7 PM on Saturday and 11 AM to 4 PM on Sunday. Show admission is \$3.00, children under 12 free. We will have displays, high quality dealers, live demonstrations and ongoing silent auctions where you can get some spectacular deals. The show is held in air conditioned comfort and boasts of wonderful desserts with good food and snacks available from our onsite kitchen. Bring the whole family to the Fulton County Fairgrounds at 8514 State Route 108, exit 34 off the Ohio Turnpike. For more information call Doris at (517) 263-1669

Waco Gem & Mineral Club Annual Gem, Mineral and Fossil Show!

We have vendors of slabs, rock, geodes, fossils, tools, jewelry and mineral samples. Our show will be held May 2 & 3, 2015 at the Extraco Events Center in the Arts and Crafts Building, 4601 Bosque Blvd, Waco, Texas 76710.

For more information, email stephanie.robert1@aol.com or call Stephanie Robert, Secretary, at (254) 722-9751

Arlington Gem and Mineral Club "Jewelry, Gems, and Minerals Galore"

Featuring 20+ vendors, Grand prize drawings, hourly door prizes, hourly silent auctions, classes, membership and class info., kids activities, free gem identification, and jewelry making demonstrations. \$6.00 adults, \$3.00 seniors, \$3.00 children (6-12) and under 6 is free. Date: June 13th & 14th, 2015, Saturday 10am-6pm and Sunday 10am-5pm. Grapevine Convention Center located at 1209 South Main Street, Grapevine, Texas. Tickets can be purchased at our website www.agemclub.com for \$1.00 off of an adult admission all the way up until the day of the show. For more information, contact: Anastasia Chaparro at (817) 739-3833

Contributor's Guidelines

Want to see your story in print?

If you would like to share a story with us, we would like to hear from you! Tell us about your adventures and let us see the treasures you find.

Field trip and other hobby related articles: If you go on digs with friends and family, with your local club, or alone, and would like to share your finds with us, let us know. If you would like to share a story about another interest you have that is hobby related, that's fine too.

Make sure your article is hobby related to include rock, gem, mineral, fossil and artifact collecting or something that relates: field trips, lapidary art, show reports, book reviews, short stories of your adventures, poems. If sharing the location of a dig site, be sure to include as much contact information as possible: directions, GPS coordinates and phone number for the property owner. If you are unsure if your article would be good for the magazine, email us with your idea and we can let you know: info@americanrockhound.com

Guidelines: Try to make your article between 2,000 and 5,000 words in length.

Make sure to include at least 10-15 photographs with your article, scenery pictures, specimen pictures and people pictures. We need at least 10-15 to pick from for the article. Be sure to include captions for each picture, describing what is happening in the picture, a location or specimen name, size, and who took the photo.

We also accept specimen photos to include in our "Favorite Finds" section. Be sure to include specimen name, size, location found and date found.

Size your pictures at 300 dpi, at least 6" in size or larger, or send the picture files as large as possible so we can resize them to fit the layout. JPG files only.

Submit your article via email or regular mail.

Be sure to include:

- Manuscript, 2,000-5,000 words.
- 10–15 photos sized at least 300 dpi. 6" in size minimum, with captions for photos.
- Detailed maps, geology and history if applicable for your article.
- Your complete contact information: name, address, email and phone number.

Email submissions can be made to: info@americanrockhound.com

Mailed submissions should be saved on CD or flash drive and sent to:

American Rockhound
PO Box 542
Leicester, NC 28748

All articles are subject to information verification and editing by our staff.

If you are unsure if your article would be good for the magazine, email us with your idea and we can let you know: info@americanrockhound.com

Advertising Guidelines

We offer several options to help you get your message out to our readers: Classified, full page, half page, quarter page and inside cover ads are offered at low rates per issue, or yearly.

Our classified ads cover a variety of categories: books, magazines, cutting rough, estates and collections for sale, rocks, gems, minerals, fossils, meteorites, lapidary services, jewelry, commercial mines/collecting sites, hobby related websites and a wanted section, a place for you to find that special piece you need for your collection or project. If you have something that is related to the hobby that is not listed, let us know and we will get it in the magazine for you.

If you would like to place an ad in our magazine, check out our rates and see what best fits your needs.

Color Ads

Ad size	Per ISSUE	Per YEAR
Inside front or back cover	\$250	\$900
Full page	\$200	\$700
¾ page	\$175	\$600
½ page	\$150	\$500
¼ page	\$125	\$400
Business Card	\$20	N/A

Black and White Ads

Ad size	Per ISSUE	Per YEAR
Full page	\$125	\$450
¾ page	\$100	\$350
½ page	\$75	\$250
¼ page	\$50	\$150
Business Card	\$10	N/A
Classified	\$0.50/word	N/A

Advertiser must provide text and pictures or art. Our editors will lay out an ad for you.

Ads must be hobby related. Once you contact us with your ad description, we will decide if it is appropriate for our magazine.

If you have any questions or want more information, send email to: info@americanrockhound.com, call: (828) 779-4501, or mail inquiry to: American Rockhound

PO Box 542
Leicester, NC 28748

If your club or rockhound group would like to advertise or invite other rockhounds to share in your club field trips, send us the information: location, date, what to find, tools needed, fees, directions and contact information. Send submissions to info@americanrockhound.com.



Rockhounding
America
and Beyond...