



Lake City Rockhound News

NORTH IDAHO MINERAL CLUB

MARCH 2014

P.O. Box 1643 Hayden, ID 83835

MEETING AT LAKE CITY CENTER 1916 LAKEWOOD DRIVE

667-4628 6:00 P.M. 3rd Thursday of month Visitors Welcome

Download the Northwest Newsletter at www.amfed.org/nfms

OUR web site for the club at www.northidahomineralclub.com

PROGRAM FOR MARCH 20, 2014

DVD—DIGGING GEMSTONES

Featuring Opals in Virgin Valley, NV and Garnets in Australia

SCHOLARSHIP DRAWING in March—TICKETS 50 CENTS

SILENT AUCTION—refreshments

NOT ROCK RELATED—UNLESS IT SHOULD HAPPEN ON A FIELD TRIP

WE CAN NEVER KNOW WHEN WE'LL SEE SOMEONE COLLAPSE SUDDENLY. THIS IS AN EASIER AND BETTER METHOD OF CPR.

THIS VIDEO IS DONE BY THE DOCTORS WHO INVENTED THE PROCEDURE AT THE UNIVERSITY OF ARIZONA SARVER HEART CENTER.

PLEASE WATCH—THEN SHARE. THIS SHORT VIDEO ILLUSTRATES THE BEST DEMONSTRATION AND GIVES THE SIMPLEST EXPLANATION OF EXACTLY WHAT TO DO IF SOMEONE NEAR YOU COLLAPSES AND IS PRESUMABLY HAVING A HEART ATTACK. YOU COULD VERY WELL SAVE THE LIFE OF A FRIEND OR LOVED ONE.

[Http://heart.arizona.edu/cpr-video](http://heart.arizona.edu/cpr-video)

Secretary will read the minutes for February at the March meeting.

In line with the article on page 4—note this from Earl R. Verbeek-Resident Geologist at Sterling Hill Museum, via GEODE 6/07—Some of the bulbs currently being sold as “black lights” emit no UV light, they are simply light bulbs with purple glass. There is probably no legal definition of “black light” so the vendors are free to sell them but they are useless for mineral fluorescence. Be careful what you buy. Stay away from party stores, and instead go to a hardware or lighting store and buy either Philips or GE BLB tubes. These are the real thing.

Nature abhors a vacuum and I feel the same way about empty space—THE KENNEWICK SHOW IS APRIL 26 AND 27—A WAY TO GO BUT WELL WORTHWHILE! GO TO ALL THE SHOWS YOU POSSIBLY CAN. DON'T FORGET ROCK ROLLERS MAR. 28-29 -30

CALCITE

Calcite is one of the most common minerals, second only to the silicates (quartz, agates, jasper, opal, etc.). It is a mineral chemically found usually as calcium carbonate. It forms into hexagonal crystals, and is found in limestone, chalk and marble. It forms in large veins as a gangue mineral. A gangue mineral is the worthless rock or vein matter in which other valuable metals or minerals occur.

It precipitates from sea water to build up limestone, and secondarily is deposited from solutions of limestone and other rocks. Localities are far too numerous to list. Crystals may be flat, clear plates, steep golden crystals, or transparent masses a foot thick. Some of these large transparent crystals are considered to be the original Iceland Spar. Marble, cave formations, travertine, and onyx are all calcite varieties. Oolitic calcite sand forms on the shores of the Great Salt Lake in Utah. Calcite is part of the group of minerals of carbonates called the Calcite Group, that includes minerals such as rhodochrosite, magnesite, siderite, and smithsonite. The carbonates constitute an important and abundant group, and many have considerable economic importance. Carbonates form in various ways: as primary minerals, separating from hot solutions freshly springing from inside the earth, and from cold solutions on the surface of the earth, near the surface, or from the very ocean itself. The Carbon Dioxide of the air combines with water to form a mild acid, carbonic acid, which attacks the surface minerals. Some of the elements dissolve, often to reappear in other solid forms as carbonates. This corrosion by carbonic acid is one of the principle mechanisms in the weathering of rocks. The same attacker alters many of the metal ores, the sulfides, when they are exposed on the surface. When such ore deposits are in the rocks that are predominantly carbonates like limestone (calcium carbonate, better known as calcite) the metals are found concentrated and immobilized as carbonates in the upper, weathered ore zones.

There are two significant crystal forms in the carbonates. The first series, formed in rhombohedral crystals, is known as the Calcite Group. The second series, formed with orthorhombic crystals, is known as the Aragonite Group. Although their structures are different, they have some properties in common. All of the carbonates are soft, all of them are light colored and translucent to transparent, all are soluble in acid, some more easily than others, as bubbles of carbon dioxide escape. They are predominantly, but not exclusively, secondary in origin.

Calcite is usually found in its natural form in a crystal state. It is extremely varied in appearance, from tabular to prismatic or needle like crystals. Scalenohedron and rhombohedron crystals are most common. The crystal formations are micro-crystalline to coarse. Calcite is frequently fluorescent. A small amount of manganese is enough to make it glow bright red under some wave lengths of ultraviolet light. Flawless transparent calcite is used in optical instruments, especially in geological (polarizing) microscopes.

SCHOLARSHIP PRIZES TO BE AWARDED IN March. BB

1. Polished specimen of Jasper/Specular Hematite from Lake Superior Mine. Very old specimen.
2. Petrified Wood intarsia with stand
3. Faceted Topaz 12 x 10 mm, 7.4 carat Standard size for mounting as a pendant or ring. Not enhanced.

The North Idaho Mineral Club belongs to ALAA, and this explains why. A speaker—John George will be at the Kennewick show in April at 9 AM on Saturday April 26. .

ALAA - WHO ARE THEY AND WHAT IS THEIR PURPOSE?

In 1991, the President of the American Federation of Mineralogical Societies (AFMS) appointed a select committee to recommend ways to make the Federation more effectively responsive to the political challenges of increasing regulation and decreasing access to public lands that State and Federal Land Management agencies were imposing on amateur fossil and mineral collectors. The committee recommended that the AFMS form a separate 501(c)(4) organization whose primary purpose would be to promote the amateur collectors' interests in present and proposed policies, rules, regulations and legislation with State and Federal land managers, elected officials and legislators. In compliance with that recommendation, the AFMS directors voted to establish the American Lands Access Association (ALAA) in July 1992 at their convention in Brunswick, Ohio. The Association is a 501 (c)(4) (non-profit) organization which means that all moneys raised by the association can go toward lobbying activity. Donations and memberships to ALAA are not tax deductible.

The purpose of the Association is to promote and ensure the rights of amateur fossil and mineral collecting, recreational prospecting and mining, and the use of public and private lands for educational and recreational purposes ; and to carry the voice of all amateur collectors and hobbyists to our elected officials, government regulators and public land managers. Their work began immediately! Within days of the July meeting, Senator Max Baucus (D-MT) introduced the Vertebrate Paleontological Resources Protection Act of 1992 into the U.S. Senate. If enacted, the legislation would have ended amateur fossil collecting on all public lands managed by the Federal government except under supervision of certain degreed paleontologists in "acceptable institutions."

ALAA has become an organization that is present wherever there are hobbyist and recreational users of our public lands whose interests and concerns are not being heard or are being jeopardized by proposed policy, regulation or legislation at the local, state and federal level. From defeating the Baucus Bill in 1992 to coordinating massive public protest to the proposed US Forest Service rules (withdrawn) and the Bureau of Land Management's RS (Revised Statutes) 2477 Rights-of-Way (rewritten), the ALAA has earned the respect of public officials from Washington, DC to state capitols across the country as the voice of the amateur and recreational users of public lands. The Association has also formed working relationships with many other organizations fighting for private property rights and multiple use of public lands including the Blue Ribbon Coalition, the Alliance for America as well as treasure hunters, metal detectorists, fishing and hunting enthusiasts, and mining and timber interests. With this network of contacts, the Association reaches into every State and into every Congressional District in the country on a national level. That network provides a swift and effective response to issues brought to our attention.

On another level, many officers, directors and members of the Association have developed ongoing working relationships with local, state and federal officials and legislators. This other network provides us with immediate access to and an impact on many proposals for changing regulations, policy or legislation before they become set in the concrete of implementation.

ALAA is also there when there are confrontations in the field and when proposals are made for expanding federal ownership of land such as publicizing and fighting the Heritage Corridor Act, and other attempts to establish additional wilderness areas under federal control.

YOUR HELP IS NEEDED TO CONTINUE OUR STRUGGLE TO PROTECT PUBLIC LANDS FOR THE PUBLIC TO WHOM THEY BELONG! ADD YOUR VOICE TO OURS! JOIN ALAA NOW !

Several of our club members made the trip to Colville last weekend to take in the Panorama Gem and Mineral Club show. There were 24 beautiful display cases, seven or eight vendors, silent auction and very busy grab bag/wheel of fortune, and ring toss. The black light cave was very popular & Dave Paquette (who now has a web site —prospectorman.com.) shares all his inventions and advice. Found this article on Fluorescent materials to share with you.

Fluorescent Minerals

by Bill Fowler

On a table in a dark room, lay out a large collection of crystalline minerals of different types from different locations. Then shine a short-wave ultra-violet (UV) lamp on each of the specimens. Although UV radiation is not visible to the human eye, you'll nonetheless find that about 10% of the mineral specimens in a typical collection will emit a clearly visible glow in response to the UV lamp. A few of them may even be quite spectacular in this regard. This phenomenon is called fluorescence. Of those that do fluoresce, about 10% will continue to glow for a few seconds after the UV lamp is turned off. This property is usually termed phosphorescence or afterglow.

Fluorescence and phosphorescence in minerals can be of any color. This color is usually not related to the type of mineral but is instead dependent on the nature of the fluorescence activator that is present in the mineral. Thus, the fluorescent color can be identical for two or more different mineral types that happen to contain the same activator. Or the color can be different for two or more different specimens of the same mineral type but from different geographical locations.

Common fluorescence activators in minerals include point defects in the crystal structures, as well as atoms, ions (i.e., charged particles), and molecules that are present in minerals as impurities, e.g., hydrocarbons, manganese, titanium, europium, lead, uranium, and sulfur. The causes of mineral fluorescence are complex, and a complete understanding of them requires an in-depth knowledge of atomic and molecular processes. Nevertheless, a simplified explanation can be given as follows. When a fluorescence activator is struck by photons of UV light, the activator absorbs the UV energy. This extra energy promotes the activator from its ground energy state (or ground energy level) to an excited energy state or level. This is an unstable condition for the activator, and thus it tries to find a way to throw off the excess energy and thereby return to the ground state.

For most atoms, ions and molecules, there are a number of ways to accomplish this goal that do not involve fluorescence. But for fluorescence activators, the only way to get rid of the excess energy is to emit photons of visible light. It is these emitted photons of visible light that our eyes detect as fluorescence or phosphorescence. Although the explanation... is complex there is nothing... complex about the observation of fluorescence. It is simply beautiful. The collector of fluorescent minerals loves to display the specimens in boxes equipped with UV lamps. But the greatest thrill for the collector lies in discovering new specimens in the field as they are first illuminated by hand held UV lamp. This is best done at night, but if you take a dark box along you can do it in the daylight.

There are now at least three types of UV lamps on the market, differing mainly in the wavelength of UV radiation emitted: long-wave, mid-wave and short wave. It is generally true that the shorter the wave-length the more expensive the lamp, and the more mineral specimens there are that can be excited by that wavelength.

Many minerals will fluoresce only under one of the three wavelengths, but there are a few that will fluoresce either the same color or a different color under each of the three. So where do you find these minerals? The potential is significant anywhere one can find crystalline rocks and minerals.mines and quarries. Rock dams, road cuts, stream gravel, ornamental landscape rock....but the best place is in the mineral collection of a rockhound who has never shined a UV lamp on their specimens. If this includes you, then you need to borrow a lamp from someone and check it out. Discover a few fluorescent minerals in your collection and it could shed a whole new light on your favorite hobby.

This article was excerpted from SCRIBE newsletter—July-Sept. 2005

The trouble with bucket seats is that not everybody has the same size bucket.Do you realize that is 40 years we'll have thousands of old ladies running around with tattoos?? (drooping tattoos!! ED)

HOW WELL DO YOU KNOW OUR AREA?

A multiple choice quiz

By Rose Alene McArthur

1. Deposits of limestone show that this area was once (a) a sandy desert (b) a warm sea (c) restructured by metamorphism.
2. Nez Perce Indian men originally (a) wore woven basket head coverings (b) made exquisite bird points (c) hunted buffalo in the Missouri River drainage.
3. Loess is (a) a windblown soil of glacial origin (b) a pale blue metamorphic mineral (c) an unconsolidated gravel.
4. Lake Bonneville (a) covered the area west of here (b) once flooded down the Snake River (c) swarmed with ammonites and belemnites.
5. A layer of ash which can be identified in the Snake River banks originated with the explosion of (a) the Yellowstone caldera (b) Mount Mazama (c) volcanoes in Owyhee County in Idaho.
6. Pillow basalt on the old Lewiston grade is evidence of lava that (a) slowly and evenly cooled (b) piled up behind an obstruction (c) flowed into water.
7. Boville is world famous for its (a) leaf fossils that still contain the original matter (b) a great cup of coffee (c) fossils of over twenty different varieties of palm wood.
8. The Missoula floods (a) were glacial meltwater (b) happened forty to sixty times (c) created scablands.
9. The Columbia River basalts (a) are confined to an area within the cliffs of the Columbia Gorge (b) are over a mile thick (c) flowed out of a volcano near Coeur de Alene.
10. The Clearwater River near Syringa has produced some (a) sapphires (b) watermelon tourmaline (c) platinum.
11. Jokuhlaups are (a) an ancient mountain goat type mammal (b) deep water in narrow bays (fjords) where the water contains no oxygen and iron sulfates form (c) huge sudden floods of glacial meltwater when ice dam gives way.
12. Steptoe Butte is (a) the top of an ancient mountain buried in lava (b) an extinct volcano (c) a great place to park.

15. The Palouse River used to flow (a) between Moscow and Pullman (b) through Clarkston Heights (c) down to join the Columbia River in the Pasco basin.

16. Emerald creek is world famous for its (a) emeralds (b) star garnets (c.) hiddenite crystals

17. Fryite, a type of dark jasper found on the Lewiston hill, was so named because (a) a man named Abe Frye found it (b) it occurs on Fry creek (c) it has been "cooked" by extreme heat.

18. Staurolite is a collectable stone because of (a) its special magnetic properties (b) it twinkles brightly (c) it twins into the shape known as "fairy crosses."

Answers at bottom of the page, but don't cheat!!! And many thanks to Rose Alene who is a mover and shaker of the Hells Canyon Club in Lewiston—from the Boulder Buster several years ago.

OFFICERS FOR 2014: NORTH IDAHO MINERAL CLUB,

PRESIDENT—DALE RUPERD 664-2712

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Bev Bockman- NEWSLETTER EDITOR AND MEMBER-SHIP 773-5384

Bill Johnson-FEDERATION DIRECTOR 765-3099

- Answers: 1-(b) 2 (all three correct.) 3.(a) 4.(b) Lake Bonneville was a huge glacial lake The Great Salt Lake is a remnant of it. At one time the divide between the two drainages was topped and the water roared down the Snake River. 5.(b) 6 (c) 7 (a) 8. (all three are correct) 9 (b) cover eastern WA, northeast OR. and part of Idaho. 10. (a) 11. (c) 12.(a & c- great view! 13. (b) 14. (a) 15. (c) 16. (b) 17 (a) 18 (c)

Hope you learned something about our state. I did!!

Lake City Rockhound News

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CLUB WEB SITE

www.northidahomineralclub.com

Save ALL your cancelled
 stamps for cancer re-
 search-bring to meeting,
 and give to Bill Johnson

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THE AMERICAN FEDERATION OF MINERALOGICAL SOCIETIES

THE NORTHWEST FEDERATION OF MINERALOGICAL SOCIETIES

WASHINGTON STATE MINERAL COUNCIL

S.C.R.I.B.E. ALAA



2014 ROCK AND GEM SHOWS IN WA., OR., ID., AND MT.

MAR. 28-30 ROCK ROLLERS ..SPOKANE. WA

MAR. 29-30 SWEET HOME ROCK/MIN.-SWEET HOME OR.

APRIL 11-13 MT HOOD ROCK CLUB-PORTLAND, OR

APRIL 12-13 YAKIMA, ROCK CLUB-YAKIMA, WA

APRIL 12-13 IDAHO FALLS GEM-IDAHO FALLS, ID

APRIL 18-20 -WILAMETTE AGATE &M IN- RICKREAL OR

APRIL 26-27 LAKESIDE GEM-, KENNEWICK WA

APRIL 26-27 GRAYS HARBOR GEM SOC-ELMA, WA

**Consult www.amfed.org/nfms for show details.

SUPPORT YOUR FELLOW ROCKHOUNDS AND CLUBS