

Mineral of the Month Club Newsletter

March 2016



Can you believe that March is here already and spring will be in the air in a matter of weeks?! Christine and Lora are back from the Tucson Gem & Mineral Show and are busy processing the shipment of minerals that just arrived via a 1,100 pound pallet. We were able to purchase a years' worth of Featured minerals and Monthly Offering minerals that is 60 minerals!

March is also the beginning of **Mineral of the Month's Club's 21st year**. Simply amazing!

Featured Mineral: This month we are featuring blue barite from a classic locality—the Chalk Cliffs at Stoneham in Weld County, Colorado. Colorado is a well-known source of colorless, golden, and blue barite. The distinctive blue color of barite from the Chalk Cliffs is due to natural geophysical radiation emitted by trace amounts of radium that deformed the crystal lattice to alter its color-absorption characteristics. Our specimens of tabular, bladed, transparent-to-translucent crystals were collected from pockets within shale layers. These pockets range in length from only a few inches to many feet; the barite is often associated with crusty growths of white-and-yellow calcite.

Barite was discovered in the late 1870s at the Chalk Cliffs, a low escarpment on Colorado's high plains. By the 1950s, Stoneham was recognized as one of the leading barite localities in the United States. Specimens of Stoneham barite did not become readily available, however, until commercial collectors began excavating the site with mechanical equipment in the 1990s. Chalk Cliffs barite originated some 25 million years ago when intense volcanic activity produced dense clouds of calcium- and barium-rich ash that settled in layers to form shale. Groundwater later percolated downward through the shale, dissolving calcium and barium mineralization and redepositing it as calcite and barite crystals within the shale seams.

A reminder that each month the featured mineral is available to purchase in larger sizes and can be found in the "Featured Mineral Platinum Letter" which has photos, sizing and pricing information. The Featured Mineral Platinum Letter can be found in the monthly email that goes out to all members. If you do not have a computer we can mail it to you, just let Christine know.

Rock Hound Tidbits: On pages 9 and 10 of this month's write-up, our special section accommodates a Club member's request for a discussion of mineral forms. As the special section explains, external crystal form reflects a mineral's internal atomic structure and is a diagnostic feature that is useful in identification. Although mineral crystals may seem to develop in a random and infinite variety of shapes, their external forms are based on strict mathematical laws and fall into **six groups or systems: *isometric* (cubic), *tetragonal*, *hexagonal*, *orthorhombic*, *monoclinic*, and *triclinic*.** We have divided our discussion of crystal form into two parts. Part I in this month's write-up covers the six crystal systems; Part II will appear next month and will explain the many habits of individual crystals and crystal aggregates.

Behind the Scenes: Club manager Christine and her assistant Lora recently returned from a week in Tucson, Arizona, after visiting many of the 41 satellite shows that are part of the greater, annual Tucson Gem & Mineral Show event. "The Tucson event gets bigger every year and it is fun to see familiar faces of the vendors we know as well as get to meet a bunch of new faces." Christine says.

The Tucson event always has something new that attracts unusual attention. This year it was Plumbogummite, a rare, basic hydrous lead aluminum phosphate from a new find in China. Plumbogummite has a turquoise-like, bluish color, occurs in botryoidal form, and makes for eye-catching specimens. This beauty will be available to you in April through the Monthly Offering sheet.

Memberships: Welcome to Jeremy L. from Nevada, Pam W. from New Zealand and Sarah C. from Brooklyn, Sarah L. from Canada and Timothy B. from Nebraska. A warm thank you to all our other members who renewed for yet another year!

Coming in April: Malachite from the D.R of the Congo.

We Are Here For You: We are here for you and all your collecting needs. If you have any questions please contact Christine, our Mineral of the Month Club manager, by telephone at #1-800-941-5594 or via e-mail at christine@celestialearthminerals.com.

Thanks to all our members, and we'll visit with you again in April with our 242nd consecutive mailing of Mineral of the Month specimens and write-ups.