

# Mineral of the Month Club Newsletter

June 2016



**Featured Mineral:** As we move into summer, our featured mineral for June is fluorapatite, or calcium fluorophosphate, from a classic locality—the Cerro de Mercado iron mine in the state of Durango, Mexico. Our specimens consist of yellow, transparent-to-translucent crystals in the form of well-developed, terminated, hexagonal prisms on a matrix of altered limestone, hematite, and calcite. As the most common phosphate mineral, fluorapatite has both mineralogical and biological origins. Biogenic fluorapatite is abundant as microcrystals in certain sedimentary rocks, notably marine sediments deposited by ancient seas that supported a profusion of plankton and other tiny, invertebrate organisms. The phosphorus-rich remains of these organisms later lithified into phosphate rock, which consists largely of fluorapatite. Phosphate rock is a major industrial commodity and the only source of elemental phosphorus.

*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:** For insight into the element phosphorus, be sure to read the special section of our write-up on pages 7 & 8 titled, “Fluorapatite and Phosphorus.” A German alchemist discovered phosphorous in 1669, extracting the element from a most unlikely source, as our write-up reveals. Fluorapatite, which is essential to all plant and animal life, is a vital component of genes, teeth, bones, and muscles. You may be surprised to learn that the body of a 150-pound adult contains about 4 pounds of fluorapatite which, in turn, contains 1.5 pounds of elemental phosphorus.

**Summertime Fun with Minerals:** Club members interested in a summertime attraction that is both educational and enjoyable should consider a visit to the East Coast Gem, Mineral & Fossil Show. This three-day event, the largest gem-and-mineral show in the eastern United States, is

held every August in West Springfield, Massachusetts. This year's show will feature 200 retail vendors of gems, minerals, fossils, jewelry, and related items. Its special exhibitor will be Dr. Peter Megaw, a geologist with 35 years of field-exploration and mineral-collecting experience. Dr. Megaw will present two talks and display his world-class collection of Mexican minerals. Another speaker will be Bob Jones, the senior consulting editor of *Rock & Gem* magazine. Children attending the East Coast Gem, Mineral & Fossil Show will each receive a free mineral specimen; they can also participate in activities like breaking open crystal-filled geodes and panning for gold and gemstones. This show, which is less than a three-hour drive from New York City, is held at the Better Living Center at the Eastern States Exposition, conveniently located just one mile off Interstate 91 in West Springfield.

**Memberships:** A warm thank you to all our other members who renewed for yet another year!

**Coming in July & August:** Looking ahead, our July Mineral of the Month will be the garnet-group mineral almandine from the Borborema Pegmatite Province in Paraiba, Brazil. These almandine specimens consist of clusters of red, translucent, dodecahedral crystals in a matrix of white, massive quartz. In August, members will receive composite specimens of the aquamarine variety of beryl. These aquamarine specimens, which contain crystals of the tourmaline-group mineral schorl as inclusions, were collected in Namibia.

With **Father's Day** and **graduation celebrations** coming up in June, we would like to suggest a Mineral of the Month Club membership as a gift for dad or that special graduate. A Club membership is a thoughtful and unusual gift that will be appreciated every month when a new mineral arrives. With each purchase of a gift membership, Club members receive a gift of a free additional month on their own memberships.

**We Are Here For You:** We are here for you and all your collecting needs. If you have any questions please contact Christine or Lora at the office, by telephone at #1-800-941-5594 or via e-mail at [christine@celestialearthminerals.com](mailto:christine@celestialearthminerals.com) or [Lora@celestialearthminerals.com](mailto:Lora@celestialearthminerals.com)

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