Rhode Island Mineral Hunters
A 501 (c) (3) HP Organization

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CUMBERLANDITE –OFFICIAL STATE ROCK

BOWENITE – OFFICIAL STATE MINERAL

Volume 54 Issue 10 October 2016 RIMH 2016

RIMH

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*If anyone would like to submit an article or anything for future publication let me know

Fossil Butte National Park Wyoming

Upcoming Meeting Details

Executive Meeting date in October is:
Tuesday October 4th. All meetings start at 7pm.

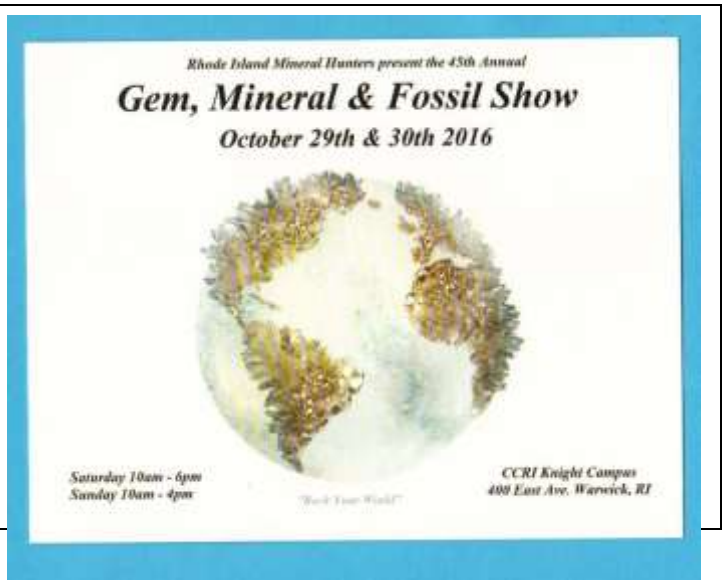
This year meetings will be held at Lou Fazzinas' rock shop (Apple Valley Minerals)
7 Homestead Avenue
Smith field, RI 02917
*Homestead is off Farnum Pike.

Next general meeting: October 11th at CCRI Warwick

******* Room 1134 *******

The big news for this month is the upcoming rock, mineral, fossil and gem show at CCRI in Warwick. See attached flyer on page 2 regarding the show. It takes place over two days. There is something for everyone. There are numerous booths including: a section with naturally fluorescent rocks, a kids only section and there a table for membership . You can either join the club or u can renew your current membership.

Yellowstone National Park steam vent



Gemstone of the month Tourmaline

Rough

watermelon tourmaline

Tourmalines are gems with an incomparable variety of colors. The reason, according to an old Egyptian legend, is that the tourmaline, on its long journey up from the center of the Earth, passed over a rainbow. In doing so, it assumed all the colors of the rainbow. And that is why it is still referred to as the 'gemstone of the rainbow' today.

The name tourmaline comes from the Singhalese words 'tura mali'. In translation, this means something like 'stone with mixed colors', referring to the color spectrum of this gemstone, which outdoes that of all other precious stones. There are tourmalines from red to green and from blue to yellow. They often have two or more colors. There are tourmalines which change their color when the light changes from daylight to artificial light, and some show the light effect of a cat's eye. No two tourmalines are exactly alike. This gemstone has an endless number of faces, and for that reason it suits all moods. No wonder that magical powers have been attributed to it since ancient times. In particular, it is the gemstone of love and of friendship, and is said to render them firm and long-lasting.

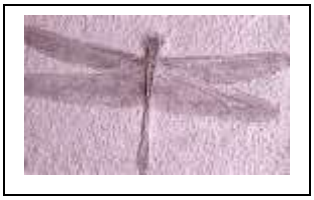
Tourmalines are found almost all over the world. There are major deposits in Brazil, Sri Lanka and South and South-West Africa. Other finds have been made in Nigeria, Zimbabwe, Kenya, Tanzania, Mozambique, Madagascar, Pakistan and Afghanistan. Tourmalines are also found in the USA, mainly in California and Maine. Although there are plenty of gemstone deposits which contain tourmalines, good qualities and fine colors are not often discovered among them. For this reason, the price spectrum of the tourmaline is almost as broad as that of its color.

Color	White, Colorless, Blue, Red, Green, Yellow, Orange, Brown, Pink, Purple, Gray, Black, Multicolored

Hardness	7 - 7.5
Crystal System	Hexagonal
Refractive Index	1.616 - 1.650
SG	2.9 - 3.3
Transparency	Transparent to opaque
Double Refraction	.018
Luster	Vitreous
Cleavage	3,2

For more information see gemstone.org/ minerals .net

Fossil of the month Dragonfly



The Odonata(dragonfly family) are known to be ancient insects. The oldest recognizable fossils of the group belong to the **Protodonata**, an ancestral group that is now extinct. The earliest fossils so far discovered come from Upper Carboniferous (Pennsylvanian) sediments in Europe formed about 325 million years ago. Like modern-day dragonflies, the Protodonata were fast-flying with spiny legs that may have assisted in capturing prey; their wingspan was up to 75 centimeters (30 inches). The group went extinct in the Triassic, about the time that dinosaurs began to appear.

Fossilized specimens of another group, the **Protoanisoptera** (family Meganeuridae), have been found in limestone at Elmo near Abilene, Kansas, USA. The Meganeuridae differed from modern Odonata in a number of ways -- they lacked a **nodus** (wing notch) and **pterostigma** (features of the wings) and were enormous compared to modern species. Fossils of these insects with seventy centimeter wingspans have been found in Commentry, France, and a fifty centimeter specimen was found in Bolsover in Derby, England both in Carboniferous layers.

Though the Carboniferous specimens are the oldest fossils of this group found to date, they were not the first specimens to be discovered. The first Odonata fossils were found in sediments from the LowerPermian, over 250 million years old. These fossils are not huge monsters like the Carboniferous fossils, but belong to relatively small Protoanisopterans and Zygopterans (damselflies). The latter seem to have changed little in structure and appearance since then. However, it is currently a question of debate as to whether members of Protodonata and the earliest Odonata had aquatic larvae, as do all modern species, since no Paleozoic larvae fossils are known. Larvae do not exist as fossils before the Mesozoic. Some workers believe that Odonata adopted an aquatic larval stage during the Lower Permian, perhaps because their prey lived in aquatic habitats. In any event, several groups of Odonata existed by the Late Paleozoic, though only three members of this group survive today.

For more information see ucmp.berkeley.edu