New Haven Mineral Club | Summer 2020

May 17, 2020 | Simpson Quarry | Portland, CT

This will be the first field trip of the season. They say it is a tradition that it will rain on the first trip, although weather forecasted for this Sunday is looking beautiful. Might be a good sign!

We left at 8:00 in the morning and arrived to the quarry by 9am. Also on the trip from the club were members Art Doyle, Bud Poulin, Leigh Voytek, Ray Meyers, Laura Turk, and the club mascot, Fred, a border collie.



Left to right: Bud, Ray, David and Becky. *Photo credit: Art Doyle*

Above: Art Doyle and Fred *Photo credit: Leigh Voytek*





Field Trip Simpson Quarry Portland CT Sunday May 17 2020 When: 9 AM - 2 PM

Simpson Quarry is another rich Portland pegmatite. It was worked for feldspar with all the good stuff thrown onto the dumps (and there are lots of dumps). In past visits, we have found beryl, hyalite opal (fluorescent green), manganapatite (fluorescent yellow), garnets, aplite, tourmaline, columbite, uranmicrolite, torbernite, autunite, uraninite and lepidolite; gahnite and samarskite-(Y) have also been reported.

In terms of tools, digging in the dumps has been very productive. There are large rocks on the dumps that yield surprises now and again, so rock-cracking tools will help there. An occasional find has been made in the quarry. It could get quite warm, so bring plenty of water. Insect repellent, a lucky hat and sun block are recommended.

Directions:

Take Rte. 66 east through Middletown, over the bridge into Portland. Follow Rte. 17A north for about 3.5 miles until it joins Rte 17 north (Glastonbury Tpke); turn left onto Rte 17 north. At around 2.2 miles you will pass Isinglass Hill Road on your right (familiar from trips to Case Prospects). Continue north on Rte. 17 for another 0.2 miles until you come to Michelle Drive on the right (marked by a white, wooden signpost). Turn right onto Michelle Drive, and continue until it makes a sharp right-turn at the edge of the woods. Park along the wooded side of the road, taking care not to block traffic. At the north edge of the sharp bend is a trail leading north into the woods. At about 250 yards up the trail, you will see another small trail leading off to the left; follow this to the dumps on the side of the hill. Remember, this is in the woods so expect to find insects and possibly reptiles.

GPS Waypoint: N 41º 38' 19.3", W 072º 35' 41.2"



Art Doyle's General Safety Rules when Rockhounding

To prevent spending the summer in a plaster cast of some sort, all of us will benefit by following some basic rules, and properly prepared equipment will make each excursion more enjoyable.

- Be sure you have **permission** to collect at any site.
- **Never collect near** vertical walls, overhangs, edges of cliffs, unstable shelves, or any other **dangerous areas**, whether posted or not. Be aware of those above and below you, to avoid accidents from falling rocks.
- Leave each site as you found it. Gates should be left open or closed according to how they were found, unless otherwise directed.
- Litter and garbage should be removed. Check that you have all tools you brought along.
- **Safety goggles or glasses**, and a **hard hat** should be worn for personal safety. Sturdy **gloves** provide protection from sharp-edged rocks. Wear suitable clothing, and footwear.
- **Insect repellent** is needed for collecting in some areas, and a **first-aid kit is** essential on all field trips.
- Hot weather, a heavy bucket, and pack can lead to trouble.
- Avoid overheating, and bring plenty of water.

DAVID'S NOTE: Something that I learned was that the label of the rock is more valuable than the rock itself. Once you make a label, it becomes a historical document. The label should show: the location, the date, the type of mineral, and who found it. (If you do this, it will make your collection more valuable).

Pictures







Top: David. People dug away at the ground, and as a result, the roots of this tree became exposed.

Photo credit: Becky Patterson



Loop tool

Priced at roughly around 5 to 10 dollars, a loop tool can magnify up to 40 times. And usually it has a string to wrap around your neck, so it's easy to take around. Also, it has two lights, one UV short wave light, and another that's a normal bright light. Bud demonstrates how to use it.

Pegmatite Mineral

Pegmatite is an igneous rock, formed from melted rock underground.

The word Pegmatite comes from Greek, which means to "bind together". Most pegmatites are composed of quartz, feldspar and mica. ^[1]



Feldspar is a common material with many uses, such as in glassmaking, ceramics, and a filler in paint, plastics, and rubber. ^[2]

The type found in Connecticut contains calcium oxide, sodium oxide, and potassium oxide, which gives it its white color. ^[3]



Leigh Voytek is using water and a screen to look for beryl.

Getting the rock wet really does bring out the color. Also, sifting it can get all the dirt and gravel out. There is one downside, though, if there are small garnets or some smaller mineral on the rock, they could fall off and get lost.

Above 4 photo credits: Becky Patterson

Minerals I collected



Black Tourmaline, AKA Schorl.

Schorl, a black tourmaline, is the most commonly found variety of tourmaline. It occurs as an accessory mineral in many igneous and metamorphic rocks. It is occasionally cut as a gem. ^[4]



Black Tourmaline, curved.

This one is much more rare. This mineral moved while it was cooling in a way that caused it to curve. Bud says some people collect minerals like this that have a curve to them.



Feldspar with garnets

Usually, if there are garnets on a rock, (in this quarry), they are small, but these ones are more uncommon since they are slightly larger.



Feldspar with beryl

Beryl is usually green or blue, but it can be other colors, too. It will have six sides. This one is not gem quality, as it is not clear. Beryl may be known by other names such as aquamarine, morganite, and emerald.



Feldspar with a bunch of tiny garnets

These garnets are quite small, but the pattern and quantity in the feldspar is quite spectacular. I chipped this off from a larger rock. You can see how thin this flake is from the side.





Mica

Mica is a shiny mineral that forms in very very very thin sheets. It can layer like this one above. The word comes from Latin, *micare*, which means to glitter. It has many uses, as it is thin but strong, lightweight, reflective, and can block heat and electricity, so it can make an excellent insulator. ^[4]

In the next picture, you can see how light passes through it. Mica is used in electronics, oven glass doors, lanterns, roofing and shingles, and many more uses, like insulating wires in toasters and hair driers. ^[5]





Smokey quartz

Quartz is the most common mineral on the surface of the earth. Historically quartz was used for tools including knives and arrowheads. It was also used in glass making. ^[6] This piece is a taupe color and was a large size. Not particularly valuable, but still beautiful. *All remaining photos above taken by either David Babic or Becky Patterson.*

Thanks for reading! Want to join the New Haven Mineral Club?

Membership dues are \$20 annually for a family. Meetings are the second Mondays of the month at 6:30pm in Hamden. Meet others interested in minerals and learn a lot! Also, joining a club allows you to go on field trips to quarries that might be otherwise closed to the public.

www.newhavenmineralclub.org

Sources

- [1] *The Industrial Might of Connecticut Pegmatite,* by John A. Pawlowski, Sr., September 18, 2012; <u>https://connecticuthistory.org/the-industrial-might-of-connecticut-pegmatite/</u>
- [2] https://geology.com/minerals/feldspar.shtml
- [3] *The Industrial Might of Connecticut Pegmatite,* by John A. Pawlowski, Sr., September 18, 2012; <u>https://connecticuthistory.org/the-industrial-might-of-connecticut-pegmatite/</u>
- [4] https://geology.com/minerals/tourmaline.shtml
- [5] *The Industrial Might of Connecticut Pegmatite,* by John A. Pawlowski, Sr., September 18, 2012; <u>https://connecticuthistory.org/the-industrial-might-of-connecticut-pegmatite/</u>
- [6] *The Industrial Might of Connecticut Pegmatite,* by John A. Pawlowski, Sr., September 18, 2012; <u>https://connecticuthistory.org/the-industrial-might-of-connecticut-pegmatite/</u>