

## **Mining in Society Merit Badge - MARCH 2, 2019**

The Mining in Society Merit Badge will be offered to Scouts from Seneca Waterways Council who register with the council office on a first come, first serve basis.

Instructor/counselor will be Fred Haynes, a retired geologist and active member of multiple local rock and mineral clubs and geology associations. Fred has a Ph.D. in Geology from the University of Michigan and spent time in his early career in hard rock mining and exploration and then the last 23 years of his career in the oil industry as a petrophysicist for ExxonMobil.

### **The primary session will be held:**

**Saturday March 2nd from 9:00 AM until 12:00 PM (noon) at the council office in Henrietta.**

THIS SESSION IS MANDATORY FOR ALL SCOUTS hoping to earn the badge.

Please arrive on time. I would like to start promptly.

### **Process/Pre-requisites – First and foremost (read and understand these two pages of instructions)**

- 1) Scouts MUST print out the Mining in Society Workbook and bring it to the September session. Some questions need to be worked as pre-requisites to the March meeting (see Requirement section below). Others will be done at the meeting so come prepared to complete workbook items at that session.
- 2) It is recommended that Scouts obtain the Merit Badge Series Book for the Mining in Society Merit Badge. It is an excellent reference that focuses on the specific requirements for the badge. However, the needed material can be found by internet searches also.
- 3) Scouts should be available for the full session on March 2nd. We should get through much of it in 3 hours, but I will need to spend a few minutes with each Scout afterwards to check the pre-requisite material.
- 4) Parents and Scout Leaders are more than welcome to attend.
- 5) Bring a blue Merit Badge card with you. Please have your portion completed.

### **Requirements (Read carefully and complete those parts listed as pre-requisites)**

- 1) You are asked to select 10 minerals and name products, explain mining process, and list countries where each is found. PLEASE DO AT LEAST 5 before the March meeting. We will discuss many and you can complete others at the meeting. You will also have an opportunity to acquire samples of several of these minerals during an activity session we will use as a break in the session.
- 2) We will do this requirement at the meeting. But if you want a head start, print out a map of New York State and see if you can find locations where the following minerals are (or were) mined in New York State.  
1) Salt (halite) 2) magnetite (for iron) 3) sphalerite (for zinc) 4) wollastonite 5) garnet  
FYI: Wollastonite is a particularly interesting mineral for New York. 100% of North America's supply of wollastonite comes from two mines in New York State!
- 3) Mining safety and hazards: This material is very well covered in the Merit Badge Series book. Please try to complete this requirement ahead of the meeting, although we will review this during the Sept. session.
- 4) Stay Out – Stay Alive: Another requirement that can easily be completed ahead of time.

5) When I instructed this badge in the fall we were able to visit Walworth Quarry during their Open House to fulfill this requirement. This is not possible in the winter. But, I have a suggestion, You can complete requirement 5F by answering the questions about a local mine using the Hampton Corners Salt Mine in Mt. Morris, NY. You should be able to obtain all the information you need on the various links within the company website. Here is a link to that.

<https://www.americanrocksalt.com/>

*Did you know that the largest salt mine (in terms of production) was just 15 miles south of Rochester?*

6) Complete this requirement prior to the meeting.

7) Pick one of the 4 options that interest you and complete prior to the meeting. We'll actually spend a few minutes on each option and at that time I will ask you to tell the group something you learned while doing the research.

8) Unless you have access to a worker in the mining industry or a local college, Requirement 8B may be the easiest to do. Please complete before the session.

**Be Prepared** and all will go smoothly.