# MICROMOUNTERS OF NEW ENGLAND
## *NEWSLETTER*

*The MMNE was organized on November 8, 1966 for the purpose of promoting the study of minerals that require a microscope*

No. 247

Summer 2003




***Next Meeting***
Saturday Jul 19, 2003
Home of Gordon Jackson
Canterbury, NH
Start at 9 am

***Map and directions are on the back page***

For information regarding MEETING CANCELLATION due to inclement weather, contact President Jim Cahoon at (978) 897-8221 or cahooncj@aol.com

### MAY 2003 REUNION MEETING

By all accounts, the May 2003 MMNE meeting was a great success. Approximately 43 people preregistered and several more showed up at the door to hear Jason Smith (Belmont, NC) speak on the Foote Mineral Co. Mine in Kings Mountain, NC and to share good times with both old friends and new acquaintances, some of whom had not been heard from since the last May meeting.

Generous donations were made to the sales table by a number of individuals including many mounted specimens from Steve and Janet Cares. There were a large number of periodicals, maps, pamphlets and other reference material donated for the silent auction, with the bulk coming from Jim Cahoon. The give-aways tables were overflowing from material from the Foote Mine, Mont St.-Hilaire and a lot other sites with contributions from many different participants.

Our speaker, Jason Smith, gave an excellent presentation which covered the geology, mining history and mineralogy of the Foote Mine, with particular reference to the phosphate assemblage there. George and Doug Rambo contributed a lot of Foote material to both the sales and give-away tables to complement the talk.

Financially the meeting was a great success, with proceeds from sales, the raffle and the silent auction giving us a profit of over $1200 after all expenses were covered.

Many thanks to all of those who contributed their time to make this a success-
the many donors to the sales and give-away tables and the silent auction,
the ladies who ran the coffee and snack tables,
Margaret Stewart who manned the registration desk,
All the members who helped set up tables and chairs before the meeting and clean up after,
Hal Herard for jury rigging a microphone system,
members who manned the sales table, and in particular, Brian Porter
Jim Cahoon who orchestrated the entire production and put together the program book,
Anita and John Hubley who hosted Jason and Mandy Smith as well as providing them with travel to and from the airport and the meeting site,
and all the other unnamed participants I have failed to mention who helped make this year's get together a great success.

Here's to next year and another great May meeting! .... Mike Swanson

### MOAT MOUNTAIN SMOKEY QUARTZ AREA
### WHITE MOUNTAIN NATIONAL FOREST, CONWAY, NH

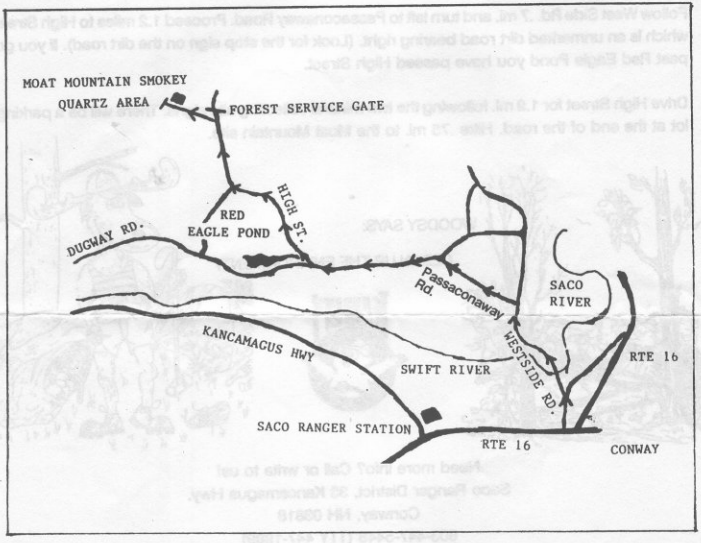
Enclosed is the USDA Forest Service map and directions to the collecting area. The walk in is quite flat until the very end of the trail. The black flies at this time of the year are probably bigger than the minerals you collect, but maybe they will help carry your prizes back to the car.

# MINERAL COLLECTING

## Moat Mountain Smokey Quartz Area

USDA Forest Service
White Mountain National Forest

Saco Ranger District




The **Moat Mountain Smokey Quartz** Area is located in the White Mountain National Forest, Saco Ranger District. Hobby collection for common minerals is permitted in this area as long as it is done for your own use and not for sale or personal gain.

Any work involving the disturbance of the ground surface will be limited to the use of hand tools. **The use of power tools or explosives is prohibited.** Before leaving the site, the mineral collector is required to restore any soil disturbance created during mineral collecting by filling holes, restoring natural contours and spreading the original soil cover of natural organic debris.

The cutting of trees or other vegetation is not permitted.

**Driving Directions to the Moat Mountain Mineral Collecting area from the Ranger Station in Conway:**

Start on Route 16 traveling North to the town of Conway. At the first set of traffic lights, take a left to West Side Rd.

Follow West Side Rd. .7 mi. and turn left to Passaconaway Road. Proceed 1.2 miles to High Street which is an unmarked dirt road bearing right. (Look for the stop sign on the dirt road). If you go past Red Eagle Pond you have passed High Street.

Drive High Street for 1.9 mi. following the two mineral collecting site signs. There will be a parking lot at the end of the road. Hike .75 mi. to the Moat Mountain site.

WOODSY SAYS:

CLEAN UP THE ENVIRONMENT!

Need more info? Call or write to us!
Saco Ranger District, 33 Kancamagus Hwy.
Conway, NH 03818
603-447-5448 (TTY 447-1989)

**Please be aware** that theft occurs at trailheads. Leave nothing of value in your vehicle. Bring it with you!

## Common Microscope Problems

The alignment of a scope is only one of the more common causes of eye fatigue for scope users.

Parfocality is the ability of a scope to be focused at high magnification and maintain focus all the way to low magnification in both eyes. If a scope is not adjusted and setup properly or if it is of poor quality, it may not have parfocality which will cause eye strain for the user.

A lack of regular and proper maintenance is the only cause of the most difficult problem of all. The problem is internal contamination of the optics. The internal lubricants aromatic components evaporate after as few as 2 to 5 years and begin the internal contamination process. Once a film of sticky contamination has coated the internal optics, dirt can stick to the film making the images dull and hazy. You may notice that the zoom knob is hard to turn or the optics may "chatter" when zooming up or down. If you look backwards through the scope with the eyepiece removed (up through the bottom lens) and slowly turn the zoom knob, you will be able to see the dirt on every optical surface in the system.

## Proper User Set-up & Diagnostics for Stereozoom Binocular Microscopes

1. Set cross-line target on stage. Best results are achieved with 0.0006" cross-line reticle of 30 mm diameter. Focus and center cross-line image at highest magnification setting. (Use the crossline printed on the back of this brochure if no glass crossline is available.) It may become obvious to you that your eyes must strain in order to focus on the center of the very fine cross-line. Continue with the rest of this procedure.

* This eye strain effect may be the cause of user complaints and can be corrected by a LASER alignment performed at ACC's facility.

2. If your microscope has dual diopter adjusters (one on each eyepiece tube) they should both be set at the zero mark or line. If there is only one diopter adjuster, please see line #3.
3. Focus at highest magnification using the stand focus knob. "Best focus" preference should be given to the fixed eyepiece side (usually under the right eyepiece). Do not move the stand focus knob from here on.
4. Looking through the fixed eyepiece side check focus of the cross-line target image at lowest zoom magnification setting. The fixed eyepiece image should still be clear. If not, the scope needs other adjustments.
5. Focus the other eyepiece also at lowest magnification using the adjustable diopter collar under the eyepiece itself (usually under the left eyepiece). Again, do not use the stand focus knob. If dual diopters are available - each eyepiece should be adjusted for best focus individually. Using a jewelers screwdriver, no set each diopter adjuster to its zero mark. This will ensure that you will always be able to quickly reset your scope to your best parfocal setting very quickly and easily even if other people use it.
6. Scope should now stay focused when going from maximum to minimum magnification as long as the stand focus was set at highest magnification, and eyepieces were focused correctly (and matched) at lowest magnification setting.
7. Recheck by setting scope at highest magnification, focus image using the stand knob then go to the lowest magnification. Both images should be clear. Use this procedure before starting your work under the microscope at the beginning of each day or after someone else has adjusted your microscope.

** Once this procedure has been completed, the diopter adjuster(s) should not be moved.


(For reference only)+/-.001"
To be used only below 40% relative humidity

Form # 612 Rev A 1/02