









Without my wife's support, I would not have been able to do it. Beverly was there whenever work needed to be done, and Stan was also right there when needed. Others who helped move material to the clubhouse were Tom, Charlie, Neal, Matt, John, and Sunday. Those also helping, particularly on the day of the sale, were Fred and Wayne plus all who came to the sale to look and even to buy. I thank you all for the success of this project. If you do not know these people by their first names, come out and learn their last names. See if you can recognize them in the following photos taken by **Steve Blyskal**. Come out and help next time—you will make some good friends and have a good time doing it.



Photos taken by Steve Blyskal





## Arkansas Collecting—1970

by Art Smith

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In 1969 my family and I took a week of vacation and mineral collecting in the Arkansas Ouachita Mountains during October (Smith 1970). The trip was so successful that we repeated it in October 1970. Although it was also put into an article for *Rocks & Minerals*, it was never published. Recently while doing some research on Magnet Cove, a copy of the manuscript was found and with editing and updates is reproduced here.

The trip to Hot Springs from Houston, 450 miles, took a good ten hours. Now it takes about seven hours. There was no Interstate highway in Arkansas, and in places U.S. 59 in Texas through East Texas was a two lane road with no shoulders. It was a grueling trip, so we took my wife's '63 Buick instead of my '64 International Scout which was geared to climb a wall but was slow on the road. We stayed at a resort south of Hot Springs on Lake Hamilton. It was off season, so we got a place with kitchen, two bedrooms, and sitting room with B&W TV for a grand total of \$11.00 a night. It was clean and basic with a 1950 country atmosphere.

The next day we headed through Hot Springs and north on State Route 7 with a quick stop at Coleman's mineral shop before turning west at Blue Springs. I was not impressed with the quartz selection or prices. As the previous year, I was looking for a super-small cabinet group. Actually I never did find one in all my trips until the crystal craze hit in the 1980s, and there was a great increase in mining and specimens. Even in 1970, most of the top quality specimens were being sent to Europe, particularly Switzerland I was told. I did buy a couple of golden calcite crystals that were supposed to be from Kentucky, but later I learned they were probably from Indiana. In those days it was common for collectors to take along some extra flats for trading with roadside dealers, particularly in Arkansas. So at times the quartz dealers sold some nice or even unusual minerals from other collectors in other parts of the country.

We headed west for Dug Hill until we came to the Avant (Buckville) crossroads and then turned south. After a couple of miles and at the crest of a hill, we found a small borrow pit on the east side of the road. We turned around and drove back to the base of the hill where a dim trail led east. Parking as far off the road as possible, we took the trail for several hundred feet and then turned south up the hill, with me pulling my three-and-a-half year old son who was using both hands to hold onto the head of my geology pick. There were many small diggings about  $\frac{3}{4}$ <sup>ths</sup> of the way up and along the north crest of the hill which now appeared more like a ridge. The most recent digging activity was in the largest cut. The wavellite and variscite occur in fractures and rarely in cavities of a gray sandy-appearing phase of the Big Fork Chert. The green to yellowish wavellite generally forms flat concentric and radiating patterns up to 5 cm across in thin seams. In the cavities, the spheres and hemispheres are up to 3 cm in diameter, and their outer surface is composed of wavellite crystal terminations. Variscite occurs as brighter and darker green coatings with drusy crystals coating some rock,

rarely directly associated with the wavellite. Before the late 1970s, practically all the wavellite produced in Arkansas came from this location in Garland County, even though much was labeled Montgomery County, Pencil Bluff, Hot Springs, and Magnet Cove. The Dug Hill area is controlled by the U.S. Corps of Engineers because it is in the Lake Ouachita watershed. They tolerated digging with hand tools, and as far as I know still do. However a few years after our visit, some local dealers moved some power equipment in and started digging wavellite. They were caught, and I heard that their equipment was confiscated and that they were fined.

One corner of the largest cut had some recent digging, and I noticed it was on an irregular 7 cm thick milky quartz vein. The unusual thing was that in the quartz vein the wavellite occurred on variscite in small green hemispheres usually less than one centimeter across. To make digging even harder, the beds of the Big Fork Chert are vertical. I followed the vein down and back into the cut as best as I could and got a few nice specimens up to 5 by 8 cm. before I realized that further digging would be futile. A few years later, in 1979, while talking to mineral dealer Clyde Garmon in Pencil Bluff where he sold minerals from a shop in his house, I learned that he was the one who originally worked the quartz vein, and he still had two flats of the material under his bed though it had been somewhat high graded. We made a swap including them, and I upgraded my own collection and had some nice trading material.

As at Mauldin Mountain in Montgomery County, there are some 1 to 2 cm spheres that are called amorphous phosphates after wavellite. I am not sure they are true pseudomorphs, but an XRD does show them to be an amorphous phosphate. However, further south on a spur of Dug Hill at the DeLinde prospect, milky white crandallite does pseudomorph wavellite in one small area.

In the early afternoon, we continued further west and stopped at Ocus Stanley's before heading back to Hot Springs, then we added a quick stop at the MacGregor Watkins shop that was located west of town on Route 70. There I purchased for \$5 apiece some recently obtained specimens from the Colorado School of Mines. Among the specimens were a Franklin, New Jersey rhodonite; an uncut Fairfield Utah phosphate nodule labeled "odontolite" (dinosaur bone) with a date of 1894, and large titanite crystal from Renfrew, Ontario, Canada.

For the rest of our stay, I concentrated my collecting at Magnet Cove in the area around the Cove Creek bridge and the highway that was then U.S. 270 and is now State Route 51. Here work had been in progress for widening the bridge, and some blasting and digging in the creek bed had uncovered some long-hidden rocks. So I grabbed my sledge and went to work on some of the larger boulders. I did not collect as much carbonatite as previously, so I did not get a large number of magnetite and perovskite crystals. I did get one nice 2 cm magnetite octahedron and some 1 cm skeletal octahedral pyrite crystals in carbonatite.

One small piece of carbonatite I acidized later at home, and I got some small groups of pseudo-hexagonal green biotite with what twenty-five years later turned out to be hercynite octahedrons. Instead this year there was quite a bit of vesuvianite rock in shades of green, yellow, and reddish brown. Crude crystal faces were observed, but

no good crystals were collected. One small white mass composed of elongate natrolite crystals was collected and some natrolite in wollastonite. Several small red to pink masses of eudialyte were also liberated from the syenite, but none showed good crystal form. The only coarse syenite pegmatite minerals collected were some 5 by 6 centimeter greenish and white cleavages of microcline and some green to black partial elongate crystals of aegirine. Coatings of acicular aegirine in green felted masses were collected with the microcline. This type of material was thought to be epidote by some collectors, but epidote still has not been reported with in Magnet Cove. It has been identified in altered rocks in the Jones Mill quarry off the south flank.

However my rarest and best find can only be talked about. In a small chunk of rock broken from a large boulder, were about 5 or 6 plates up to one centimeter across slightly protruding from a fine-grained matrix. They were an extremely bright yellow-brown, and without careful examination I put in out of harm's way on a boulder in the creek. Then I went to work on the rest of the boulder which evidently contained nothing of interest—at least nothing that I remember. On arriving home in Houston and after unwrapping my specimens and not finding it, I realize I had left it on the boulder in the creek. I schemed ways to retrieve it but soon faced reality—the distance was too great, and vacation time was not available to take a quick trip. So I can only guess what mineral I left. I think it was probably the astrophyllite described by Williams (1891), but they also could possibly be titanites. I had never seen either astrophyllite or titanite before from the Cove Creek bridge, but both have been reported. A couple of years ago while breaking open some medium-grained syenite from the location that I purchase, I found a small yellow, not very bright, microscopic plate. EDS analysis showed it to possibly be lamprophyllite, but I doubt that was the mineral left in the creek.

During this trip I made a stop to visit Joe Kimzey who lived along the highway east of the bridge on the north side of the road. I found him at home and well enough to entertain visitors. We had a nice visit, and I purchased some small black andradite garnets, some small brookite crystals, and some black quartz. However, the larger pegmatite specimens he had sitting on the lawn were beyond my means at \$25 each. Now they would be worth many times that while the specimens I did purchase have been all bettered and so removed from my collection.

### References:

Smith, A. E., Jr. 1970 Arkansas Revisited – 1969. *Rocks & Minerals* 45:748-751.

Williams, J. F. 1891 *Igneous Rocks of Arkansas*. Annual Report of the Geological Survey of Arkansas for 1890, Volume 2.



## Coming Attractions: Lapidary Programs

June 20 ..... Practice **Riveting** and other cold attachments

Photographs below taken by Matthew Phillips at the May meeting.

### Making doublets



















































