



Hand specimen" (about 4" long) of micaceous gneiss from the Graywacke-Schist member of the Tallulah Falls Formation. Gray and white are quartz and feldspar; black is biotite mica. Note the right to left banding or foliation planes of the minerals, typical of metamorphic gneiss and schist.



Large chunk of nearly pure quartz near the top of the Vaseyi Trail.



In-place interlayered micaceous biotite gneiss and schist exposed under the Duke power lines. Note the cross-cutting quartz veins and the foliation of the rock, dipping or sloping to the right, or northwest.



A sampling of the variety of gneiss and schist found in the Graywacke-Schist member of the Tallulah Falls Formation ranging from low to high content of biotite mica. These were exposed on Duke Rd. during site preparation for the new greenhouse.



In-place interlayered gneiss and schist exposed in the streambed beside the Vaseyi Trail.



A large piece of "native" biotite gneiss that is not in place. This is one of the few large rocks along the trails in SHR that is not imported from elsewhere. Note the bands of minerals that swirl and fold.



A piece of biotite gneiss showing fine-scale folding and inclusions of darker fragments. This was removed from Duke Rd. during site preparation for the new greenhouse. Photo is about 18" across.



Biotite gneiss removed from Duke Rd. during site preparation for the new greenhouse. Note fine biotite banding in the piece on the right. The piece on the left exhibits weathering along the banding or foliation planes. It is becoming soft enough to break off with your fingers - on the way to becoming saprolite.



Large pieces of in-place gneiss and schist found between Betty Bench and Duke Rd. These are dipping to the right, or to the northwest.



Closeup of a piece of the in-place gneiss near Betty Bench. Note the banded orientation of the biotite mica, and the round critter hole at the top center that leads back into weathered space between the rock layers. Microhabitats such as this support a plethora of wildlife from invertebrates to small mammals and salamanders.



Small stream flowing down a steep slope west of the power lines. The jumbled positions of the rocks and the rock fragments in brown mud (center of the picture) indicate that a land slide occurred here at some point in the past.