



Appendix C

On The Care, Use, and Value of Collections

Very few things surpass the educational value in the earth sciences of a good collection. Just as preserved specimens and dissection are the mainstay of the biological sciences, so does a good earth science collection add to the richness and variety of studies in geology, soils, hydrology, and related crustal processes. A number of things distinguish a collection from a mere accumulation of materials. These include documentation, maintenance, growth, and use.

One of the primary reasons for collecting a specimen of something is because of that specimen's uniqueness in reference to others of its kind or different materials around it. It may be the best example (or the worst), but WHATEVER it is that provides the uniqueness must be DOCUMENTED if the specimen is to achieve its maximum value. All specimens should be documented as to species, exact and precise locality data, the time the specimen was collected, and those aspects of the specimen that make it a desirable specimen; all these should be noted in writing. Collectively, this information is known as the provenance of the specimen. (Incidentally, "specimens" are curated and preserved, while "samples" are usually tested and discarded.) In historical times all data was either painted onto the specimen (impractical with soils) or attached to the specimen with tags, tape, and/or wires. Current coding techniques and computer databases have removed much of the burden from curating collections. It is, oftentimes, the provenance of the specimen which makes the specimen valuable as an educational resource.

Collections need to be maintained; they need adequate provision for storage when not on display, and, while tastes in display techniques vary, any display medium should provide for the cleanliness and security of the specimens. Unsecured specimens are just begging to be "transferred" to someone else's collection. Some materials have requirements relating to heat, light and humidity and these need to be taken into consideration when displaying or storing materials. While it may sound silly to talk about keeping one's rock and mineral collection clean, and the labels up to date, the

attitude we project onto the materials is the prevalent attitude that will be picked up by the students.

Like all things, collections are either in a growth stage, a steady state, or a stage of decline. Collections grow by the careful, planned accumulation of specimens that fit the needs of the person(s) charged with the development and use of the collection. In a teaching situation the needs may be obvious as well as subtle and diverse. A mature collection, one that has to come to perfectly fit the needs of the people using it, involves almost no expense beyond the issues of maintenance (cleaned, controlled, correlated, and documented) involved with the collection.

Using a collection involves much more than just looking at the specimens and noting their locations. A mature collection invites comparisons and analyses; it suggests topical displays which can change periodically (perhaps in a portion of the trophy case in the front lobby?); it makes an excellent tool for the construction of identification tests; and finally acts as an immense reservoir (if properly documented) of factual information that can be tapped as needed.

Unless one is very wealthy, one does not just go out and assemble a collection in a very short period of time. Collections are normally built slowly, over a period of years, often at only minimal cost when their total value is considered in aggregate. Maine offers a wealth of locations for obtaining all kinds of specimens for collections, including rocks, minerals, soils, glacial sediments, beach sediments, as well as structural/process materials. A number of publications exist to help teachers and students get started in the process of collection building. Students, especially, have the energy and enthusiasm to make building a school-based collection an exciting and rewarding process. Specimen collecting in the field should be done with permission. Care and conservation should be kept in mind. If you are not certain to what use the prospective specimen will be put, once it has been collected and curated, OR, if the collection of the specimen may possibly result in its destruction, the intended specimen should be left in place. Some things, because of size, delicacy, or other factors, can only be collected with a camera. The lovely, symmetrical folds exhibited in Acton, Maine (see CREST Field Trip Guide), for example, would be only be destroyed in the collection process. Use care and discretion and DO include photographs in your collection.

A number of collections do exist around the state and all have some strong points that make them worth viewing. Unfortunately, the best collections of Maine materials exist

out of state. This has been true historically and will, no doubt, prove to be true in the future. The premier single collection of Maine minerals is to be found in the New England Room, Harvard Mineral Museum in the Harvard Natural History Museum, Cambridge, Massachusetts. One visit to this room will amply demonstrate why Maine is mineralogically famous in all parts of the world. Instate collections include the following:

Maine State Museum

Bates College

Bowdoin College

University of Maine, Farmington

University of Southern Maine, Gorham

Norway Historical Society

Brighton Medical Center

MacDonald's Mineral Museum

Nylander Museum

L.C. Bates Museum

Undoubtedly other public collections exist tucked away in libraries, natural history buildings, schools, and so on. CREST welcomes additional information on any collections not listed here.