# Toward mineral database standards for World-Wide-Web utilization

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Museum mineral collections must serve society broadly in order to maintain their relevance. While galleries and exhibitions provide the most intimate connection for most Museum visitors, accessibility should include access to catalogues and databases via the World-Wide-Web. In this manner, the broadest community, including scientists, collectors, students and the general public, can utilize museum mineral collections more easily and appreciate their importance as a record of the natural world and material diversity. However, to suit a worldwide community, we must adopt standards on the format of the data which define and describe our specimens. Our goal here is to begin a dialogue towards generalized standards, which for the most part virtually exist but require more agreement.

The most critical information is species and locality. Species designations are administered by the IMA Commission on New Minerals and Mineral Names, but in practice, museums have found it necessary to include a variety of old or unofficial terms to deal with inadequately studied samples with general terms, e.g., tourmaline group, or odd samples, e.g., fake and obsidian. Variety can be a very useful field for gem species. Assemblages should be identified in some manner; cross referencing is of considerable value for specimens exhibiting multiple, well-developed species. Locality is highly problematic because of variability in political geography but generally is hierarchal by country, province, county (or equivalent), nearest city/town, place name such as a mine, geographic feature, etc., a detail field such as for mine level, etc., and ideally latitude and longitude or standardized map coordinates (e.g., NAD83)–for the latter standards of notation must be readily available in the search function or display. Transliteration of locality names can prove frustratingly variable and it is suggested that locality information be recorded in the written language(s) of the country-of-origin as well as in an English transliteration. Information such as type specimen category and references to published specimen data would also be valuable. Date fields are important for showing when the specimen was extracted and when it entered the collection. Images ARE worth a thousand words. They provide a valuable inventory tool and the closest facsimile to a museum visit for study or enjoyment. Implementing web-databases with images is extremely important for their and museum success.

A Web collection of collections would be valuable to science and society, but we need standards in order to achieve this important goal. Let us get busy.

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