Mineral Resources on the Internet by Charles Calkins

The Internet has had a significant impact on rock collecting as a hobby and occupation. This article will describe a number of sites that are of use to the collector.

Mineralogy Database (Mindat, http://www.mindat.org/) claims to be the largest mineralogy website on the Internet, currently cataloging over thirty-eight thousand mineral names. It originated as a stand-alone application written in 1993 to facilitate associating minerals and their localities. In 2000, it became web-based and accessible to the public.

A search of the mineral database can be made by entering a mineral name, location, chemical properties, or by a number of other criteria. The page for a mineral includes information such as chemical composition, crystal structure, streak color, hardness, luster and other details. A map is displayed of known locations where the mineral can be found. A link next to an image of the mineral leads to a gallery of user-supplied images. Viewing images of a mineral can help in its identification, because a mineral may exhibit multiple habits, colors, and such.

Each image of a mineral provides a link to the location where the mineral is found. Selecting that link displays a page devoted to that location which gives a general description, literature references, a list of minerals found, and, if available, photos. When identifying a mineral from a particular region, assuming that it is a mineral previously known to be found there helps to speed the work.

A user can register on the site for free (full name and email address are required) to obtain greater access. Once registered, a home page is created for the user. This allows the user to contribute images to Mindat, and to participate in the discussion forums, online chats, and auctions. A user can also contribute articles or post blog entries which are accessed from their home page.

For example, my home page is http://www.mindat.org/user-10785.html; the "My Photos" tab shows about 200 of my photos. Options at the top of this page allow photos to be selected by type ("minerals," "locations," or "other"), location, and/or mineral. Images can be sorted by when they were contributed to Mindat, by locality, or by popularity.

In order for a "mineral" photo to be accepted by Mindat, the locale where the mineral was found and the dimensions of the sample must be provided. A "locality" photo is a photo of an area of interest, such as a mineral collecting area, a mine complex, map or other such image. An image that does not fit either category can be listed under "other," and, unlike the other categories, specifying a location is optional. Unfortunately, at the time of writing, Mindat can only classify true minerals – rocks such as rhyolite must be entered in the "other" photo category. Submitted images are evaluated by a team of reviewers to ensure that information is complete. If an issue is raised by a reviewer (such as a possibly incorrect attribution or locality), the submitter is informed by email and the issue must be resolved before the image can be accepted.

Another on-line mineral database is Webmineral (http://webmineral.com/) which provides similar mineral information to Mindat, including identification information and images. It does not appear to have the same community as Mindat, however, because it does not support user-specific features. A useful feature of Webmineral, though, is the extensive help system where terms such as "habit," "cleavage," and "dichroism" are clearly defined and explained in detail. This helps in understanding properties of minerals and aids in their classification.

Many other web sites provide information useful to the mineral collector. A few that I have found particularly helpful are worthy of mention. The U.S. Geological Survey (http://www.usgs.gov/) provides much geographical information, including maps. Some states, such as Illinois, have specific sites for geologic information (Illinois State Geological Survey, http://www.isgs.illinois.edu/). ExpertGPS provides the latitudes and longitudes of over 300 mines and quarries in Missouri (http://www.expertgps.com/data/mo/mines.asp), and of over 400 in Illinois (http://www.expertgps.com/data/il/mines.asp). If GPS software is not available, these points can be entered into Google Maps (http://maps.google.com/) as comma-separated latitude-longitude pairs. For other information, a search performed through Google (http://www.google.com/) or other search engines can also be profitable.

Commercial resources for minerals and supplies are also widely available. A comprehensive list of mineral shows is available as a series of Blogger posts (http://gemshows.blogspot.com/), and in the "Rock, Gem and Mineral Clubs" group on Facebook (http://www.facebook.com/#!/RockGemMineralClubs). Individual sellers, such as STLMGS's own Roy Hurlburt, list the shows they attend, as well as minerals for sale, on their own web pages (http://www.emineralshow.com/hurlburtr/RH_Minerals.html). Sellers can be found through general web searches, or through directories such as the one provided by Mindat (http://www.mindat.org/directory.php). Even the auction site eBay (http://www.ebay.com/) has a "Rocks, Fossils & Minerals" category under "Collectibles."

With the advent of the Internet, obtaining minerals and their IDs, and building communities of collectors, has become much easier.