

Ribbens, Eric, Thiers, Barbara. 2009. The Wired Herbarium #7: Index Herbariorum. In The Vasculum (newsletter of the Society for Herbarium Curators), July 2009.

Index Herbariorum

<http://sciweb.nybg.org/science2/IndexHerbariorum.asp>

comments from Eric Ribbens:

I've been trying to compile information about the distribution of *Opuntia fragilis* this year, and I've been contacting various herbaria around the country, using Index Herbariorum as my source of herbarium information. This is a great site. Maintained by the New York Botanical Garden, it is a registry of herbaria around the world, and can be searched several ways, including by region, by person, or by herbarium name.

As I've used it I've noticed several things. First, it would be wonderful if the Index somehow marked or separated out defunct herbaria. For example, a search for the state of Colorado yields 18 herbaria, but seven of them have transferred most or all of their specimens or are completely defunct. It would be nice to be able to see that up-front. I completely agree that even herbaria that have been transferred to other collections should remain listed, but mark them somehow in the list. Second, it would be helpful for those of us trying to contact multiple herbaria if there was a way that email distribution lists for particular states or regions could be made available; it certainly is possible to cut-and-paste email addresses to build your own distribution list, but it's tedious.

However, the biggest problem with the Index is the quality of information that various herbaria have provided. Again, to use Colorado for an example: two herbaria do not list an email contact at all, and emails sent to two other institutions were rejected as undeliverable.

Herbarium webpages are even worse. Many herbaria simply do not list a webpage at all; only four out of the 11 existing Colorado institutions do. Some webpages given do not even connect to the herbarium: one Colorado institution lists a webpage that connects to the Biology Department of their institution, and one link has been moved and connects not to an herbarium but to the entire museum. Other institutions in other states list webpages that are simply the webpage for the entire university. Only one Colorado herbarium has a decent searchable database, although one other institution maintains a skeleton database that simply returns taxonomic presence, and another one is apparently in the process of databasing and developing a searchable online site.

Some recommendations for herbarium curators:

First, check your listing in the Index Herbariorum. Update it regularly. Updating is easy and virtually painless. Remember, the Index is one of your major contacts with the outside world, particularly those of us seeking information who don't already know about your institution.

Second, provide contact information. Telephone #, mailing address, and very importantly, an

email address that is regularly checked. The Colorado email failure rate of over 20% is unacceptable.

Third, your herbarium should have a webpage. It doesn't need to be fancy, but include your webpage in the Index. If your site gets moved, update the Index. Include on your webpage information about your collection, your mission, and how to contact you.

Fourth, if you have a partial database, either list the taxa that are in or realize that you will still get requests for information from those of us who wonder if the taxon we are interested in is included yet. And don't design your database to provide limited information: you can screen out precise location information for rare species but otherwise give us the information!

And this update from Dr. Thiers:

There are approximately 3990 herbaria in the world today, with almost 10,000 associated curators and biodiversity specialists. Collectively the world's herbaria contain an estimated 350,000,000 specimens that document the earth's vegetation over the past 400 years.

Index Herbariorum (IH) entry for an individual herbarium includes its physical location, web address, contents (e.g., number and type of specimens), history, and staff information, including names, birth dates, contact information and areas of expertise. Only those collections that are permanent scientific repositories are included in IH. New registrants must demonstrate that their collection is large (usually over a minimum of 10,000 specimens), accessible to scientists, and actively managed. Each institution is assigned a permanent unique identifier in the form of a four to eight letter code, a practice that dates from the founding of IH in 1935. The first six editions of Index Herbariorum were published by the International Association for Plant Taxonomy in the Netherlands (1952—1974). Dr. Patricia Holmgren, then Director of the New York Botanical Garden, served as co-editor of edition 6, and subsequently became the senior editor of IH. She oversaw the compilation of hard copy volumes 7 and 8, and Dr. Noel Holmgren, a scientist on the NYBG staff, oversaw the development of the IH database, which became available on-line in 1997. In September 2008, Dr. Barbara M. Thiers, Director of the NYBG Herbarium, became the editor of IH.

Index Herbariorum has not had any paid staff since the 1990s, when The National Science Foundation supported updates prior to the last print publication of the Index (edition 8). The amount of time the Editor can devote to the Index is enough to respond to changes that are submitted by participants, but not enough to conduct what is really needed – a solicitation of new information from each institution, with follow-up requests if no response is received.

The New York Botanical Garden is seeking grant funding to obtain updates from all herbaria, create an on-line entry update system, add more searching and downloading options, develop a map view for herbarium locations, and visually display geographical areas of expertise. A few modest improvements have already been made. The registration form is now available for download from the opening Index Herbariorum webpage, and updates (which number about 25 --50 per month) are recorded using twitter (most recent updates are listed on the opening page of the Index).

I would like to underscore the point Dr. Ribbens makes above about the necessity for each herbarium curator to check and update the information pertinent to their herbarium in the IH. It is our goal to maintain the IH as an essential and useful tool for plant systematists, but our information only reflects what we have been provided.