

The Creation Research Society Herbarium: a Progress Report

by George F. Howe*

A herbarium is a collection of pressed, dried plants that have been identified, mounted, and labeled (Figure 1). Mothballs are placed with the specimens to prevent damage by insects. The plants are kept indoors, free from excess moisture and extreme temperatures. Specimens stored in herbaria [plural] can remain useful for many years. Even features of

cellular anatomy such as epidermal guard cells can be studied successfully from preserved plants. Herbarium collections are found at many college and university botany departments, large museums, and botanic gardens. Some fine personal herbaria are also maintained by individuals who have built their own collections and have stored them in their homes or offices.



Figure 1. A herbarium specimen inside its “genus cover.” This one is *Liriodendron tulipifera* L., the “tulip tree.” These eastern deciduous forest trees are called tulip trees because their flower resembles a tulip and their leaf looks like the profile of a tulip—even though they are in an entirely different family.

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Figure 2. The main Creation Research Society herbarium cabinet. The shelves contain plants filed in genus covers. Note jar with insecticide, lower left.



Figure 3. A closer view of genus covers in the metal herbarium cabinet.

A herbarium can help in the study of plant taxonomy, which is the identification and classification of plants. With the help of a herbarium, plants can be identified quite specifically. Individuals using a herbarium range from qualified students on up to Ph.D. scientists. It is easy for practicing scientists to obtain access to herbaria, while people with less experience may use the collections under proper supervision.

Herbarium plants may be used to

study very similar species, especially when microscopic differences are the criteria for separating one species from another. Using specimens collected over a period of years, it may become possible to study shifts in the ecological “cover” in a region. Herbaria may be a resource of great value to “baraminologists,” who attempt to determine the limits of the Genesis created “kinds.” The characteristics of many similar mounted species can be compared and changes occurring within a given species can be analyzed. It will be possible to assess whether or not any evolutionary changes have taken place.

In the late 1980s the Creation Research Society (CRS) herbarium began to take shape, thanks to the efforts of Joneen Cockman, its first curator. Her work and all other work on the CRS herbarium have been done on a volunteer basis. She secured some Arizona plants and also identified specimens that had been collected in Arizona and elsewhere by Emmett

Williams, Steven Hagberg, George Howe, and others. Cockman’s identifications of these plants were verified by her associates in plant taxonomy. She published a helpful article describing the CRS herbarium and telling how to collect, press, and label plants (Cockman, 1988). A short note also appeared (Howe, 1988) telling how a herbarium can have value in creation science.

After the Van Andel Creation Research Center (VACRC) was built in the early 1990s, John Meyer saw the value of preserving the herbarium and purchased a sturdy, metallic, herbarium cabinet for the collection—see Figures 2 and 3. But little further development of the collection itself occurred in the 1990’s.

In September 2001 Stephen B. Austin started working on the CRS collection and has been its curator from that time to the present. He is an avid plant taxonomist from Fruita, Colorado, and has identified hundreds of plant species. His work is known and recognized at herbaria in Grand Junction, Colorado and in Denver. On several collecting trips he has greatly extended the number of Arizona plant species and has increased the CRS holdings from Colorado and other western states as well (see Figure 4).

Recently Mark Armitage secured the Byron Deshler herbarium from a college in Southern California and helped transport it, together with its wooden cabinet (Figure 5) to VACRC at Chino Valley, Arizona. Austin combined this Deshler collection and another herbarium donated by Mary Carse of Hinesburg, Vermont, with the CRS herbarium. Donated plant collections help to increase the size and usefulness of the CRS herbarium, which now contains 1320 specimen sheets from 509 genera in 125 different plant families. While this is a substantial beginning, much more needs to be done.

If other herbaria become available

as gifts, readers are encouraged to communicate that information to Austin at creationbotanist@gobrainstorm.net. Individuals interested in collecting, mounting, and contributing plants for the CRS collection should also contact Austin and consult Cockman (1988) or some other herbarium publication for proper procedures. Correspondence is welcome from volunteer taxonomists who would like to take part in collection and identification of plants. We would be pleased to hear from individuals who might know of herbarium cabinets, plant taxonomy equipment, or taxonomic books to be donated to the growing herbarium library. We welcome inquiry from those who might wish to use the CRS plant collection for creation studies.



Figure 4. Austin and others, collecting Arizona plants on a road up to Big Bug Mesa, southeast of Prescott, AZ, in the Bradshaw Mountains, September 2005. People from left to right are: Barbara Austin, John Meyer, Stephen B. Austin, and George Howe.

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References

- Cockman, J. S. 1988. Collecting plants for Creation Research Society Herbarium. *Creation Research Society Quarterly* 24:187-193.
- Howe, G. F. 1988. Why collect plants? *Creation Research Society Quarterly* 24:186.



Figure 5. The wooden herbarium cabinet of the Deshler collection, now being used to hold part of the Creation Research Society herbarium.