A HUNDRED YEARS OF HEADLINES HIDDEN IN HERBARIA

by Allyson Ayalon, Daniel McNair, and Ellen Dean

UC Botanists Press Plants in Newspaper—Document Plant Diversity!

Around the world, millions of flattened, dried plants are stored within herbaria, scientific museums that document the world’s flora. Often associated with universities, botanic gardens and natural history museums, herbaria have played a central role in botany since the 16th century. Today, herbarium specimens are a resource for studies in genetics, ecology, evolution, and population biology, among other disciplines. They are crucial for documenting plant diversity and protecting endangered species as well as for documenting the spread of invasive species.

For over 150 years, botanists have been using newspapers to collect plant specimens. The freshly collected plants are placed inside newspapers, which are then placed between blotter papers and cardboard inside a plant press. Understandably, these newspapers are usually regarded as unimportant compared to the specimens they hold. Collections sometimes sit in herbaria for decades before the mounting process is completed and the newspapers are discarded, but it turns out that the newspapers have unexpected value.

Recent curatorial projects at the UC Davis Center for Plant Diversity have revealed newspapers dating from 20 to 100 years old depicting what was once headline news in our society. These newspapers illustrate how our attitudes towards major issues such as sexuality and gender, science and technology, and even the food we eat (or used to eat) every day has changed. Many of the newspapers such as The San Francisco Chronicle, The Sacramento Bee, The New York Times, and other news journals, still exist today.

The Importance of Newspapers in the Curation process

At the time a specimen is pressed, botanists often write a number or a date on the newspaper holding the specimen. Ideally, this notation on the newspaper matches an entry in a collector’s notebook which can be used to make a label for the specimen. However, detailed notes are often lacking, and the only clue to the origin of the pressed specimen inside the newspaper is the newspaper itself (one of the reasons it can take 50 to 100 years for specimens to be curated). The curator scans the newspaper for a publication date and knows that the specimen had to have been collected after that publication date, but how long after? A day, a week, a month, a year? If the newspaper is a local paper, was the specimen collected near the location where the newspaper was published? In the same state? Near the city? Then the handwritten phrases provided by the collector are scanned. Phrases such as “Green Mountains,” “scree field” or “found with Quercus kelloggii” help us know more about the specimen’s geography and ecology. A reasonable guess as to date and place can be made based on the newspaper’s publication date and origin, as well as the collector’s handwritten notes. Then if field notebooks exist, more information can be found. It is a giant, time-consuming curation puzzle!

The Implications of Shrinking Newspapers

With the increasing rarity of printed newspaper, as media is primarily received through digital outlets, the future of using newspaper for an age-old tradition in botany is unknown. Newspaper size has varied considerably over the past 100 years, with a folded newspaper from 1900 averaging 11 by 17 inches and one from 2016 averaging 11 by 11 inches. The optimal folded newspaper size for pressing herbarium specimens is 11 inches by 13 inches; a specimen pressed within these dimensions is perfect for mounting onto herbarium paper that is 11 inches by 17 inches. The dimensions of most 2016 newspapers have already shrunk below that needed for pressing plants with the exception of the British paper, Financial Times, which is the preferred newspaper used at the Center for Plant Diversity.

Newspaper Exhibit Honors Botanists’ Work

Premiering at The UC Davis Center for Plant Diversity’s annual Botanical Tea, and returning later at the UC Davis Picnic Day, we have brought together newspapers from the collections of several researchers including: June McCaskill (Curator of the UC Davis Center for Plant Diversity from 1953 to 1991), whose personal collection of amusing newspaper clippings reflects the role of plants in our changing society; G. Ledyard Stebbins (Professor of plant evolutionary biology and genetics at UC Berkeley and UC Davis), whose large collection spanning more than fifty years, has contributed several of our most notable headlines; Jack Major (Professor and high-elevation vegetation ecologist at UC Davis from 1955 to 1981), whose back-pack-sized specimen newspapers will be on display; and Harold Olmo (Professor of viticulture at UC Davis from 1938 to 1977), whose pre-prohibition era wine grape specimens are housed at our herbarium. The exhibit is entitled “Herbarium Specimen Newspapers: A Botanist’s Newspaper for the 20th Century.”