

What is a herbarium?

It's a huge collection of dried plants preserved and mounted onto sheets of paper. We have one here in Fort Worth, in the Botanical Research Institute of Texas (BRIT) building located on the other side of Pollinator Pathway!

There, we document the plant specimens, photograph them, and upload them to our database so other scientists from all over the world can look up plants in our collection. And you can too!

All the preserved plants are stored in big cabinets in a climate-controlled area with some anti-pest measures to make sure bugs stay out of our plant collection (or else they will eat them, yikes!!!!) and keep the plants in optimal condition for study.

We get new plants every day, and we give special care to each one to make sure it is well preserved; if we take good care of them now, we can refer back to them for years and years. We have preserved plants going back to the 18th century in our collection!



Rows of cabinets inside the BRIT Herbarium, specially made for holding and maintaining preserved specimens.

Photo Credit: Molly Harris

What is a herbarium used for?

All kinds of research!

It can tell us:

- What an environment was like at the time of collecting, which is often on the label.
- Identify other plants by giving us something to compare to.

It allows us to:

- Keep a record of preexisting plants to refer to when someone has discovered a new species.
- Document the morphology, or how a plant looks, so we can better describe that particular species or taxa, which is the taxonomy names associated with that plant.

So many people look at these specimens after they get documented and filed away. Any mistakes made while identifying a plant often get fixed when the plant has been documented because once someone revisits the plant, they might have better information to reclassify the name. When this happens, they put an “annotation label” to let future people know what changes were made to the specimen description. And now with our digital database, we can transcribe all the information on the physical labels so it can be searched for/reference online, too!



A look inside one of the many cabinets, each folder color denotes what region of the world the specimens inside are from.

Photo Credit: Molly Harris

How do we get plants?

Field biologists or other institutions hand over plant collections that have already been dried and preserved. They usually come in boxes with plants folded in between newspapers, if you can believe that! Or other institutions send us their already mounted specimens to add to our collection, sometimes as a gift, but we also share specimens with each other as a “loan”, too!

Volunteers and staff carefully mount these loose dried specimens to a thick paper sheet using adhesive in our preservation studio.



The preservation studio workspaces where volunteers mount specimens.

Photo Credit: Molly Harris

Most of the time, the person or people who collected the plants already identified them, or attempted to via describing all the characteristics, then referred to a flora or plant index to get the scientific name of the plant that matches the description. We can find out what taxa it belongs to just by looking at external (outside) features to help us narrow it down.

They often leave a label with all this information including where they collected it, and sometimes what the habitat looked like. This all goes on what is called the “primary

label”. If you look at the primary label in this image, you’ll see that this Blue Bonnet was collected in 1924— this specimen is 100 years old!



An actual digitized specimen from the BRIT Herbarium, *Lupinus texensis*.
Photo Credit: Botanical Research Institute of Texas

More Resources:

- TORCH database accessible via: portal.torchherbaria.org/
- Video overview of the herbarium on YouTube: <https://youtu.be/WW2kX0Xz-CE>
- Learn more about the BRIT Herbarium via: fwbg.org/research/herbarium/