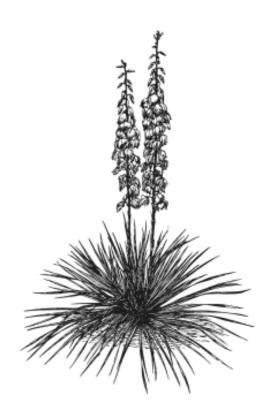


# ARNUAL REPORT



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# Numbers and highlights from 2022



# Visited by over 219 guests

Botanists, students, and plant enthusiasts from our community visited us this year. Long-time visitors noted that the herbarium is as lively as it has ever been!



# Added 2,284 new specimens

Over 2,000 new specimens were accessioned into the UNM Herbarium and are available on SEINet, our online data repository (swbiodiversity.org).



# Imaged 3,280 specimens

Specimen images are uploaded to SEINet and linked with collections data. These images allow scientists anywhere to conduct research with the click of a button.



# Georeferenced 17,746 specimens

Student staff mapped over 17,000 specimens to their collected locations! This can help us to understand how plant taxa are changing over space and time.

# A fresh face for the UNM Herbarium

In 2022, many student and volunteer hours were spent cleaning, re-organizing, and updating the spaces in the herbarium. Through these efforts, we have been able to clarify the status and health of our collections, as well as develop effective workflows and protocols. Furthermore, we have identified areas for future efforts to ensure a well-maintained and high-quality collection of plant specimens here at the UNM Herbarium.



Mounting Space Before



**Mounting Space After** 

### **Mounting Space**

The main workspace, once cluttered with imaging tech, is now a bustling space for mounting and repairing specimens.

#### **Imaging Room**

A room previously used as storage for various odds and ends is now a highly efficient room fitted with two specimen imaging stations.



**Imaging Room Before** 



**Imaging Room After** 



Storage Room Before



Storage Room After

### **Storage Room**

The herbarium storage space has been cleaned up and organized, allowing collectors near and far a space to resupply quickly before collection trips.

# Collection Development: Type Specimens

In 2022, the Type specimens collection was re-inventoried and reorganized, and over 40 type specimens were added to the UNM Herbarium. This work, facilitated by our Herbarium Graduate Assistant Joseph Kleinkopf, resulted in an updated number of nearly 200 type specimens.

# What are types?

Type specimens are representative specimens of their respective taxa, and as such are incredibly important. Taxonomic strengths of the UNM Type collection, unsurprisingly, include **Cactaceae** (43 specimens) and **Asteraceae** (24 specimens).

Right, the oldest type in our collection, an isotype for *Heuchera* wootonii, was collected by Elmer Wooton in 1897 in the White Mountains of Lincoln County!



Our updated Type collection

**35** Holotypes

116 Isotypes

24 Paratypes

6 Syntypes

**Neo/Lectotypes** 

# **Field Work**

Despite New Mexico being one of the most botanically diverse states in the country, it is drastically under collected. Our survey of the collection in 2022 illuminated the need to increase collection efforts, and in return we conducted the most field work that had occurred in the herbarium in over a decade.

Below are just some of the field and research projects being conducted at the UNM Herbarium. In 2022, we hosted six graduate students and one postdoctoral researcher.



## **Alpine plants**

One floristic focus of the UNM Herbarium is alpine plants. Curator Hannah Marx, collections manager Harpo Faust, and PhD student Joseph Kleinkopf are interested in collecting alpine plants to understand their ecology and evolution. Left, Lauren Urenda, Jeremiah Westerman, Hannah Marx, and Harpo Faust processing specimens in Latir Wilderness, New Mexico.

## **Chihuahuan Desert**

Bryana Olmeda is a Masters student interested in the floristic diversity of the Chihuahuan Desert in New Mexico. A better floristic inventory of this ecoregion is vital to understanding the diversity of plants in New Mexico. Right, Bryana pressing late season Asteraceae in the Caballo Mountains, New Mexico.





## **New Mexico wetlands**

The wetlands of New Mexico are poorly studied, despite their important role in hosting a number of species endemic to the state. Collections Manager Harpo Faust has started collecting in these habitats to better understand their plant diversity. Left, Gwen Houston-Hatton collects sedges on Chochiti Lake, New Mexico.

# Outreach & Community Engagement

# **Plant Identification Nights**

In April 2022, the UNM Herbarium hosted their inaugural Plant Identification Night. Due to high demand, we continued this with a 4-event series in the fall. We had 32 participants keying pressed plant specimens at our largest night.

In May 2022 the UNM Herbarium hosted the first ever plant collection training at the Sevilleta Field Station.

We are excited to continue to offer both of these events regularly. Look out for more events in the coming year!







## **Community Engagement**

Classes from across the UNM campus came to the Herbarium to engage with the specimens. Of note, the collection was used by students in Plants and People (BIOL 406) and Introduction to Art and Ecology (ARTS 141).

Tours provided to classes and other educational groups led to five new student employees and 11 new volunteers who are now trained and active members of a vibrant herbarium community. It is thanks to these people that the herbarium is looking so great today!

# The People at the UNM Herbarium



Hannah Marx
Curator & Assistant Professor
hmarx@unm.edu



Harpo Faust
Collections Manager
harpofaust@unm.edu

### **Herbarium Personnel**

Graduate Assistant (Spring) ...... Carolina May

Graduate Assistant (Fall) ...... Joseph Kleinkopf

Postdoctoral Associate ...... Lizzie Lombardi

Undergraduate Student Staff ...... Gwendolyn Houston-Hatton

Xavier Cardona

Jeremiah Westerman

Shelby Haney

Zoe Vermette

# Support the UNM Herbarium

As the largest herbarium in the state, the UNM Herbarium takes the responsibility to maintain and actively curate the collection seriously. On top of this we are devoted to growing the collection and training aspiring botanists.

This work could not be done without the support of the botanical community here in New Mexico. We want to extend gratitude to the many students, volunteers, associates and botanists who have helped maintain this herbarium.



Lastly, a special thank you to those who donated to our herbarium in 2022. Your support helps us continue to maintain this incredibly important collection.



Please consider donating!

#### More Information

http://www.msb.unm.edu/divisions/herbarium/index.html

#### **Contact Us**

Email Dr. Marx: hmarx@unm.edu

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Call the Herbarium: (505)-277-1360