

#### A CHAPTER OF THE NATIVE PLANT SOCIETY OF NEW MEXICO



# BULLETIN JULY, AUGUST, SEPTEMBER 2011

**Editor: Charles Holmes** 

# PROGRAMS

All programs are free and open to the public. Meetings are usually the third Fridays of the month at 7:00 pm at WNMU's Harlan Hall, with refreshments following the program.

Activity updates and further details will be posted on our website www.gilanps.org.

Friday, September 16th, 7:00 pm, Room 100, Harlan Hall, WNMU Campus. Dr. Richard Felger will speak to us about Desert Islands and Sky Islands in the American Southwest.

Bio-islands may be a small desert nurse-tree sheltering a diverse insular community surrounded by blazing hot sand, a desert island in the Gulf of California, a desert mountain or a sky island in the Gila National Forest. Let's explore the dynamic desert and sky islands in southwestern North America from the past 40,000+ years to the predicted near future.

## FIELD TRIPS

Hikers meet at 8:00 am in the south parking lot of WNMU's Fine Arts Theatre the morning of the hike to arrange for carpooling. Participants must sign a release-of-liability form at that time and will receive a list of native plants in the hiking area.

Bring water, lunch, a hat, sunscreen, and good hiking shoes. For more information, call Deming Gustafson, 575-388-5192. Destinations may be changed because of weather conditions. For updates, go to www.gilanps.org.

## July 17th - A Visit to the Silva Creek Botanical Garden.

Charles Holmes, who is the Volunteer Manager of this garden, will lead the group on a tour of this approximately ½ acre plot near the northern end of Virginia St. He will discuss not only the many varieties of native plants, shrubs and trees growing there, but also the system of water collection and preservation that has served the garden from its creation four years ago.

## August 21st - A trek in Myers Canyon.

Myers Canyon is one of our favorite places because of the wide variety of plants growing there and the geological nature of the place. It is located a little way off the Georgetown Road. We hope to see Blue-eyed Grass (Sisyrinchium demissum) and some Coral Bells (Heuchera sanguinea) in this riparian canyon. Hiking boots are required here.

# September 18<sup>th</sup> - Spirit Canyon off Mimbres Road.

There are many kinds of plants in this shady canyon which ends in a sheer cliff. You will be looking up at this spectacular geological site where lots of Heuchera (Coral Bells) hang off its face. There are many other wonderful species to be seen, including the Rocky Mountain Juniper (Juniperus scopulorum), which is relatively rare. We'll see many late summer blooms and seeding plants.

## ANNOUNCEMENTS

## **Annual Plant Sale 2011 Report:**

The 2011 Plant Sale was quite a success! Among the factors that contributed to that outcome were having the pre-sale in the Silco Theater (giving us more exposure), having the entire plant list and information online at our website, and permitting online payments. Thirty-three percent of orders were fulfilled using web facilities.

The profit from this year's sales put an additional \$2551 in our coffers. I think we'll do this again next year.

#### **GNPS Board of Directors Report**

This is a new feature of the Bulletin. It will summarize recent decisions by your Board of Directors to keep you better informed about the special activities of the GNPS.

The Board Meeting in May 2011 reported that:

Debbie Bird resigned as Treasurer and Ron Groves has been appointed to take over this position. The GNPS has given the Foundation at WNMU the sum of \$1,000 to be distributed to deserving botany students for various purposes. Professor Bill Norris will select the students. The new treasurer has been authorized to move \$4,000 (half of the balance in our First New Mexico Checking Account) to our Edward Jones investment account.

Information was distributed about the upcoming state organization (NPSNM) meeting in Santa Fe in early August. We also learned that the state organization has a new Administrative Support person.

Keller Suberkropp, our Vice President, and Jeff Boyd, our new Education Chair, talked on April 29<sup>th</sup> about trees in the Mogollon Box to eight groups of 5<sup>th</sup> graders as part of the activities of the Children's Water Festival (sponsored by GCEC). We also approved a contribution of \$500 to the Gila River Festival for this September.

# REPORTS

On Friday, April 15<sup>th</sup>, Mark Donnell, a pharmacologist, anesthesiologist and strong proponent of the preservation of species, spoke to a large crowd about his knowledge of Medicinal Plants in New Mexico.

Here are a few of a rather long list of plants that have medicinal uses, some of which might surprise you.

Cercocarpus montanus (many uses) Cleome serrulatum

Populus tremuloides (similar to aspirin among many other things)

Lobelia cardinalis Anemopsis californica (Yerba Mansa)
Abies concolor Solanum eleagnifolium (alkaloid weed)

Artemisia filifolia (a sage) Sphaeralcea laxa

Ericameria nauseosa (Chamisa) Datura wrightii (watch out!)

Fallugia paradoxa Peganum harmala (noxious weed)

There are many, many others. He told us that usually the roots and leaves were used and not the flowers. Of particular interest, he advised that larger drug companies would not try to market any of these substances because they do not consider them sufficiently profitable.

Here are a few plants that have medicinal uses: morphine, taxol (chemotherapy, but not made now), and vincristine (also used in chemotherapy).

On April 17th, a large group of field trippers made our way to two sections of the C Bar Ranch Road to check out the spring plant growth. We did not expect to find much because of the drought, but we were pleasantly surprised to have our expectations exceeded.

Among the many trees, shrubs and herbs that we discovered were *Packera neomexicana* (New Mexico Groundsel), *Hymenoxys rusbyi* (Rusby's Rubberweed), *Prunus serotina* (Southwestern Chokecherry), which we might have expected to be in a more moist area; *Rhamnus (Frangula) californica* (Coffeeberry), *Orobanche ludoviciana* (Louisiana Broomrape), *Ribes aureum* and *cereum* (Golden Currant and Wax Currant), actually blooming; *Calliandra humilis reticulata* (Dwarf Stick Pea), the ground-hugging kind, and our old friend, *Polanisia dodecandra* (Clammyweed), which could easily be in your own yard without you having planted it.

5.

On May 15<sup>th</sup>, some of us made a field trip to Hoodoo Canyon in the last mountainous area before entering the flats leading to Lordsburg.

This is usually a very dry area though hardly more so than our own area recently. I guess we were rather surprised to find so many species that seemed to be doing OK. Among those that particularly caught our attention were a giant Juniperus monosperma (One-seeded Juniper), many blooming Fallugia paradoxa (Apache Plume) and Chilopsis linearis (Desert Willow) in its more natural environment, Lycium pallidum (Pale Wolfberry), Agave palmeri (Palmer's Agave), Ephedra trifurca (Mormon Tea) and Quercus turbinella (Scrub Live Oak).

Even though it was so dry, we were not disappointed in what we found. It just proves that nature finds a way.

# SPECIAL FEATURES

#### A Rose by any other name smells just as sweet

## by Russ Kleinman

Well, that's certainly true. However, when you start trying to learn the scientific names for fruits of some of our common plants, things can get a bit muddy. Not everything is what it seems. The confusion stems from the words botanists use to describe certain fruits, trying to distinguish them from each other. For instance, a fruit with a stone inside a fleshy coating is called a "drupe." And, a "nut" is a hard-shelled fruit that doesn't open on its own and doesn't have a fleshy exterior. The following more exact definitions cause botany students real headaches:

A walnut is a drupe and not a nut.

A raspberry is an aggregate of drupes and not berries.

Pine "nuts" aren't even a fruit---they are seeds and not nuts.

A coconut is a drupe and not a nut.

The problems get worse when you consider the types of fruits ---

A coffee "bean" is a drupe and not a bean.

A strawberry is an aggregate of achenes and not berries.

A peanut is a legume or pod and not a nut.

Juniper "berries", like pine "nuts", aren't a fruit at all but are cones and not berries.

OK, so what difference does all of this make? It makes no difference in the supermarket where we all know what we mean by the common terminology.

But, in the botanical scientific world, it helps for everyone to be thinking about the same basic fruit type when a field researcher, for instance, is describing a new plant from Madagascar and describes the fruit as a drupe. The scientific meaning of the word "drupe" and its usage as an exact description of the fruit helps keep us all on the same page.

Oh...and that rose? Its hip is an aggregate of achenes.

# **WAIT A BIT....CAT CLAW!** by Angela Flanders

Shrubs of the MIMOSACEAE subfamily can be very confusing, especially in the Silver City area where people are inclined to call Wait-a-Bit by the name of Cat Claw. Oh! You know well the plant to which I refer! Mimosa aculeaticarpa var. biuncifera is a shrub which we often encounter while hiking when we get off the trail (and even on the trail sometimes.) Even though it can reach a height of 8 feet, its blood-thirsty desires seem to keep it below eye level at knee to hip height, where it surrounds novice as well as seasoned hikers, pulling, scratching and ripping at clothing and skin.

There are three such shrubs in our area belonging to the same family, FABACEAE, and the same subfamily, MIMOSACEAE, all with the same bad attitude. I have listed below some identifying characteristics. After all, if we are going to be cursing a plant, wouldn't it be nice to know which one?

#### **LEAVES**

alternate, bipinnate, leaflets 3/8" to 1 3/8" long - Mimosa aculeaticarpa var. biuncifera alternate, bipinnate, leaflets 3/8" to 1 3/8" long - Mimosa dysocarpa alternate, bipinnate, leaflets 2 3/8" to 4 3/8" long -- Acacia greggii

#### **FLOWERS**

pale pinkish to pale cream, spherical clusters, 10 or less stamens per flower - Mimosa aculeaticarpa bright pink clusters, 2" cylindrical brush, 20-30 buds, 10 or less stamens, fragrant - Mimosa dysocarpa pale yellow clusters, 2" to 3" cylindrical brush, 20-100 stamens per flower, fragrant - Acacia greggii

#### **FRUIT**

dry, flat pods, up to 1.5" long with curved prickles along margins - Mimosa aculeaticarpa pods velvet to the touch, .75" to 2.5" long with curved prickles along margins - Mimosa dysocarpa flattened, twisted pods, irregularly constricted, 1.5" to 4" long -Acacia greggii

#### SPINES

recurved to straight thorns in pairs - Mimosa aculeaticarpa recurved in groups of 3 along a three-sided stem - Mimosa dysocarpa recurved, scattered between nodes, not paired - Acacia greggii

#### HEIGHT

**COMMON NAMES** < Wait-a-Bit, Wait-a-Minute, Catclaw Mimosa up to 8 ft. - Mimosa aculeaticarpa 3 to 6.5 ft. < Velvetpod Mimosa, Velvety Mimosa - Mimosa dysocarpa 6.5 to 20 ft. - Acacia greggii < Catclaw, Arizona Catclaw

Other similar plants that may be found in our area are Acacia angustissima, Acacia neovernicosa, Calliandra humilis and Calliandra humilis var. reticulata. None have thorns.

#### **REFERENCES**

Allred, Kelly, Flora Neomexicana I: The Vascular Plants of New Mexico

Carter, Jack & Martha & Donna Stevens, Common Southwestern Native Plants

Carter, Jack, <u>Trees and Shrubs of New Mexico</u>

Felger, Richard Stephen, Flora of the Gran Desierto

Ivey, Robert DeWitt, Flowering Plants of New Mexico

Kleinmann, Russ, www.wnmu.edu/academic/nspages/gilaflora/index.html >Vascular Plants of the Gila Wilderness

NMBCC herbaria www.swbiodiversity.org/seinet/index.php SEINET

NPIN Native Plant Database - Lady Bird Johnson Wildflower Center www.wildflower.org/plants Jercinovic, Gene <newmexicoflores.com>