

# MANZANITA

NEWSLETTER OF THE KANE  
COUNTY CHAPTER OF THE  
UTAH NATIVE PLANT SOCIETY

April 2006 News

## **April Meeting: Thursday, 20 April - Wildflowers of Glacier National Park: Past, Present, and Future by Peter**

**Lesica** Our April meeting is being postponed from its normally scheduled time at the first of the month to accommodate a special, out of state visitor from Missoula, Montana. Peter Lesica is one of Montana's leading botanists/ecologists and has published a wide array of scientific papers and non-technical articles ranging from techniques for monitoring rare plants and the ecology of prairie riparian woodlands to the paradox of locally abundant rare species. He is currently working on revising the flora of Montana and on a photographic guide to wildflowers of southern Utah. Pete has conducted research for many years on the flora of Glacier National Park on the Montana-Canadian border (as well as authored or co-authored two floras of the park) and will describe some of his many interesting discoveries in a well-illustrated slide presentation.

Please note that the meeting will be held on Thursday night (instead of Monday or Tuesday as usual), but will be at the normal time and place (7 PM in the public meeting room of the Grand Staircase-Escalante National Monument, on highway 89 east of Kanab next to Holiday Inn). And as always, there will be desserts and general merriment following the presentation.

## **St. George Field Trip, Saturday April**

**15:** We will resume outdoor activities with our first field expedition of the season to the St. George area on Saturday, April 15. The plan is to explore the gypsum areas around Bloomington for the highly threatened Dwarf bearclaw poppy and other oddities, then travel to the slopes of the Beaver Dam Mountains and Beaver Dam Wash to take in some of the Mohave flora that barely enters SW Utah. Members are encouraged to carpool from Kanab (meet at the Grand Staircase-Escalante NM visitor center parking lot at 8 AM for the caravan) or can



*Above: Dwarf bearclaw poppy (Arctomecon humilis) is probably Utah's most critically endangered plant species. It is restricted to gypsum rich soils in the vicinity of St. George, where it is threatened by loss of habitat to urban growth, competition from annual weeds, mortality from motorized recreation, loss of native pollinators, and poor reproduction and survival in periods of drought. This member of the poppy family is listed as Endangered under the US Endangered Species Act. We hope to see this species on our April field trip to St. George. Photo by W. Fertig.*

meet us in St. George at the NE corner of the Bloomington Wal-Mart parking lot (off exit 4 of I-15) at 10 AM. Look for my black Toyota pickup with a black shell – I'll be wearing the white scarf.

## **UNPS State Board Meeting – Saturday,**

**April 22:** On April 22, the state board of the Utah Native Plant Society will be holding a meeting and field trip in Escalante. The exact itinerary and details are still being determined – look for an announcement by email in the coming weeks. All members in the local area are invited to participate in the field trip and board meeting.

## **You too can join the UNPS Native**

**Cacti Yahoo Group:** (From Bill Gray, UNPS) UNPS recently created a Utah Native Cacti feature for members who have a special interest in our native cacti. It is open only to paid-up UNPS members. You will not be included without making an active request to join. Here's the website if you'd like to join: <http://groups.yahoo.com/group/UNPSNativeCacti/>

We work with a Yahoo list serve which allows members to post messages to the group, and to place photos and articles in an on-line repository. If you have any questions, please check with:

Kipp Lee (kipp\_lee@comcast.net) or  
Dorde Woodruff (jodw@earthlink.net)

**Jan Gisler's Soil Recipe:** [Editor's note: The *Manzanita* ordinarily does not print recipes, celebrity gossip, or diet tips, but due to popular demand, we are breaking editorial policy to print the soil recipe presented by Jan Gisler at our February meeting.]

Here is the soil recipe as we use it at Zion: The units are by volume and we use a 5-gallon bucket as the measure. If another size measure is used, the Osmocote needs to be changed to fit.

<u>Ingredient</u>	<u>Volume</u>
Vermiculite (ours is free of asbestos):	1 1/2 measure
Sterile sand :	1 measure
Turface :	1/2 measure
Peat Moss	2 measures
Osmocote (13-13-13)	32 ounces

Turface is an ingredient in kitty litter. "Johnny Cat" is made of turface with no other ingredients. If you check kitty litter ingredients and it says clay particles, that usually is turface. Osmocote is a granular, time-release fertilizer and can be found at any garden center, Lowe's, Star Nursery, etc. It needs to be 13-13-13. Vermiculite also can be found at any nursery center, however I don't know if it is asbestos-free as is that which we buy for use at Zion. I believe they purchase our supplies (in large quantities, of course) at Steve Reagan Company in St. George. An alternative for vermiculite would be perlite which is also available at nursery/garden centers. JG

## Botanica

(Or odds and ends from the botanical world)

### Seed Banks Save Rare European Grasses

It is not often that an extinct species gets a second chance, but fortune recently smiled on an annual grass endemic to calcareous meadows of eastern Belgium and adjacent France. The "Brome of the Ardennes" a.k.a. *Bromus bromoideus* was once locally abundant in the farming provinces of Liege and Luxembourg (not to be confused with the independent nation of the same name), but changes in agricultural practices in the early 1900s resulted in a precipitous decline and no plants have been observed in the wild for nearly 70 years. For several years, the species continued to persist under cultivation, but ultimately these populations died out

as well. Fortunately, small numbers of seed were maintained in a number of university and private collections, although often not under optimal conditions (one set of seeds was discovered in an attic).

In 2004, Dr. David Alpin, a British botanist working at the National Botanic Garden of Belgium, became intrigued by the demise of the Brome of the Ardennes and began consolidating the surviving sets of seed. A small batch was dispatched to Kew Garden's Millennium Seed Bank for germination trials. Despite low viability (ranging from 1-35% for various seed collections), Kew researchers successfully germinated seed in September 2005, and for the first time in many years *Bromus bromoideus* was once again alive and well. Seedlings are now being grown in the greenhouse and in the wild to increase the number of available seeds and to hopefully reestablish natural populations in Belgium.

Although most seed banks used for plant conservation are stored "*ex situ*" (off-site in a museum or laboratory), a recent case study in Austria has demonstrated the utility of on-site (*in situ*) seed banks in species recovery. Moss grass (*Coleanthus subtilis*) is a rare grass found naturally on exposed mud flats bordering small ponds across much of central Europe. Its range has contracted greatly in recent years due to the loss of wetlands on the continent and the grass was thought to be extirpated in Austria until its rediscovery in 2000. Researchers at the BOKU University in Vienna began to systematically reinventory historical populations of Moss grass throughout Austria and collect soil cores to see if any seeds remained. To their surprise, viable Moss grass seed was still present in 6 "extinct" populations and often at high density. These seeds, stored safely on-site and awaiting the next drought to expose suitable mud bank habitat, are now being used to establish new populations elsewhere in Austria. WF

### Join the Utah Native Plant Society

Membership categories:

Student \$9, Senior \$12, Individual \$15, Household \$25

Make check payable to Utah Native Plant Society and send to:  
Membership,  
Utah Native Plant Society  
PO Box 520041  
Salt Lake City, UT 84152-0041

This edition of the Kane County Native Plant Society news was written by Walter Fertig, Jan Gisler, and Bill Gray. Reader submissions are welcome. For more information about upcoming events, contact Walt Fertig at 689-0224 or walt@kanab.net.