NATIVE PLANT SOCIETY OF NEW MEXICO
March 1979 Newsletter

March Meeting: On Wednesday, March 21st, the Native Plant Society of New Mexico will hold a general business meeting to organize the Annual NPS Plant Sale and discuss other spring activities. The Plant Sale is scheduled for May 19th, so there is limited time to get ready. Several members have already met informally to pot plants and another planting party will be held soon. We are also trying to organize a plant sale in Albuquerque, where a new chapter will be launched at that time. We welcome your ideas and participation. The meeting will begin at 7:30 p.m. in Lab 118 of the Laboratory Bldg. at St. John's College.

NEWS & NOTES

Mark your calendars: The Annual NPS Plant Sale will be held Saturday, May 19, 1979, from 9 a.m. to 5 p.m., at the Institute of American Indian Arts on Cerrillos Road, Santa Fe, New Mexico. All who participated last year said they had a good day and the NPS also benefited 15 percent on all sales. We ask that anyone interested in selling plant materials this year join us at our planning meeting March 21st. We also welcome any extra help we can get from the membership that day. Please support your NPS in this annual event.

Plant Tours with Myra McCormick of Bear Mountain Guest Ranch, Silver City:

March 10,11 - See early wildflowers in the Cooke's Range, Florida Mountains
April 14,15 - 6th Annual Desert Wildflower Show, City of Rocks, Gila River
May 19,20 - Guadalupe Canyon overnight bird/wildflower tour; see Mexican border "escapes"
June 2,3 - Edible Wild Plant Workshop; pot herb/salad greens identification

Tours leave from the Guest Ranch and charges range from $5.00 to $15.00 depending on if you ride in Myra's bus or drive you own car. See add this issue for address and phone number.

For those more advanced field botanists, we have just located a few copies of Manual of the Vascular Plants of Texas by Donovan Stewart Correll and Marshall Conring Johnston. Write to Green Horizons, 500 Thompson, Kerrville, Texas 78028. Many of the species of the eastern half of New Mexico are included in this large, complete technical work (no illustrations, just keys). $42.50

ENVIRONMENTAL ISSUES

BLM Wilderness: The Roswell area District's proposed list of wilderness areas to keep is short and apparently involves only roadless areas in the Guadalupe Escarpment foothills, rather than out on the Plains. In an effort to preserve a sample of shinnery-type vegetation, please write to James H. O'Connor, District Manager, Bureau of Land Management, P.O. Box 1397, Roswell, New Mexico 88201. Tell him that a roadless area in the shinnery type, Quercus havardii/Andropogon spp. (grasses up to six feet tall!), should be retained for extensive inventory. The New Mexico Natural History Institute is working hard for all of us to get a good list of BLM wilderness areas now to avoid the even harder task of getting something that had been dropped back in to the wilderness review.

ON SOLAR GREENHOUSES*

The New Mexico Solar Energy Association sponsors weekend workshops with community groups to build solar greenhouses. Of the 30 in New Mexico last year, half were on private residences, five were on Navajo reservations, one was on a pueblo and one at a senior citizens' home in Albuquerque. This year greenhouses have been built with the local food coops in Santa Fe and Las Cruces. Most are attached to buildings and have part of the roof clear to capture the sun's energy in winter. Having part of the roof shaded through adjustable layers of corrugated tin and fiberglass, can actually result in higher greenhouse temperatures in winter (outside temp. 30°F.) than in summer (outside temp. 80°F.). You can further reduce the problem of overheating in summer by altering the angle of the front face.

After the foundation is laid, doors or vents to the house are drilled. Then a ledger plate is built and attached. The framing structure can be built in components on the ground so that it may be disassembled and moved. After glazing and roofing, the greenhouse needs to be caulked and insulated to make a tight seal and avoid heat losses. Even on cloudy, winter days an attached solar greenhouse will be warm, given good insulation and no air leaks. Double glazing is often used to improve insulation by providing a dead air space that reduces heat loss. If thermopane glass is used instead of poly, strips of neoprene rubber on the frame members are used to adjust for the expansion and contraction of glass.

Corrugated materials for the roof are popular because they can better withstand the impact of hailstorms than flat materials. Fiberglass-reinforced plastic, such as Lascolite, is recommended for the outside glazing, and a poly film like Monsanto 602 for the inside. Some of the new acrylics have good properties: they last a long time and can withstand high temperatures. Some negate the need for double glazing, but are expensive. Tempered thermopane is very strong and has the advantage of being more permanent than plastic, but you have to use 2X6' or 2X8' boards instead of 2X4's, which makes framing more expensive. Glass which is low in iron impurities that reflect light is also getting hard to find; look for glass that has blue edges instead of green.

In designing a solar greenhouse, it is wise to allow space for 55-gallon drums or other storage containers. Anything in the greenhouse will help store energy (plants, soil, rock beds), but probably the best media for reducing wide fluctuations in temperature is water. For every square foot of glazing, use 2-4 gallons of water or 80-90 square feet of massive materials. The NMSEA may be getting 30 55-gallon drums a month from a bakery in Albuquerque to provide a regular supply to the public. Sealed drums, if cleaned before using, should last 15-20 years. Putting oil on top can help reduce evaporation. Sometimes there are ads in the paper for 17-gallon, rectangular drums made of aluminum that can be stacked more easily and look attractive. Collectors should be painted a dark color to absorb the sun's energy, but it doesn't matter if its glossy or flat paint. White paint is often used for the frame structure to help scatter the light.

Utilization of the energy collected in a greenhouse is provided by upper and lower vents which allow warm air to move into the living area and cool air back

*Notes taken from a presentation given by Alex Wilson of the New Mexico Solar Energy Office in Santa Fe. Thank you, Alex.

into the greenhouse. Low watt fans may be used to facilitate this flow of air, creating a vacuum effect. Vents to the outside are also important in summer for cooling as well as to supply fresh CO_2 to the plants. These are strategically placed on the west side of the greenhouse because our winds usually prevail from the southwest. The shading effect provided by an attached greenhouse to the south wall can actually keep a house a little cooler in summer, even in Las Cruces. Curtains or blinds may be used to help shade the greenhouse in summer, or you can use plants either on the inside or outside the greenhouse.

Since light is coming primarily from one side, distinct microclimates occur in a solar greenhouse, which means good management is essential. You will want to put plants that can take direct sun and wide fluctuations in temperature up near the front. You can use this area to start seedlings before spring. The back of the greenhouse is a good place for houseplants because of the lower light and more stable temperatures. Growing a variety of plants helps to reduce the bug problems. Light soils are good for the greenhouse, though it is also good to have a rich organic material and mineral source, since minerals get used up rapidly. Gravel or other inert media combined with a daily nutrient solution have been used successfully for hydroponics.

The NMSEA, leaders in the field of solar energy, has 2500 members in 50 states, half are out of state and in 17 foreign countries. Besides the workshop program, the NMSEA offers consultation and education services (showing teachers how to incorporate solar energy teachings in the schools) and has a publications program that produces a monthly Bulletin. In addition to greenhouses, there is growing interest in space heating, water heating, crop drying and other uses of solar energy. Consultants are operating under a busy schedule at this time of year, so if you need advice, call for an appointment.

Membership: Join the Native Plant Society of New Mexico by writing Carol Dimeff, Route 4, Puesta del Sol, Santa Fe, New Mexico 87501. Dues are $6.00 per person or $8.00 for family memberships, a tax-deductible contribution to a non-profit organization if you itemize. Membership entitles you to receive our monthly newsletters and to learn about our meetings, field trips and plant sales. One third of your dues is forwarded to the chapter of your affiliation.

Booklets: Our revised publication, "Native Plants for Landscaping in Northern New Mexico", including the 8-page supplement, is 75¢ plus 40¢ postage per copy. The southern version, "Native Plants for Landscaping in Southern New Mexico " is also available at the same price by writing to the editors c/o Route 4, Puesta del Sol, Santa Fe, New Mexico 87501.

Illustration: Gutierrezia sarothrae, Broom snakeweed, or matchbrush, is now beginning to leaf out on the mesas of New Mexico. This low shrub is one of the few unpalatable perennials left after cattle have eaten their fill. We hear that it is difficult to transplant, but it sets seed well, so if you want a tough, low perennial border, try growing some at home. The seed can be collected now. Not a very effective soil binder, according to Pauline Patraw in Flowers of the Southwest Mesas, whom we thank for this illustration (page 4).

Classified Ads

BEAR MOUNTAIN GUEST RANCH
Guided wildflower tours.

Myra McCormick
Silver City, N.M. 88061
Phone: (505) 538-2538

AGUA FRIA NURSERY
Specializing in perennials and native plants.

Philip and Bob Pennington
1409 Aqua Fria
Santa Fe, New Mexico 87501
Phone: (505) 983-4831

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Native grasses need water only until established. Thereafter, they will last 'till the next ice age on precipitation alone.

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GRASSLAND RESOURCES
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plants of the southwest
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Nursery specializing in native wildflowers, shrubs & trees

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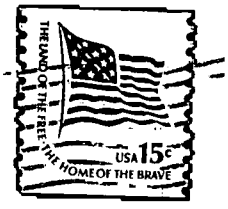

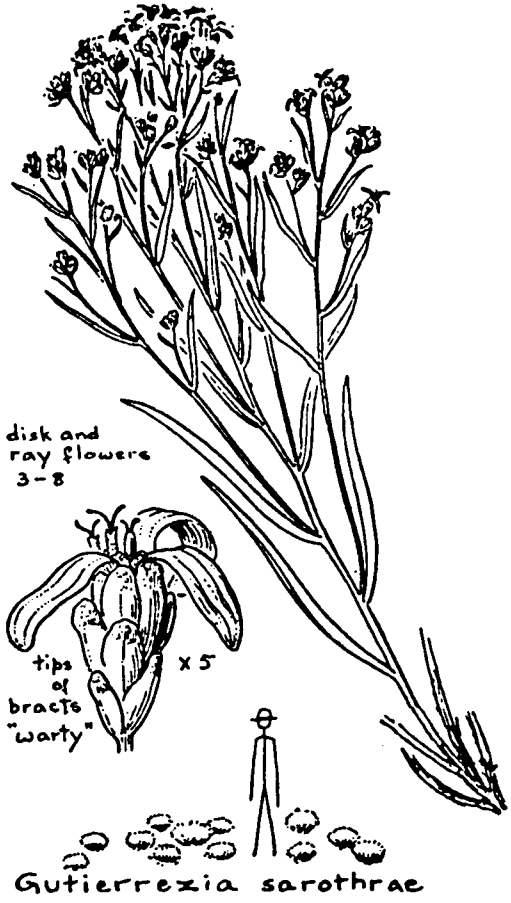

Gutierrezia sarothrae