WILDFLOWERS

The Bulletin of the Botanical Society of Western Pennsylvania • March 1999

Next Meeting is March 8

The next meeting will be Monday, March 8, at 8:00 p.m., at the Kresge Theater at Carlow College, 3333 Fifth Avenue, Pittsburgh, PA (Oakland).

Member **Chuck Tague** will present "Heart's Content". He will talk about the history and uncertain future of this small remnant of the once vast White Pine-Hemlock-Northern Hardwood Forest in northeastern Pennsylvania. Chuck has been writing about and photographing this complex ancient forest for over a decade.

Snow Trillium

One of the first harbingers of spring in the Pittsburgh area is Snow Trillium *(Trillium nivale)* It flowers from early March through early April. This trillium usually occurs on limestone derived soils, though in some parts of the eastern United States, it occurs on loess and alluvial soils, according to Frederick W. Case, Jr. in *"Trilliums"*.

Snow Trillium does not compete well with other vegetation and requires raw, open soil, kept so by the action of rock weathering and gravity. Plants grow in crevices of limestone outcrops, talus and creeping soil at the bases of ledges, sliding soil at the tops of cliffs, or debris at the base of weathering larger rocks and boulders.

Otto E. Jennings, in *"Wildflowers of Western Pennsylvania and the Upper Ohio Basin"*, says this "charming little trillium almost invariably grows on steep lower slopes in protected ravines or narrow valleys where hemlocks now do or formerly did occur".

Early in the spring of 1998, my friends and I visited several sites in Westmoreland and Allegheny counties where snow trillium was known to grow. We also explored areas where we thought snow trillium might grow based on the presence of limestone derived soils discerned by topographic, soil survey, and geologic maps.

While visiting these sites, we noted associated plant species, slope aspect (the direction the slope faces), and the presence of rock outcrops.

Plants associated with Snow Trillium were Virginia Spring Beauty, Ovate-leaved Ragwort *(Senecio obovatus)*, Sharp-lobed Hepatica, Hop Hornbeam *(Ostrya virginiana)*, Northern Red Oak, Basswood, and Sugar Maple. Eastern Hemlock was present at the occurrences in Allegheny County. Generally, Snow Trillium was observed in forested areas with a closed canopy.

Generally, the sites were at or adjacent to relatively steep slopes. Limestone float or outcrops were observed at or in close proximity to most of the occurrences in Westmoreland County. (Float is a term used for gravel- to boulder-size rock fragments that have been transported downslope from bedrock outcrops). The sites in Allegheny County were near outcrops of shale which may be calcareous. Although slope aspect varied, most slopes had afternoon sun in the spring season.

Some of the populations tended to grow in fairly dense clumps. The clumpy populations were in areas that have a gentle slope where the soil would not be kept raw by the erosive action of

gravity. Could the clumps reflect some effects of growing on a gentle slope, the age of the population, or a method of seed dispersal such as ants?

If you have any observations or comments regarding Snow Trillium, please call Mark Bowers at (724) 872-5232, or write to him at 279 Orr Road, West Newton, PA 15089.

Mark Bowers

So why is the teasel not in the Asteraceae?

The answer to last month's question regarding whether or not the teasel *(Dipsacus sylvestris)* is a member of the Asteraceae family is "NO". The teasel belongs to the Dipsacaceae, a family directly 'behind' the Asteraceae in this phylogenetic order.

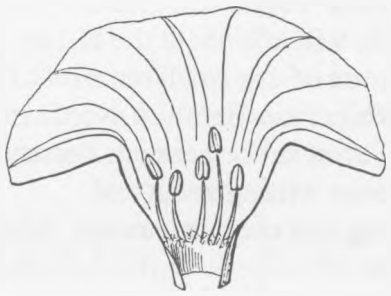
The Dipsacaceae and Asteraceae (or Composites) share many similar characteristics that can fool anyone. For instance, the teasel's inflorescence is somewhat like the inflorescence of a Composite. It has small tubular flowers arranged in a head, though the head is more elongated and spike-like. The inflorescence of the teasel also comes complete with receptacular bracts associated with each flower to fool you into believing this is a Composite. Similar to the Composite's inflorescence, encircling the teasels' head are involucral bracts. These are the long, pointy, and not to mention dangerous looking structures under the inflorescence.

The main characters lacking in the teasel are syngenesious (pronounced sin-gin-e-see-us) anthers and the advanced ligulate-type floret, both uniquely found in the Composites. Generally speaking, not having these two characters rank the Dipsacaceae "less advanced" when compared to the Asteraceae.

Families ranked 'below' the Asteraceae still share some major characteristics with 'advanced' families, such as inferior ovary, adnate stamens (epipetalous), and fused petals (sympetalous), yet each family has a unique set of characters separating and ranking them in ways primitive to the Asteraceae. Remember that in this classification, the evidence for determining a primitive and advanced character comes from botanists' interpretations of the plant fossil record. This evidence suggests early flowering plants possessed many free distinct floral parts, and as evolution and natural selection proceeded, reduction and fusion occurred.

Next month: the Valerian Family

Jeff Polonoli



Epipetalous stamens, inserted on, or adnate to, the corolla

Pennsylvania Rare Plant Forum will meet at French Creek State Park

The Pennsylvania Rare Plant Forum will be held Saturday, May 1, 1999, at French Creek State Park, in Elverson, Pennsylvania.

All people interested in the distribution and abundance of plant species in Pennsylvania are encouraged to attend this meeting. The Forum serves, indirectly but effectively, in an advisory role to the Bureau of Forestry for issues related to the conservation of the native flora of Pennsylvania.

Your input will be appreciated as we discuss issues related to the appreciation and conservation of our native flora. The primary task will be discussion of proposed changes to the list of Plants Of Special Concern In Pennsylvania (POSCIP).

This is also an excellent opportunity to socialize with other people, amateurs and professionals, who share your interest in the flora of Pennsylvania. We plan to take advantage of the later date this year with a nearby botanical foray after the meeting.

Motels are available in Morgantown, PA; camping and cabins at French Creek State Park. For information, contact Steve Grund at the Western Pennsylvania Conservancy, 209 Fourth Ave., Pittsburgh, PA 15222. Telephone: (412) 288-5401. e-mail: sgrund@paconserve.org

Steve Grund, Chair

BSA 1999 Joint Field Meeting to be held June 20-24

The 1999 joint field meeting of the Northeastern Section of the Botanical Society of America, the Torrey Botanical Society and the Philadelphia Botanical Club will be held from Sunday, June 20th to Thursday, June 24th, at Manchester College in North Manchester, Indiana, located in the north-central part of the state.

This area has interesting vegetation and flora, combining species of the prairie border and boreal regions with those of Midwestern deciduous forests. The meeting will include three days of field trips to savannahs, fens, and mature forests in the northern part of the state. Evening programs will introduce regional plant ecology and floristics.

The cost for the Field Meeting is $225.00 per person, and includes double occupancy housing, meals, field trips, transportation to field trips, programs, and hand-outs.

The deadline for registration is Friday, May 7, 1999. For more information, contact Dr. David J. Hicks, Biology Department, Manchester College, North Manchester, IN, 46962. Phone – (219) 982-5309. E-mail: djhicks@manchester.edu

Field Trip Schedule

Registration is not required. Everyone is welcome, including non-members. Trips are not canceled due to rain. Wear shoes that can get wet. For questions, call the trip leader or Loree at (412) 521-9425.

Saturday
March 27, 1999- **Little Sewickley Creek** in Herminie, Westmoreland Cty
Leader: Mark Bowers
(724) 872-5232
Time: 1:00 p.m.

Directions: We will meet at the park-and-ride at the Irwin exit of the PA turnpike. This exit is located between the Monroeville and New Stanton exits. From there, we will carpool to the site.

Expectations: Snow trillium. Possibly early spring ephemerals.

Trout Lily (Erythronium americanum) by Tammy and Janet Watychowicz

Get Well Soon

These three members are recuperating, or about to recuperate from, surgeries and hospital visits. Get well wishes to Mary Lou Brown, Sister Mary Joy Haywood, and Esther Allen.

Botanical Society of Western Pennsylvania – Mar 99
5837 Nicholson Street
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WILDFLOWERS - Bulletin of the Botanical Society of Western Pennsylvania

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WILDFLOWERS is published monthly by the Botanical Society of Western Pennsylvania. We welcome short articles of botanical interest, drawings, letters to the editor, and notices of botanical events and group activities. Articles, notices, drawings, etc. should be sent to the editor at the above address. Deadline for submissions is the 17th of the previous month.

The Botanical Society of Western Pennsylvania - Membership Information

The object of the Society shall be to bring together those who are interested in Botany and to encourage the study of this science and a knowledge of plants. Our members include both amateurs and professionals. Annual dues are $10.00 for individual and $15.00 for family. Students can join at half-rate. To join, mail your name, your address, and check payable to "Botanical Soc. of W PA" to Loree Speedy, 5837 Nicholson Street, Pittsburgh, PA 15217. Your membership includes a subscription to the monthly bulletin WILDFLOWERS.

The Society meets the second Monday of each month, September through June, at 8 PM sharp, at Trinity Hall or Kresge Theater, Carlow College, 3333 Fifth Avenue, Oakland. All are welcome. An informative program follows the business meeting. Visit the Botanical Society Homepage at
http://home.kiski.net/~speedy/b1.html.