

---

# WILDFLOWERS

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

---

---

## Next Meeting is December 13th

---

Our annual Christmas Party will be Monday, December 13, at 8:00 p.m., at **the Atrium of the A. J. Palumbo Hall** at Carlow College, 3333 Fifth Avenue, Pittsburgh, PA (Oakland). As you approach the campus on Fifth Avenue (heading toward downtown Pittsburgh), do not turn right into the Carlow Campus entrance. Instead, pass the entrance, stay in the right lane, and make the immediate right into the parking area. Park here and cross the street.

This is our annual "wild" Holiday Party. Members and guests can bring up to twelve botanical slides to share. Bring a holiday treat made with something from the wild! And don't stay away if you've nothing but your seat to share.

---

## Wildflowers...wishes

---

The Holiday season is here and I know you've been thinking "What can I give to all my friends who love wildflowers, gardens, trees, mushrooms, field trips, seeds and even lycopodiums?"

Try this green gift idea! Send an article or a botanical drawing for this newsletter. What better way to celebrate the winter holidays than to put pen to paper and share your love of plants.

Late December begins the collection of annual dues; \$10 individual, \$15 family, and students half-rate.

Renewals should be sent to Walt Gardill, PO Box 226, 9775 Grosick Road, Ingomar, PA 15127. New members should forward dues to

the newsletter editor, Loree Speedy, 5837 Nicholson Street, Pittsburgh, PA 15217.

Merry Christmas, and thank you for keeping the knowledge of plants a part of our cultural heritage!

---

## Nature by Max Henrici

---

*Max Henrici was a noted local nature columnist. This article was published in the Pittsburgh Sun-Telegraph in the 1940's.*

Unlike some botanists who, on finding an uncommon flower or fern, keep its location to themselves, W.E. Buker, professor of mathematics at the Perry High School, who botanizes for recreation, likes to share his discoveries with others who may be interested. To that I and other members of the Botanical Society owe a delightful field trip under Mr. Buker's leadership last Saturday, on which we saw at least two flowers and one species of fern which I, for one, had never seen before.

The flowers were the Allegheny Vine (*Adlumia fungosa*) of the Fumitory family, and the blue toadflax (*Linaria canadensis*) of the Figwort family. The fern was the purple cliff brake (*Pellaea atropurpurea*).

Our excursion was to Rock Point on the Conoquenessing Creek, near Ellwood City. Old-time Pittsburghers will remember Rock Point as a park where outings were held. I have a vague recollection of having been there on a picnic as a child 50 or more years ago—probably a picnic of the Park Avenue Presbyterian Sunday school. But I had not been there since and I was surprised to observe how

beautiful the property, long since abandoned as a park, is.

There are great rocks and boulders in the Conoquenessing at Rock Point. Our party ate lunch seated on one of the boulders while some small boys sat on an equally huge rock on the other side of the stream and fished. In a few minutes I saw them catch a black bass and a catfish.

Mr. Buker recently found the Allegheny vine in the county's North Park. Its discovery at Rock Point was a later development. It was growing by some rocks on a steep hillside, entwined about the rocks and shrubbery. Its delicate yellowish pink flowers remind one of Dutchman's breeches, squirrel corn and corydalis, to which, indeed, it is closely related. How it got its name of Allegheny vine I have not been able to learn. Some of its other common names are mountain-fringe, wood-fringe, canary vine and fairy-creeper. It gets its scientific name *Adlumia* from John Adlum, a Washington, D.C. gardener.

The blue toadflax is a very diminutive sister of our common yellow toadflax, better known in the Pittsburgh district as butter-and-eggs (*Linaria vulgaris*). None but a botanist, I suspect, would recognize the kinship.

Leaving Rock Point, we took the road from Ellwood City to New Castle, and it was in a field beside this road, a mile or two distant from the former town, that Mr. Buker showed us the purple cliff brake. This rare fern was growing on some limestone rocks in the midst of the field—rocks which in some cases had been weathered and eroded in such a way as to suggest the rocks in Colorado's famed Garden of the Gods.

This is the nearest station of the purple cliff brake to Pittsburgh. In his book "The Ferns of Allegheny County", Lewis S. Hopkins reports that the cliff brake has been found in Westmoreland County, but so far as I know it has never been found in Allegheny County.

---

## Back to Basics

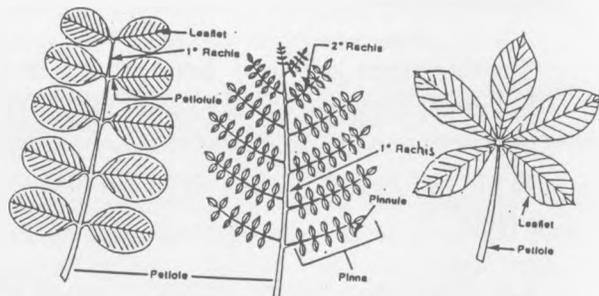
---

The first step towards plant identification is learning the 'botanical language'. When describing a pistil from a specific plant it is not enough to say, "a pistil is present". One needs terms to specifically describe the ovary, style, and stigma of the pistil.

First we should distinguish between **vegetative** and **reproductive** plant parts. Reproductive parts include all organs involved in sexual reproduction; the flower, flower parts, and even fern fronds that produce sori. The vegetative parts include all other plant parts such as roots, leaves, stems, and fern fronds not producing sori.

There are two kinds of leaves, **simple** and **compound**. A simple leaf has a single blade called a lamina that may or may not have a stalk called a petiole, but a simple leaf always subtends an axillary bud. A simple leaf can be pinnately lobed (blade lobes parallel to mid vein) or palmately lobed (lobes radiate like fingers from a palm).

A **compound** leaf is made up of more than one blade called **leaflets**. Each leaflet may or may not have a stalk called a **petiolule**. A leaflet differs from a leaf by never being associated with an axillary bud. Compound leaves can be described further by arrangement of the leaflets, as shown below.



From left to right: Pinnately, bipinnately, and palmately compound

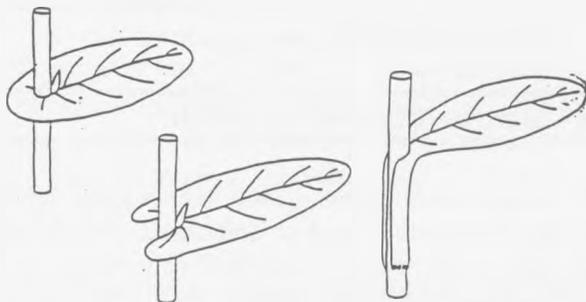
We all should know the four basic types of leaf arrangement, or **phyllotaxy**; basal, alternate,

opposite, and whorled. **Basal** refers to leaves developing from an underground stem or leaves closely aggregated with very short internodes positioned at the base of an above ground stem. An **alternate** leaf refers to one leaf at a node, **opposite** leaves refer to two leaves at a node, and **whorled** leaves refer to more than two leaves at a node.

**Cauline** leaves are those leaves positioned on a stem, in contrast to basal leaves or leafy inflorescence bracts.

Leaf attachment describes how the leaf is attached to, or has developed from, the stem. If a leaf has a petiole it is said to be **petiolate**. If it does not it is **sessile**. (One can also use the term subsessile when describing a leaf with a short petiole.) Sometimes the leaf blade will taper and continue the entire length of the petiole. This type of petiole is termed **winged**, as seen on *Aster cordifolius*.

Some plants like grasses have **sheathing** leaves in which the petiole or leaf blade forms a tube that completely or partially surrounds the stem above the node. A **clasp**ing leaf has the petiole or leaf blade projecting backward on each side of the node only, as seen on *Aster prenanthoides*. The last type of leaf attachment is that observed in Boneset (*Eupatorium perfoliatum*), and is called **perfoliate**. Perfoliate is a sessile leaf that has its blade completely surrounding the stem at the node and sometimes connate with an opposite sessile leaf.



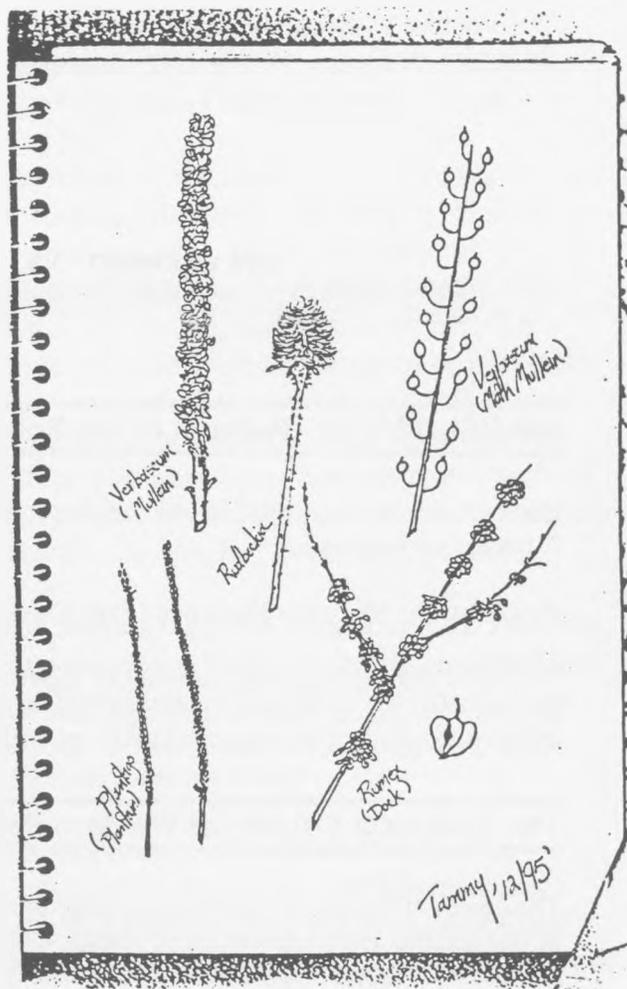
From left to right: Perfoliate, clasp, and sheathing leaf attachments

Jeff Polonoli

## Join Philadelphia and Washington D. C. Flower Show Tour

A bus trip to visit flower shows in Washington, D.C. and Philadelphia is being planned for March 10 through 12, 2000. The cost of \$365 includes two nights in a hotel, three breakfasts, three dinners, bus transportation and show admissions.

For more information, call Karen Schmidt at (724) 285-5525 or e-mail her at [kschmidt@spang.com](mailto:kschmidt@spang.com).



Winter notebook by Tammy Watychowicz

**Botanical Society of Western Pennsylvania – December 1999**  
5837 Nicholson Street  
Pittsburgh, PA 15217

Nonprofit Org.  
U.S. Postage  
**PAID**  
Pittsburgh, PA  
Permit No. 716

CARNEGIE MUS NATURAL HIST  
HERBARIUM  
4400 FORBES AVE  
PITTSBURGH PA 15213

13213X4007 12



---

---

## **WILDFLOWERS - Bulletin of the Botanical Society of Western Pennsylvania**

---

---

Editor: Loree Speedy, 5837 Nicholson Street, Pittsburgh, PA 15217 Telephone: (412) 521-9425;  
E-mail: <yoree@sgi.net>.

President: Dr. Mary Joy Haywood (412) 578-6175; Vice-President: Phyllis Monk (412) 831-2724

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. Send to the editor at the above address. Deadline for submissions is the 20th 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 p.m. 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>.