Dr. Lawless took all the photographs himself and offered the following hints for successful photography of wildflowers:

- Avoid bright sunlight.
- If it is a bright, sunny day he suggested a professional disc should be used for diffusion.
- It is best to take pictures on a cloudy day.
- Use a tripod.
- Watch out for a background that could be distracting. A little pruning may be necessary.

At the conclusion of the presentation, many talked to Dr. Lawless about photography and where to find certain wildflowers, as we enjoyed homemade refreshments brought in by Joann Krumviede. The meeting adjourned at about 9 pm.


Respectively submitted, Karen Waltman, Secretary
NEWS from ALL OVER

GRASS = GAS?
According to a team of ecologists (and economists!) at the University of Minnesota, highly diverse mixtures of "low-maintenance" prairie grasses may outdistance such biofuels as soybean biodiesel and corn ethanol as an alternative biofuel to gasoline. Scientific American.com and News@nature.com (7 December 2006) both posted summaries of a recent article on the topic. One of the most notable findings from the article is that these diverse grassland species "constitute a carbon-negative source of energy that could alleviate 19 percent of global electricity consumption and 13 percent of the world’s petroleum consumption." David Tilman, an ecologist and co-author of the article, calculates that "nitrogen-poor, degraded land planted with a mixture of perennial prairie grasses such as goldenrod, Indian grass, big blue stem, and switchgrass can actually provide up to 238 percent more bioenergy than the same land planted with only one species." The report also notes that "switchgrass, when grown alone in poor soil, returned only one third of the energy of a diverse plot." Compared to ethanol (from corn in rich soil), Tilman claims a return of 51 percent more energy per acre. The "kicker" to Tilman’s findings is that the process is "carbon-negative," meaning that the plants can "store more carbon in their roots than they will create during their conversion to biofuels or electricity," an occurrence that occurs because "prairie grasses have complex root systems underground that typically make up two thirds of the plant total biomass, making them efficient carbon sinks. All told, the Minnesota group estimates from its own soil sampling that per acre, these grasslands could result in the sequestration of up to 1.8 tons of carbon dioxide per year." Another advantage of the grass mixtures is that they can grow on land not suitable for agriculture. Over the years, too, plant mixtures become more productive as their root systems grow deeper and more intricate, adding nutrients and humus to the soil. As nature.com reports, "If you take into account the greenhouse gas emissions produced by growing, harvesting, transporting, and converting plants into fuel—along with the carbon dioxide produced by eventually burning that fuel—and weigh this against the amount of carbon dioxide sucked up by plants during growth, prairie grass comes out 6 to 16 times better than corn grain ethanol or biodiesel. Sources: Nature, 7 December 2006, "Prairies could fuel the future," news@nature.com; Scientific American, December 7, 2006, "Amber Waves of Gas? Gasoline Alternative May Be Found in Prairie Grass, scientificamerican.com; Science. Original published article: "Carbon-Negative Biofuels from Low-Input High-Diversity Grassland Biomass, by Tillman, D. et al., Science, 314. 1598-1600 (2006).

BOOKS OF INTEREST


Understanding Orchids by William Cullina. An invaluable guide for beginners, experienced growers, and experts alike, Cullina shows us how to grow these beloved plants easily at home, with or without a greenhouse. New England Wildflower Society, 2007. $40 (M $36).
EVENTS OF NOTE

January 11, 2007, 8:00 a.m. to 4:30 p.m.  “Ecological Restoration: Challenges, Controversy, and Conflicts.” Annual conference, Mid-Atlantic Chapter, Society for Ecological Restoration International.  Sponsored by Biohabitats, Inc. Maryland Native Plant Society, New Jersey Native Plant Society, PA/DE Chapter of ASLA, Philadelphia University, Society of Wetland Scientists Mid-Atlantic Chapter, and the Virginia Native Plant Society. Kanbar Campus Center, Philadelphia University, Henry Avenue & School House Lane, Philadelphia, PA 19144. Conference is geared toward restoration practitioners of all levels of skill and experience, including volunteers engaged in community-based restoration to professional consultants. Fees: SER members, $45; Nonmember, $60. Registration includes lunch. For brochure, registration, and directions, call Dennis Burton, president, Schuylkill Center for Environmental Education, 215/482-7300 x110.

January 18, 4:00 – 7:00 p.m. “Plants in Danger: What Do We Know?” Presented by Dr. Jane Smart, OBE, Head of the Species Programme, IUCN – The World Conservation Union. Botanical Partners on the Mall, U.S. Botanic Garden Conservatory, 100 Maryland Avenue, S.E., Washington, D.C. Free, but reservation is required. RSVP to Katie at 202/226-8038 or kpalma@acq.gov. Space is limited.

January 27 – March 3. (Saturdays) from 9:00am – 12:00 noon
The Basics of Gardening: A Series of Classes for the Serious Gardener.  This series of 5 classes is for the gardener who would like to know some of the science behind gardening, plant culture and pest and disease solutions.  The series focuses on research-based knowledge of plant science, problem avoidance and least-to-most toxic control strategies.

Dates: Scheduled class dates are Saturdays, January 27 through March 3, with March 10 as a snow date.

January 27 — Botany & Soil
February 3 — Trees & Shrubs
February 10 — Diseases
February 17 — Lawns & Groundcover
February 24 — Annuals, Perennials, & Bulbs
March 3 — Insects

Location: McCoy Conference Room, Sudley North Business Center, 7987 Ashton Ave, Manassas, Virginia.  Cost: The fee is $40 ($70 for couples) for the series which includes all materials and refreshments. Registration required. Please call 703-792-7747 or email at master_gardener@pwc.gov to register. Registration ends January 24, 2007. Limited Enrollment.

Within the circuit of this plodding life
There enter moments of an azure hue,
Untarnished fair as is the violet
Or anemone, when the spring strews them
By some meandering rivulet, which make
The best philosophy untrue that aims
But to console man for his grievances.
I have remembered when the winter came,
High in my chamber in the frosty nights,
When in the still light of the cheerful moon,
On every twig and rail and jutting sprout,
The icy spears were adding to their length
Against the arrows of the coming sun,
How in the shimmering noon of summer past
Some unrecorded beam slanted across
The upland pastures where the Johnswort grew;
Or heard, amid the verdure of my mind,
The bee's long smothered hum, or the blue flag
Loitering amidst the mead; or busy rill,
Which now through all its course stands still and dumb
Its own memorial,—purling at its play
Along the slopes, and through the meadows next,
Until its youthful sound was hushed at last
In the staid current of the lowland stream;
Or seen the furrows shine but late upturned,
And where the fieldfare followed in the rear,
When all the fields around lay bound and hoar
Beneath a thick integument of snow.
So by God's cheap economy made rich
To go upon my winter's task again.

--Henry David Thoreau, The Dial (July 1842)
DON'T FORGET: FLORA OF VIRGINIA!

In any weather, at any hour of the day or night,
I have been anxious to improve the nick of time, and notch it on my stick too;
to stand on the meeting of two eternities, the past and future,
which is precisely the present moment; to toe that line.

-- Walden

PRINCE WILLIAM WILDFLOWER SOCIETY
A Chapter of the Virginia Native Plant Society
PO Box 83, Manassas, VA 20108-0083

exp. 10/06

Nancy Arrington
8388 Briarmont Lane
Manassas, VA 20112-2755

NEXT MEETING: January 15, 7:30 p.m. PWWS Member Annual Slideshow
Bethel Lutheran Church, Manassas.