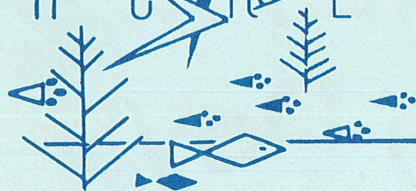


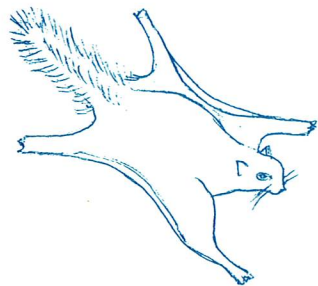
A C R E S

QUARTERLY

FALL • 1984
Vol. XXIII No. 3



1984 ACRES Autumn Days



Saturday
Sept. 22 - Tour of the Bixler Lake Park Wetland Nature Area at Kendallville. This center has a marsh for water fowl and upland area for songbirds. On our way to the Olin Lake Preserve, we will visit the Gene Stratton Porter home, Rome City.
Meet: at Golden Dome bank, 600 E. Coliseum Blvd. at 8:30 a.m. or go direct to Bixler Park.
Bring: Sack lunch, drink, family and friends
Naturalists: Jim Goodwin and Jim Haddock

Saturday
Sept. 29 - GEORGE PALMITER DAY. Work with George in the PALMITER RIVER RESTORATION method to finish the work on the South Branch of the Elkhart River.
Meet at the Lloyd Bender Memorial Forest, 9:00 a.m. Ted Heemstra in charge
For more information call 484-4385.

Saturday
Oct. 13 - WORK DAY at Fogwell Woods, Hammer Woods, Acres Along the Wabash and Hanging Rock.
Meet: at Rogers parking lot, west side, 7008 Bluffton Road at 8:30 a.m.
Bring: Sack lunch, drink, work gloves, rakes, loppers and shovels.
Board members in charge.

Remember: Rain or Shine does not stop ACRES.



NOV. 10

Annual Dinner Meeting

POTAWATOMI INN
POKAGON STATE PARK

6:45 p.m.

\$7.00 a plate

SPEAKER: Marianne Preston Golden, niece of Helen Swenson. She will give a history of Wing Haven entwined with bits of her Aunt's philosophy, accomplishments and love of the land.

Marianne has been associated with the "Naper Settlement" Village Museum at Naperville, Ill. for ten years.

Decorations by the Wing Haven Committee



Saturday
Nov. 10 - SPECIAL WING HAVEN DAY with Open House and Hikes through our newest area. There will be a SALE from Helen Swenson's studio at Wing Haven from 3:00 to 6:00 p.m.

To get there: Travel I-69 to the interchange for Pokagon State Park. Turn right or south onto old #27, then immediately turn left onto County Road 400 N. for approximately $\frac{1}{4}$ mile. There will be a sign on the gate at the entrance to Wing Haven.

Pat Pichon, Art Eberhardt, Bob Weber in charge.

Make arrangements to stay over for ACRES' 24th annual dinner at Potawatomi Inn at Pokagon State Park. There is a gate fee of \$1.50 per car to enter the Park.

For reservations: Write checks to ACRES, Inc.
Mail checks to ACRES, Inc.
1802 Chapman Road
Huntertown, IN 46748

NAME _____

ADDRESS _____

Reservations for _____ Persons.

If no reservations are made, meal will be \$8.00 at the door.



IF YOU ARE A DUES-PAYING MEMBER IN GOOD STANDING:

YOU MAY MAKE NOMINATIONS UP UNTIL OCTOBER 13 (see details).
YOU WILL RECEIVE A RETURN-BY-MAIL BALLOT BY NOVEMBER 1.
YOU MUST VOTE BY MAIL BY DECEMBER 6 or YOU MAY VOTE IN
PERSON ON DECEMBER 7, 1984 8 PM 1802 Chapman Rd.,Huntertown.

SELECTION OF DIRECTORS: There will be 18 directors. Three are appointed for staggered three year terms, one by the Dept. of Public Instruction of the State of Indiana, one by the Indiana Chapter of The Nature Conservancy, and one by the Indiana Park and Recreation Association. These appointees give broader public representation on our Board.

Fifteen directors are elected by the dues-paying members in good standing, five each year for three year terms.

The procedure is as follows:

1. The statutory annual membership meeting will be held at 8PM on December 7, 1984 at 1802 Chapman Road, Huntertown, IN. At this meeting ballots will be counted, members present may vote in person and the elected directors will be determined. *NOTE* This is not the annual dinner meeting at which we have a speaker. The Annual Dinner Meeting will be held November 10 6:45PM, Pokagon State Park
2. Between September 13 and October 13, dues-paying members in good standing may nominate directors as follows: Any ten members in good standing may nominate a member of the Corporation by a written instrument which is a) signed by the 10 members, b) contains the nominee's written consent to serve if elected, and c) is delivered to the Secretary at 1802 Chapman Road, Huntertown, IN 46748 on or before October 13.
3. If more than six members are nominated, the six nominated by the largest number of members shall be the nominees. The nominee for the one year term will be selected by the Nominations Committee by lot.
4. If less than six nominations are made by the members, then between October 13 and October 29 the Nominations Committee may, but need not, nominate enough to make a total of ten nominees.
5. Each nominee may submit a statement of his qualifications which will be sent to members with the ballot. Such statement must be received by the Secretary before November 1
6. No later than November 1 the Secretary will mail to members entitled to vote a ballot and the statement of nominee's qualifications, together with a short reminder of the voting procedure.
7. Members may vote by mailed ballot. Members do not need to attend the annual meeting on December 7. However, if a member does attend, he may vote in person and cancel any ballot he may have returned by mail. There are no "write-in" votes accepted for anyone not nominated pursuant to the foregoing procedure.

*****To be effective, a ballot returned by mail must a) be enclosed in an envelope signed by the voting member, b) not be marked for more than six persons and c) be received by the Secretary NO LATER THAN DEC.6.

Wing Haven

About a year ago your ACRES board learned that Helen Swenson had bequested to us nearly 150 acres of her property in Steuben County. In May of this year we assumed possession of the property, including the old log home and the five log outbuildings. The setting is very picturesque, as one would expect from one so attuned to nature and to art as was Helen Swenson.



One of the buildings is a former old log tavern which Mrs. Swenson had moved to the property. It is a two-story structure, laden with charm, which she used as a studio in which to paint. The acreage includes most of the Seven Sisters Lakes with their relatively pristine waters and unspoiled shorelines. Mrs. Swenson's great love for trees is evident as one hikes a scenic trail from the home and down a long, steep slope to the first lake. The slopes and valleys this spring exhibit one of the finest wild flower displays one could expect in Indiana.

A three-member committee has been named to work with this property which is called WING HAVEN NATURE PRESERVE. (Wing Haven was the name used by Helen and Ben Swenson for their guest resort which they operated for many years on Highway 27.) The committee includes Pat Pichon, Art Eberhardt, and Bob Weber.



We recognize that some wonderful opportunities for extending the educational needs and membership needs for ACRES exist with Wing Haven. The committee has been thinking ahead toward future uses as it has been dealing with inventory and cleaning the buildings. To begin with we were able to get Mr. and Mrs. Fred Wooley to live in the house as caretakers. Fred is the chief naturalist at Pokagon State Park and his wife, Jackie, is a school teacher. They are ideally suited to give us the help we need with Wing Haven.

We are mostly occupied now with the readying of the buildings for use. The old tavern, or studio, will make a fine meeting room for small groups, and the other buildings are serving as some long-needed storage areas for ACRES. As we inventory the many items from the buildings we realize that several things need to be kept for future use in interpreting Wing Haven to visitors, but there are many other items which we should sell for income and to relieve storage space. These surplus items will be on sale to ACRES members and friends on the afternoon of November 10. (See Fall Schedule of Events.) You will receive further details about this sale later this fall.

Because of the many tasks yet to be done, Wing Haven is not open now for general visitation. By next year we hope to have facilities to accommodate members and small groups. It is expected that Wing Haven will be home base for ACRES in Steuben County from which we can more effectively inform members and others of the works, the goals, and the need for ACRES. Within a few minutes time from Wing Haven one can visit six other nature preserves in Steuben County: Beechwood, Woodland Bog, McClue, Pokagon, Ropchan Memorial and Ropchan Wildlife Refuge.



Leaf colors aid in aging study

By WALTER SULLIVAN

New York Times

NEW YORK — Today, as in all past autumns, millions upon millions of leaves are being transformed from green to a multitude of yellows, scarlets and russets. But a new interest has been awakened in the process; some researchers now see in it possible clues to aging, not only in plants but in animals — including humans.

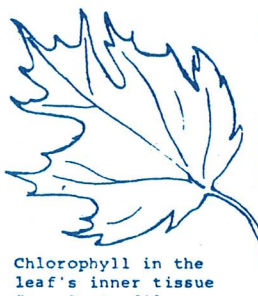
While some of the most basic steps in the changing of leaf color are not yet understood, recent research has uncovered details. It has long been known autumnal color changes result from a breakdown of chlorophyll, the green substance in leaves. It now appears this occurs when proteins to which the chlorophyll molecules are bound break up into the amino acids of which they are formed. When the chlorophyll is no longer bound to a protein, it disintegrates, losing its green color.

The amino acids resulting from breakup of the proteins are transported through tiny sieve tubes into the stems and roots, where their nitrogen is conserved for use in the next season.

According to Kenneth V. Thimann, professor of biology at the University of California in Santa Cruz, a similar breakdown of proteins is characteristic of the aging process in elderly people, who tend to lose protein faster than they can replace it.

"Plants are awfully careful with their nitrogen," he said recently. By storing it they are able to have sufficient nitrogen for regrowth in the spring. To produce new leaves through photosynthesis, Thimann said, plants get plenty of carbon from carbon dioxide in the air and hydrogen from water taken up through their roots. Though gaseous nitrogen makes up almost 80 percent of air, it cannot be used directly by plants. It must first be fixed by incorporation into compounds, such as nitrates, which the plants then derive from the soil.

As pointed out by Eduardo Zeiger, professor of biology at Stanford University, healthy chlorophyll absorbs light at colors other than green, which is reflected. Hence leaves appear green; but once the chlorophyll breaks down the yellow or brown color of the remaining leaf tissue appears.



Chlorophyll in the leaf's inner tissue "ages" steadily.

Sunlight converts sugar—stored in leaves during cool nights—into red pigment.

Nitrogen compounds from chlorophyll decay pass through stem for storage.

Chlorophyll in guard cells on the leaf surface apparently does not age.

Even in summer months, Thimann noted, chlorophyll partially breaks down as it performs its photosynthetic role in sunlight, but is restored during the darkness. Consequently leaves are imperceptibly greener in the morning than at sundown.

In the course of many years of research at Harvard and subsequently at Santa Cruz, Thimann has shown another factor is responsible for the reds of autumn in maples, sumac and many other plants. This is the accumulation of sugar in the leaves and its conversion, through a chain of reactions, into a red pigment known as anthocyanin.

The cool autumn nights inhibit the flow of sugar out of the leaves. At the same time, sunshine promotes sugar synthesis and its transformation into anthocyanin.

Ever since the birth of botany, scientists have wondered what initiates the color changes in autumn leaves. Is it cool weather, long nights or some inborn timer? Zeiger and Thimann both suspect a combination of factors is the answer.

In a clue bearing on the mystery of aging, Zeiger has found that whatever initiates it in a leaf does not affect all its chlorophyll. It breaks down steadily in the inner tissue, sandwiched between the leaf's top and bottom layers. On the leaf surfaces, however, chlorophyll in guard cells controlling the entrances to leaf pores changes little, if at all, before the leaf dies by drying out.

Zeiger's work was described in part Nov. 12 in the journal *Science*, in an article he wrote with Dr. Amnon Schwartz.

ACRES COVER ART is a sketch by Helen Swenson found among materials in her art studio. It welcomes us to steward and enjoy this 150 acre Steuben County addition of woods, lakes, wetlands, and the rustic homestead--- a gift to ACRES from Helen Swenson.

IF THERE IS A CHECK (✓) BY YOUR LABEL
YOUR DUES ARE DUE!

The Red Maple

"...a medium-sized tree 50 to 70 ft. high and 12 to 24 in. in diameter (max. 116 by 6 ft.) with a long, fairly clear bole, an irregular or rounded crown, and a shallow root system. It is characteristic of swampy sites and is associated with such species as black ash, black tupelo, cottonwood, American elm, and the bottomland oaks; ...it is a most cosmopolitan species, occurring in 54 forest-cover types."

"Red maple is one of the first trees to flower in the spring, long before the leaves appear. The fruit matures and is shed in early summer. It germinates immediately or may hold over until the following spring. Growth is rapid, and maturity is reached in 70 to 80 years, although certain individuals may attain an age of 150 years....This species is said to be the most abundant and widespread tree of eastern North America."

"Red maple is used widely as an ornamental and shade tree, and at least in the North it provides a spectacular display after the first fall frosts. Then its leaves turn a brilliant scarlet against the dark green spruces and pines, and the northern woodlands present an unforgettable sight."

Thoreau said something to the effect that the red maples in the autumn forests of New England were like scarlet jewels.

Our own great Hoosier botanist Charles Deam remarked that "the red maple is not abundant enough in Indiana to be of any economic importance. It grows rapidly and should replace the silver maple for shade tree planting since its branches are not broken off as easily by ice storms and it is more resistant to insect attack."

I have read a couple of references about the use of red maple for sugaring and there is agreement that, although one can use its sap for making sugar, it is significantly inferior to the sugar maple for that purpose. It is apparently in the same league as silver maple and box elder in this regard. A 1911-12 Annual Report From the Bureau of American Ethnology, in speaking of the Indians near Indiana and on north, reports that "all the tribes made sugar from the soft maple." The report states further that "Prince Maximilian of Wied, in his journey up the Missouri River in the spring of 1832, observed the process of sugar making. In his journal of the latter part of April of that year he says, 'Auch die freien Indianer benutzten jenen Ahorn zur Bereitung des Zuckers.'"

Bob Weber
November 1983



Field Entomology



Your Fox Island Alliance has been able to obtain the instructional services of Dr. Jim Haddock, IPFW, for a six-session field and lab course in entomology. A maximum of twenty persons will comprise the class which, beginning 8 September, will meet on six successive Saturday mornings. Acceptance of persons for the class will be on a first-come-first-served basis.

Pertinent facts:

1. Nets, magnifiers, etc. will be provided
2. First meeting at 8:30 am Sat. 8 Sep. at Fox Island Educ. Bldg.
3. A fee of \$25 is payable with the application below
4. Basic format: a beginning one-half to three-fourths hour lecture, to be followed by a field exercise lasting until noon (flexibility possible)
5. Proposed class sessions:



- 2 labs - pond/marsh ecology, concentrating on insects & other invertebrates
- 1 lab - pollination biology
- 1 lab - succession/interactions in rotten log communities
- 1 lab - gall-forming insects; leaf miners & other plant-infesting insects
- 1 lab - predatory insects & how to start and maintain an insect collection

To apply call or write Bob Weber, 3649 Algonquin Pass, Fort Wayne, In. 46809
Phone: 747-6030. Act quickly and include your check to the Alliance for \$25.

ACRES, Inc.
1802 Chapman Road
Huntertown, Indiana 46748

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