

Spring 2015



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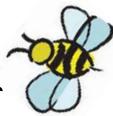
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Upcoming Events:



- * Music Under the Stars
May 21
- * Summer Camps -
Habitat Explorers
July 13 - 17
- * Summer Camp -
Earth & Sky Adventure
July 20 - 24

Check out the EE Activity Guide for classes and events offered through the year!

[EE Activity Guide](#)

Log on to
www.waukeshacountyparks.com
for more information.



Spring at Retzer!

Stop by and see what signs you can find hiding along the trails that spring has arrived?



As Shirley Blanchard would say as she concluded her articles —

See you on the trails!



HEARTWOOD

In April I was the Parks and Land Use Department's speaker, for their monthly staff seminar. I was asked to speak on (no surprise) Retzer Nature Center. In the power point presentation, I tried to cover the bases regarding Retzer's history and program (and I'd be glad to show the power point to anyone who's interested). As a handout for the presentation, I came up with the following...

Retzer Nature Center—A Program Summary in 25 Points

1--Retzer Nature Center is the Nature Center of the Waukesha County Park System.



2--In 1938, Milwaukee attorney John Retzer purchased the 90-acre Zimmerman farm (Town of Genesee) from the Federal Land Bank (purchase price less than \$5000). From 1944 until 1973, John and Florence Retzer and their friends planted tens of thousands of trees, shrubs, and wildflowers.

3--The Retzers transformed their farm into a nature center, before the term was even invented. In 1973, Florence donated the farm to Waukesha County; Retzer Nature Center was founded there in 1974, with offices and program space housed in the Retzers' farmhouse.

4--Retzer Nature Center represents the coming together of—

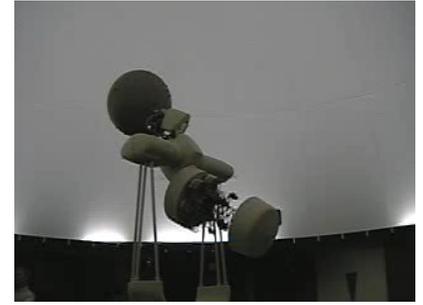
- **Florence Retzer's donation,
- **increasing interest in land preservation and education during the 1970s, the 'Environmental Decade',
- **Waukesha County's development of a nature-based Park System, and
- **the Parks' creation of a Nature (Naturalist) program in 1971. Retzer Nature Center became the home base of the County Naturalists, and of their activities in land preservation and education.

5--Waukesha County has added to the original 90 acres of Retzer Nature Center, as follows— the Sigurdson Triangle parcel (23 acres, 1980), the Brown's Fen parcel (222 acres, 1984), and the Owen Williams parcel (68 acres, 2001), for a current total of 403 acres.

6--Retzer lands are comprised of natural and restored SE Wisconsin landscapes, including forest, savanna, pine plantations, prairie, and wetland (including an alkaline groundwater fen). Retzer lands are served by 5 miles of hiking trails, including an award-winning accessible nature trail.

7--Retzer's Environmental Learning Center (opened 2005) includes exhibits, teaching/meeting rooms, a gift shop, and offices. Retzer's rooms are available for rental use, for private meetings and functions.

8--The Waukesha School District's Star Theatre, the Horwitz Planetarium, is located at Retzer (since 2005), making Retzer the only combination Nature Center/Planetarium facility in Wisconsin.



9--Retzer has a staff of 15, including Naturalists, and land, nursery, maintenance and clerical staff.

10--Retzer offers about 120 public environmental education programs each year. Retzer offers school programs and field trips for about 6,000 students each year.

11--Retzer program offerings include programs on plants, trees, animals, birds, insects, forests, prairies, animal habitats, landscape-reading, animal tracking, snowshoeing, environmental issues, composting and recycling, land restoration, astronomy, scout badges, arts and crafts. Retzer has snowshoes available for winter land exploration.

12--Retzer conducts ecological inventories and land studies for the acquisition of County parkland.

13--Retzer gives ecological input to the development of County parkland.

14--Retzer plans and conducts natural land management and restoration of County parklands. This started with selected areas in the Park System, and progressed as interest in natural land management increased among Parks administration, field staff, and the general public.

15--An Ecology Team was formed, to lead natural land management efforts in the County parklands.

16--The Ecology Team includes—

- **the Conservation Biologist (who develops the Parks' Natural Management Plans),
 - **the Retzer Land Manager (who implements the Land Management Plans, and advises field staff),
 - **the Native Nursery Manager (who raises and collects native seeds for land restoration projects),
 - **the Parks' Field Supervisors (who oversee Parks field staff in implementing land management), and
 - **the Nature Center Supervisor (who makes sure everyone works and plays well together).
- **The Ecology Team is supported by the Parks' Landscape Architects (who coordinate Parks projects).

17--Natural land management has the objective of preserving or restoring native plant communities and in the parklands. Management practices include control of invasive non-native species, timed cuttings and application of herbicide, fire management, and seeding of native plant species.

18--Retzer sells native plants for natural landscaping, at our twice-yearly plant sales.

19--Retzer consults with private landowners undertaking natural land restoration.

20--Retzer is now the new home of the education activities of the Waukesha County Recycling staff.

21--Retzer has annual special events, including Winter JanBoree, Wild Winter Night, Earth Week, Apple Harvest Festival, and Howl-o-ween.

22--Retzer's trails have a new Interpretive Sign system that tells the story of the Nature Center, including its natural and human history.

23--Retzer provides volunteer opportunities for Waukesha County residents. Our volunteers assist us with education programs, natural landscaping and land management, office projects, and special events. In all our volunteer activities, we work closely with the Parks Volunteer Coordinator.

24--As a public Nature Center, Retzer is funded by Waukesha County. But Retzer also has a wonderful 501c3 non-profit organization, the Friends of Retzer Nature Center, who support our many projects. Friends accomplishments include—

- **the accessible Adventure Trail (1995),
- **the West Patio Pergola (2007),
- **the Night Sky Observation Area (2012),
- **the Prairie Underground Exhibit (2015),
- **the Sponsorship of all Retzer Special Events—Winter JanBoree, Wild Winter Night, Earth Week, Apple Harvest Festival, and Retzer Howl-o-ween
- **the Environmental Learning Center (2005),
- **the Teaching Pond Restoration (2011),
- **the Interpretive Signs (2014),
- **the Sponsorship of Central American Ecotourism Trips

Ongoing support by the Friends makes Retzer, in effect, a public/private partnership.

25--Retzer’s overall program is based on the teachings of Wisconsin Naturalist Aldo Leopold. Retzer Nature Center is dedicated to discovery-based experience and education about the land. Discovery-based experience and education about the land increases people’s quality of life. It also provides people with a reason to care about the land, and to save and preserve it.

“The only sure foundation for wildlife conservation is the right of things to exist for their own sake.”
—Aldo Leopold

Larry





Retzer Nature Center

Historic Dates—

- 1836—Original survey of Wisconsin lands.
- 1846—Waukesha established as 'Prairieville'.
- 1847—Name changed to 'Waukesha'.
- 1848—Wisconsin statehood.
- 1830s-1930s—Future Retzer property saw farming—crops, hay, pasture, dairy cattle.
- 1898—John Retzer born.
- 1900—Florence Retzer born.
- 1938—Milwaukee attorney John Retzer purchased 90-acre Zimmerman farm in Genesee Township from the Federal Land Bank (purchase price less than \$5,000, less than \$56/acre).
- 1944—John Retzer married writer/journalist Florence Horn, couple moves into the farmhouse.
- 1944-1956—The Retzers and their friends planted thousands of trees, shrubs, and wildflowers.
- 1948—Wisconsin Naturalist Aldo Leopold died.
- 1949—Aldo Leopold's masterwork *A Sand County Almanac* published.
- 1956—John Retzer died.
- 1956-1973—Florence Retzer and her friends continued planting trees, shrubs, and wildflowers, bring total to 26,000.
- 1970—First Earth Day held, April 22nd.
- 1971—Waukesha County Parks Nature Program begun.
- 1972—Jerry Schwarzmeier hired as County Naturalist.
- 1973—Florence Retzer died, gave her 90-acre farm to Waukesha County to establish a nature center.
- 1974—(Spring) Retzer Nature Center founded/ opened, with the farmhouse as the first visitor center.
- 1980—23-acre Sigurdson Triangle purchased from the August Sigurdson estate, became part of Retzer Nature Center (total acreage now 113 acres).
- 1984—222-acre Brown's Fen Nature Area acquired from Harmony Homes (as part of the creation of a 'planned unit development' or 'conservation subdivision', Kame Terraces), became part of Retzer Nature Center (total acreage now 335 acres).
- 1986—New Visitor Center building opened.
- 1987—First annual Apple Harvest Festival held.
- 1988—Severe drought.
- 1989—Friends of Retzer Nature Center established as a 501c3 non-profit organization.
- 1989—Larry Kascht joined the Retzer staff.
- 1990—May 10th snowstorm destroyed many trees, flattened the Retzer barn.
- 1995—Retzer accessible 'Adventure Trail' dedicated.
- 2001—Retzer farmhouse taken down.
- 2001—68-acre Owen Williams parcel purchased from Owen Williams' estate, became part of Retzer Nature Center (total acreage now 403 acres).
- 2005—Retzer Environmental Learning Center addition and new Horwitz Planetarium opened.
- 2006—Jerry Schwarzmeier retired after 34 years as a County Naturalist.
- 2011—New maintenance building opened.
- 2012—Ecotourism trip sponsorship begun by the Friends of Retzer.
- 2012—Geothermal heating and cooling system activated.
- 2013—Geothermal educational programming and geothermal system working model developed.
- 2014—New interpretive sign system installed.

THE LAST PRAIRIE



We Don't Need No Stinking Lignin

You may have heard of us. For the most part, we grow low and slow in places where most don't deign to even look. Our spirit far outstrips our statures, and if folks would just give us a chance, I know we could win your curiosity. Occasionally, we make it into the mainstream. Perhaps you saw our short-run television series "Bryophytes are Plantae Too", or settled down to read the novella "Of Moss and Fen", or caught "The Sword, the Stone, and the Wort" at the box office. Those are the exceptions. Mostly, we have humble beginnings and endings. Listen closely my friend, and we will tell you a tale seldom heard.



Welcome to Hornworts' School of Bryophytes. Some say 'non-vascular plants' and that is very true and fine, but most of the pros call us Bryophytes. What's a **Bryophyte**? This traditional term refers to all terrestrial plants without any true vascular tissue to transport food and water; it includes all Mosses, Hornworts, and Liverworts. While some of us non-vascular plants have pathways/channels to route fluids, none of the so-called 'experts' in the field of botany seem to think these are proper vessels. Apparently, you need **lignin** (a polymer present in woody plants; also part of the secondary cell walls in many plants and even some algae) to be considered among the vascular. Our xylem and phloem kin are called **Tracheophytes**, or vascular land plants.

All of us 'phytes' in the Kingdom Plantae contain chlorophyll and use photosynthesis for proper nourishment, but when and where we use it are very different. Buckle up; this is where we get technical. Ok, so you really need to know what the heck gametophytes and sporophytes are to fully understand what's going on. A **gametophyte** is a plant or plantlike organism with only one set of chromosomes (**haploid**, or from only one parent). By contrast, a **sporophyte** contains both sets of chromosomes (also called **diploid**). With the plants that most of you know, the sporophyte is the prominent form, where the gametophytes are usually pollen (contains sperm) and ovules (eggs). With us, that doesn't work at all. It is our gametophytes that do the heavy lifting. Our haploid forms cover the Lion's share of growing and photosynthesis; they are the ones that are nutritionally independent; they are the green that you see; they are the plants that exist. So you see, the Tracheophytes have it all backwards.

There are some differences between the Phyla (Mosses—Phylum Bryophyta, Liverworts—Phylum Marchantiophyta, and Hornworts—Phylum Anthocerotophyta), but the general life cycle among most of us is very similar. A new Bryophyte begins its life as a haploid spore, which settles onto some amazingly wonderful, suitably moist growth medium. A **protonema**, or branched system of filaments, grows from the spore. From the protonema, anchoring filaments grab hold of whatever they find, while green filaments grow upward and eventually become defined gametophyte shoots (which can resemble stems, leaves, or even modified leaves like needles). The mature gametophytes continue to grow and gather energy until the time is right to produce reproductive

Antheridia produce sperm and **archegonia** form eggs. At this stage, all of us non-vascular flora absolutely depend on water to transport sperm. It could be dew, or it could be torrential rain, but we need water. The sperm have two flagella each, but they need something to swim through, and they can use all the mobility assistance they can get. After fertilization, the diploid stage develops in the archegonia. The sporophyte develops a 'nutrient transfer zone' (which is freakishly similar to a placenta) at its connection with the adult gametophyte. After a relatively short time, the sporophyte dries or otherwise opens to disperse its newly created spores for new gametophyte plants. Some species are dispersed by water and some species travel on winds, but all spores are pretty tough; some of the moss spores are viable up to forty years.

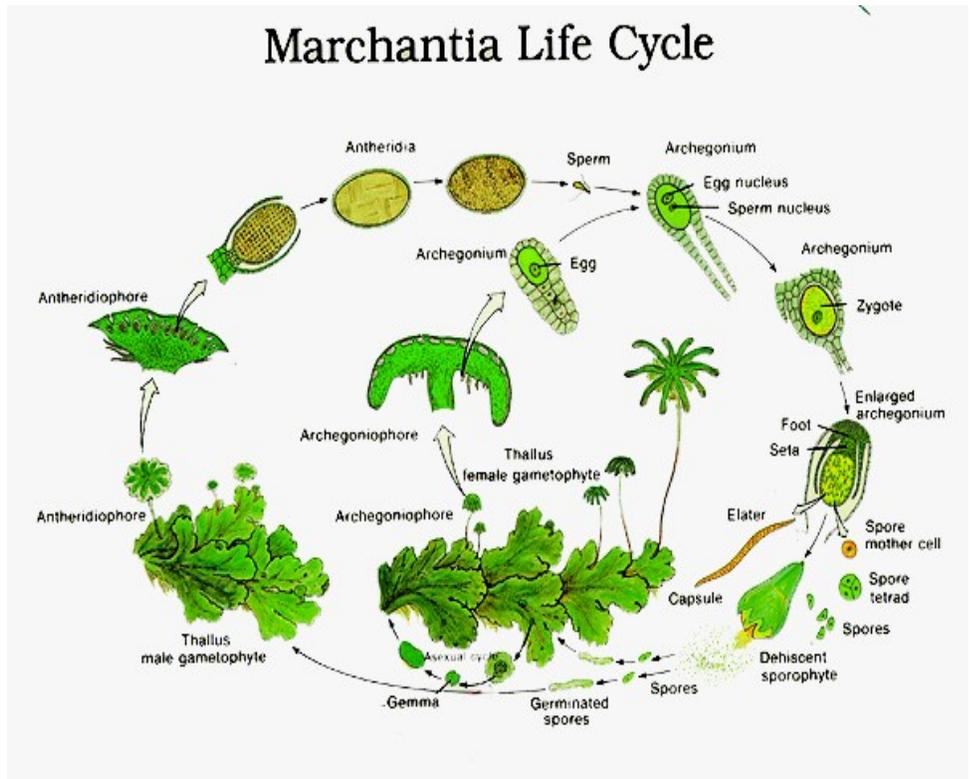
In your area, sadly, there are none of our exact kind, but there are some Liverworts and several Mosses, and most of these are perennials. Throughout the world, I must reluctantly admit that the Mosses are fantastically diverse, and by far the

most numerous of us, but that just makes the rest of us that much more special. A quick note before I leave you, not all 'wort' plants are bryophytes. Wort is a remnant of the Old English word 'wyr't', which has origins that connect it to 'root'—it is not exclusive to non-vascular plants. At the end of the article are two web-sites where you can learn more. One links to all the Bryophyte species recorded in Waukesha County. I wish you good hunting... just be ready to get down on your hands and knees.

Mike

References:

- <http://bryophytes.plant.siu.edu/bryojustified.html>
- <http://wisplants.uwsp.edu/bryophytes/index.html>





Upcoming Events



Master Gardener Workshop
Saturday, June 13
11am - Noon
FREE
"Differentiating Weeds
from Wildflowers"

**Friday Morning
Bird Hikes**
Friday mornings thru June 26th
7—8:30 am
Fee: \$2.00
Meet in the Retzer parking lot.
Check out some frisky feathered friends
as they go about their daily routines.
Don't forget your binocular!

Kids Summer Camps
(7-12 year olds)

Habitat Explorers
July 13-17
Noon - 3pm
Fee: \$80.00

Explore a variety of habitats as you discover the wildlife which live in each area. Wild activities and crafts will enhance your camp experience.

**Adventurers On the Earth
& In the Sky**
July 20-24
8:30 am - Noon
Fee: \$100.00

A cooperative camp with Retzer and the Planetarium.
Discover the far out reaches of space as you fly through the solar system and then back down to Earth to unveil the secrets of life on our planet. Cool projects and experiments will highlight your adventure.

Family Adventure Hikes - Saturdays
Fee: \$4.00

May 23	9-11am
May 30	9-11am & 1-3pm
June 13	9-11am
June 20	8:30 -10am

The Friends of Retzer Nature Center, Inc

present

Music Under the Stars

Thursday, May 21, 2015
Retzer Nature Center
Social: 6PM, Concert: 7PM



Katie Dahl and frequent sideman Rich Higdon

Please join us for the first “**Music Under the Stars**” concert on Thursday, May 21 with a performance by **Katie Dahl**.

Katie is from Door County and has won numerous awards including the Big Top Chautauqua Songwriter of the Year (2010). You can learn more about her at www.KatieDahlMusic.com.

We will be outside unless the weather is inclement. Doors open at 6 and the performance will be at 7.

Snacks and beverages will be available. If you wish you can bring a picnic dinner.

Donations to the **Friends of Retzer Nature Center** would be appreciated.

For more information or to reserve a seat contact: Dawn@FriendsOfRetzer.ORG



RETZER NATURE CENTER

WAUKESHA COUNTY PARKS & LAND USE

S14W28167 MADISON STREET

WAUKESHA, WI 53188

Return Service Requested

Friends of Retzer Nature Center

The Friends of Retzer Nature Center is a registered, 501 (c)3, organization dedicated to encouraging, perpetuating, and promoting the work of conservation and natural resource education.

The organization seeks the involvement of the community in the form of financial and volunteer support to work toward the continued growth and improvement of Retzer Nature Center. If you would like to become a member or view some of our projects and activities, please visit our web site at <http://FriendsOfRetzer.org>.