



RAVINIA

An Advocate for Community Resources

Published by Friends of the Ravines (FOR)

Fall/Winter 2016–17

CELEBRATE SPIDERS!

by Maureen Lorenz

(Photos Courtesy of Dr. Richard Bradley unless otherwise noted)

We discovered after moving into our old home 35 years ago that it had a house moth infestation in the basement. Following the recommendations of a pest control expert, an insecticide ‘bomb’ was released. And it did little to deter the moths. The next step we took was not popular with our two daughters growing up, but it worked. We let the spiders in the basement deal with matters—moths gone. I keep spiders in my employ in the basement to this day—just in case.

Spiders eating insects is nothing new. Spiders found in basements is nothing new. Using the spiders as a biological control was a little ‘out there’, but made sense – certainly a better alternative than releasing poisons into our living space. When the food source disappeared, so did (most of) the spiders.

Plants, however, are my passion. As a botanist and landscape architect I decided it was time to design and plant a pollinator border of mostly native plants. As I tended to the new plants I became impressed with the variety of spiders I was encountering at the soil level, followed by various web designs in the leaves displaying captured insects.



Bold Jumper—Phidippus audax

I am a fan of Dr. Richard A. Bradley, Associate Professor Emeritus, Department of Evolution, Ecology and Organismal Biology at The Ohio State University. When he wrote in his blog that spiders eat stinkbugs, I decided it was time to learn more about these fascinating animals. As Dr. Bradley states, ‘the enemy of my enemy is my friend.’ And I hate stinkbugs. And Japanese beetles. If I can enlist the help of spiders to control these pests, I’m all for it. Give spiders a little love for that!

Spiders get a bad rap. Imagine a Hollywood horror thriller or

Halloween decorations without spiders to prey on our fears. No doubt people have serious phobias of these animals and many people are afraid of them. Spiders do have a creepy factor that can be off the charts. They are hunters, they are silent, and they are efficient. Fortunately, spiders in the landscape like to keep a low profile.

Spiders are carnivores. Whether they use webs or roam around, spiders hunt. And spiders are generally not selective about the bugs they eat. I’m just beginning to understand spiders and appreciate the role they play as predator in the

FROM THE CHAIR OF THE BOARD

It's fall in the ravines! This is truly a magical time to explore our beautiful local natural areas. We would love to see your pictures and hear your stories of how you enjoy our Central Ohio ravines in the fall and winter! Please consider sharing with us by emailing info@friendsoftheravines.org. We may even include your contributions in our next issue!

We hope you enjoy the variety in this issue. Friends of the Ravines is an all-volunteer board of ravine enthusiasts who are passionate about sharing the importance and value of proper stewardship of our ravines. We are always looking for more friends to join our group. Whatever talent or time you have to offer, please let us know! Our ravines need you!

Many creatures and plants fill our ravines with life. Our cover article, Celebrate Spiders, speaks to the often underappreciated but nonetheless important spider! As children we may have changed our views of spiders after reading *Charlotte's Web*, a tale of friendship and sacrifice. Spiders have a very interesting story and we hope you enjoy our feature article. Want to see those spiders in full color? Visit our webpage, www.friendsoftheravines.org. We understand the threat of development to our ravine systems, but there is another threat from within our ravines to the health and diversity of the plants and animals that call ravine refuges home. Invasive plants are that threat and you can read more about how they impact our natural areas and also how you can help. And finally, our ravines often contain unnamed streams or tributaries that flow into our more well-known creeks and rivers. We have presented the history of such a tributary to Alum Creek for you in this issue. Enjoy!

It's never too soon to be thinking about spring! Join us on April 9, 2017 for our annual plant walk on Walhalla Ravine. Read details in right hand column! We invite you to join us for this free event to showcase a central Ohio ravine and the spring wildflowers and other natural wonders found there.

Thanks for picking up this issue of *Ravinia*; we hope you enjoy it! Please consider a generous donation of any amount to help us keep this publication alive. If you would like to see a topic presented here, please let us know!

See you in the Ravines!

Carrie R. Morrow, Chair



If you would prefer to read *Ravinia* on the Web instead of receiving a paper copy, please send an e-mail to friendsoftheravines@gmail.com and let us know.

We'll e-mail you when a new issue is ready to read.

NEWS FROM THE RAVINES

One Franklin County ravine-google-group promoted this home-made deer repellent. It was published originally in *This Old House* magazine.

1 bar of Fels Naptha soap
2 bunches of scallions, roughly chopped
2 heads of garlic, cloves separated
4 eggs
Chili powder, lots

1. Fill 1/2 of a 5-gallon bucket with hot water.
2. Shave soap into bucket to dissolve.
3. Place scallions, garlic, eggs, and chili powder in a large piece of doubled cheesecloth. Tie up ends of cloth tightly; use a wooden spoon to crack the eggs. Place pouch in bucket.
4. Fill the bucket with more water; cover tightly with lid. Place in shaded area. Let sit for 1 week.
5. Transfer in batches to a pump sprayer. Apply after each rainfall or every 2 weeks.

Friends of the Ravines Plant Walk

Walhalla Ravine

April 9, 2017—2:00–4:00PM



Learn about the Underground Railroad & Walhalla Ravine

Visit a private native wildflower garden.

Details will be posted on friendsoftheravines.org and Facebook. If you are on FOR's mailing list, you will receive a postcard about this exciting event in the spring.

landscape. According to Jessica Walliser in her book, *Attracting Beneficial Bugs to your Garden* (2014) one study reports that a quarter of the total of bug predation in a garden is attributable to spiders, and much of this takes place at night.

According to Dr. Richard A. Bradley there are 43 families and over 651 species of spiders in Ohio. He reports that one reliable study revealed there are hundreds of thousands of spiders per acre preying on hundreds of insects in their lifetime. And most spiders are harmless to humans and pets.

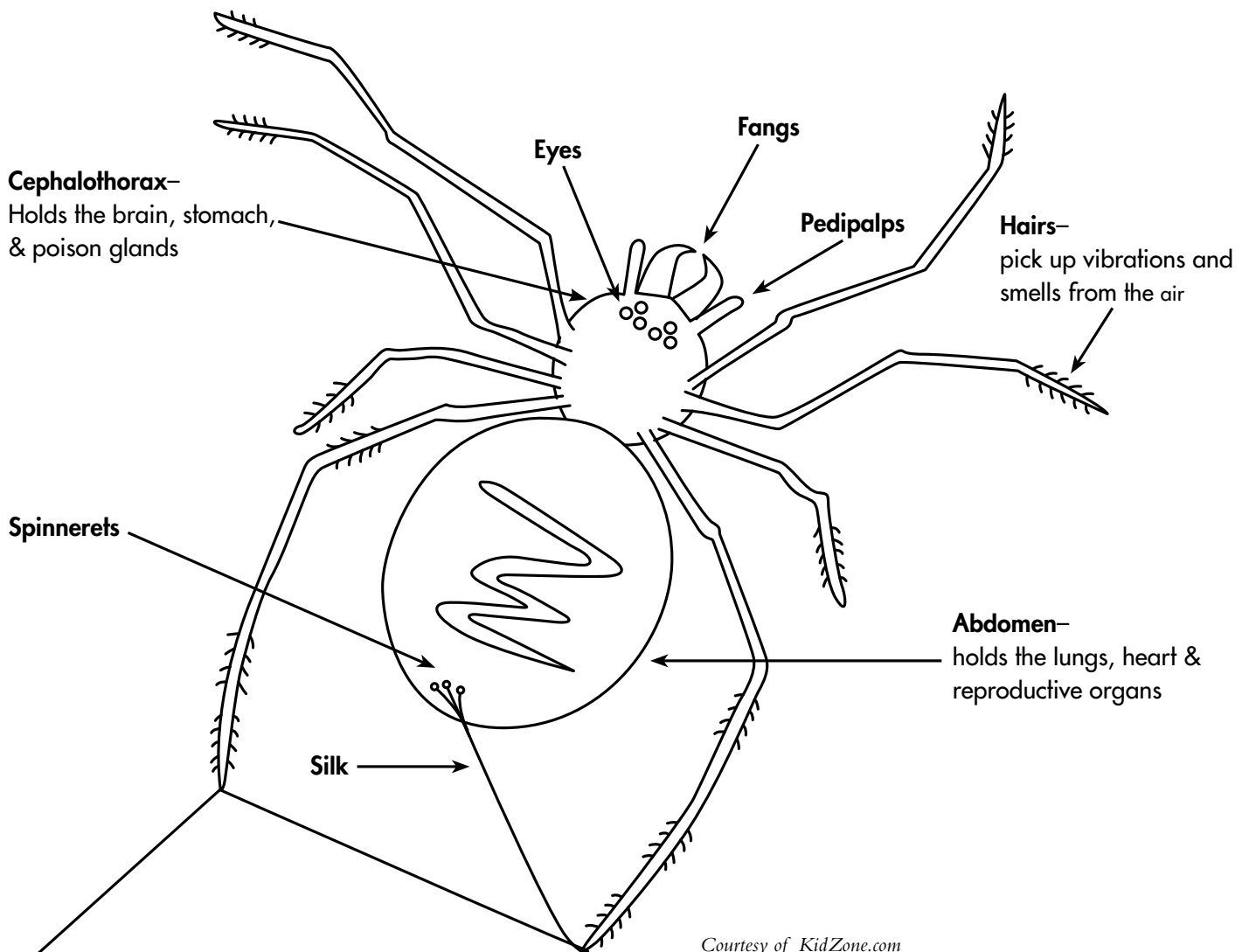
What spiders do best is add to the richness of a landscape. Spiders are every bit a contributor to the biodiversity of our environment. An environment that supports biodiversity functions better, supports clean water, breathable air, and healthy productive soils. Spiders are part of the web that sustains life, pun intended.

Clean water and healthy environments are the primary purpose of our Friends of the Ravines stewardship. Protecting ravines and education and understanding the diversity of life they harbor is our mission. Spiders are predators and are preyed upon, and are a necessary part of a ravine system. We need to understand spiders and their role better.

Due to land use and agricultural changes over the last century, spiders that used to be common in Ohio are now rare or no longer found. For instance, a burrowing spider, the Carolina Wolf Spider, also one of the largest spiders with a leg span of four-plus inches, was once common because of the abundant open fields and meadows in early Ohio. There were, however, no records of this species since 1953 (Division of Wildlife field guide) until 2014! Noted naturalist Jim McCormac found this wolf spider hiding out in a southern Ohio prairie preserve. (Columbus Dispatch, 8-12-2014) All is not lost!

continued on page 4

Spider basics: Spiders have two body parts and eight legs.



Courtesy of KidZone.com

The May 2013 Bioblitz in the ravine of Glen Echo Park left us a clue to the spiders typically found in our ravines in Central Ohio. Cross checking this list with Dr. Bradley's *Common Spiders of Ohio* field guide revealed no surprises and provides an introduction to the spiders most likely to be encountered in the out-of-doors.



Agelenopsis sp.

Courtesy of Maureen Lorenz

GRASS SPIDER, genus *Agelenopsis* sp. are funnel weavers. This very common spider builds a dense funnel-shaped web she works on all summer. The funnel is open at the back to allow for a hasty retreat by the spider or a quiet dinner. Typically, these spiders have three pale stripes and two dark stripes on the carapace with long, thin legs. The abdomen is brown or gray and has a light stripe down the middle and darker bands to the sides. The spinnerets extend well beyond the end of the abdomen.

GROUND SPIDER, probably *Gnaphosa muscorum*. These are running spiders and have thick, strong legs, evenly brown with hair attached to a dark brown carapace approximately as long as the abdomen with black markings along the radial furrows. The abdomen is dark gray to black and covered with fine hairs that get longer and courser at the back. The dark spinnerets appear conical and separated. These spiders hunt along the ground, living under stones and fallen logs.

DARK FISHING SPIDER, *Dolomedes tenebrosus*. This spider is not aggressive and that's good because its leg span can be up to four inches. The habitat is more commonly a moist woods, wetland, or vegetated bank along a stream. They don't make a prey-capture web, but will make a 'nursery web' out of folded leaves and silk for the new young. The dark fishing spider has long legs with hairs, attached to a dark with pale median stripe carapace, and a dark abdomen with several diagnostic chevron markings. Their faces are black bordered by white or tan.

NURSERY WEB SPIDER, *Pisaurina mira*. Long hairy legs attached to a carapace that is slightly longer than wide, light brown with a straight cream-lined dark brown band in the center. The abdomen is twice as long as wide with a dark brown central band lined with a cream-colored wavy line. The Nursery Web spider will carry her egg sac in her jaws until she folds green leaves with silk to create her nursery web as a safe place for the spiderlings to hatch. These spiders prefer moist, open woods and edges of forests and are common throughout Ohio.

THIN-LEGGED WOLF SPIDER, *Paradosa* sp. These are rather small spiders found in fields, lawns, and along streams. They are active during the day, and, therefore, seem to prefer more humid areas. They have hairy, long thin legs attached to a dark carapace with lighter (often tan or gray) median bands, and an ovoid abdomen often with irregular spots and black chevrons. They carry their bodies high on those long, thin legs.



Variable Orbweaver—*Neoscona crucifera*

TUFT-LEGGED ORBWEAVER, *Mangora* sp. Identifying this tiny spider is easier by finding its very intricately woven web about 12" across, vertical or inclined to the horizontal. The circular sticky lines are very closely spaced. Legs are yellowish with long spines attached to a carapace of yellow with brown stripes down the middle and along each side. The abdomen is elliptical with yellow-white patches on either side of a wide dark-brown median stripe.

ORCHARD SPIDER, *Leucauge venusta*. The orchard spider spins its web at an oblique angle or nearly horizontal to differentiate it from others. The female has green legs and hangs under her web. The first pair of legs are the longest. The marking on the abdomen is bright green and silvery-white and below it has a two-lobed orange spot. Typical habitat is moist woods.



Parasteatoda tepidariorum

COMMON HOUSE SPIDER, *Parasteatoda tepidariorum*. A very common spider found most easily around structures in very tangled webs. The egg sacs are teardrop shaped. The females are a mottled gray or tan, but not uncommon to be yellowish to nearly black. The males are usually smaller and reddish in color.



Pholcus phalangoides munching on a stink bug

LONG-BODIED CELLAR SPIDER, *Pholcus phalangoides*. This spider like most in the family tolerates dry conditions and can go a long time between meals. The long and thin legs are the distinguishing feature. (Don't confuse them with Daddy Longlegs which are not spiders and have but one body part). The carapace is mostly circular and pale, and the abdomen is tubular, more than twice as long as wide and twice the length of the carapace. The abdomen may have darker dorsal markings.



Salticus scenicus

ZEBRA JUMPER, *Salticus scenicus*. The legs of this unmistakable jumper are black and white striped attached to a carapace that is longer than wide and black with two white bands along the sides and a pair of white dots behind the posterior eyes. The abdomen is black and white 'zebra' striped with a white band across the front of the abdomen. The large two front eyes help to locate prey as they hunt in the light.

Only 641 more species to go! The intent of this article was to increase your awareness of spiders. Spiders need habitat, greenspace, food source, and clean water and in return, they will add richly to our biodiversity. Maybe most importantly, they need understanding of the job they do. It's a lot to ask, but if a spider errantly wanders into your home, maybe gently capture her and place her back outside. Unless you think you have a job for her in your home.

Spider references and sources:

<https://wildlife.ohiodnr.gov/portals/wildlife/pdfs/publications/id%20guides/pub5140.pdf>

In Ohio's Backyard: Spiders. Dr. Richard Bradley. 2004. Ohio Biological Survey, Columbus, Ohio, USA.

Spiders of the North Woods. Larry Weber. 2003. Kollath+Stensaas Publishing, Duluth, MN



Protecting Natural Areas from Plant Invaders!

by Carrie Morrow & Photos by Maureen Lorenz

Central Ohio is a wonderful place to live. But its parks and hidden natural areas are constantly threatened by invasive plants. Invasive plants are one of the leading threats to natural biodiversity today. In addition to habitat fragmentation and urban development, invasive plants out-compete our native plant communities for space and sap resources which cause the loss of healthy habitat. An accepted definition of an invasive plant is a plant that was not part of the Ohio landscape before substantial European settlement—around 1750.

There are more than 3,000 known plants documented in Ohio and 75% are considered native. Of the remaining 25% non-native plants only 3% (around 100) of those plants are considered non-native and invasive plants. Some native plants can exhibit invasive characteristics, but I will focus on the non-native invasive plants in this article.

Plants have many ways of making their way into our habitats. Many were intentionally introduced for their medicinal or horticultural value. Once in our region, without the natural controls such as diseases and insect predators found in their place of origin, non-native invaders can grow unchecked. Some plants made their way here by accident. Seeds or plants stow away in ship cargo or travel in contaminated ship ballast waters. It doesn't matter how they get here, when they arrive they make themselves at home.

The extent of threat depends on the type of habitat: for instance, wetlands and woodlands have different invaders. Also, depending on the management goal, the priority may determine which invasive plant is more of a threat. Land managers and private land owners should first consider the habitat and the management goals of their site. Are there rare and endangered species or communities? What are the human use goals of the area? When those questions are answered, the work of addressing the invasive plants can begin.



So who are these persistent invaders to our natural areas? In our central Ohio ravines, there are several that are particularly challenging. Many homeowners may easily find some of these invaders in their yards. Many plants were used in landscaping because of the very characteristics that make them invasive! Prolific flowering leads to bounteous seed production. Fast growing plants provide home owners with mature landscaping quickly, but it also means that if these plants escape to the wild, they grow faster and crowd out the naturally occurring plants. See the chart for a list of these most common plant invaders that escape from yards into natural areas.

So you have non-native invasive plants in your yard, now what? Depending on the size of the infestation and the species you have, there are several control measures. Manual removal through mowing, cutting or even pulling plants out can work for smaller areas and smaller plants. Herbicide application can successfully deter invaders and can maximize your removal efforts. Land managers and wildlife professionals can help guide you in your invasive plant removal project. Replacing areas of removal with native plants that are similar in structure to the invasive plant is a great way to improve the habitat in your yard and keeping the invasive plants from coming back.

Awareness of invasive plants is a great start to helping find solutions to this threat! Be sure to share what you have learned and find ways to support invasive plant control efforts in your area. Our natural ecosystems are counting on us to preserve the wildlife and plant communities for our future generations.

Carrie Morrow serves on the Ohio Invasive Plants Council and is a Natural Resource Manager for the Columbus and Franklin County Metro Parks.

For more information contact:

Friendsoftheravines.org or info@friendsoftheravines.org
 ODNR: naturepreserves.ohiodnr.gov or ohiodnr.gov/gonative
 Columbus and Franklin County Metro Parks: www.metroparks.org
 OSU Extension Service, Franklin County: franklin.osu.edu
 Franklin County Soil and Water Conservation District: franklinswcd.org
 Ohio Invasive Plants Council (OIPC): www.oipc.info
 Great Lakes Early Detection Network: www.gledn.org
 Digital field guide where you can report invasive plant sightings.

Non-native Invasive Plants Found in Yards and Ravines

These species have been accepted as invasive in Ohio through the Ohio Invasive Plant Council's Assessment Protocol. www.oipc.info/assessment-results.html

Bush Honeysuckles (including Amur, Morrow, and Tartarian)	<i>Lonicera maackii</i> , <i>Lonicera morrowii</i> , <i>Lonicera tartarica</i>	Common shrub in woodlands and wood edges. Shades and inhibits growth of native vegetation.
Garlic Mustard	<i>Alliaria petiolate</i>	Small herb found in woodlands and wood edges
Oriental Bittersweet	<i>Celastrus orbiculatus</i>	A climbing vine with bright red berries.
Multiflora Rose	<i>Rosa multiflora</i>	Small white flowers on long spiny cane-like branches
Tree of Heaven	<i>Ailanthus altissima</i>	Fast growing tree with multiple leaflets on long stems
Callery Pear	<i>Pyrus calleryana</i>	Ornamental tree with early spring flowers and small fruits.
Japanese Barberry	<i>Berberis thunbergii</i>	Small ornamental shrubs with reddish leaves and spines
Japanese Honeysuckle	<i>Lonicera japonica</i>	Vining honeysuckle with large white flowers and creeping vines.
Lesser Celandine	<i>Ranunculus ficaria</i>	Small herb with yellow buttercup like flowers in early spring
Wintercreeper	<i>Euonymus fortunei</i>	Ornamental ground cover that blooms after climbing trees or other vegetation.



History of an Alum Creek Tributary

By Martha Harter Buckalew & Sherrill Massey

Alum Creek, one of Columbus's most scenic river corridors, stretches from the southern confines of Alum Creek State Park reservoir dam in Delaware County to Three Creeks Park in Franklin County. At that point, three rivers—Alum Creek, Blacklick Creek, and Big Walnut Creek—merge. And the confluence is named Big Walnut Creek. Farther downstream, Big Walnut Creek empties into the Scioto River which flows to the Ohio River. The health of these waterways depends, in part, on the health of Alum Creek and its tributaries.

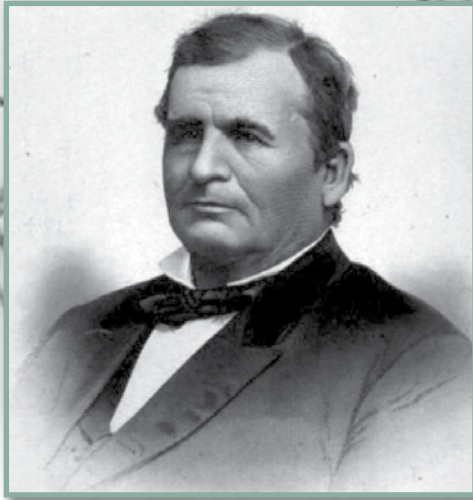
Located below the dam at Alum Creek State Park, Alum Creek's 6th largest tributary—recently named Argyle-Woodland Run—covers approximately 3.25 miles and flows through a ravine at the south end of Ohio Dominican University and into Alum Creek where the Alum Creek Greenway Trail is located. It is a tributary with a rich and varied history linking it intrinsically to the settling and development of Columbus's east side. You can now locate the Argyle-Woodland Run on current USGS topo and Franklin County maps.

It was in 1870 when the street named Leonard Avenue first appeared on a Franklin County Montgomery Township map. Its namesake was Theodore Leonard who owned a lot of property as well as a brickyard on the east side of Montgomery Township. The street name stopped at Alum Creek and became Johnstown Pike going east. Going west it ended at the Columbus Arsenal built in 1864, which became Fort Hayes in 1922, in honor of Rutherford B. Hayes.

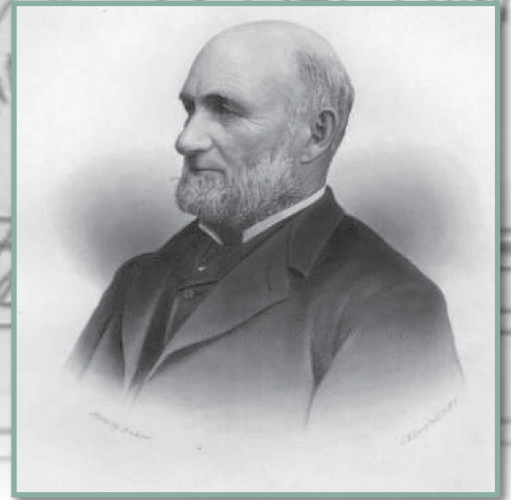


Courtesy of Franklin County Auditor's Office

Theodore Leonard was born in Quebec, Canada in 1819. He came to Columbus, Ohio in 1840, penniless and still speaking his native French, according to one source. Another source says he arrived here with one extra suit of clothes and only fifty cents. Once in Columbus, Leonard began his climb to success. After he hired on with a brick maker named Windsor Atcheson, he advanced quickly in the brick business. He learned English, married, started a family, and over time the brick company was named Atcheson, Shuemaker and Leonard.



Theodore Leonard (1819-1887)



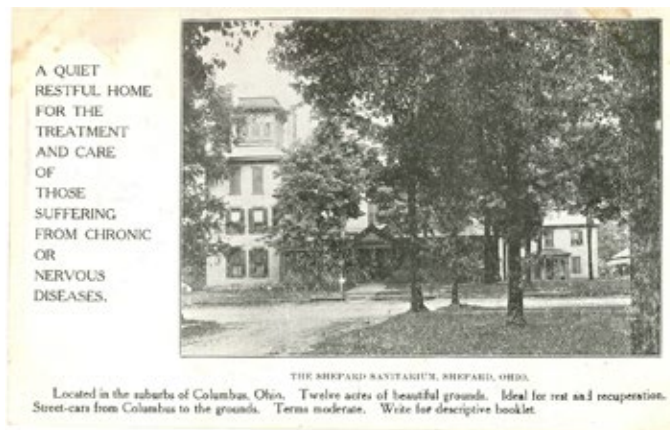
William Shepard (1825-1914)

Leonard (who fathered seven children) enrolled two of his daughters at a Catholic boarding school for girls named St. Mary's Academy. Located in nearby Somerset, the Academy was one of the first Catholic schools in Ohio. In 1866, after a disastrous fire destroyed Academy buildings, Leonard offered the Dominican sisters thirty-three acres of land and bricks from his brick yard to rebuild the St. Mary's Academy in Columbus.

The Sisters came to Columbus from Somerset as guests of the Leonard family to examine the property given for the new St. Mary's. They selected a site bounded by Alum Creek on the east. The hilly grounds had great potential, and all parties were impressed by the preponderance of natural springs on the property. To distinguish the new Academy from the old St. Mary's of Somerset, Bishop Watterson suggested a name change to St. Mary of the Springs. At once, Leonard hired an architect and a builder, and he assumed the responsibility for their expenses. Theodore Leonard had become a wealthy man.

The landscape surrounding the Academy of St. Mary of the Springs had several railroad lines nearby. The rolling campus landscape had elegant drives and fine groves of trees planted by the Sisters. Bubbling up from the grounds were springs of water. One spring, rich in iron, was said to be superior to any of the kind in Ohio. Also on the grounds was a spring of white sulphur, which possessed many medicinal qualities. The other springs were pure and cool, bringing forth fine drinking water.

The neighborhood of the Academy of St. Mary of the Springs was known as Shepard; its boundaries were: Leonard Avenue on the north, Conrail Road on the south, Alum Creek on the east, and Norfolk Southern Railroad on the west.



This suburb of Columbus was named for Dr. William Shepard who wore many hats. He was a Franklin County Legislative Representative. He helped found the East Side Ice Company which constructed a large dike along Alum Creek. The ice company pumped water from the creek to make large blocks of ice; they were stored with sawdust between them for delivery all over the city. Dr.

Shepard also served on the board of the interurban company. And you guessed it! The interurban stopped at Shepard.

The following advertisement appeared in Volume 10, page 207 of *The Ohio Cultivator* on May 1, 1854.

**Columbus Water Cure and Medical Infirmary
for the Treatment of Chronic Diseases
of Females and Children.**

The above institution is located 3 miles from the city—
is healthful and pleasant. It is exclusively devoted
to reception of females—no gentlemen patients
being admitted.

Particulars will be sent to you on application.

Address: W. Shepard M.D.
Water Cure, Columbus, Ohio



St. Marys of the Springs, Columbus, O.

William Shepard's Sanitarium offered a quiet place for rest and peace of mind, a home with big trees for shady walks, good food, fresh air, proper exercise, rest, and sunshine.

coeducational in 1964, and the college changed its name to Ohio Dominican College on July 1, 1968. Ohio Dominican became a university on July 1, 2002

By the time Theodore Leonard's brick firm dissolved (around 1859), and the partners divided the shares between them, Leonard had 175 acres of land which he used for brick making and farming. He had become a well-known contractor and builder—erecting from forty to fifty houses in the city of Columbus and its vicinity. Eventually he owned 900 acres in Montgomery, Clinton and Mifflin townships. When he died in 1887, Leonard was a man of comparative wealth and was considered one of the largest landowners about Columbus. St. Mary of the Springs Academy operated in its Columbus location until its closing in 1966.



In addition to the founding of St. Mary of the Springs Academy, the Dominican Sisters founded and implemented plans to establish the College of St. Mary of the Springs, the predecessor to Ohio Dominican University, in 1911. It formally opened in 1924 as a Catholic women's college. It became

Dr. William Shepard lived until 1914; his sanitarium closed in 1918. The facility served as *Big Brothers and Sisters Home* from 1919 to 1952. From 1953 to 1973 it served as the Columbus Children's Psychiatric Center. The last agency in the building was the Uhuru Drug Center, which was destroyed by fire in early October 1981. The Shepard Branch of the Columbus Metropolitan Library opened on the site on June 14, 1985.

In recent years, the neighborhood of Shepard on Argyle-Woodland Run has felt the positive impact of the federal *Clean Water Act*—reorganized and expanded in 1972—and the negative impact of the 1989 *I-670 Corridor Development Plan* which sliced through the Shepard Community near Alum Creek. Urbanization and development have paved over once bubbling springs and replaced aged shade trees with new construction. But, for now, the names of two of its movers and shakers, Leonard and Shepard, still appear on the city map of Columbus, Ohio.



Friends of the Ravines Celebrates 20 Years with New Ways to Donate

By Alice Waldhauer

This year, *Friends of the Ravines* celebrates 20 years of protecting and restoring central Ohio ravines.

Friends of the Ravines is now an independent non-profit organization, and with our new tax-exempt status, we have access to additional tools and opportunities to help us fulfill our mission.

Ravine supporters can now donate online through our website at www.FriendsoftheRavines.org.

Of course, you can still write a paper check and mail it to our post office box, but many people find online donations convenient. Whatever method you choose, we appreciate your support.

Kroger-Plus customers can donate whenever they buy groceries by registering their shopper loyalty card.

Go to <https://www.kroger.com/topic/kroger-community-rewards-3> and search for *Friends of the Ravines* (organization 41888) in the list of

community non-profit organizations. Shoppers must re-enroll each year on May 1 to keep donations flowing to the non-profit of your choice. Enroll today to support us each time you go Krogering!

Have more time than money?

Consider donating your time to help us with ravine litter clean ups, invasive plant removal, or writing educational articles, grants or blog posts. We're always looking for folks to help plan events like the Annual Ravine Art Contest or Spring Plant Walk, deliver Ravinia newsletters to local distribution points, and implement outreach campaigns. Whether you would like to volunteer regularly or just once-in-a-while, we certainly welcome your help. Your support helps us keep our central Ohio ravines healthy and beautiful. In central Ohio we may not have beaches or mountains, but Franklin County has over fifty ravines!

YES! I WANT TO BE A SUPPORTING MEMBER OF FRIENDS OF THE RAVINES.

Name _____ E-Mail _____ Phone _____

Address _____ City/State/Zip _____

Indicate any special instructions for listing of your name in the Roster of supporting members. _____

Membership Category *Make Check Payable to Friends of the Ravines.*

Friend: \$15 Sponsor: \$35 Sustainer: \$50
 Contributor: \$25 Household: \$40 Patron: \$100 Corporate (Over \$100) _____

I want to volunteer to help Friends of the Ravines carry out its mission to protect ravine areas and educate the public. I can help by:

Distributing *Ravinia* Writing Articles for *Ravinia* Preparing Mailings
 Assisting with the Website Giving Computer Advice Helping with Ravine Cleanups
 Planning Community Forums Removing Invasive Plants in Ravines Becoming an On-Call Volunteer

My special area of expertise is _____.

My favorite ravine is _____.

Friends of the Ravines, PO Box 82021, Columbus, Ohio 43202

Supporting Members:

(March 16, 2016 – August 16, 2016)

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Submissions and suggestions are welcome.

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