

UNDERSTORY

THE NEWSLETTER OF IRVINE NATURE CENTER



Our native bracken fern is one of our planet's oldest ferns, with fossil records millions of years old.

One-Two Punch Threatens our Native Plants

By Rob Mardiney, Irvine's Director of Education

Maryland's native plants are the champions of our local ecology. The diversity of trees, shrubs and wildflowers strengthens our ecosystems by providing valuable food and habitat for animals, stabilizing soil and improving water quality. For centuries these 'heavyweights' have successfully battled any contenders that challenged to knock them out of the ring.

Alas, their most recent adversaries have put together an effective combination punch, pushing Maryland's native flora against the ropes. Rising populations

of both deer and invasive exotic plants (the one-two punch) could end their dominance, significantly destabilize the environment and contribute to mass extinctions. To avoid a knockout, many natives will need our help.

Plants *have* evolved an impressive array of survival adaptations. Despite the handicap of being immobile, they successfully (1) acquire food, (2) defend themselves, (3) reproduce and (4) disperse their offspring. Ferns, for example, have managed to survive on

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earth for more than 350 million years. Apparently these tiny, over-looked ‘lightweights’ are tougher than the mighty dinosaurs that lasted a mere 150 million years at best.

Food: The miracle of photosynthesis allows plants to use the sun’s energy to combine water and CO₂ to create sugar. Plants in the pea/bean family even solicit the assistance of bacteria in their roots to capture nitrogen from the air and convert it to a usable form for making enzymes and proteins.

Defense: Plants are veritable chemical factories, which is advantageous for defending against herbivores. Some trees, including maples, produce glass-like crystals of silica around the veins of their leaves to reduce the amount of damage done by caterpillars. If insects eat large quantities of these leaves, they begin to show extensive tooth wear and can no longer chew. In another example, bracken ferns produce the chemical thiaminase which prevents mammals from metabolizing thiamine. Eating too much bracken causes cows or sheep to become sick and disoriented, a condition called “bracken staggers.”

Reproduction: By providing rewards of sugar (nectar) and protein (pollen), flowers entice animals to help with pollination. While foraging, our unsuspecting native bees regularly carry pollen from one blossom to the next. Although not native, the flowers of England’s fly orchid (*Ophrys insectifera*) give wasps an amusing alternative motive. These orchid flowers are shaped remarkably like a female digger wasp, and they emit the scent of that insect. A male digger wasp is fooled by the orchid and tries to mate with these fake-females. The wasp thinks it is mating, but it’s really only enabling the orchid to reproduce by transferring pollen.

Dispersal: To reduce competition from their own seeds, plants often rely on the wind or animals. Our native wildflowers such as bloodroot, Dutchman’s breeches and trillium, for example, have seeds with nutrient-rich nodules attached (elaiosomes). Ants want these nodules. They carry the seeds to their colonies, consume the nodules but leave the seeds – acting as both dispersers and planters!

Despite these and other adaptations, the double threat of deer and exotic

invasives may knock many native plants out of the ecosystem forever.

Deer: The lack of predators and the creation of favorable suburban habitats have contributed to the recent population explosion of white-tailed deer. Some estimate the current US deer population is 10 times higher than pre-European colonization. Deer prefer to graze on our native vegetation. As the deer over-consume our native flora they also leave openings for the second punch – the colonization of invasive, non-native plants.

Alien Invaders: Nearly 4,000 alien species have established populations in the US, reducing biodiversity and degrading habitats. Moreover, many of our native animals are not adapted to utilizing them. Studies by University of Delaware entomologist Doug Tallamy highlight this point: Native oak trees support more than 500 butterfly/moth species; but the non-native, flowering crapemyrtle supports just one species! Some alien plants can be poisonous to wildlife. Deer don’t eat the ever-growing population of garlic mustard, a wildflower introduced from Europe. Moreover, West Virginia white butterflies lay their eggs on this plant, and it is toxic to their offspring.

Unfortunately there is no ‘saved by the bell’ with this fight. The battle to protect our native plants and biodiversity is never-ending. Be a good promoter: Request, purchase and plant natives in your backyard. Garden for wildlife. Remove invasive exotics. Attend Irvine’s Native Plant Seminar in August and spread awareness. We owe it to our planet and its inhabitants to “Go the distance!”



The seeds of our native bloodroot, called elaiosomes, are rich, nutritious food for ants.

Ask the Naturalist

By Steven Mickletz, Irvine's Naturalist & Manager of Public Programs



A wood thrush's nest is usually in the lower branches of a sapling or shrub, where a fork provides good support and twigs or foliage provide shade and cover.

QUESTION: Birds migrate in the spring and fall; what do they do in the summer?

ANSWER: When you walk Irvine's trails in the summer, you are surrounded by wood thrush, ovenbirds, robins and woodpeckers. These birds often go unnoticed, though, and with good reason – they do not want you to find them! Summer is the time of year birds are doing one of the things they are most famous for: taking care of a nest full of eggs or young birds.

In the case of the wood thrush, known mostly for their flute-like song, these nests are probably at eye level for an adult and just above the head of a youngster. The nest is made of sticks and rests in a forked branch of a spicebush or small cherry tree in the understory. The female, brown in color, remains well camouflaged as she sits on the nest. The male, a boldly brown bird with spotted breast and belly, will search the forest floor, flipping leaves as he looks for caterpillars, spiders and other bugs to feed the babies.

So as you stand amongst the trees of the forest, keep an ear open for rustling leaves and an eye open for a wood thrush patrolling for a leaf litter buffet. Then, in the winter, come by again to see if there is a nest resting in the surrounding shrubs. You may be surprised by how many you find!



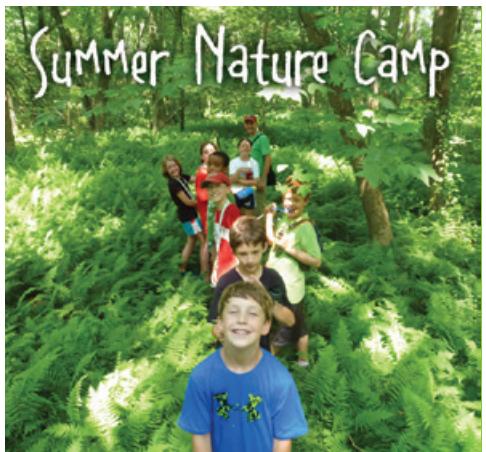
Save the Date

6th Annual
Pumpkins on the Green

October 24, 2014

Our annual "ungala" is a fun and casual event that celebrates nature! Tickets go on sale later this summer.

Live Music • Dancing
Catering by Linwoods • Cocktails
Silent & Live Auctions



Choose from more than 40 nature-based camp sessions with activities that include:
• Hiking • Animals • Water Activities
• Biking • Camping • Green Games
• Stream Studies • Healthy Cooking
• And other hands-on activities outdoors!
Before and aftercare available with most sessions.

For more info, contact Clare at 443-738-9220
or NaldrettC@ExploreNature.org.



When people peruse Irvine's preschool blog, naturepreschool.wordpress.com, it's easy to see how learning unfolds. What's not always evident is our underlying philosophy about how young children learn best.

Foundational early childhood education research reveals that early learners make meaning of their world while skill-building through play. This means that a teacher's role is more aptly defined as a guide or facilitator of learning rather than one who presents content to "teach."

Given that play is the primary vehicle for early learning, it makes sense that skills don't develop in separate categories like 'science' or 'language.' Children make meaning as they observe, move their bodies, verbalize, interact with peers, feel and express emotions, defend their ideas, and use trial and error to problem-solve. When teachers invite open-ended play, children have freedom to invent and learn.

When rich open-ended play meets nature, students reap even more benefits.

"There's no real prescribed way to use the natural materials outdoors," says Sophie Gerard, a lead teacher in The Nature Preschool. It is this flexible approach to materials and processes that help facilitate meaningful learning.

Irvine's Preschool Director Monica Wiedel-Lubinski defines unstructured outdoor play as *wild nature play*. Children roam and play without interruption or redirection from teachers. At The Nature Preschool, more than 50% of students' time is spent engaged in wild nature play. Highlights of wild nature play include:

- physical fitness through daily active play
- Vitamin D from the sunshine
- exposure to healthy *Mycobacterium vaccae* in soil
- appreciation for local plants and animals
- connected sense of place with the land
- freedom to assess one's own risk during play
- compassion and respect for living things and each other

Katie Rooney, also a lead teacher, summarizes the role of play at The Nature Preschool, "When you take kids outside your focus doesn't need to be naming things. It's about simply observing and participating in the natural world. It's the process rather than finding an answer."



Animal Spotlight



Leucistic Rat Snake

By Laura Soder, Irvine's Naturalist & Animal/Exhibit Coordinator

Many of Irvine's visitors are often puzzled by the sight of a bright white snake in our exhibit labeled "black rat snake." But, this is not a case of mistaken identity!

This particular rat snake is considered "leucistic," meaning she was born with reduced pigmentation in her scales. This is a genetic condition similar to the one that makes an animal albino – but instead of being completely colorless, this snake still has dark bluish-gray eyes.

Black rat snakes are a common species found in Maryland, inhabiting farmland, forests and sometimes our backyard sheds. They are typically solid black with a light chin and patterned belly, and can grow to an impressive size – it is not uncommon to find shed skins for the black rat that are six feet in length! As with many snakes, they feed on rodents, birds and other small animals, using their tongues to track down scent trails of their preferred prey.

It is rare to find a leucistic snake surviving in the wild, as the lack of camouflage makes them an easy target to other hungry animals. If you happen to come across a black rat snake on a sunny spring hike though, be sure to give it some space and admire its unique adaptations!



Leucism affects members of all species, including reptiles, birds and mammals – even humans!

2014 Native Plant Seminar & Sale



Saturday,
August 23
9 a.m. – 4 p.m.

REGISTER NOW:
www.ExploreNature.org



3RD ANNUAL Nature Preschool Conference

Preschool educators and administrators will connect to discover and share activities, insight and best practices.

FRIDAY, SATURDAY & SUNDAY
JUNE 6-8, 2014

Register Online!

Vince's Crew

By Emily Stransky, Irvine's Group Project Coordinator

Volunteers are an important aspect to any organization, but to Irvine – with thousands of visitors a year and 116 acres of land – volunteers are vital. The dedication and hard work of our volunteers allows Irvine to host visiting families, school field trips, programs and summer camps, as well as provide a safe learning environment for preschool students.

Among these volunteers is the Post Secondary Functional Life Skills Class or, as we like to call them, “Vince’s Crew.” Vince’s Crew is made up of young adults who dedicate their time to make Irvine a better place. Vince Johnson and Cathy Fisher have led our volunteers from this program for over 8 years!

Currently, Marissa, Travon, Daniel, Gabriel and Naim spend a few hours every Monday, Tuesday and Thursday at Irvine. They clean the glass in the exhibit hall so visitors can see the critters, fill the bird feeders so we can observe songbirds, pick up sticks on the trails so visitors can walk safely outdoors and so much more. Vince’s Crew is always willing to complete tasks and they are always enthusiastic while doing their work!

Thank you to the entire Post Secondary team! You continuously show the true spirit of volunteerism through your hard work and commitment!



Volunteers Marissa and Gabriel are part of “Vince’s Crew.” Here, they are helping Irvine staff prep hundreds of batteries for proper recycling.

Volunteer Spotlight

we need YOUR help!

SPECIAL EVENT VOLUNTEERS

Volunteers will assist with preparation of Irvine's annual events. Duties include setup and breakdown, food prep, decorating, etc.

Upcoming Events:

Preschool Conference: June 6, 7 and 8

Native Plant Seminar: August 23

Pumpkinfest: October 11 and 12

FALL VOLUNTEER

NATURALIST TRAINING

Become a volunteer naturalist at Irvine! This 3-session course will teach you how to lead educational trips for school groups. We'll cover field trip themes, natural history, trail activities and teaching techniques. No experience necessary – just bring enthusiasm for working with kids!

Tuesday, September 16,

9:30 a.m. – 12:30 p.m.;

Thursday, September 18,

9:30 a.m. – 12:30 p.m.;

Saturday, September 20,

9 a.m.-3 p.m.

NATURALIST INTERN

Interns will be trained to implement science-based lesson plans and will learn local natural history, trailside activities and teaching techniques. General duties include assisting with animal care, program materials maintenance, trail and garden work, and exhibit interpretation. Monday-Friday, some evenings and weekends required. 15-30 hours per week.

If interested in volunteering,
contact Courtney Sagal at
CourtneySagal@ExploreNature.org.



Bullish on Irvine, T. Rowe Price Invests Time and Money

By Karen Nitkin, Irvine's Grant Writer

T. Rowe Price is more than a corporate sponsor to Irvine. We are proud to call this global investment firm a loyal partner and friend.

Through the T. Rowe Price Foundation, Irvine receives important support for our annual *Pumpkins on the Green* fundraising event and our One School program, which brings environmental education to students in Baltimore City Public Schools.

But Irvine's relationship with T. Rowe Price goes well beyond dollars and cents.

Over the years, we have come to rely on the cheerful, hard work of T. Rowe Price employees, who have done so much for Irvine, from maintaining our walking trails and Outdoor Classroom to constructing the wigwam and longhouse at our Native American site.

"Our associates are passionate about the environment," says Renee Christoff, head of Corporate Social Responsibility. "We have both individuals and teams donating their time. During the past three years, over 250 associates have donated almost 1,600 hours of service to Irvine."

As Irvine has grown, we have been able to share our triumphs with help from Page Seville, T. Rowe Price's Vice President and Senior Manager, Retirement Plan Services Institutional Marketing. Page joined our board in 2008 and completes her term on Irvine's marketing committee this June.

So to Page and all the wonderful volunteers and supporters at T. Rowe Price, we just want to say we can't thank you enough for all you do.



One of the many outstanding corporate volunteer groups from T. Rowe Price that donated their time and energy to us in 2013.

BOOST THE POWER OF YOUR GIFT WITH BALANCED GIVING



Think of everything we balance – work schedules, tires, checkbooks, meals and so much more. Yet, for all we so carefully keep in tune, few of us consider balancing our charitable giving. But just like everything else that runs better when aligned, our charitable giving can be more powerful and effective when it takes into account today and the future.

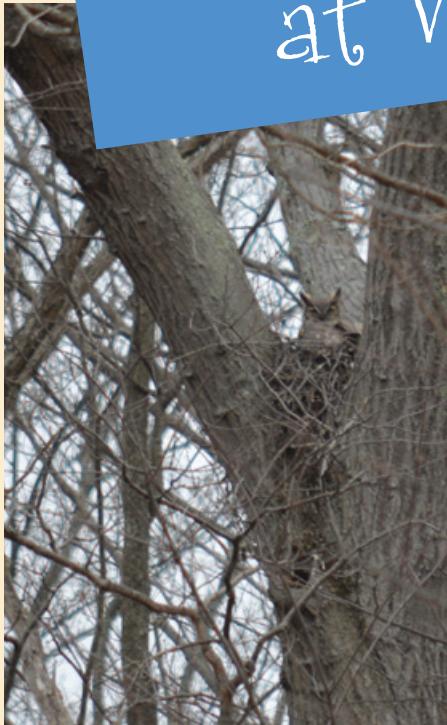
If you make annual gifts to Irvine, you may be interested in ways to continue your giving into the future. If you have already included us in your will or created another planned gift, you may wish to see the benefits of your giving today.

We can help you find the mix that is right for you. To learn more, visit us online at www.irvinelegacy.org, or call Anna Lincoln Whitehurst at 443-739-9236.

Your Irvine at Work



SEE WHAT WE'VE BEEN UP TO FOR THE PAST FEW MONTHS. THERE'S ALWAYS SOMETHING GOING ON AT IRVINE!



At the edge of Irvine's property, a great horned owl built a nest. Staff had the privilege of seeing the owlet (inset) using a spotting scope.

The Woodland Garden swelled with gorgeous flowers, like these native bluebells, throughout April and May.



For the second year in a row, the winners of our annual Birdies on the Green golfing event were the Wilmington Trust team of Kevin Burke, Tom Herring, Mackey Hughes and Bo White.



The St. George's Garden Club hosted a free exhibit of their gorgeous spring plants and photography at Irvine in April. Gardeners from all over brought their very best spring daffodils to display.



Irvine's new nocturnal birdcam caught these little critters grabbing peanuts from our feeders. They're flying squirrels.

Whooo's watching you? Birders came in droves to spot long eared owls hanging out in a large conifer by Irvine's stream.

TREEHUGGER 5K | APRIL 27, 2014



Winner of the 2013 Baltimore Marathon, David Berdan, counted down the racers. There were 140 participants (100 more than the previous year!).



Eleven-year-old Christopher Withee came in 5th place overall! Here he is crossing the bridge and headed to the second half of the course, which wound through the stream.



High Five! Deneen Philistine crosses for the Charm City Run Rogues.



Family finishing strong together! The run may have been tough, but no one got left behind!



Overall winner Chris Coder (who crossed with a time of 22:54) at the presentation of his recycled trophy full of violets.



Runners made it through the wetlands! No one escaped without at least a healthy splattering of mud.

SPRINGFEST | APRIL 27, 2014



Climb! Climb! The rock wall was everyone's favorite attraction all day long.



One of the messiest activities was learning to make a worm composter to take home. Each composter included a discarded banana peel from the morning's 5K after-party breakfast.



Baby goats made an appearance, thanks to the Stevenson University Equestrian Club. There were also farm animals and precious baby bunnies.



Early birds to the event were treated to fast paced games and no lines. It was a beautiful day to get outside and play!



Our wonderful red-tailed hawk, here with Irvine Naturalist Laura Soder, made an appearance for visitors to get an up-close look at one of our most popular raptors.

Signs of the Season

By Valerie Barbare, Irvine's Naturalist and Manager of School & Urban Education Programs

With the severely cold and snowy winter we had, I promise not to complain that it's too hot outside this summer. Instead, I plan to spend a great deal of time outdoors, water bottle in hand. The warmer temperatures and longer daylight hours invite children and adults alike out to play, read, talk, dine, hike, jog, swim, lounge, garden, entertain and more outdoors. It's the perfect opportunity to connect (or reconnect) to nature.

Regardless of which activities you choose to do, the idea is to get your family and friends outdoors.



Want to feel less stressed? Get some outdoor time like these Summer Nature Camp kids!

Numerous studies have revealed that the benefits of being outside include higher levels of vitamin D, lower levels of stress, improved mood, increased energy, improved concentration and a connection to

nature that keeps people committed to taking care of our earth.

So enjoy the warm weather this summer, the health benefits from being outdoors, and your (renewed?) connection to nature.

WHAT'S HAPPENING AT THE NATURE STORE?

Have you signed up for Summer Nature Camp yet?

Summer is right around the corner and the Irvine Nature Store is the place to go for all your camp and campout essentials. We carry Irvine lunchboxes, totes and cinch sacks – perfect for campers of all ages!

Stay cool and hydrated with a Klean Kanteen, available in many colors and sizes! Complete your order with an Irvine T-shirt, sweatshirt or hat. You will be the coolest camper (or camp parent) in town!

Don't forget to save the trees by donating your gently used books to the Irvine Re-read, Re-Use, Recycle Fundraiser!



Haven't been to the Nature Store lately? We've got all new stock, and tons of items not available anywhere else.

WELCOME TO IRVINE, NEW MEMBERS!

WE'RE THRILLED TO HAVE A GREAT BUNCH OF NEW MEMBERS WHO JOINED OVER THE SPRING. MEMBERSHIP DUES HELP US CARE FOR OUR TRAILS, PROVIDE QUALITY ANIMAL CARE AND MAINTAIN THE OUTDOOR CLASSROOM. THANKS SO MUCH FOR YOUR SUPPORT!

Mrs. Megan Abbruzzese
Ms. Elizabeth Alex
Mr. Michael Baillif
Mrs. Patchaya Banks
Mrs. Kindle Barkus
Mr. and Mrs. Craig Blake
Mrs. Tess Brody
Mrs. Dina Bruno and Mr. Gary Bruno
Mrs. Chrystal Buchanan and Mr. Grandon S. Weaver
Dr. and Mrs. Kelley Burgin
Ms. Stephanie Bylkas-Moore and Mr. George Moore
Mrs. Megan Cardin
Ms. Kelli Chapeski and Mr. Adam Chen
Mrs. Florence Chertkof
Mrs. Kirsten Clarke
Ms. Maureen Cochran
Ms. Marsha Colbert
Mrs. Ashley Collevecchio
Ms. Jennifer Cumbo
Ms. Rita Curtis
Mr. and Mrs. David O. Dardis
Ms. Sarah DeFelice
Ms. Christina M. DeMarr and Mr. Ryan A. Blackwell
Mr. and Mrs. Jason Dennis
Mr. and Mrs. Roberto Lopez
Dr. and Mrs. Dana Ferraris
Mr. and Mrs. Dale Foard
Mrs. Jennifer Frank and Mr. Paul Proctor
Mr. Stephen Frazier
Mr. James Gibbons
Mrs. Natalia Goldenberg
Mrs. Lee Goldstein
Mrs. Samantha Gray
Ms. Crystal Guengerich and Ms. Renee Pié
Ms. Laura Hahn
Mrs. Rian Hart
Ms. Janet Hartka
Ms. Julie Hartman Skokna and Mr. Christopher Skokna

Ms. Jessyca Henderson and Mr. Casey Lide
Mrs. Emily Herzing
Dr. Zachary Hettinger and Dr. Meagan Hettinger
Ms. Shelly Hettleman
Mrs. Keri B. Hoke
Mr. and Mrs. Joseph Hovermill
Mr. and Mrs. Ben-Jr Wang
Ms. Linda Hutchinson-Troyer and Mr. Walter Troyer
Ms. Lily Im and Mr. Tom Reifsnyder
Mr. and Mrs. Keith Isaacs
Dr. Lisbeth Jorgensen
Mrs. Ashley Kennedy
Mrs. Young Ju Kim
Dr. Yuliya Klopooh
Mr. and Mrs. John Lalley
Mrs. Libba Lane
Mrs. Christina Lavelle
Mrs. Neetu Likhari
Mr. Chieh Iun Liu
Ms. Victoria Lucas
Ms. Milana Marksamer
Mrs. Jul Lee Martensson
Ms. Meghan McPhail
Beth Blauer and Oren Miller
Dr. Carmen L. Moore
Dr. Kathryn Moore
Mrs. Carol Morris
Mr. and Mrs. Mark Norris
Capt. and Mrs. Olav Nyseter
Dr. Dionne Oliver
Mrs. Karen Owczarzak
Ms. Donika Patel
Mr. and Mrs. John Pauliny
Miss Viviana Prado-Nunez
Ms. Amanda Pyne
Mr. and Mrs. Dennis Robinson
Mrs. Karen Ropka
Ms. Debra Roth
Mr. Paul Rudolf
Dr. Amelia Safi

Mrs. Mandy Saleh
Mrs. Michelle Sansur
Mr. Jon Schmitt
Mrs. Vicki Schneider
Mr. Chen Shao
Dr. Jessica Shiller
Ms. Robin Siegel
Ms. Kate Skovron
Ms. Jenna Slonaker
Dr. Lauren Spearman and Dr. John LaPolla
Mr. and Mrs. Matthew Speicher
Mr. and Mrs. Chad Steele
Mrs. Angelique Teague
Mrs. Janet Tham
Mr. and Mrs. John Tracey
Mr. and Mrs. Christopher A. Tucker
Ms. Natalya Tychshenko and Mr. Gabriel Nunez
Mr. John Uder
Mr. and Mrs. John Voneiff
Ms. Jacqueline Weinstock
Mr. and Mrs. Brian Whitman
Ms. Emily Wireman and Mr. Bernie Davis
Mrs. Leili Younts
Mrs. Tabitha Yuhad

Thank You to Our New and Renewing Corporate & Foundation Partners, & Grants!

The Abell Foundation
The Baltimore City Foundation
Baltimore County Commission on Arts and Sciences
Baltimore Life Companies
Biohabitats, Inc.
Black Oak Associates
Bob Jackson Landscaping
Bonsal Family Fund
Charm City Run
Clapp Communications
Constellation Energy
Corbyn Investment Management

Croft Investment Management
The Davey Tree Expert Company
The Dillon Fund
Edgesource
The Elizabeth B. and Arthur E. Roswell Foundation
Gallagher Evelius & Jones LLP
Halcyon Asset Management
Harbor Investment Advisory
Harris Media Group
Heritage Properties
Hill and Company Realtors
J C Crothers Foundation, Inc.
J C Porter Construction
The John Ben Snow Memorial Trust
Joseph and Harvey Meyerhoff Family Charitable Funds
Klein Agency, LLC
Larson & Associates
Marathon Capital Management, LLC
The Marion I. & Henry J. Knott Foundation
McCauleys Landscaping LLC
McCormick & Company, Inc.
Merritt Management Corp.
Natural Concerns
Obrecht Properties, LLC
Oxpoint Hodings
Peapod
Platt Development
Rosemore, Inc.
St. John Properties, Inc.
Stevenson University
Sylvan Laureate Foundation
Transamerica
The Whit Harvey Group

We make every effort to ensure the accuracy of this list. If you notice any errors, please accept our apologies and contact us at 443-738-9227 or BeckerV@ExploreNature.org.

NATURE TIP



BIRD-SIZED MOSQUITOES?

Though their sting may sometimes feel like they're large, mosquitoes are a natural part of summer. To protect yourself from them without harming the environment, try a homemade repellent made of apple cider vinegar, sage, lavender, rosemary, thyme and mint. There are detailed instructions online. Like this tip? Sign up for Irvine eNews to get one a month.

TREE TIP



By Stephen Sprague, Safety Director at Carroll Tree Service

In high populations, bagworm moth caterpillars can be serious defoliators of needled evergreens. To manage populations effectively, just pull off the bags and destroy them. The bags contain the larva of the bagworm. After pupating, females remain in the bag and lay their eggs. Discard or destroy the bags – don't just leave them on the ground.

Five Consecutive Sell-outs!

By Rob Mardiney, Irvine's Director of Education

"These programs are the highlight of our month," says Irvine member Willis Chen. "My wife and I love the friendly atmosphere, great food, quality speakers and door prizes!"

As of this writing, Irvine sold out its fifth consecutive Eat, Drink and Learn Series for adults. More than 100 people register for these entertaining and educational evenings that provide dinner, alcoholic and non-alcoholic beverages, and a natural history program. This year's theme was animal-focused with topics on butterflies, coyotes, deer, frogs, hawks and bluebirds.

In the fall, Irvine is expanding the series to seven months, so mark your calendars now: the third Thursdays of September, November and January through May. If this year is any indication, you'll want to sign up early. Or better yet, sign up for the entire series for a discount.

2014-2015 EAT, DRINK AND LEARN SERIES

Third Thursdays!

Join us for our continued series of fun, educational opportunities for the 21+ crowd! Share a specialty drink with friends, eat a delightful dinner, then adjourn to the Fern Rooms for an engaging discussion. All events begin at 6:30 p.m., with the presentation starting at 7:15. The cost is \$30 per member, and \$40 per non-member.

Bears & Brews

September 18, 2014

Presentation by Harry Spiker

Bugs & Bourbon

November 20, 2014

Presentation by Michael Raupp

Bones & Bohs

January 15, 2015

Presentation by Frank Marsden

Locavores & Lagers

February 19, 2015

Presentation by Irvine Naturalist Steven Mickletz

Climate, Conservation & Cosmos

March 19, 2015

Presentation by David Curson

Wild Flowers & Whiskey Sours

April 16, 2015

Presentation by Irvine Director of Education Robert Mardiney

Pond Life & Pinot

May 21, 2015

Presentation by Middleton Evans

NEW! This year, we'll be offering passes for the entire season of 21+ events at a discount. Members can purchase passes to all 7 events for \$180. Non-members can purchase passes to all 7 events for \$240.*

Visit www.ExploreNature.org to purchase your tickets today!

*There are no refunds for events you cannot attend, however you may transfer your ticket to a friend, colleague or family member by calling us in advance of the event. Offer available through September 17, 2014 only.

Summer 2014 Programs

at Irvine Nature Center



FOR KIDS



COOKIES AND CANVAS

Is there a better way to spend a Saturday morning than eating cookies and painting scenes from nature? Cookies and Canvas is hosting a step-by-step painting class with instructions for your child to come home with a masterpiece. Children paint on gallery-wrapped canvas, which is ready to hang with no framing required. Paint the Wild Animal Summer series is specially created for Irvine! Ages 5 & up. Children under 5 permitted with parental guidance. Cookies provided – feel free to bring your own snack as well.

*Saturday, June 28; Sunday, July 13;
Saturday, July 26; and Sunday, August 10
10 a.m. – noon*

*Each class: \$16 members,
\$20 non-members*



TALES AND TAILS!

Join Irvine for a few animal stories followed by an up close interaction with Irvine's animal friends! All ages (with adult).

*Every Friday from June 20 through September 19 (except Friday, July 4)
10 – 10:45 a.m.
Free!*

TURTLES, TERRAPINS AND TORTOISES

Come get an up close encounter with Irvine's resident turtles. Learn facts, ask questions and see what it's like to live a slow, long life. All ages.

*Sunday, June 29
10 – 11 a.m.
Free for members, \$10 non-members*

SLUGS AND BUGS

Turn over logs and rocks to uncover all sorts of creepy crawlies during this naturalist-led hike. Bring a water canteen, binoculars and your bug field guide! All ages.

*Sunday, July 20
10:30 – 11:30 a.m.
Free for members, \$10 non-members*



HOW TO REGISTER

THERE ARE 4 WAYS TO REGISTER:

1. Call 443-738-9220.
2. Email Programs@ExploreNature.org.
3. Register on-site at Irvine.
4. Visit www.ExploreNature.org and look for online registration.

LIFE ON YOGA MOUNTAIN – INTRO TO YOGA

Come "Children of All Ages" for a creative and colorful journey on Yoga Mountain! This interactive workshop will introduce basic yoga poses that draw inspiration from nature. Led by Wendy Cohen, long-time yoga instructor, artist and author of the book *Life on Yoga Mountain*. Ages 6-10. Children under 6 permitted with parental guidance.

*Sunday, June 22
1 – 2:30 p.m.
\$16 members, \$20 non-members*

LIFE ON YOGA MOUNTAIN – MINI-CAMP

Wendy Cohen brings decades of experience to Irvine as the leader of this creative arts and nature based yoga camp. Art and yoga are two waves that ebb and flow, creating a balance in the minds of children and developing positive character traits that last a lifetime. Each day will include art projects, yoga poses, time outdoors and an animal encounter!

Ages 6-10. Children under 6 permitted with parental guidance. For more info, visit www.lifeonyogamountain.com and www.wendycohen.us.

*Monday – Wednesday, July 28 – 30
1 – 3 p.m.
\$80 members, \$100 non-members*

CANCELLATION POLICIES

Irvine may cancel programs due to bad weather. If Irvine cancels a program, fees will be refunded. If you cancel your reservation less than one week before the program, no refund will be given.

PAYMENT IS REQUIRED AT TIME OF REGISTRATION.

STREAM SEARCHIN'

Enjoy a fun hike to our stream and immerse in some aquatic exploration to find critters like crayfish, caddisflies and salamanders. Ages 6 & up.

Saturday, August 2

10:30 a.m. – noon

Free for members, \$10 non-members

DRAGON TRAINING 101

Have you ever wondered if

Fantastic beasts and where to find them!



dragons are real? What's the inspiration for the mockingjay? Why are ninja turtles so tough? Come to Irvine to meet some of the real-life inspirations for mythical creatures of books and movies! We'll even hit the trails to see if we can find any of the beasts. Ages 6 & up.

Saturday, September 13

10:30 a.m. – noon

Free for members, \$10 non-members

YOUTH PROGRAMS**INTRO TO BIRDING**

Youth birders! Meet at Irvine for a hike to identify some of our summer resident birds. No experience with birding is necessary, but a willingness to learn tricks and techniques to identify birds is a must. Bring your own binoculars or borrow ours. A light breakfast is included. Ages 10 & up (teens included!).

Tuesday, August 12

8 – 10 a.m.

Free!

FOR FAMILIES**FATHER'S DAY SNACK WITH THE ANIMALS**

Looking for the perfect way to spend Father's Day? Bring your dad to observe animal feeding time at Irvine. Find out what our resident animals like to munch on, see some critters enjoy a tasty meal and share a delicious treat with dad!

All ages.

Sunday, June 15

1 – 2 p.m.

\$5 for members, \$15 non-members

NATIONAL MOTH WEEK – CAMPFIRE AND LIGHT TRAPPING

Survey the diversity of insects that come to our light trap by the gazebo. With a little luck we may get to see luna and promethea moths in addition to a variety of other species! While we wait for darkness, we'll spend some time around the campfire learning about moths and roasting marshmallows.

Ages 6 & up (with adult).

Thursday, July 24

8 – 10 p.m.

Free for members, \$10 non-members

ROOT ROOT ROOT BEER FOR THE HOME TEAM

Have you ever had a refreshing root beer on a hot summer day and wondered where that great flavor comes from? Using natural ingredients, and guided by a naturalist, you can try your hand at making a homemade batch! Learn all about the origins of this tasty drink, the edible plants used within and assist in the brewing process. Each family will get to take home a six pack of homemade root beer at the end of the program!

Saturday, August 9

10:30 a.m. – 12:30 p.m.

Per Family: \$20 members,

\$30 non-members

IRVINE FAMILY CAMPOUT

Pitch a tent at Irvine, head out for a naturalist led night hike, do some stargazing, then enjoy a campfire snack before bed. In the morning, we'll listen to the sounds of the forest waking up and share a light breakfast. A naturalist will be present to lead all activities. Pre-registration is required; Irvine provides a limited number of tents (please mention that you need one when registering).

Please eat dinner before arriving promptly at 6 p.m. All ages (with adult).

Friday, September 5, 6 p.m. –

Saturday, September 6, 9 a.m.

For families of up to 4: \$20 members,

\$40 non-members

Individuals: \$10 members,

\$20 non-members



FOR FAMILIES *continued*

SO-LONG TO SUMMER CAMPFIRE SING-A-LONG

The days are getting shorter, so let's celebrate while we still have a sliver of summer. Sing songs, tell tales and, best of all, roast s'mores as we salute a wonderful summer!

Friday, September 19 (rain date Sept. 26)

6:15 – 8 p.m.

\$5 for members, \$15 non-members

FOR ADULTS



DUSK WALKS

Each season brings new flora and fauna to Irvine's trails. Be the first to discover what the changes have to offer. This naturalist-led 1.5-mile, slow-paced walk is perfect for amateur birders, photographers and general nature enthusiasts. For summer walks, be sure to wear long pants (tick protection!) and sun protection. Hikes last about 1.5 hours. Ages 12 & up recommended.

June 18, 6:30 p.m.

July 24, 6 p.m.

August 27, 6 p.m.

Free!

BENEFITS OF BABYWEARING

Greenberries Mobile Babywearing Clinic will guide you through the wonderful world of babywearing. Learn the benefits and safety points to babywearing successfully. Parents will be able to try on carriers with a trained CBWS Greenberries consultant, purchase a carrier if desired and join us for a one-hour hike. There will be a 10% discount on all purchases made at the workshop!

Sunday, July 13 or Sunday, August 10

1 – 3 p.m.

Free for members, \$10 non-members

MARYLAND MASTER NATURALIST COURSE

This 7-week training course taught by Irvine Nature Center, Masonville Cove and National Aquarium staff and local environmental specialists covers natural history of Maryland, environmental interpretation and conservation stewardship. Classes will alternate between the sponsor's locations. After completing the classroom training, volunteers must complete 40 hours of volunteer service with Irvine, Masonville Cove or the National Aquarium.

Fridays, June 6 – August 1 (except July 4)

9 a.m. – 5:30 p.m.

\$250

DEER AND VOLE CONTROL FOR HOMEOWNERS

Have you ever installed a wonderful new plant only to have it disappear underground...or have it mown down by foraging deer? This presentation explains the difference between moles and voles, reviews the best techniques to keep munchers (above and below ground) at bay and suggests deer-proof and deer-resistant plants for sun and shade. Presented by Master Gardener Nancy Lewis. Light refreshments will be served.

Saturday, September 6

1 – 2:15 p.m.

Free for members, \$10 for non-members

PROJECT LEARNING TREE (PLT) WORKSHOP

PLT is a multi-disciplinary environmental education program designed for teachers and other educators. PLT focuses on trees and forests, but also includes land, air and water issues to help students understand our complex environment. Participate in many elementary school-level activities and take home the 475-page PLT Curriculum Guide containing over 100 lesson plans.

Tuesday, July 1

9 a.m. – 3:30 p.m.

\$20 (fee for curriculum guide and light snacks)

FALL VOLUNTEER NATURALIST TRAINING

Become a volunteer naturalist at Irvine! This 3-session course will teach you how to lead educational trips for school groups. We'll cover field trip themes, natural history, trail activities and teaching techniques. No experience necessary – just bring enthusiasm for working with kids!

Tuesday, September 16,

9:30 a.m. – 12:30 p.m.;

Thursday, September 18,

9:30 a.m. – 12:30 p.m.;

and Saturday, September 20,

9 a.m. – 3 p.m.

\$30 deposit (refunded at conclusion of season)

HIVES IN THE CITY

A presentation on urban beekeeping by author Alison Gillespie. Save the date! More information in the fall issue of *Understory*.

Tuesday, October 14

7 – 8 p.m.





11201 Garrison Forest Road
Owings Mills, MD 21117
443-738-9200
www.ExploreNature.org

Spring 2014 Programs



HOURS

Open daily 9 a.m. - 5 p.m.

NATURE STORE HOURS

Tues. - Fri. 9 a.m. - 5 p.m.

Weekends 10 a.m. - 4 p.m.

Check out
our brand new
inventory!

ADMISSION

Our trails, gardens and exhibits are open to the public free of charge. We encourage you to sign the guest book and consider a donation or membership, as these gifts keep Irvine green and free. Programs and special events often require a fee.

NATURE STORE

The Nature Store at Irvine has something for everyone: handmade lunch bags, Scrabble tile necklaces, and Irvine shirts and hoodies. We also offer our own special mix of birdseed custom blended based on studies by the U.S. Fish & Wildlife Service.

DIRECTIONS

Irvine Nature Center is located in Owings Mills, Maryland at 11201 Garrison Forest Road. From the Baltimore Beltway, take exit 20 (Reisterstown Rd.) headed north toward Garrison. Turn right onto Greenspring Valley Road. At the first stop sign, turn left onto Garrison Forest Road. Go approximately 2 miles to Irvine Nature Center's entrance on the right.

To find out more, visit
WWW.EXPLORENATURE.ORG

Irvine Nature Center

Established as a non-profit environmental education organization in 1975, Irvine Nature Center educates and inspires current and future generations to explore, respect and protect nature. Irvine fulfills its mission through outdoor environmental education programs and events. Program offerings include public nature programs, Summer Nature Camp, school field trips, The Nature Preschool, Nature in the Classroom, teacher professional development, group programs and special events. Irvine features a green building, a trail system with 6 miles of trails, native plant gardens, live animals, interactive exhibits, a kid's corner and the Nature Store. Irvine also serves as a community resource for natural history information.

We are supported by our members and generous donors.