



## Decurrent False Aster:

### *the Rare River Plant of the St. Louis Region*

Though some might dismiss decurrent false aster (*Boltonia decurrens*) as a common weed because it is a prolific seed producer with explosive growth in sunny, recently disturbed floodplains, this is by no means an ordinary plant. Decurrent false aster is one of Missouri's rarest plants and it is one of nine federally protected plants in the state. The U.S. Fish and Wildlife Service first listed decurrent false aster as federally threatened in 1988 and it is considered state endangered in Missouri due to habitat loss and alteration. Today, small populations of the plant are known to occur around the confluences of the Mississippi, Missouri, and Illinois rivers. Without the ongoing efforts of the Missouri Department of Conservation and partnering agencies, this dynamic flood-dependent plant could disappear from the Missouri landscape.

How do you know it when you see it? Decurrent false aster is a perennial herb that can grow over 6 feet tall with linear, decurrent leaves (the base of the leaves clasp the stem and proceed downward as wing-like projections). At flowering time, usually July through October, this plant can be quite showy producing 250-400 pinkish-white, daisy-like flowers the size of a nickel. There are some confusing look-alikes including the closely related White doll's daisy (*Boltonia asteroides*) and several types of Fleabane (*Erigeron spp.*), but none of these plants have the light green decurrent leaves characteristic of decurrent false aster.

Alterations over the last 100 years (urbanization, levees, etc.) to the natural flooding processes that occurred along the Missouri, Mississippi, and Illinois rivers, have resulted in a dramatic loss of associated terrestrial and aquatic habitats. These changes have impacted not only the rare and interesting decurrent false aster, but a variety of other species like the Interior least tern, Lake sturgeon, and Fat pocketbook mussel that also rely on the dynamic connection of these major rivers to the surrounding land.

Columbia Bottom Conservation Area, near the confluence of the Mississippi and Missouri rivers, is one of the best places in Missouri to see decurrent false aster. The local population soared to several thousand individuals following a flood event on the area in 2012. Thanks to the diligent efforts of Columbia Bottom Conservation Area wildlife staff to implement soil disturbance by discing in the late winter/early spring, decurrent false aster can still be found in large numbers throughout the area, even in the absence of recent flooding.

By ANDREA SCHUHMAN  
natural history biologist



For more information about this decurrent false aster visit <http://mdc.mo.gov/discover-nature/field-guide/decurrent-false-aster>.

*Missouri Department of Conservation is a national leader in conservation.*

# Jay Henges Shooting Range and Outdoor Education Center

1100 Antire Road, High Ridge, MO 63049 • [mdc.mo.gov/node/299](http://mdc.mo.gov/node/299)



From the east/St. Louis  
I-44 west to Beaumont Antire Road, exit 269. Left over I-44 to Antire Road. Right on Antire. One hundred feet to entrance.

From the west/Eureka  
I-44 east to Beaumont Antire Road, exit 269. Follow exit lane around to top.

## HOURS:

April 1 – November 30

Wednesday: 11 a.m. – 7:30 p.m.

Thursday and Saturday: 10 a.m. – 5:30 p.m.

Friday and Sunday: 10 a.m. – 4:30 p.m.

December 1 – March 31

Wednesday – Sunday: 10 a.m. – 4:30 p.m.

Programs are free. Call **636-938-9548** or email [henges.range@mdc.mo.gov](mailto:henges.range@mdc.mo.gov) with your name and phone number to sign up for a program requiring registration. Up to two reservations are allowed per registration; groups should contact the range for more information. If you are unable to attend, please call and cancel as a courtesy to those on the waiting list. Interpretive services are available for those with hearing loss with 5 days notice.



## Beginning Shotgun

Aug 1 • Saturday • 1 – 3:30 p.m.

*(First time shotgun shooters, ages 11 and up)*

This is an introductory program for beginning shooters who want to learn the correct way to get started in shotgun sports. We will discuss appropriate shotguns, correct fit, gauge, and ammunition selection, proper stance, mount, movement, and vision. All participants will have an opportunity to shoot at some clay targets after the classroom portion of the program. (Reservations begin July 1.)

## Introduction to Trapshooting

Aug 8 • Saturday • 1 – 3:30 p.m.

*(Experienced shotgun shooters only, ages 16 and up)*

If you do not know the specifics of the game of trapshooting, this program is for you. We will learn the basics of competitive trapshooting, appropriate guns and ammunition, rules of the game, and shoot a round for score. Trapshooting is a great lifetime sport. Firearms and ammunition will be provided, or you may bring your own 12- or 20-gauge shotgun. (Reservations begin July 8.)

## Introduction to Skeet Shooting

Aug 18 • Tuesday • 6 – 8 p.m. and

Aug 19 • Wednesday • 6 – 9 p.m.

*(Experienced shotgun shooters only, ages 14 and up)*

Henges will be hosting a two-night skeet program. Night one is the mandatory classroom training held at the Jay Henges Education Center classroom. Night two will be held at the nearby St. Louis Skeet and Trap range in Pacific. Equipment and 12 and 20 gauge ammunition is provided; shooters may bring their own shotgun and/or ammunition the second night. (Reservations begin July 18.)

## Introduction to Crossbows

Aug 20 • Thursday • 6 – 9 p.m.

*(Ages 6 and up)*

A crossbow takes skill, training, and a lot of practice. An advantage with a crossbow is that you don't feel a recoil. If you cannot bear a gun's recoil and noise or do not have the strength to draw and hold a hunting bow, as long as you have the desire to hunt or get out and just do some shooting, this may be an option for you. Crossbows can be used to hunt all game species in Missouri, so come and let us help you learn and shoot this popular equipment. (Reservations begin July 20.)

## Effective Wingshooting for the Hunter

Aug 22 • Saturday • 8 a.m. – 5 p.m.

*(Experienced shotgun hunters, ages 14 and up)*

Dove season and other bird seasons are upon us, and it's not too late to be practicing and getting ready. Participants will learn how to improve wingshooting and distance estimation skills. We will provide 12 and 20 gauge non-toxic/steel ammunition. Participants must bring their own shotgun, choke tubes, and your normal non-toxic hunting ammo (for patterning). (Reservations begin July 22.)

## Beginning .22 Caliber Rimfire Target Handgun

Aug 29 • Saturday • 8 – 9:30 a.m.

*(First time handgun shooters, ages 11 – 15)*

This program is for first time youth handgun shooters. We will cover the basic parts, operation, and safe handling of revolvers and semi-automatic target handguns, with one-on-one instruction on the range. We will provide .22 caliber handguns and ammunition. Parent(s) must accompany youth. (Reservations begin July 29.)

*Unless otherwise indicated, youth under the age of 16 must be accompanied by an adult.*

# Busch Shooting Range and Outdoor Education Center

2360 Hwy D, St. Charles, MO 63304 • [mdc.mo.gov/node/270](http://mdc.mo.gov/node/270)

## Youth Air Rifle

Aug 1 • Saturday • 9 – 11 a.m.

(Ages 9 – 15)

Interested young people who have never had experience shooting are invited to participate in a Saturday morning session learning safety and the proper techniques of shooting air rifles in a controlled, safe environment. Firearms, ammunition, and safety equipment are provided. Meet at the August A. Busch Conservation Area Regional Office classroom. (Reservations begin July 2)

## Youth Archery Day Camp

Aug 12 • Wednesday • 9 a.m. – noon

Aug 13 • Thursday • 9 a.m. – noon

(Ages 10 – 15)

This two-day program helps students acquire the skills needed to safely participate in this fun and rewarding outdoor activity. All equipment will be provided. Meet at the August A. Busch Conservation Area Regional Office classroom. We will cover types of bows, parts of the bow and arrow, proper stance, grip, form, release, and other important tips and techniques. Must attend day one in order to attend day two. (Reservations begin July 13.)

## Shotshell Reloading

Aug 12 • Wednesday • 6 – 9 p.m.

(Ages 15 and up)

Due to the rising cost of shotshell ammunition, here is your opportunity to learn the inexpensive process of reloading shotgun shells. The technique is easy and will save you money over the cost of factory ammunition. This is a hands-on learning class; we'll produce quality shotshells with low-cost equipment. All equipment provided. Meet at August A. Busch Conservation Area Regional Office classroom. (Reservations begin July 13.)

## Introduction to Bow Hunting for Whitetail

Aug 19 • Wednesday • 6 – 9 p.m.

(Ages 11 and up)

We will discuss bowhunting and how it differs from deer hunting with a rifle. We will cover techniques to improve your chances of a successful hunt. Meet at the August A. Busch Conservation Area Regional Office classroom. (Reservations begin July 21.)

## Duck Hunting 101

Aug 20 • Thursday • 6 – 8:30 p.m.

(Ages 11 and up)

This is an introduction course to duck hunting and how to have a successful hunt. Class will cover habitat, migration patterns, hunting opportunities, blinds, decoys, ammo, chokes, calls, waterfowl identification and more. Meet at the August A. Busch Conservation Area Regional Office classroom. (Reservations begin July 22.)

## Basic Archery

Aug 22 • Saturday • 9 a.m. – noon

(Ages 10 and up)

This program provides students with skills needed to safely participate in this fun and rewarding outdoor activity. All equipment will be provided. Meet at the August A. Busch Conservation Area Regional Office classroom. (Reservations begin July 23)

## Duck Calling 101

Aug 27 • Thursday • 6 – 8 p.m.

(Ages 11 and up)

This program teaches the basics of duck calling. We will cover making basic sounds, basic calling techniques, and sounds used in hunting situations. Bring the call that you will be using. Meet at the August A. Busch Conservation Area Regional Office classrooms. (Reservations begin July 28.)



From I-64/40 take Hwy 94 south to Hwy D; turn west on Hwy D for approximately 5 miles. The area entrance is on the south side of Hwy D.

Programs are free. Call **636-441-4554** to register Monday through Friday 8 a.m. – 5 p.m. If you are unable to attend a program, please call and cancel as a courtesy to those on the waiting list. Interpretive services are available for those with hearing loss with 5 days notice.

## Wingshooting Warm Up

Aug 29 • Saturday • 9 a.m. – noon

(Ages 12 and up)

Brush up on your wingshooting skills to get ready for hunting seasons. We will discuss safety, proper shooting technique, shotgun fit, ammunition, shot size, proper choke selection, and more. This class **IS NOT** designed for the novice, or beginning shooter. You should have some shotgun shooting experience before attending this class. Meet at the August A. Busch Conservation Area Regional Office classrooms. (Reservations begin July 30.)

**REMINDER** The August A. Busch Shooting Range is closed for a total renovation. For more information see our website <http://mdc.mo.gov/regions/st-louis/august-busch-shooting-range> and visit our blog <http://mdc.mo.gov/blogs/busch-range-renovations>

*Unless otherwise indicated, youth under the age of 16 must be accompanied by an adult.*

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# Powder Valley Conservation Nature Center

11715 Cragwold Road, Kirkwood, MO 63122 • [mdc.mo.gov/node/271](http://mdc.mo.gov/node/271)

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From I-44 east take the Watson Road exit and turn left on Geyer. Cross over the bridge and turn left on Cragwold Road. Follow one mile to the entrance. Enjoy nature exhibits, attend programs, purchase hunting and fishing permits, browse through a nature-related gift shop, and pick up free conservation brochures. Outdoors, enjoy three miles of hiking trails through oak-hickory forest.

## **HOURS:**

Building: Tuesday – Saturday: 8 a.m. – 5 p.m.

Area: Daily: 8 a.m. – 8 p.m. DST  
8 a.m. – 6 p.m. CST

Programs are free. Call **314-301-1500** to register. If you are unable to attend a program, please call and cancel as a courtesy to those on the waiting list. Interpretive services are available for those with hearing loss with 5 days notice.

## **The Overlooked Opossum**

Aug 4 • Tuesday • 10 – 11:30 a.m.

(Ages 4 – 7)

Are opossums cute to you? Some people love them, and some aren't really fans. Either way, they are a very important part of our ecosystem. We will explore the characteristics of the opossum, make a craft to take home, and play a game about their survival. And although we probably won't see any of these secretive creatures during the day, we will go on a short hike to explore their habitat. (Reservations begin July 21.)

## **Fish Frenzy**

Aug 5 • Wednesday • 10 – 11 a.m.

(Ages 5 – 8)

Do you know how to tell the difference between a blue gill and a crappie? Would you like your kids to know how to identify the most common fish in Missouri? Join us for some educational fun and games in the classroom! (Reservations begin July 22.)

## **Floral Design with Wildflowers**

Aug 14 • Friday • 9:30 – 11:30 a.m.

(Adults)

Native plants greatly benefit the wildlife, but wildflowers can also make beautiful floral arrangements! Learn about the native wildflowers in the garden at Powder Valley, and then learn simple tips and tricks about design before making your own arrangement to take home. (Reservations begin July 31).



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## *Powder Valley Hallway Exhibit*

### *Dan Rackley and Marcia Owens Photography*

*Dan Rackley and Marcia Owens are native Missourians who love to travel the state. Braving the elements, chiggers, mosquitoes, and ticks, they travel the back roads, enjoying nature and taking photographs. Rackley and Owens hope you enjoy their photographs and encourage you to make time to discover nature.*

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# Powder Valley Conservation Nature Center

11715 Cragwold Road, Kirkwood, MO 63122 • [mdc.mo.gov/node/271](http://mdc.mo.gov/node/271)



## Nature Nuts Trivia

Aug 15 • Saturday • 10 a.m. – noon  
(Ages 14 and up)

Are you a nature lover that enjoys learning and discovering the outdoors? Well come and challenge yourself with our naturalist quiz and nature sounds bingo. Bust myths about Missouri's wildlife and the great outdoors with Nature: Fact or Fiction. Whether you are a novice or an expert, have fun applying your current knowledge and expand on what you know! (Reservations begin July 18.)

## Badgers and Otters and Minks, Oh My!

Aug 18 • Tuesday • 9:30 a.m. – 11 a.m.  
(Ages 6 and up)

Badgers digging in the prairies, otters playing in the rivers, minks hunting in the lowlands – what do they have in common with each other? Actually these interesting predators are related, all being considered members of the weasel family. We will look at how they are alike, and how their different adaptations help them live in such different parts of the habitat. (Reservations begin Aug 4.)

## Girls on Fire!

Aug 29 • Saturday • 8:30 a.m. – 1 p.m.  
(Girls, ages 14 - 18)

Bring out your inner Katniss! Learn some of the skills this character used in the popular book series, *The Hunger Games*! Participants will rotate between 3 activities: archery, camouflage, and fire/water/shelter. Dress for the weather and bring a water bottle and snack. This program will be held at Emmenegger Nature Park. Please call for directions. (Reservations begin Aug 15.)



## Forest Park Office

5595 Grand Drive, St. Louis, MO 63112 • [mdc.mo.gov/node/10254](http://mdc.mo.gov/node/10254)



From I-44 take Kingshighway north to West Pine Blvd, turn left. Follow West Pine to Lindell, turn left. Continue on Lindell past Union Drive to Cricket, turn left. Take first right onto Grand Ave. The visitor's center is on the right.

### HOURS:

Monday – Friday: 8 a.m. – 5 p.m.

Programs are free. Call **314-877-1309** to sign up for a program requiring registration. If you are unable to attend a program, please call and cancel as a courtesy to those on the waiting list. Interpretive services are available for those with hearing loss with 5 days notice.

### Is That Snake Venomous?

Aug 13 • Thursday • 10 a.m. – 12 p.m.  
(Ages 6 – 16)

Missouri is home to nearly 50 species of snakes. Although found in every habitat, snakes are rarely encountered. However, we all know someone, and maybe it's yourself, who is afraid of snakes. Learn the facts and get rid of the fears today. Learn characteristics of venomous snakes, which snakes are found here in St. Louis, and the difference between venom and poison. Participants will be indoors for most of the program. Meet at the Dennis & Judith Jones Visitor and Education Center. (Reservations begin July 27.)



# Columbia Bottom Conservation Area

801 Strodtman Road, St. Louis, MO 63138 • [mdc.mo.gov/node/298](http://mdc.mo.gov/node/298)



From I-270 north, take the Riverview Drive exit (last Missouri exit); go north 2.8 miles. Riverview Drive becomes Columbia Bottom Road at its intersection with Larimore Road. The entrance is on the right-hand side.

## HOURS:

Building: Wednesday – Friday: 8 a.m. – 5 p.m.

Saturday – Sunday: 8 a.m. – 4 p.m.

Area: One-half hour before sunrise to one-half hour after sunset except authorized activities.

Programs are free. Call **314-877-6014** to sign up for a program requiring registration. If you are unable to attend a program, please call and cancel as a courtesy to those on the waiting list. Interpretive services are available for those with hearing loss with 5 days notice.

## School for Mother Nature

Aug 13 • Thursday • 10 a.m. – noon

(Ages 6 – 12)

Ever wonder what Mother Nature has to do to get ready for school? Join us to find out what's in store for the coming months. We will complete a craft worthy of the refrigerator and then venture through some of our wild areas on a short hike. Be prepared for the weather and bring a water bottle. (Reservations begin July 30.)



## Between the Sun and Moon

Aug 29 • Saturday • 7 – 9 p.m.

(Ages 7 and up)

Columbia Bottom Conservation Area is "Big Sky Country" in North County and the sunsets here are spectacular! Walk with us as fields and prairies transform from lush green to glowing golden-red under the setting sun, then to a silvery hue by the light of the full Sturgeon moon. It's the perfect setting to discover how the Missouri Department of Conservation works with you, and for you, to sustain healthy forests, fish and wildlife. Meet at Parking lot "M," about four miles from the front entrance. Walk is about 3 miles on flat, paved surface. (Reservations run Aug 13 through 27.)

**Save the Date!**  
**Don't miss the fun.**

*National Hunting and Fishing Day  
is Saturday, September 26, 2015.*

*This fun event is for all ages. Don't miss the  
boat rides, archery, casting, and more.*

*Watch for more information in September.*

# August A. Busch Memorial Conservation Area

2360 Hwy D, St. Charles, MO 63304 • [mdc.mo.gov/node/300](http://mdc.mo.gov/node/300)

## Reptiles of the Marias Temps Clair Conservation Area

Aug 1 • Saturday • 8 – 11 a.m.

*(All ages)*

A warm summer morning is a wonderful time to see reptiles basking in the sun in their native habitat. We can usually see several species during a summer hike at Marais Temps Clair Conservation Area and we invite you to join us for a 2.5 mile hike on the levees to view exciting native wildlife of eastern St. Charles County. Learn the identifying characteristics of the native turtles and snakes while viewing them up close and through provided spotting scopes. Effort = Moderate for 2.5 mile hike on level terrain. (Reservations begin July 17.)



## Aquatic Adventure

Aug 4 • Tuesday • 9 – 11 a.m.

*(Ages 6 – 12)*

What could be more fun on a hot day than finding cool critters in the water? Net aquatic animals to learn about the food chain in our woodland pond and how we can affect it. Dress for the weather; we may be getting muddy and wet. All equipment provided. (Reservations begin July 21.)

## Woodland Nature Detective: Wild Mammals!

Aug 20 • Thursday • 3:30 – 5:30 p.m.

*(Ages 6 – 12)*

Be a woodland nature detective! Go on a wild mammal safari in the woods to see what you can find. We will scout for signs of mammal life on the ground and in the trees. We will investigate leaf piles, peer under rocks, and peep into tree trunks to learn about Missouri mammal habitats. Indoors, we will study animal mounts, pelts, and skulls to discover the amazing adaptations Missouri mammals developed for survival. (Reservations begin Aug 6.)



From I-64/40 take Hwy 94 south to Hwy D; turn west on D for approximately two miles. The area entrance is on the north side of Hwy D.

### HOURS:

Building: Monday – Friday: 8 a.m. – 5 p.m.

Area: Daily: 4 a.m. – 10 p.m.

Programs are free. Call **636-441-4554** to sign up for a program requiring registration. If you are unable to attend a program, please call and cancel as a courtesy to those on the waiting list. Interpretive services are available for those with hearing loss with 5 days notice.

# Rockwoods Reservation

2751 Glencoe Road, Wildwood, MO 63038 • [mdc.mo.gov/node/272](http://mdc.mo.gov/node/272)



From I-44 take Hwy 109 north 4 miles to Woods Avenue; left on Woods Avenue, then immediately right on Glencoe Road. From Manchester Road take Hwy 109 south 2 miles to Woods Avenue; right on Woods Avenue, then immediately right on Glencoe Road.

## HOURS:

Building: Monday–Friday: 8 a.m. – 5 p.m.  
Area: Sunrise to one-half hour after sunset except authorized activities.

Programs are free. Call **636-458-2236** to sign up for a program requiring registration. If you are unable to attend a program, please call and cancel as a courtesy to those on the waiting list. Interpretive services are available for those with hearing loss with 5 days notice.



## Aquatic Adventure

Aug 5 • Wednesday • 9 – 11 a.m.  
(Ages 6 – 12)

What's more fun on a hot day than finding cool critters in the water? Dress for the weather and for getting muddy and wet. All equipment provided. (Reservations begin July 22.)

## Woodland Nature Detective: Wild Mammals!

Aug 18 • Tuesday • 3:30 – 5:30 p.m.  
(Ages 6 – 12)

Be a woodland nature detective! Go on a wild mammal safari and scout for signs of mammal life in leaf piles, tree trunks, and under rocks. Inside, study mounts, pelts, and skulls to discover the amazing adaptations Missouri mammals developed to survive. (Reservations begin Aug 4.)



## Overnight Float on the Meramec River

Aug 7 and 8 • Friday and Saturday  
(Ages 10 and up)

Have you floated with our naturalists in previous years, or are you signed up this season? If so, you are eligible to float, fish, camp, swim, explore, and more over two days and one night on the Meramec River near Meramec State Park. The trip is no cost with some meals provided. Attendance by at least one family member is mandatory at a pre-trip meeting on Wednesday, August 5, 7 – 8:30 p.m. at Rockwoods Reservation. Attendance will be determined by random drawing on Friday, July 24.

*Logistics:* All participants must be good swimmers with at least one participant over the age of 18 per canoe. Pre-float instructions provided at mandatory meeting. The float is no cost! However, a \$15 refundable deposit per canoe is required by check to hold reservations. Effort = Strenuous, for maneuvering canoes in slow and swift water, lifting heavy objects, tent camping on gravel bar, and exposure to weather. (Submissions to drawing begin July 10.)