

SPECIAL FEATURE: CUMBERLAND FALLS PHOTO WEEKEND 2016 by Bob Ihrig

Six members (Ron Beck, Lisa Hathorn, Teresa McGill, Dan Thompson, Jerry Carpenter, and Bob Ihrig) of Tri-State Photographic Society attended the Cumberland Falls Photo Weekend. Even though rain was predicted for the weekend, it did not occur and we had great weather for shooting. I thought the wildflowers might be sparse because of the early warm weather, but the dry conditions in this area seemed to be the culprit. We did see some wildflowers of most the species we expected to see, just not in the numbers there should have been. The Cumberland River was about as low as I have seen it for this time of the year.

I was shooting about fifty feet from Dan in the Blue Heron Mine area when I heard a loud crash. When I looked up, Dan was slightly bent over and holding his head. When he did not respond to my shouts, I went to investigate. It appears Mother Nature decided to prune the tree under which Dan was standing (John, please note I did not end this sentence with a preposition). A rather large limb bonked Dan on the noggin, bounced off this shoulder, and opened his chain saw wound. His shoulder was bruised, but the hit on his head did not seem to cause any ill effects. With Dan, it's hard to tell if there were any concussion symptoms. Fortunately, the limb missed all of Dan's photo equipment. Being the trooper he is, Dan continued shooting, being particularly careful not to drip any blood on his equipment. The rest of us were careful not to sand to close to Dan for the remainder of the trip.

Sharing a cabin with other humans allows one to notice some interesting eating habits. When Jerry finishes his cereal, he does not just tip the bowl and drink the remaining milk. Instead, he drops in a couple of Oreo's. I thought this was a very good idea. Lisa pops a frozen Gold Star three-way in the microwave for breakfast. I did not think this was a very good idea. Teresa cooked dinner for us each night while Jerry, Dan, and I washed dishes (please do not tell Annabel I did this).

All members got some really nice shots. Unfortunately, the judges did not always agree. I saw many images that I thought should have placed. Overall, I did not think the judges did their job as well as in the past, but this can be expected to happen from time to time. I am sure you will see some of these images in future competitions. The following won plaques in the competition: Lisa Hathorn - 2nd place in Scenic, Russell Beck (Ron's son) - HM in Wet and Wild, Bob Ihrig - HM in Forest Floor, and 3rd place in Artist in You.

Jerry, Dan, and I went to the falls Saturday night to shoot the moonbow. The time for the moonbow was advertised as approximately 11:30 p.m. This was not the case. We stayed until 11:45 p.m. and the moon was still not nearly high enough. I suspect the moonbow did not appear before 12:30 p.m. or 1:00 a.m. Too late for senior citizens like us. I understand Ron and Russell saw it on Friday night.

I am looking forward to next year's competition and hope more TSPS members will also attend.

Places to Photograph in 2016

This feature will continue to grow. Please send any information that could be used here to the editor so it can be added.

These places have been selected to give some options for photographers for personal field trips. Most can be done in one day or less but a few are best if you can spare a couple of days or more. A few organized options are also mentioned.

Photo Opportunities in April:

Several areas may be worth investigating for early wildflowers such as trout lilies, Dutchmen's breeches, and squirrel corn are found in the Tristate area. Timing of blooms depends on temperatures, so if you don't find wildflowers when you visit one of the following areas go back at 1 week intervals until you find the blooms.

Good areas for wildflowers:

Boone Cliffs County Park (Boone County, KY)
Big Bone State Park (Boone County, KY)
Highland Cemetery (Kenton County, KY)
Red River Gorge (Slade, KY)
Muscatatuck National Wildlife Refuge (Seymour, Indiana)
Sharon Woods County Park (Sharonville, OH)

Photo Opportunities in May

Middle Creek Park, Boone County Kentucky – Masses of Blue Eyed Marys
Camp Ground Red River Gorge trail head - Yellow Lady Slippers

Organized Photography Opportunities in April and May

April:

Cumberland Falls SRP: Photography Weekend
Wildflower weekend Natural Bridge State Resort Park
Herpetology Weekend at Natural Bridge State Resort Park
Wildflower Pilgrimage Carter Caves

May:

Spring Trade Re-enactment Fort Boonesboro State Park

2016 Club Competitions Subjects:

Pictorial

Nature

April	LOCKS	FORMAL OPEN
May	OPEN	FOREST FLOOR
June	INFORMAL PORTRAIT	OPEN
July	OPEN	GONE TO SEED
August	STAIRS/STAIRCASES`	FORMAL OPEN

September FORMAL OPEN

WATERFOWL

October BEVERAGE CANS OPEN

November FORMAL OPEN MOUNTAIN(S)/HILL(S)/VALLEY(S)

December ARCHES/DOORS/WINDOWS OPEN

Featured Photography Destination: Boone Cliffs (Boone County, KY Parks) By Richard Jones

As winter begins to wane, many photographers look forward to new opportunities such as wildflowers. This month let's look at one local area that offers superb opportunities to photograph some of the most interesting and beautiful wildflowers. One of Kentucky's wildflower gems is in Boone County – Boone Cliffs. Boone Cliffs was saved from development by the Nature Conservancy and later transferred to Boone County Parks. It is severely threatened as we shall see in a bit.

Location: Boone Cliffs and its sister park – Middle Creek Park are located off KY 18 about 5 miles west of Burlington, Kentucky.

Directions: To reach Boone Cliffs Park, take I-75 to exit 181 and take KY 18 west. Travel through downtown Burlington and continue another 5 or so miles. The turn off to Boone Cliffs is marked with a sign reading Dinsmore Homestead which is a few hundred feet ahead. Turn left at this point. You are now on Middle Creek Road. This road is narrow and you may need to use some of the pull offs to let opposing traffic pass. Some of the land along Middle Creek Road is part of Middle Creek Park and some is private property. Please do not trespass. After about 1.3 miles there is a small parking lot on the left for the Boone Cliffs Park. There is enough space for 5 or 6 vehicles depending on vehicle size and parking abilities. For parking ideas, see below.

Best Time to Visit: Mid-March through June. Because the blooming is a continuous process, this area can be visited weekly for new and different species. **Photography subjects:** Due to weather variation, the blooming of wildflowers begins anytime from mid-March to April. The first flowers will be White Trout Lilies followed by Dutchmen's Breeches and Squirrel Corn. Next will be violets and trilliums. Jack in the Pulpit Trilliums, native Phlox and many other species will follow.

Nearby attractions: Middle Creek Park and Dinsmore Homestead that was built in 1842.

Park Fees: None. Dinsmore Homestead has a \$5 fee for a guided inside tour.

General Description: This is an easy day trip from anywhere in the tri-state area. Allow up to two hours. This makes a great field trip.

Equipment suggested: Macro lenses are valuable here. 200mm lenses will allow photography of species a bit off the trail. A short telephoto lens with extension tubes or a screw in close up lens can be substituted. The trails are rough so a kneeling pad helps getting low enough to photograph the shorter flowers.

Hazards: Poison ivy is abundant from late spring until autumn. Snakes are fairly common, BUT none of them are dangerous.

NEVER hike the trails if the trails are wet. They stay slippery for several days even after a light rain. The trails easily erode so be prepared. I had a nasty fall one spring when a whole section of trail collapsed while I was on it.

The trails are very narrow and rough. Even when dry, watch your step, tripping or falling off the trail can produce serious injuries.

The greatest danger is traffic along the road. Be careful when photographing along the road.

Future of Boone Cliffs: Bleak! The spread of the Garlic-Mustard is crowding out native wildflowers. Garlic-Mustard is a non-native plant whose roots emit poisons to kill its competition.

Humans are also causing problems. People come from as far as Nebraska and Florida based on license plates that are observed in the parking lots. Few of the visitors to the park are interested in the wildflowers. Most just come to hike the moderately difficult trails. While rules prohibit off trail hiking, it is common to see people blazing new trails. Drivers often park on the wild flowers along the road when the parking lot is filled. Another serious danger to this park (and to several others) is the Boone County Park System which routinely cut up fallen trees and then stack the wood in the best wildflower areas.

What to do when the Parking Spots are occupied: There is plenty of parking at Middle Creek Park. A group can park at the parking lot here and car pool to Boone Cliff or one driver can shuttle other photographers back and forth between Middle Creek and Boone Cliffs parking lots.

Books: There are no books specific to Boone Cliffs Park, however, there are several wildflower identification books that are available in book stores. One of the best is *How to Find and Photograph Kentucky Wildflowers*, by Professor Thomas G. Barnes. This covers identification of nearly every wildflower you will see at Boone Cliffs plus it gives information on wildflower photography. Many other Kentucky wildflower areas are described in the book.

Special Places: The trails are not handicapped accessible, but it is possible to photograph along the road. Most species bloom all the way down to the edge. But I suggest someone act as a lookout for traffic. In fact where the road crosses the little stream is one of the best places in the park to photograph Jack in the Pulpit. Even those capable of hiking the trails should only photograph from the road when the trails are slippery.

At the beginning of Middle Creek Road you will see acres of Blue Eyed Marys. This usually occurs in May.

Do you have a favorite place to photograph that you are willing to share with other club members? Please write it up and send it to the editor and it will be published in a future edition of In Focus.

A Book that may be valuable for Photographers

Nature identification:

Garden Insects of North America by Whitney Cranshaw, published by Princeton University Press (WWW.princeton.edu.)
copyright 2004, 656 pages \$29.95

This book is subtitled The Ultimate Guide to Backyard Bugs and lives up its title. It includes photographs of 1,420 insects that might be in your backyard. Also included are pictures of some of the eggs and larva. Distribution, host plants, and life history are also detailed. This book documents the most insects of any insect guides. Of course it is not all inclusive, but it is the one book that should be on your bookshelf if you photograph insects.

Websites of interest:

These websites may help you with photography:

<http://www.birdsasart.com>

<http://photo.net/learn/basic-photography-tips/>

<http://www.lightandmatter.org/2011/learn-photography/the-three-basics-of-photography/>

<http://digital-photography-school.com/camera-basics-101-the-exposure-triangle/>

NEW FEATURE: Classified Ads

If you have any photographic items for sale, contact the editor and they will be in the next newsletter.

DVDs of interest:

Recently the Great Courses Company released a volume II of the *Fundamentals of Photography*. The first volume was primarily intended for new photographers but was also a good refresher for experienced photographers. *Fundamentals of Photography II* is meant for more experienced photographers but there is a great deal of information for the new photographer as well. Each set of DVDs consists of a series of 30 minute lectures on a variety of subjects. They are both worthwhile for all photographers. Both volumes emphasize the development of creativity in order to be able to make striking images with new ways of seeing subjects.

Joel Sartore is the presenter for the lectures in both volumes. He is a long time contributor to *National Geographic Magazine*. His lectures use down to earth easy to understand language in explaining techniques.

Another Great Courses DVD is *The Art of Travel Photography: Six Expert Lessons* by Joel Sartore. Lessons include Getting Beyond the Postcard, Light – Early, Late and in between plus 4 others. Much of this volume teaches methods of working in less than perfect light to make outstanding images.

There is a future Volume III of the fundamentals of photography that will emphasis landscape photography but there is no date yet announced for its release.

The Great Courses cover a multitude of topics including Economics, History, Science, Math, Language, etc.

Website: www.thegreatcourses.com

Technical Tips – Sharpness

Sharpness is not always required in photography. Portraits, particularly those of women, are often softened. Blur is used to show movement or to create images with mood.

That said, most other photographs are expected to “sharp.” There can be differences of opinion as to what is sharp and not every part of a photo needs to be sharp.

What are the causes of unsharp images?

Some are not fixable by the photographer. An example of this is using a super telephoto to capture the image on a hot day. Heat coming from the hot ground can really destroy sharpness.

The most common cause of unsharp images is the photographer. Most of this is due to camera shake because of using a too slow shutter speed or poor tripod technique. These issues are easily controlled using higher shutter speed or using proper tripod techniques.

Every photographer has a minimum shutter speed for handholding a camera/lens combo which consistently gets a sharp image. The variables are personal steadiness, photography format, technique, and focal length of the lens being used.

An estimate for the minimum handholding shutter speed of a lens is 1/focal length of the lens for 35mm film and full frame digital formats. With a 300mm lens the minimum handheld shutter is 1/300 second.

If you are using a cropped sensor camera substitute the 35mm equivalent of the focal length lens you are using. For example on an APS-c camera a 200mm has a full frame equivalent of 300mm which

makes the formula above $1/300$ sec. A 300 mm lens becomes the equivalent of a 450mm lens and thus has a minimum $1/450$ second shutter speed when hand-held. Remember, these are averages and you may be able to hand hold with slower shutter speeds or you may need to use higher shutter speeds.

If you are using a super telephoto lens, the weight may be too great to handhold the lens.

Other options include bracing the camera on a sturdy item such as a rock or tree or fence, or use VR (Vibration Reduction) or IS (Image Stabilization) or increase ISO. [Note ISO issues below]

Every image has a maximum size to which it can be enlarged. There are limits to how much cropping or enlargement can be done before an image becomes too unsharp.

Another common cause of un-sharpness involves ISOs. Higher ISOs produce noise which reduces sharpness. This is fixable by using lower ISOs. Newer cameras typically allow use of higher ISOs with much less loss of sharpness than older cameras.

Lenses also come into play. In general higher priced lenses tend to be sharper, although there are many less expensive lenses that break this trend.

The lens aperture being used can sometimes cause un-sharpness. Generally, photographers tend to stop down to gain more depth of field, however some times smaller aperture diameters (larger numbers) reduce sharpness. This is due to diffraction. Diffraction occurs more commonly in smaller sensors or more densely pixel packed sensors.

Here is a simplification of why this occurs: Refraction is caused when the aperture becomes so small that different colors focus differently. The aperture diameter is somewhat proportional to the size of the sensor or film format. The larger the format the less diffraction is encountered. The smaller the format, the more likely diffraction will occur. The late Galen Rowell is said to have never made a photograph at an f/stop greater than f/8 because he wanted to avoid diffraction. Personally, I run into diffraction issues during macro photography than any other form of photography. That makes sense because macro photography usually is done at small apertures.

Although 8 x10 view cameras are not as common today as they once were, it is not uncommon for large format shooters to stop lenses down to f/64. Diffraction is not a problem with view cameras, because f/64 is a larger diameter than f/8 in a full frame or smaller digital cameras.

Another issue with lenses is that lenses typically are sharper when they are stopped down 3 f/stops. Full frame and smaller sensor digital cameras often begin to show diffraction beyond f/8.

This is another reason that some lenses cost more. Most camera makers make the more common focal length lenses in both f/2.8 and f/4. The f/4 lenses cost considerably less than f/2.8 maximum aperture lenses, but at 3 stops down the f/4 lenses are at f/11 and the f/2.8 lenses are at f/8. The f/4 lenses may start to show effects of diffraction when stopped down 3 stops. This doesn't mean that you can't stop down more than f/8. It just means that you have to balance depth of field with un-sharpness caused by diffraction.

For technical information and photographic examples of diffraction at small apertures download the Technical Guidelines for the Nikon D800/D800 at:

https://support.nikonusa.com/app/answers/detail/a_id/18103

Technical Tips- Memory Cards

Memory cards are an essential part of digital imaging, but they can be confusing when you are buying them. There are a lot of numbers, letters, and classes listed on the cards. Many cards are too slow to be used in cameras although they may be fine in many electronics. If you are buying memory cards you need to buy fast cards. You probably won't find fast ones at most big box stores, you need to shop at camera stores either locally or on line. In order to try to simplify the selection, I chose to look only at the fastest available. The fastest cards cost very little more than the slower ones and will maximize your camera's performance. The following is a very simplified explanation of things to look for when buying memory cards.

Type of card

There are several types of memory cards on the market today. The type or types of cards that you can use is(are) preset for you by your camera's manufacturer. Currently most of cameras use Compact Flash (CF), SDHC or SDXC cards. Some of the newest cameras are starting to use Cfast (Canon) or QXD (Nikon) cards. The latter two are much faster than CF or SDHC cards. Some cameras have 2 slots for the same type card others have 2 slots for 2 different types of cards.

SDHC stands for Secure Digital High Capacity. SDXC stands for Secure Digital Extended Capacity. These cards are essentially the same so here you may be able to use a SDXC when SDHC is referenced.

If your camera has two slots for the same type memory cards, you need identical cards (same speed and brand) to avoid slowing down the camera. If you have two slots for 2 different types of cards, activate only one card at a time to avoid slowing down the camera.

The manufacturer picks the Card type(s) you will use in your camera. But you still have some choices only you can make.

Brand

There are dozens of brands on the market. The two largest brands are SanDisk and Lexar.

Cards Capacity

How big of a card capacity do you need? Capacities start at 8 GB and go as much as 512 GB and even more. What is the best capacity for you? It is going to be a personal choice and will depend on your camera's file sizes and the number of images you will want to capture.

Many people prefer several small capacity cards rather than 1 larger card thinking it prevents losing a whole photo shoot if the card fails. On the other hand, card failures are extremely rare. Stopping to change cards is inconvenient and could result in missing a great shot while you change the card.

I shoot the 36.3 MB Nikon D800 which makes large files and can only get 103 images (Raw uncompressed 14 bit averaging 41.3 MB) on an 8 GB Compact Flash card. A 32 GB card holds approximately 412 files and a 64 GB card gets 824 files. My experience tells me that the best capacity range for this camera is between 16 and 64 GB cards and the 32GB cards are a good compromise. I find that as I get more than 300 files on a card, the transfer of files to a hard storage drive starts to slow down a bit. I use a laptop with Windows 7. Probably I could improve this by changing to Windows 8 or higher that have USB 3.0 ports. Using a 64GB is doable; it is just a bit slower.

Obviously, 16 -24 MP cameras will have less capacity issues than larger MP cameras.
A 32 GB card holds about 600 raw images from a 24 MB camera

Card Speed

An important factor is card speed. It is always better to buy the fastest cards for your camera. The faster the card write speeds, the faster the images are transferred from the camera's buffer memory to your memory card. The buffer can fill up very quickly with burst shooting. When the buffer fills, the camera can't make another shot until a file is transferred. Depending on the camera and the card it can seem like an eternity before the camera can make another set of shots. If you often shoot in bursts or shoot movies buy faster cards.

It must be noted that all memory card speeds that are quoted by the manufacturers are maximum speeds. Actual speeds may be much less.

Read speed is the speed of the memory card when transferring files from the memory card to a hard drive. While this is not as important as write speed, it is still important. Higher read and write speed cards cost just a bit more than slower ones. Even if you are buying cards for an older camera, it makes sense to buy faster cards if you plan on buying a new camera in the near future.

Examples of fastest current 32 GB cards:

SDHC:

SanDisk 32GB Extreme PRO SDHC UHS-II Memory Card

Lexar 32GB Professional 2000x UHS-II SDHC Memory Card (Class 10, UHS Speed Class 3)

Compact Flash:

Lexar 32GB Professional 1066x CompactFlash Memory Card (UDMA 7)

SanDisk 32GB Extreme Pro CompactFlash Memory Card

CFast 32GB

Lexar 32GB Professional 3500x CFast 2.0 Memory Card

SanDisk Extreme PRO CFast 2.0 Memory Card

XQD cards:

Lexar 32GB 2933x XQD 2.0 Memory Card

Currently SanDisk does not make XQD cards

As you can probably guess from the data above, Compact Flash Cards and the SDHC cards may become obsolete in the next decade. As cameras need faster cards, Cfast an XQD cards will probably become the main cards.

But will both new cards become normal for newer camera?

Some photographers still wonder about XQD cards. They were developed by Sony who has never used them in a camera. So far only Nikon has used them in a camera.

The new Nikon D5 can be ordered either with two XQD card slots or two Compact Flash Card slots. They also offer to exchange the types of slots for a fee Nikon considers nominal if the photographer changes their mind about which type card they want to use.

The new Nikon D500 continues Nikon's ridiculous pattern of using two different memory card slots, in this case one XQD and one SD Card slot. It is ridiculous due to the fact that if both card slots are filled and active, the much faster XQD card's buffer speed is reduced to that of the slower SD card.

Canon is using CFast memory cards in some of their cameras. Maybe Canon knows something.

Only time will tell.

Issues with the new Nikon D500:

Lexar 1000x and 2000x SDHC UHS-II cards which are according to the camera manual are supported, don't actually work. There are also reports of SanDisk cards not working either. The EN-EL15 batteries that are used in the D500 as well as many other Nikon Cameras have a few quirks. Not all Nikon batteries work in the D500 and no aftermarket brands batteries work in the D500.

Unfortunately Japanese initial quality is not what it once was. Both Nikon and Canon have experienced quality issues in recent year. It's better to wait for a year or maybe longer before buying newly released expensive equipment.