

DEVELOPMENTS



President
Blair Ball
(901) 624-0209
Beball7@comcast.net

Vice President
Patti Possel
(901) 737-1246
Papossel@comcast.net

Treasurer
Peggy Copen
(901) 767-7247
Pwcopen@aol.com

Secretary
Allen Sparks
(901) 755-8013
Asparks306@bellsouth.net

Director
Education Committee Chair
Dale Cox
(901) 757-0402
Dale.Cox@GoodAdvertising.com

Director
Website Design
Mary Stubbs
(901) 755-4507
Maryphotocollege@aol.com

Competition Chairman
Barry Siegel
(901) 755-2474
Bearmann@aol.com

Newsletter Chairman
Tom Richey
(901) 794-4225
TRichey@hotmail.com

MCC meets nearly every Thursday
1st Thursday: Competition
2nd Thursday: Digital Class
3rd Thursday: Program & Business
4th Thursday: Carl & Tom's Class
for Enthusiastic Photographers

May 2009

www.MemphisCameraClub.org

How to use the Kelvin Scale for Better Photos

—Blair Ball

Found on most modern cameras, the Kelvin scale is a control feature forgotten by some photographers. However, the Kelvin scale can provide opportunities for fantastic creativity with a little bit of knowledge.

Lord Kelvin's bright idea

The color of light is measured on a temperature scale that was proposed way back in 1848 by British mathematician and physicist William Thomson, later knighted by the Queen as Lord Kelvin. 1848 was the infancy of black-and-white photography, the era of the daguerreotype. The precise color of the light didn't matter for photography in those days, and presumably Lord Kelvin couldn't have foreseen television, the digital CCD camera, or white balance. The Kelvin scale quantified a physics problem, giving a natural, or absolute, scale for measuring temperatures. The scale ranges from absolute zero (-273.15C) upward using units that are equal to the Celsius scale. So a lot of the Kelvin scale is below the levels where any light is emitted. Water freezes at 273.15K, and water boils at 373.15K.

The Kelvin scale helped quantify the color of light emitted by materials as they were heated. If you've ever watched a blacksmith at work, you'll see him heating the iron in the forge until it begins to glow. He can tell whether the iron is hot enough for the specific operation by the color. A dull red isn't hot enough to be malleable, but a glowing yellow is. When iron or steel is tempered, it is heated until it seems white hot, almost beginning to emit a bluish light. The Kelvin scale quantifies these changes for a theoretical "black body," an object with no reflectivity or other properties and no impurities to alter the color when heated. Incidentally, Lord Kelvin, was actually knighted by Queen Victoria for one of his other engineering accomplishments - the laying of the first transatlantic telegraph cable in 1866.

Color temperature and camera presets

We are concerned with the part of the Kelvin scale that starts in the upper region of 2,000 K to 3,000 K, a range of yellow-orange light. Ordinary household frosted bulbs generally put out light that is around 2,800 K, definitely beginning to be orange. Quartz and tungsten bulbs, such as those designed for film and TV use, put out light at 3,200 K, a yellow tint that is generally accepted

as interior or incandescent light. Your camera will have a white-balance preset for this temperature. Consumer cameras will generally indicate this preset with a symbol that looks like a light bulb. Film stocks that are designed for interior or tungsten light are balanced for this temperature.

The other part of the Kelvin scale that we pay attention to is in the 5,000 K to 6,000 K range, a blue tint that is accepted as daylight. Daylight is generally defined as 5,600 K. Again, your camera will have a preset for this color temperature. Consumer cameras will indicate this preset with a symbol that looks like the sun.

Of course, 3,200 K and 5,600 K aren't the only temperatures you will encounter. Most bulbs differ from their manufacturers' designated temperature, especially as they age. Actual sunlight varies depending on the weather conditions and time of day. It can go way over 6,000 K and, of course, can turn golden and even pink-red at sunset. Then there's the evil green range around 4,000 K in between that's common with older or cheaper fluorescent tubes.

Now, why are we so concerned with these specific light frequencies? As I mentioned, your camera can only represent one frequency (color temperature) as white, and will render all other frequencies as green or orange or blue. Your camera is dumb; you must tell it what color to home in on as white. If you make a mistake and shoot at the wrong setting, your photos will be too blue (outdoors while on 3,200 K preset) or very yellow (quartz light while on 5,600 K preset). Recognizing that lamps are sometimes off one way or another, pros will generally do a manual white balance.

Manual white balance

Although the exact procedure for a manual white balance varies somewhat from camera to camera (check your manual!), the basic procedure is similar. A white card is held up in such a way as to catch the key light for the scene--the light we want to be reproduced as white. The white card can be white typing paper, or poster board, or a commercially available card (Whibal Card) with white on one side and a test pattern on the other. The camera operator zooms in on the white card until it fills the screen, and then presses and holds the proper button to register a manual white balance until the indicator shows that the camera has

set the temperature. Pro cameras will show the precise color temperature of the manual white balance in the viewfinder. Another professional way of doing this is through an Expo Disc, which you attach to the front of your lens.

So what is actually happening when you execute a manual white balance? You are feeding the camera a signal that has a specific color temperature and telling the camera to use it as white. The camera then adjusts the amplifiers on the red, green, and blue CCDs so the combined output meets the spec for white - that is, equal signal level outputs from R, G, and B channels. The camera then remembers these amplifier settings until it is told to reset to a new temperature.

Digital cameras will occasionally seem to add a tint (most noticeable when it's a bit of magenta) to hot highlight areas. This usually shows up when the rest of the scene is fairly dark. This happens when the boosted signal of the highlight areas maxes out but the less-amplified signal corresponding to the rest of the frame still has some room before it clips.

The coldest tone of the scale starts at 1000, casting a very cold bluish tint to photos. The warmest tone of the scale ends at 20000 and is extremely blue. It may help to think of the Kelvin Scale in terms of white balances:

1000-2000 K Candlelight
2500-3500 K Tungsten Bulb (household variety)
3000-4000 K Sunrise/Sunset (clear sky)
4000-5000 K Fluorescent Lamps
5000-5500 K Electronic Flash
5000-6500 K Daylight with Clear Sky (sun overhead)
6500-8000 K Moderately Overcast Sky
9000-10000 K Shade or Heavily Overcast Sky
10000- 20000 K Northern Blue Sky

Just as your camera's white balance will "compensate" for the way it "sees" the light in a scene, Kelvin Scale allows you to control the color correcting of your images point by point.

ERRATA!

It was erroneously reported in the April newsletter that the image, "Eye over London" by Ellen Cox received a 26 instead of the 27 that it really received. We extend our apologies to Ellen for the mistake.

Lake Martin Revisit Part 2

—Tom Richey

For those of you that are fairly new to the club, here is a little background to make this article have more sense to it. I discovered Lake Martin in Breaux Bridge, LA about 8 years ago. It was a great place for someone that was into bird photography. The rookery in the spring had upwards of 20,000 birds in it: Great Egrets, Cattle Egrets, Snowy Egrets, Great Blue Herons, Little Blue Herons, Black Crowned Night Herons and the showpiece was the Roseate Spoonbills. The really great part was that they nested in the trees about 30 to 40yds off of the road. The road was on the east side of the rookery so you were shooting all morning with the sun at your back. It was by all accounts a bird photographer's dream location. About 4 years ago someone with their own agenda went into the rookery at night and did something to disturb the birds and within 48 hours the rookery was empty. It was a critical time for the birds and the disturbance was devastating.

I went back 2 years ago to see what it was like. In a word, disappointing! There were birds there, but unfortunately they were nesting way out in the swamp where some of them could be seen but not photographed. It was really disheartening to see what the individual or individuals had done. In the *Developments* issue June 07 I wrote an article "Lake Martin Revisited", hence the title of this article.

I decided to return there again this year and this is what I discovered. The large stand of Tupelo and Cypress trees that had been the focus of the large wading bird rookery was still completely empty. As you went further to the north and the foliage became Button bush where the smaller wading birds had nested, is now where the birds are located. It is an area of about 1/8 of a mile along the road. The larger birds are nesting in the back and the smaller ones are along the roadway. It is a difficult situation to get anything really good as the larger birds are not within the range of even 600 or 800mm lenses. The second week in May will probably be the most productive as then the smaller birds will have hatched out and the parents will be actively feeding.

Is it useless to go to south Louisiana to photograph birds? Not really. About 35 miles SW of Lafayette near Delcambre, LA, there is a place called Jefferson

Island. There are a couple of areas there that are rife with large wading birds, specifically the Roseate Spoonbills.

This is a really doable trip. Breaux Bridge is about 430 miles from Memphis. In addition to the Lake and the rookery there are a lot of things to see and do in the area. There is the Tabasco Factory at Avery Island, the Acadian Village or Vermillionville which are old settlement recreations. There are boat tours on the Atchafalaya. Many fine restaurants and some really quaint eating establishments complete with Zydeco or Cajun folk bands.

Field Trip Schedule

—Steve Copen

July 10-12 Reelfoot Lake

This is always a fun trip to photograph the blooming water lilies and American lotus. Our guide is MCC member David Haggard. David is the Tennessee State Parks Interpretive Specialist for West Tennessee. The highlight of the trip is always the day on the lake where we often find nesting ospreys and their chicks, and always find herons and egrets and with luck, one of the resident eagles. We will as always do sunrise and sunset as the weather permits. More detailed information will be forthcoming.

<http://www.tennessee.gov/environment/parks/ReelfootLake/>

China Part II

—Tom Richey

For those who were unable to attend Patty McLaughlin's presentation at the April business meeting, you missed another exceptionally well done show. Patty presented the second part of her trip to Mainland China. This part of the trip included Shanghai and Hong Kong. Patty has certainly improved her skills as a show producer; it truly gets better each time. We look forward to her future travels and the programs that will surely follow.

Fall Creek Falls

—Patti Possel

As the winter landscape is replaced by the chirping of nesting birds and the smell of the budding trees attracts a variety of insects, eleven shutterbugs of Greater Memphis journeyed to the eastern hills of our diverse state of Tennessee. Nestled in the mountains lay a true treasure of natural beauty, Fall Creek Falls State Park. This gem not only offered visual inspiration, but also an opportunity for those who attended to share information, to shop in each other's camera bags, and to learn new tidbits.

Our adventure began on Thursday April 9, 2009. Groups meandered east, staggered arrival times gave weary travelers time to unwind, spread out and kick their feet up before the next group arrived. Ann Moore and I were to the last to reach our destination. Could it have been that extra little stop in Nashville where we witnessed Miley signing books?

We were disenchanted when our planned shoot of a beautiful sunset was overcast with clouds. Not to worry, our light-hearts eager to have a good time, decided tomorrow would be another day and we might have an opportunity to get a better shot of the sun rising. That too was dampened by heavy clouds and threats of rain. The rain held off long enough for us to venture into the park. Some of us went to one of the three large waterfalls. Others explored the other side of the lake, across from our villas. Lunch brought a break and time for an updated weather report. It was decided it would be prudent to sit the storm out in the lodge. The weathermen were predicting a potential for heavy rain, hail and tornados. Fortunately, we only saw heavy rain.

Late afternoon gave time to see more of the park. As early evening approached, the villa-mates in 336 started preparing supper for the entire group. Mo and Cindy Gehi traveled to FCF, behind the storms as they moved east and arrived in time to join the celebration. Ellen Cox, grill-master extraordinaire, cooked up everyone's steaks to perfection. Peggy Copen, as promised, brought the yummy kind of spinach, and everyone pitched



in with other side dishes, appetizers and the meal was complete when the last bite was a taste of Tony Menne's chocolate pecan pie. The evening passed with laughter and chuckles as we played Pictionary. Ann's team technologically were the winners after a member of Ellen's team, who will remain nameless to protect him from humiliation on a grand scale, gave the winning answer to the opposing team. Peggy was the big winner of the "Clothes Pin" game.

Saturday morning was a washout. The Furlottes and Ann and I moseyed on home. I envision the others relaxed and watching the woodland ducks on the lake the rest of the day. What they actually did, you will need to ask them. I did hear that Steve Copen ventured to Millikan's Overlook on Sunday morning and got caught by an early morning preacher giving a sunrise sermon. Good thing he had a good humming voice, he blended into the crowd unnoticed.



I had a wonderful time and I hope all the others did, too. Thanks to Patty Mac for all the planning, especially since she was unable to attend at the last minute.

TWRA Calendar Contest Winners Announced (posted) April 27, 2009

—Congratulations Tom Furlotte!

The winners for the 2009-10 Tennessee Wildlife magazine photo contest have been selected. The staff of Tennessee Wildlife made the selections that will appear in the annual calendar issue of the magazine which will be available in the early summer.

Hundreds of entries were submitted, but the staff had the difficult task to narrow the entries to 13 photos that will appear in the calendar issue. The 2009-10 calendar issue will begin with the month of August.

The photographers, who have entries that will appear in the 2009-10 calendar, are Greg Booher (Bristol), Shellie Dallas (Murfreesboro), Tom Furlotte (Bartlett), Samuel Hobbs (Goodspring), Bill Lea (Franklin, N.C.), W. Kelly Roy (Knoxville), Eric Rutherford (Abingdon,

Va.), Brian Shults (Greenback), William R. Stoddard (Bartlett) and Tom Wood (McMinnville).

The staff of Tennessee Wildlife offers congratulations to all of our winners and reminds photographers that if your photo was not chosen this year, your next year's entry could be a winner.



Rules and deadlines for the 2010-11 Tennessee Wildlife photo contest will appear in the fall and winter issues of the magazine and also in the early fall or on the Tennessee Wildlife Resources Agency's Web site, www.tnwildlife.org.

Tennessee Wildlife is an official publication of the TWRA.

Exposure and Metering

—Tom Furlotte

The most basic way of setting the right exposure in daylight is called the Sunny 16 Rule. It says that the exposure for a subject in bright sun is $f16 @ 1 / ISO$, e.g. if using ISO 100 the exposure is $1/100th @ f16$ for subjects in direct sunlight. For subjects in other levels of daylight the complete guidelines are:

$f16$ Bright Sun - strong shadows

$f11$ Hazy Sun - soft, but distinct shadows

$f8$ Cloudy Bright - overcast, but can locate sun

$f5.6$ Overcast - overcast but cannot locate sun

$f4$ Dull - Dark storm clouds

You don't need a meter to take well-exposed images in daylight if you follow the Sunny 16 rule. Outdoor readings from your light meter should be very close to these exposures. If readings vary more than a stop, you should find out why. Your meter may be out of calibration or you may have the wrong ISO set.

Light Meters

The exposure for indoor subjects and for subjects in the shade is best determined by using a light meter. To get the most accurate readings from a meter, you need to know the meter's angle-of-view (how much of your subject the meter sees) and how the meter interprets the light reading. Meters that read the light reflected from the subject see every subject as if it were gray.

This simulates the typical "Average Subject." This type of reading is susceptible to misinterpretation. Light-toned subjects reflect more light than average and thus cause a higher reading than needed and give an underexposed result. A mostly dark-toned subject will cause readings that overexpose. If the subject is much lighter or darker than "average", then you, as the photographer, must make a correction to the reading to get the right tonal value.

How a meter "thinks" will determine how you use it. In-camera meters can be multi-sensor or single cell and can vary from spot-sensitive to center-weighted to multi-pattern interpretive designs. Camera meters that read through the lens (TTL) normally have the angle of view of the lens, but some can be selective spot meters, too. Hand-held meters could see as much as a 30° angle or as little as a 1° angle. The best reason to use a hand-held meter is its ability to take incident readings. Incident readings are made from the subject position back toward the camera and measure the level of the light falling on the subject. The domed receptor on incident meters is not susceptible to errors caused by subject reflectivity found with reflected light meters (see above). Modern hand-held meters can also measure flash and are accurate to within $1/10th$ stop.

Mont Blanc Climb

—Tom Richey

Memphis Camera Club member Dr. Mohan Gehi will embark on his fourth climbing expedition to raise money for the Alzheimer's Association. In July of this year he will climb Mont Blanc. At 15,781 feet Mont Blanc is the highest peak in the French Alps. These treks are to increase awareness of Alzheimer's disease and to raise funds for the Alzheimer's Association. If you would care to become one of his sponsors, you may send your donation to the Alzheimer's Association at 326 Ellsworth St. Memphis, TN 38111. You may also call them at 901-565-001. Who knows, we may see some images of the climb in future competitions.

Welcome New Members!

Lisa Ketchum

David Tutterrow

Luis Wiadacz

Where Land and Water Meet

By Francine Corcoran

“As a solitary traveler I stand alone, breathe silently, and hold the image of place and time near me. I hear the fauna, the wind through the rushes, the pines, the prairies, the waves. I smell the soil, the pitch, the rain, the blooms, the beginning of oil. I feel the damp, the sun, the breeze, the stones, the organics underfoot. Although I try not to Sometimes I exclaim aloud with delight. Then I take the photograph.”

Member Birthdays — 5/15 – 6/15

5/18	Allen Sparks	6/1	Tom Coughlin
5/21	Beverly Hammond	6/1	Rena Neal
5/23	Peter Pace	6/2	Jill Griffith
5/24	Pam Johnson	6/3	Charles Everhart
5/26	Ronnie Booze	6/4	Uttam Shah
		6/14	Gina Smith



Editor's Announcement!

—Tom Richey



Beginning with the June issue we will be including a new feature article titled “It’s All About You”. This will be a recurring article that each month will highlight one member of the club, telling you all about them. We have done this in the past and it has been suggested that we do it again. It’s a great way for all of us to get to know each other a little bit better. We hope that you will enjoy these personal profiles, and if you are asked to be the subject one, please do not say no!

THIS MONTH'S WINNERS

May 2009 Competition			
Category	Winners	Title	Points
Black & White	Mary Stubbs	An Elevated View	25
Candid People	Paula Cravens	Dancers with Bison	24
Color Open	Blair Ball	Slinging Mud	26
	Blair Ball	Going Down	26
	Paul Fultz	Close Up	26
Creative	Patti Possel	Heighten Your Senses	24
Digital	Dodie Bush	Wetlands Spring	27
Landscape	Bob Laster	Farm Country	25
Nature	Bob Laster	Iris	27
Portrait	Beverly Hammond	Butterfly Kisses	25
Digital of the Month	Dodie Bush	Wetlands Spring	27
Print of the Month	Bob Laster	Iris	27