Placer Color

Year 47 Number 2 **Newsletter of the Placer Camera Club** February 2009 **est. 1952**
http://www.placercameraclub.org PO Box 4990, Auburn, Ca. 95603

Placer Camera Club meets the third Tuesday of each month, except July and August, at 7:00PM in the Beecher Room of the Auburn Placer County Library, 350 Nevada Street, Auburn, Ca. **Visitors Welcome!**

Event Calendar

Feb 17
Monthly meeting.
Print image evaluations.
Theme is '**still life'**.

March 1
Gold Rush meeting of PSA

March 17
Monthly meeting.

April 21
Monthly meeting
Projected image evaluations
Theme category is **reflections**

May 19
Monthly meeting
Print image evaluations
Theme category is **close up**
Annual competition entries due.

June 16
Monthly meeting.
Annual awards

This month's meeting will be Tuesday **Feb 17th.** Informal gathering at **6:30** with the meeting starting **promptly** at **7 PM.**

This month we will have print image evaluations.
Our judge will be **Dolores Frank**.

Don't forget to label the back of your print with your name, category, and print title. Also, you must register your print with Judy Hooper before the meeting begins.

Move Over Photo Albums

Here Come the Books

by Sue Barthelow

Remember the days of the photo album? You'd get your film processed, buy an album and then spend hours collating your photos and adding them to its pages. Maybe you still print and collect your photos in an album. Having moved on to a digital camera, I've found that my images seem to stay forever inside my computer. Here's a solution that lets digital images out of their cells (pun intended).

Today, technology lets you collect your photos digitally and use your computer to create a book of photos. If your photos are digital, the cost of creating a photo book may be significantly less than that of printing your images and buying a photo album. If you have printed photos and have access to a photo scanner, you can include the prints in your photo book after turning them into digital images.

There are several book-making companies on the Internet. With some, all you need to do is download the company's free software to your computer. That software helps create your book. When the book is ready, you upload it to the company over the Internet and have it printed and shipped.

Some companies are better for photos than others. I use Blurb (www.blurb.com) because they're well suited for photo books. Check out their web site for samples and to see what they offer. Read a PC Magazine review online at http://www.pcmag.com/article2/0,2817,2310968,00.asp. Blurb offers books in sizes 7x7 inches, 10x8 inches, 8x10 inches and 13x11 inches. A 7x7 inch softcover book of up to 39 pages costs about $13. A 7x7 hardcover book comes to about $23 with a dust jacket over a plain cover or to about $25 with an image printed on the book's cover. Prices for a 10x8 book start at about $20. A 13x11 book starts at about $55. Each block of up to 40 additional pages costs a little more as does printing on premium paper.

These books work especially well for vacation photos and for theme-based collections. Download the software and give it a try. It costs you nothing until you upload and order your book.

Caution – you may become addicted.

This month we have a series of previous newsletter articles on understanding some of the fundamentals of photography and your camera.

Beginner's Corner

An Introduction to F-stop and Shutter Speed

by Mike Schumacher

Two terms you will hear are f-stop and shutter speed. They have to do with the amount of light the lens will supply to the film or digital chip. **Shutter speed** is the amount of time the shutter in the lens will stay open, **f-stop** is the amount of light the lens will let in while the shutter is open. Shutter speed is measured in fractions of a second and for longer exposures in seconds or even minutes. Most common shutter speeds are $1/15^{th}$ of a second to $1/500^{th}$ of a second. Common f-stops range from f1.8 to f22. The smaller the number the larger the opening for light to enter. An exposure of f1.8 at $1/250^{th}$ would let more light in than f16 at $1/250^{th}$.

Depth of field is the area from near to far that is in focus. Smaller f-stop numbers (larger opening) will have a smaller depth of field. If you are making a portrait of a person and want just the person and not the background in focus (shallow depth of field) you would use a smaller f-stop number probably f2.8 – f5.6. If you were doing a landscape and wanted everything in focus from near to far (large depth of field) you would use a large f-stop number probably f11- f16.

Shutter speed will control blur. Fast moving subjects require a fast shutter speed. A portrait would not need a fast shutter speed, you might want that shallow depth of field but remember….small f-stop = more light., so…….

→ The amount of light available will now dictate what shutter speed can be used for proper exposure. ←

As you can see from the above example the amount of light available will dictate the shutter speed / f-stop combinations that can be used. Which combination you use will depend on what you are trying to take a picture of. A fast moving car, a landscape, a flower? Is it high noon in summer or late evening in winter? Shallow depth of field or large depth of field?

As you can see f-stop and shutter speed are very inter related.

Part 2 will have more on f-stop's and shutter speeds and how they can be manipulated.

An Introduction to F-stop and Shutter Speed - Part 2

by Mike Schumacher

In part 1 we looked at f-stop and shutter speed and how they are related to depth of field. We looked at how available light will dictate the f-stop and shutter speed combination.

Both f-stops and shutter speeds can be measured in **stops.**

The stop is a basic unit of light in photography. Stops can be controlled by shutter speed, f-stop and iso setting.

Shutter speeds double or half the amount of light. Standard shutter speeds are:

1/2 1/4 1/8 1/15 1/30 1/60 1/125 1/250 1/500 1/1000 sec

A step faster halves the amount of light (minus one stop) and a step slower doubles the amount of light (plus one stop).

Going from 1/60 to 1/30 sec doubles the amount of light. Going from 1/30 to 1/60 halves the amount of light.

Iso is the sensitivity of film or the digital sensor to light. The higher the number the more sensitive the film or digital sensor is to light.

Standard iso settings are 50 100 200 400 800 1600

Increasing the iso one step doubles the amount of light (one stop), decreasing iso one step halves the amount of light (one stop). Caution should be used when adjusting iso to a high value. Higher iso settings can introduce noise especially in the shadows.

Aperture settings are described in f-stops. F-stops specify the light gathering ability of the lens. A specific f-stop on one lens, say f8, will be the same on another lens.

Standard f-stops are:

1 1.4 2 2.8 4 5.6 8 11 16 22

If we use f4 as an example going to f5.6 halves the amount of light (one stop) and going to f2.8 doubles the amount of light (one stop). In our f4 example going to f5.6 would be referred to as closing down the aperture and going to f2.8 would be referred to as opening up the aperture. Aperture also controls depth of field. F16 will have more depth of field than f5.6. Depth of field can be used very creatively to direct the viewer's eye.

One scene can have many different f-stop and shutter speed combinations. f/4 at 1/250 is the same as f/5.6 at 1/125 or f/8 at 1/60 or f/11 at 1/30.

Which one you use will be dependent on what you are trying to achieve.

Freeze action or blur? Large or small depth of field?

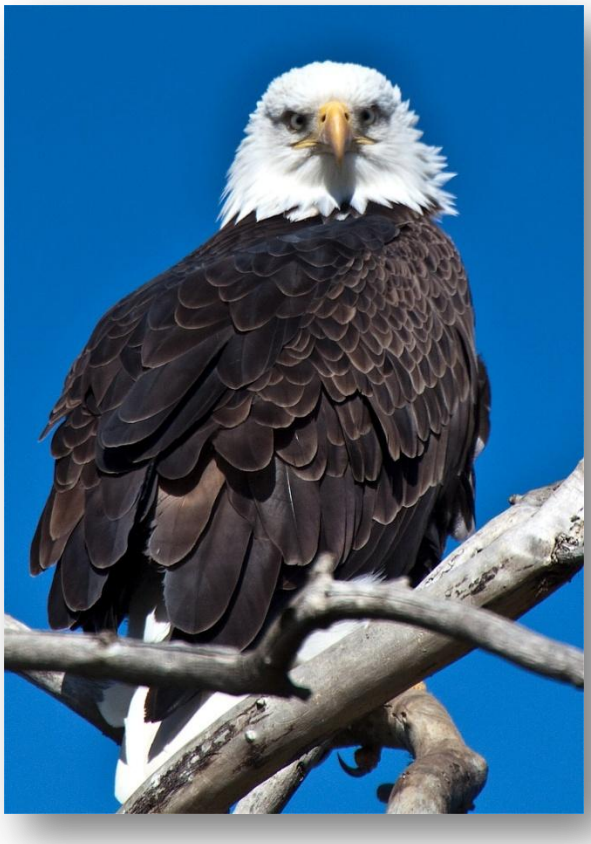
If you've gotten this far you might be wondering, why do I care about all this? It is very useful to understand these inter-relationships. Controlling aperture for depth of field and shutter speed for freezing or blurring action are basic tenants of creative photography.

More importantly we've all had fantastic photo op's and tried to capture what we see. The human eye can see between 12 to 14 stops of light. Your digital or film camera can see about 5, maybe 6 or 7 if you play a bit in the darkroom. So when we are in the forest with the sun shining through the treetops we have at least 5 stops of light or more between the shadows of the forest and the sunlight at the top of the trees.

Matrix metering combines the highlights and the shadows to create an average. So if you have bright sunlight and deep shadow it creates a compromise that has either plugged up shadows or blown highlights. This is where knowledge of stops in photography comes in handy.

We can shoot multiple frames and use exposure compensation. We could shoot 3 frames….one frame at -1/3 (stop), one frame at the correct exposure (according to the meter in your camera) and one at + 1/3. Some cameras will only do ½ steps, consult your cameras manual to use exposure compensation.

Next, how your camera meters a scene and what you can do about it



Camera Metering

By Mike Schumacher

Last time we discussed exposure compensation and stops of light. Your camera metering mode will also affect how the camera interprets the light levels in a scene. There are 4 basic types of metering.

Multi zone metering- takes in the whole scene. Depending on the camera it might be called matrix, evaluative or multi zone, but it basically involves sampling multiple areas in a scene and using that to determine an f-stop and shutter speed.

Center Weighted- averages the whole scene with emphasis on the center of the scene.

Partial- meters only the center of a scene, usually about 9% of center.

Spot- meters only the center usually about 1 -> 3%.

Which of these metering systems you have will depend on the camera. Most will have multi zone, center weighted and partial or spot.

When your camera meters a scene it is calibrated to expose for middle gray or about 18% gray. The problem with this can be over or under exposure at extreme light levels. A dark scene will be brightened to 18% or over exposed and likewise a bright scene will be darkened to 18% or underexposed.

Modern cameras do a fairly good job on most scenes in the multi zone mode. It's extremes of light where we have problems. If you have a scene where a certain portion is brighter of darker that the rest and that's what you want to expose for you can use center weighted, take a reading and re-compose.

If you are shooting flowers you might want to use partial or spot.

Bracketing exposures comes in handy for tricky lighting. The camera will automatically bracket + 1/3 or ½ and – 1/3 or ½ depending on your settings. A bracketed set is usually 3 exposures. One at the recommended setting and one above and one below.

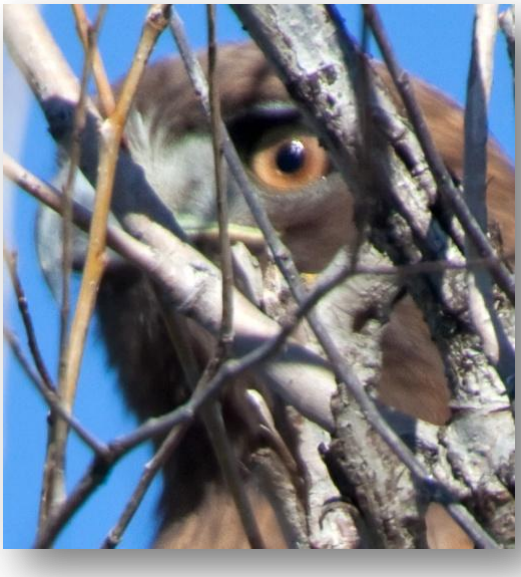
You can also use exposure compensation and do it manually. If you have a very bright scene with some deep shadows you will have to decide what you are exposing for. Take a spot or partial reading on the bright or dark areas and use exposure compensation accordingly.

For a dark area you would use minus exposure compensation and for bright areas you would use plus exposure compensation. Start with 1/3 or ½ stop and expose multiple frames. This sounds backwards but remember that 18% middle gray?

The whole point of this is your cameras meter can be fooled. It can and will expose a scene with difficult lighting wrong. This is why a scene with a lot of white like a snow

scene with very little else will turn gray unless you use plus exposure compensation.

Next time, your camera's different modes.



Your Camera's Modes

By Mike Schumacher

Your camera has different shooting modes for different situations. We'll take a look at some of them.

Most cameras have a simple point a shoot mode which allows for the least creativity. The camera sets most of the parameters and allows the least human intervention.

The next step up (on Canon, I'm not sure about Nikon) is a P – program mode. This still sets aperture and shutter speed but allows the user to set different relationships between aperture and shutter speed with the spin of a dial. Slower shutter speed and smaller aperture or faster shutter speed and wider aperture. Many other options can be set including choice of raw or jpg, type of metering etc. This is fine for some pictures but not all.

Three other modes allow for the most creativity.

TV - time value or shutter speed priority. In this mode the user sets the shutter speed and the camera sets the correct aperture. This is very useful when the subject is fast moving and you want to freeze it such as sports, car racing etc or you want to emphasize movement such as in a slow shutter speed to show motion in a waterfall. This is a good

mode for nature photography such as fast moving critters. Using a telephoto lens often requires a fast shutter speed to prevent ‘lens blur’. The use of a tripod is recommended with a telephoto but not always practical or possible. One way is to use the focal length of the lens as the shutter speed. If the focal length is 250mm use 1/250 sec or faster shutter speed.

AV – aperture value or aperture priority. In this mode the user sets the aperture and the camera sets the correct shutter speed. This can be used for creative depth of field compositions. This is a great mode for landscape and close-up photography where depth of field (or lack of it) is the main criteria. The photographer can use depth of field as well as composition to direct the viewers eye in the photograph.

M – or manual mode. This mode allows for the most control of the camera. The user sets both the aperture and shutter speed. This can be used with the cameras metering to control all aspects of the exposure.

All 3 of these modes can be used for **night** photography.

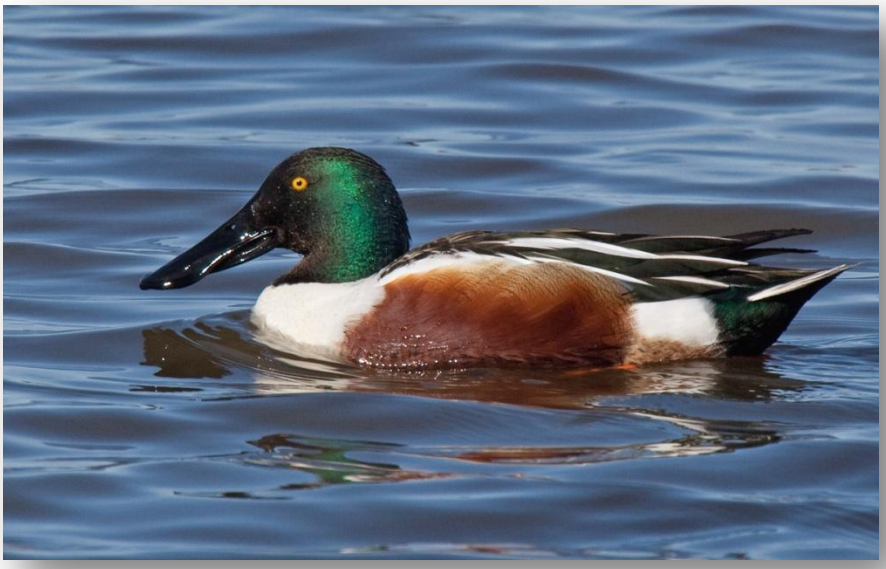
In the **manual** mode using the cameras spot or partial metering take a reading on the area of the composition you want to emphasize and set the appropriate aperture and shutter speed. You can then re-compose your picture.

In **aperture** or **shutter** priority modes you can focus on depth of field or blur car headlights. These modes will work if there are no extremes of light. You can use the above method of metering and re-compose.

With night photography **bracketing** is very useful. Make multiple (usually 3) exposures above and below the desired exposure. That would be one exposure at the desired exposure and one above and one below.

A **tripod** is essential if you want sharp photos.

Next month – composition and creativity.



* * * *For Sale* * * *

Hoya 67mm HMC Multicoated **close-up lens** kit (+1, +2, +4) $50

Canon bg-e2 **battery grip** for Canon 20d-30d & 40d $75

Dell **Laptop** with windows xp. 512 mb mem -30mb hd – usb – wi-fi with ac supply & battery $175

Contact Mike Schumacher 530-367-4505 or radioman@ftcnet.net

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Carl Koenig is looking for a Nikon **Speedlight** for his D-90 camera, Possibly a SB-600, SB-800 or ??? Contact Carl @ 530-889-8059 or mrtransister@sbcglobal.net

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If you want to sell or are looking for photography related items members can list them in the newsletter or on the club website. Email or call me. Listings are free for members.
Mike 530-367-4505 radioman@ftcnet.net

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Huey Monitor Calibration

The club has a Huey monitor calibration system for use by club members. Contact Judy Hooper to 'check out' Huey. 530-888-8308.

→ Please feel free to contact me with items for the newsletter!

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Placer Camera Club Webpage

Check out the Placer Camera Club webpage. Webmaster Sue barthelow has been doing a fantastic job! Thanks Sue!

http://placercameraclub.org

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