

# NATURE PHOTOGRAPHY - BASICS & MORE

Photography - Painting or Drawing with Light

*"A painter practices the art of inclusion while the photographer practices the art of exclusion."  
Allen Haskin*

Composition is the pleasing selection and arrangement of subjects within the picture area.

## **Six Guidelines to Better Photographic Composition (PSA Video on Composition)**

1. Simplicity
2. Rule of Thirds
3. Lines
4. Balance
5. Framing
6. Mergers

### **1. Simplicity**

- Select an uncomplicated background.
- Slight changes to point of view can create major improvements in the final photo.
- How much of subject to include.
- Move in close.
- Compose horizontally or vertically.
- Horizontally is usually for scenics.
- Verticals - a single mountain, a tree or tall flowers.
- Remove unrelated busy backgrounds and place the subject slightly off center.

### **2. Rule of Thirds**

- Place imaginary lines in your viewfinder 1/3 in from each side and 1/3 from top and bottom.
- The points of intersection of these lines are referred to as 'power points'.
- These are the points where you want to try to place your subject or point of interest.
- Viewfinders on many digital cameras give this as an option as an overlay.
- Move the subject away from a centered "bull's eye" composition.
- Path of moving subjects - give them space to move into, that is leave space in front of the moving subject.
- With a portrait (a flower can be thought of as a person in a portrait), give the subject space to look into, not out of, the photo.
- Place the horizon line in the upper or lower third of the photo.
- A centered horizon line creates a static composition.
- With vertical compositions, move the subject slightly off center.

### **3. Lines**

- Lines can create either a static or a dynamic feel to a picture.
- Vertical and horizontal lines are static.
- Diagonal lines create a dynamic field to a picture.
- Repetition of lines helps a composition.
- C or S curves create a pleasing feeling.
- Look for geometric shapes such as triangles.
- Look for separation of shapes (flowers) instead of stacking or overlapping shapes.

#### 4. Balance

- The arrangement of shapes, colours and objects within the picture.
- Symmetrical balance - two people or couples in a photo. Would one be better?
- Unsymmetrical balance - often more interesting - large and small complimentary objects.
- Odd numbers are often more interesting than even numbers of subjects within in the photo.

#### 5. Framing

- Frame the center of interest with objects in the foreground.
- Look through a window, door or arch (often under exposed or silhouetted).
- Use trees - trunks to either side, or branches looping over the top, or a tree and branches.
- A branch coming from nowhere may be disturbing.
- Generally have people look into a picture instead of out of it.
- Place people walking into a picture, down a trail, rather than walking out of the picture.

#### 6. Mergers

- Trees or light poles in the background growing out of a person's head.
- Mergers of colours that compete with the main subject.
- Is your subject touching the edge of the picture? - a border merger.
- A near or tonal merger - very similar colours.
- Slightly change the angle of view to remove mergers and make a big change in composition.

\*\*\*\*\*

#### Factors to Consider

- Pictures are created with careful planning and often waiting (for light or wind).
- Other factors include weather, time of day and sky (overcast, blue sky, puffy clouds or shade).
- Find a strong subject, simple and close.
- Avoid centered (bull's eye) compositions.
- Angle of subject - if possible try to be level with your subject. (Also use this hint taking pictures of your children/grandchildren and pets.) Get down to their eye level, don't look down on them.

#### Quality of Light

- Choose the type of "light" for your subject.
- Early morning or late afternoon are referred to as the "golden hours" for a softer light as opposed to the harsh flat light of midday sun.
- Look for shadows and work them to enhance the contrast or depth and features of a picture.
- Overcast days are my preference for flower pictures - even light with lack of harsh shadows.
- Clear blue skies give contrasty light for flowers - not good.
- Try to include clouds and sky in scenics.
- Overcast days - keep gray sky out of pictures - unappealing.
- Blue sky in shade reflects an "unnatural" blue cast to the picture.
- You can change the quality of light in various ways.
  - Flash which is usually harsh and flat.
  - Fill flash "advanced" cameras - you can reduce the flash's power -2/3, -1 or -1-1/3 to provide fill light.
  - Catch light in an animal's eye. Natural sunlight or with flash gives a spark of life to the subject.
  - Reflectors: commercial disks - white, silver, gold and silver, and gold reflect sunlight or ambient light onto the subject.
  - The center of some reflectors is a diffuser that can be placed over the subject to cut harsh sunlight.
  - Cast a shadow to cover or obliterate light spots in a photo. Use your body or have a friend hold a blanket or towel to cast shade. (Photography is a team sport.)
  - Make your own reflector using crinkled aluminum foil over a piece of cardboard.
  - Tape a couple of pieces of white matte board to make an "A Frame" that can be placed on the ground.

## How to Hold a Camera

- A tripod is the optimum holder - it holds the camera still, holds camera in one place, then you can change things within the picture you have chosen, i.e. remove shiny or dead leaves, twigs or branches bothering the picture, cast a shadow, use a reflector or a diffuser.
- Hold your camera using the principles of a tripod.
  - Drop your elbows to the side, cup the camera in your left hand and use the right hand for the shutter button.
  - Hold the camera viewfinder up to your eye.
- Many simple cameras have only the viewing screen. The camera is held away from the body in an unsteady position.
- If you have a viewfinder, shut the view screen off and hold the camera as above.
- Shutting the view screen off also saves battery life.
- Other ways to steady your camera for low shutter speeds:
  - Lean against a tree to steady your body.
  - Sit at a table or lie on the ground using your elbows as a tripod to steady the camera.

The beauty of digital photography "Pixels are Free". Shoot to your heart's content.

Use the view screen to preview your work.

You no longer have to wait days or weeks to view your results.

## Photo Bag

- A small backpack that doesn't have Nikon or Canon on it. (This is an invitation for theft from the back seat of your car).
- Protects the camera.
- Also contains lens cloth and fluid.
- Filters that screw into the front of the lens:
  - UV for lens protection.
  - Close up "diopter" filter.
  - Polarizer - changes the quality/colour of the light, pops clouds in blue sky, removes glare from green leaves even on cloudy days. Don't use with a rainbow. Maximum effect at 90° to the sun.
- Hot shoe level.
- Pen and paper for notes.
- Gardener's knee pads, ground cloth and or camping mat.
- Reflectors
- Garden shears, tweezers and/or hemostat.
- Green wire ties.
- Tripod

## Technical Part of the Photo

- How you control the light determines what the photo will look like.
- 3 parameters: shutter speed, aperture size (these 2 are a reciprocal relationship) and ISO rating (light sensitivity).
- Shutter speed is usually a fraction of a second, i.e. 1/30th, 1/60th, 1/125th - read as 30, 60, 125. The larger the number, the less camera shake. Lower shutter speed - shake - time for a tripod. Slow shutter speeds, 1/4 second to 10 seconds for lacy waterfalls and artsy windblown vegetation. High shutter speed greater than 1/250<sup>th</sup> of a second to stop action of birds, animals, people and vegetation in the wind.
- Aperture - size or opening of the lens: Large opening, small number - F4, F5.6, F8 - less of picture in focus. The smaller the opening, the larger the number - F11, F16 - more of the picture in focus.

## Technical Part of the Photo *cont'd.*

- Depth of field - how much of the picture is in focus?
  - Minimum depth of field - small aperture numbers, subject in focus, background out of focus simplifies a composition.
  - Maximum depth of field - large aperture numbers - everything in the picture is in focus. More for scenics. Foreground is in focus all the way through the picture to infinity. Flowers in the foreground of a scenic with mountains behind will all be in focus.
- ISO Rating - light sensitivity
  - Lower numbers: 50, 100, 200 - less sensitive to light, better quality of sharpness.
  - Larger numbers: 800, 1000, 1200, 1600 - more sensitive to light, reduces the quality of the picture referred to as digital noise, or the picture being pixilated. Pixilation can also occur by enlarging a photo. The pixels appear larger and more pronounced.

## Light Meter

- Light meter - reads average light (18% gray). Our eye accommodates for brighter or darker, the light meter doesn't. Sometimes you have to fool the camera's light meter.
- For bright subjects, light sand, snow or looking back into the sun (glare) - over expose one half to two stops to compensate for the light meter's averaging.
- For dark subjects, dark grays to black (charred wood) or dark blue water - under expose one half to two stops.
- Spot meter - a small part of the frame, or point camera with a telephoto lens at clear blue sky 180° from the sun (most people say northern sky, but that changes with time of day) at about 45° up. Note, a light haze doesn't work, it reflects white, not a true blue sky.

## Lenses and Focal Length - Normal, Wide and Telephoto

- Normal - 50 mm - what the eye normally sees.
- Wide angle - 17, 24, 28 or 35 mm - sees more than the naked eye. Easier to have more in focus.
- Telephoto - 135, 150, 200, 300, 500 - acts like a binocular - less of the scene in the photo - thought of as a wildlife lens. 300 mm is the equivalent of a 6 power binocular. This is my favourite flower lens - gets you further away from the flower. Reduces air movement around the body - wind on the close up flower.
- Zoom - most lenses now are zoom lenses: 18-75 mm, 75-300 mm, 25-300 mm. Can carry fewer lenses - easier to frame a photo by zooming in and out.

## Film Plane - Back of Camera

- Want to keep the back of the camera parallel to the subject with close ups. Easier to have everything you want in focus, i.e. the camera is not tipped up or down, right or left, with respect to the close up subject.

## Critique your own Work

- The object is to edit and throw away the "bad pictures". You only want to share the good work, so your friends say "ooooh" & "aaaah".
- TIC - Technique, Interest or Impact, & Composition
  - Technique is exposure and focus. Throw out over or under exposed pictures. Focus, low shutter speed, hand held camera, shake - or movement of subject, i.e. wind on a flower. Subject should be "tack sharp".
  - Interest/Impact - is the subject interesting to who you are showing it to? Is there impact that causes them to say WOW?
  - Composition - the principles discussed at the beginning of the lecture.
- Look at pictures in books and magazines - what do you like about them, what don't you like, how would you change the picture if you took it?

## Give yourself an Assignment

- How many different angles can you shoot your subject from?
- Start further out and go in close.
- Different backgrounds.
- Different light.
- Make and use a reflector.
- What can you shoot in your backyard?
- Put together a story (slide show) from your trip or day's outing.

This is a lot of material - learned slowly over years.

If you find getting more involved with your camera is intimidating, do a little at a time, become comfortable. Go out take pictures and have fun.

**Reference Books:** *(Many of these books are out of print. They are good finds at garage sales.)*

- Adams, Ansel; Yosemite and the Range of Light, 1979
- Campbell, Charles; The Backpacker's Photography Handbook; Amphoto; 1994
- Canadian Rockies; 2002 Tourist Coffee Table Book
- Fitzharris, Tim; Close Up Photography in Nature; Nature Photography; Natural Park Photography; Virtual Wilderness, Wild Bird Photography
- Lepp, George; Beyond the Basics (More Innovative Techniques for Outdoor Nature Photography)
- National Geographic 100 Best Pictures
- The Nikon School Handbook
- Patterson, Freeman; Photography for the Art of Seeing; Photography of Natural Things; Photographing the World Around You; Photography for the Joy of It; a Sierra Club Book; 1977; back of book gives 50 tips - excellent
- Shaw, John; Closeups in Nature; John Shaw's Landscape Photography
- Tharp, Brenda; Creative Nature & Outdoor Photography
- Wignal, Jeff; The Joy of Digital Photography; Lark Books; 2006; The Joy of Photography was an excellent book for film cameras. This new version is equally as good.

***Presentation by David Bedry, January 17, 2019; 604-485-1240; david@bedry.ca***