

INTRODUCTION TO WILDLIFE PHOTOGRAPHY



Richard Seeley Photography

Agenda

- ❑ Objective
 - ▣ Master basics on Wildlife Photography
 - Improve ability to capture impressive images of animals
- ❑ Presentation on Wildlife Essentials – 1 hour
- ❑ In-field practice with dogs in Dog Park – 1-1.5 hours
- ❑ Critique some images – 1-1.5 hours

Topics

- ❑ Nature Photography
- ❑ Why Wildlife Photography
- ❑ Get Close, Safely
- ❑ Understand Your Subject
- ❑ Types of Wildlife Images
- ❑ Capture Behavior
- ❑ When Most Active
- ❑ Quality of Light
- ❑ How We Find Wildlife
- ❑ Compositional Elements
- ❑ Photography Basics
- ❑ Autofocus Modes
- ❑ Autofocus Points
- ❑ Exposure Histogram
- ❑ Wildlife and Shutter Speed
- ❑ The Dog Park

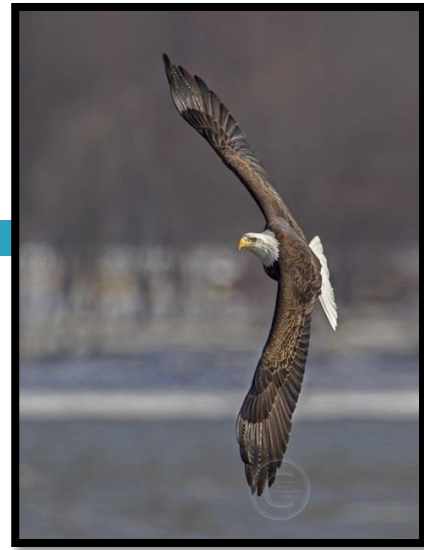
Nature Photography

- ❑ Landscapes and scenic photography
- ❑ Wildlife photography
 - ▣ Animals
 - Mammals, birds, insects, amphibians, fish and invertebrates
 - Summit County abundant wildlife – what have we seen?
 - ▣ Plants and flowers
 - Wildflower season
 - ▣ Celestial



Why Wildlife Photography?

- ❑ One of the more challenging areas of photography
 - ▣ Birds the most challenging of wildlife.
- ❑ Wildlife are undependable – they move
- ❑ Safety concerns when approaching
- ❑ Tend to be crepuscular (active at dawn and dusk) when lighting is the most challenging for photography
- ❑ Can require state-of-the-art camera technology
 - ❑ Big lenses, fast frame rates, fast auto focus, many megapixels
 - ❑ Can be quite successful with less extreme gear!



Because

- ❑ Get to travel to interesting places
- ❑ Experience behaviors that most people never get to see.
- ❑ A thrill when you capture that “moment”
- ❑ A learning process to constantly improve technique and skill
- ❑ Provides a strong motivation to constantly learn about animal behavior and types of animals
- ❑ An opportunity to be an advocate for conservation through photography.



Get Close, Safely

- Each species has a different “threat zone”
 - ▣ Safety for wildlife and human life
 - ▣ Become agitated, notice you, flee or consider you prey
 - ▣ Better to be stationary and let wildlife approach you
 - ▣ Long lens gets you “close” and provides comfort zone



Too Close

- ❑ Red Fox
parent
warning me
from the den
- ❑ 10 – 20 yards



Bighorn Sheep

□ 10-20 yards



Moose

□ 25 yards



Elk



Don't Spill Your Beer



Couple Targeted

25 yards was not enough

Rule for Grizzlies

Always keep at least
one tourist between
you and the bear

100 yards



When Most Active

- ❑ Crepuscular – dawn and dusk, sleep/rest during the day
 - ▣ Ungulates (moose, elk, deer, bison), hummingbirds, river otters
- ❑ Nocturnal – during the night
 - ▣ Foxes, most owls, skunks, raccoons, cougars
- ❑ Diurnal – during daylight
 - ▣ Most raptors (hawks, eagles, falcons), snowy owls, hawk owls, pikas
- ❑ Many are not in just one category, and some change with season

Understand Your Subject

- Understanding behavior is the key to **anticipation**. Anticipation allows you to start shooting before the action starts.
- A leopard will jump and climb a tree when threatened by a hyena



Understand Your Subject

- Anticipation
 - ▣ Whooping cranes will lean forward just before they begin their take off



Understand Your Subject

- Study the behavior
 - ▣ A red fox mother will leave the den and return in 30-60 minutes with a meal for the kits



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Understand Your Subject

- Anticipation
- An osprey will often squawk when it is about to leave the nest
- Read/study about your target wildlife and learn their behavior.



Understand Your Subject

- Understanding behavior - Bluebirds
- A bluebird will land on a branch or post just prior to entering its birdhouse.
 - ▣ Start shooting the instant the bluebird leave the post.

Understand Your Subject

- Start shooting the instant the bluebird leaves the post.



Types of Wildlife Images

- ❑ Portraits
- ❑ Action
 - ▣ Stop action
 - ▣ Blurred action
- ❑ Interaction
- ❑ Anthropomorphic



Spin Cycle

Portraits

- ❑ Animals not moving, posing
- ❑ Looking at camera
- ❑ Usually the $\frac{3}{4}$ position



Action – Stop Action

- ❑ Freeze the moment
- ❑ Usually very high shutter speed required
- ❑ Capture behavior



Action – Blurred Action

- ❑ Sense of motion
- ❑ Best if eye in focus
- ❑ Legs blurred
- ❑ May have to experiment with shutter speed – about 1/50 sec



Interaction

- Two or more animals interacting with each other

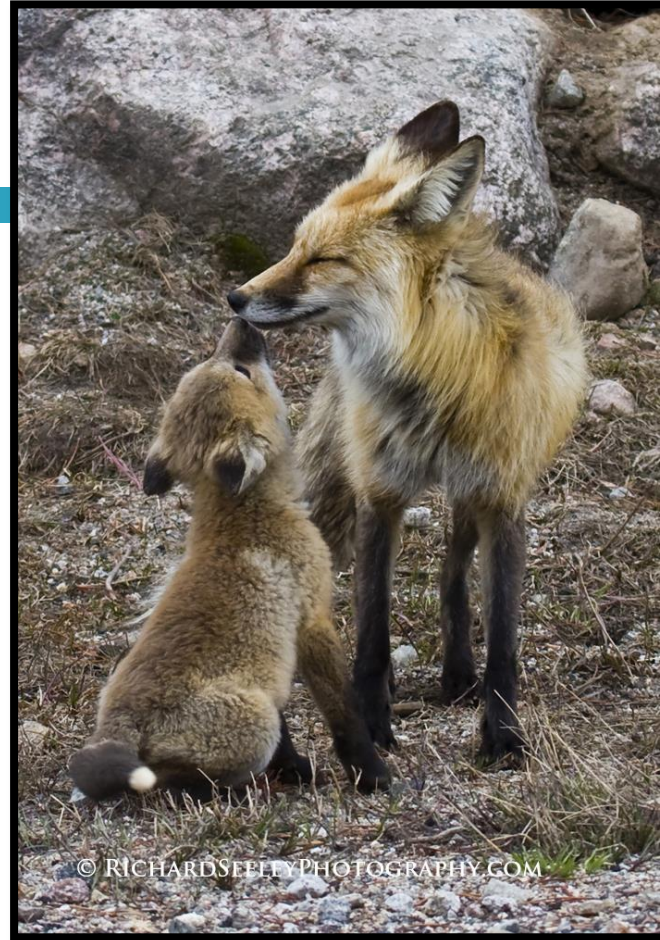


Anthropomorphic

- Exhibiting human like qualities



Snuggle Up



A Kiss for Mom

Capture Animal Behavior

- ❑ The best shots that captivate the imagination and make lasting impressions are those that usually exhibit behavior
- ❑ Behavior can be
 - ▣ Action (running, hunting, fighting, flying, climbing, etc.)
 - ▣ Animal interaction (mother grooming infant, infants at play, etc.)
 - ▣ Family portraits



Quality of Light

- Time of Day
 - ▣ Early morning, late evening, golden hour
 - Softer light, fewer shadows
 - Coincides with crepuscular wildlife



Short Eared Owl

Quality of Light

□ Time of Day

▣ Mid-day

- Harsh light, shadows, contrasty
- Can be offset by a cloud cover
- Consider fill flash
- Look for shade



Mirror Mirror – Mandarin Duck with Flash

Quality of Light

□ Direction of Light

▣ Back Light

- Usually the least desirable
- Animal tends to be dim, muddy with little detail
- Can create a rim-light or halo effect on animal
- Good for silhouettes



Quality of Light

- Direction of Light
 - ▣ Back Light
 - Good for silhouettes



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Quality of Light

□ Side Light

- ▣ Can create dramatic texture with the lights and shadows
- ▣ Easy to lose detail in the shadows, shoot in early morning soft light or evening sunset
- ▣ Consider fill flash



Snowy Glow – Snowy Owl at Sunset

Quality of Light

- More Side Light



Shape of Emotion

Quality of Light

- Front Light
 - ▣ Usually the best light for animal photography
 - ▣ Keep the sun to your back
 - ▣ Allows for fastest shutter speed for stop action
 - ▣ Easier to capture more detail and sharpest detail
 - ▣ Easier to extend Depth of Field
 - ▣ Allows for less noise in the image
 - ▣ Allows easier capture of eye glint (more on this later)



Coyote Pup

Compositional Elements

- Best when animal is moving towards the camera plane or facing the camera
 - ▣ Beware of butt shots



Butt Shot



Butt Shot



Facing Shot

Compositional Elements

- Three quarter position



Compositional Elements

□ 4 legs v.
3 legs



3 legs?



4 legs



3 legs?

Compositional Elements

- Eyes -
 - ▣ looking towards camera,
 - ▣ in focus
 - ▣ with glint



In Focus with Glint



Cannot see Eye or Glint

Compositional Elements

- Eyes -
 - ▣ looking towards camera,
 - ▣ in focus
 - ▣ with glint



Compositional Elements

- Depth of Field –entire animal or multiple animals should be in focus



Left Wood Duck Out of Focus



Both Canada Geese are in Focus

Compositional Elements

- ❑ Beware of clipping the animal
 - ▣ Crop above or below the joints



Clipped at Joints in Original Image



Cropped in Post Process To Correct

Compositional Elements

□ Position of a moving animal in the frame

- Think leading space when shooting



Jumping Out of Frame



Jumping Into the Frame

Compositional Elements

- Get eye-level if possible



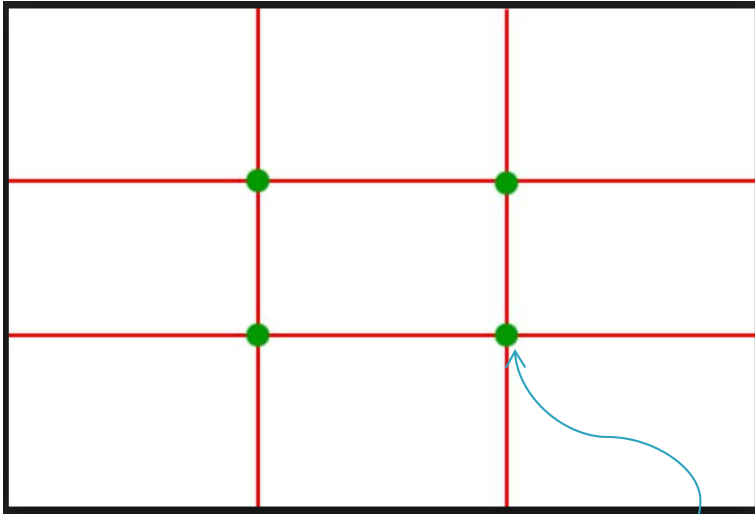
Looking Down Perspective



Eye-Level, More Impactful

Compositional Elements

□ Rule of Thirds



Subject Placement points



Places to Shoot

- ❑ Backyard
- ❑ Summit County – moose, elk, bears, osprey, eagles, ducks, geese
- ❑ Wildlife concentrations
 - ▣ National Parks, state parks, Africa
- ❑ Zoos
 - ▣ A great place to practice
- ❑ Network with other photographers

How We Find Wildlife

Bus Jam Method



Photo by Beth Seeley

How We Find Wildlife

Wildlife
Paparazzi
Method



How We Find Wildlife

Finger Pointing Method



Photo by Beth Seeley

Photography Basics

- Digital Camera Sensor
 - ▣ The electronic heart of the digital camera
 - ▣ Captures light for the image
 - ▣ Many sizes
 - ▣ Full frame sensor
 - Size of a 35 mm film frame – 36mmx24mm

Photography Basics

- Exposure
 - ▣ Shutter speed, aperture, ISO
 - ▣ Controls amount of light reaching the sensor
 - ▣ Light measured in “Stops”
 - ▣ Increasing the settings by 1 Stop doubles the amount of light reaching the sensor
 - Converse is true – decreasing by 1-Stop, halves the light
 - ▣ Open-up means increase the amount of light
 - ▣ Stop-down means decrease the amount of light

Photography Basics

□ Shutter Speed

- ▣ Controlled by shutter release button
- ▣ Measured in fractions of a second
 - As fast as $1/8000$ sec and as slow as 30 sec
- ▣ Increasing shutter speed, decreases light, increases stop action
- ▣ Decreasing shutter speed, increases light, increases blur

Photography Basics

- Aperture and Depth of Field
 - ▣ Aperture is the circular opening in lens
 - Opening is controlled by the diaphragm
 - Size of opening is measured by F-Stops
 - ▣ f/2.8, f/4, f/5.6, f/8, f/11, f/16, f/22, f/32
 - ▣ Each stop represents a halving or doubling of light from previous F-Stop.
 - ▣ f/2.8, large opening, more light; f/32, small opening, less light
 - ▣ Depth of Field (DoF)
 - The distance that everything is in sharp focus from focus point
 - Increasing the aperture NUMBER increases the DoF.

Photography Basics

- ISO – International Standards Organization
 - ▣ Sensor light sensitivity setting on camera
 - Can be set to AUTO in most cameras
 - ▣ ISO 100, 200, 400, 800, 1600, 3200
 - ▣ Increasing the ISO number increases sensor sensitivity
 - ▣ Increasing the ISO allows for increasing the shutter speed
 - ▣ Increasing ISO increases digital noise, unfortunately.

Photography Basics

❑ Putting it all Together

- ❑ Automatic – Camera calculates the setting for specific scene
- ❑ Aperture Priority (Av – Aperture value) – set the aperture and let the camera determine the shutter speed for a properly exposed image.
- ❑ Shutter Priority (Tv – Time value) – set the shutter speed and let the camera determine the aperture setting for a properly exposed image.
- ❑ Manual (M) – set both shutter speed and aperture.
- ❑ In wildlife photography, which is best?

Aperture Priority v. Shutter Priority

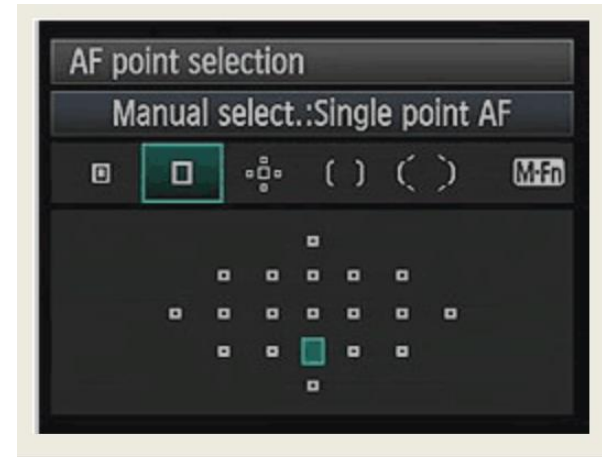
- ❑ In wildlife photography which should be used?
- ❑ AUTO can work in many situations
- ❑ Depends on objective. If shutter speed is most important (birds flying, cheetah running) then use Tv. If depth of field is most important (need sharpness on multiple animals not in same focal plane or want to blur the background), then use Av.
- ❑ For the advanced photographer - Manual (M) provides the most flexibility
- ❑ Most important is to know how to use the camera buttons/dials to get the desired setting for the conditions at the time.
- ❑ For the advanced photographer - Very important to be able to change shutter speed, aperture, ISO and Auto Focus point (AF point) without looking up from the viewfinder

Auto Focus Modes

- Single Shot – stationary subjects, one shot per depressing of shutter release
- Continuous Burst – multiple shots while depressing shutter release.
 - ▣ Burst speed measured in frames per second (fps)
 - ▣ Canon 1DX - 12 fps; Canon 5D Mark 3 - 6 fps; Nikon D4 – 11 fps, Nikon D800 – 4 to 6 fps

Auto Focus Points (AF Points)

- ❑ Center Point works most of the time and is usually the most accurate and fastest for autofocus
- ❑ When subject is clipped in viewfinder, can move the AF point to recompose.
- ❑ Be able to recompose while looking through the viewfinder and not at the dials/buttons.
- ❑ Know “quick return button” to get back to center point AF



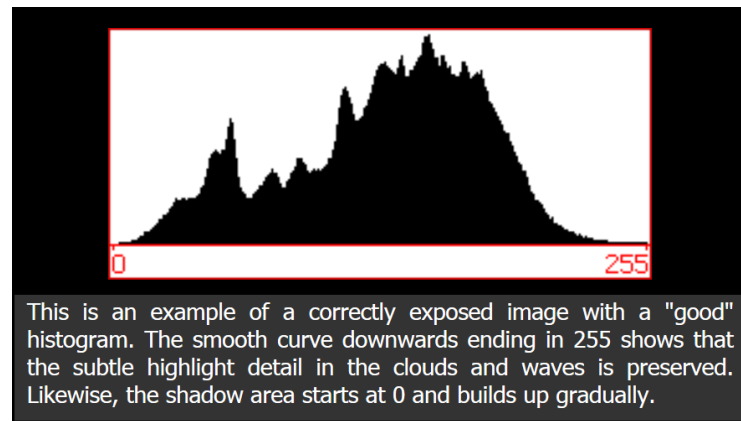
Keep it Steady

- Use a tripod whenever possible.
 - ▣ Carbon fiber is lightest, stiffest, most expensive and works well
 - ▣ Avoid extending the center post, since it is unstable
 - ▣ Extend heavier segments of legs first when not extending all segments
 - unlike image on the right ☺
 - ▣ Hang weight from center to stabilize when possible
 - ▣ Gimbaled (ie. Wimberly) head best for birds (see image at right)
- Use bean bags mounted on window sill when in vehicle
- Handheld can work effectively
 - ▣ High shutter speed and panning skill required for birds or animals in flight (1/2000 or faster)
 - ▣ Lower shutter speed for blurring of background (1/80 – 1/125)
- Image Stabilization (can get 1-4 additional f-stops of light, depending on lens)
 - ▣ Read lens manual to determine if IS should be on/off when on tripod. Each lens is different.
- Maximize shutter speed for sharpest shot



Exposure Histogram

- Set “blinkies” to “on” for indication of over exposure clipping (highlight clipping)
- Check histogram frequently, especially at the beginning of a new event
- Strive for a “good” histogram with no clipping on left or right edge (see diagram)
- Adjust exposure compensation to eliminate/reduce clipping
 - Negative EV (exposure value) to reduce highlight blinkies
- Not all blinking is bad – look at the % of area blinking. Some can be ignored if minor
- Also check focus and detail on subject by zooming in to max zoom on LCD and using a Loupe to view the image



Wildlife and Shutter Speeds

- Stationary wildlife

- 1/125-1/250 sec with a tripod.
Image Stabilization can reduce shutter speed further (lens/tripod combination permitting)



Moose Smooch

- Slow moving wildlife –

- 1/250 to 1/1000 sec



Swan Serenity

Wildlife and Shutter Speeds



Fast Moving – 1/1000- 1/3000 sec

Rainbow's End



Birds in Flight - >1/2500 sec

Wildlife and Shutter Speeds



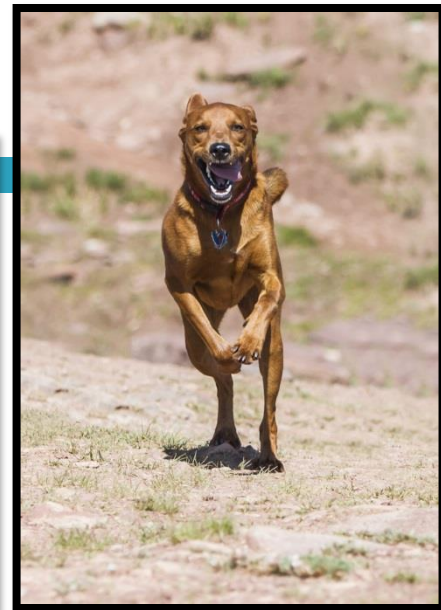
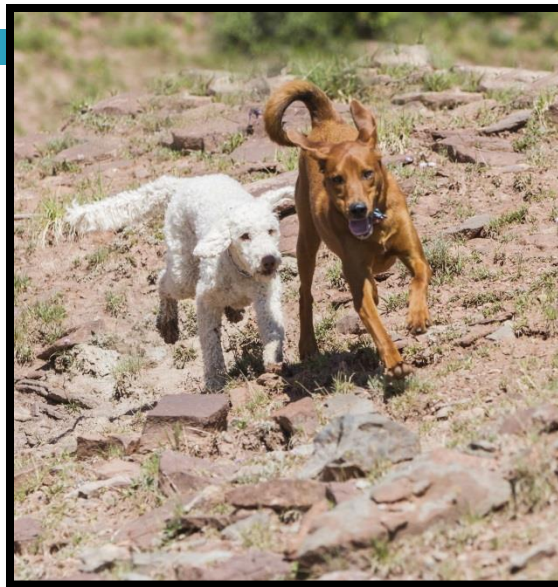
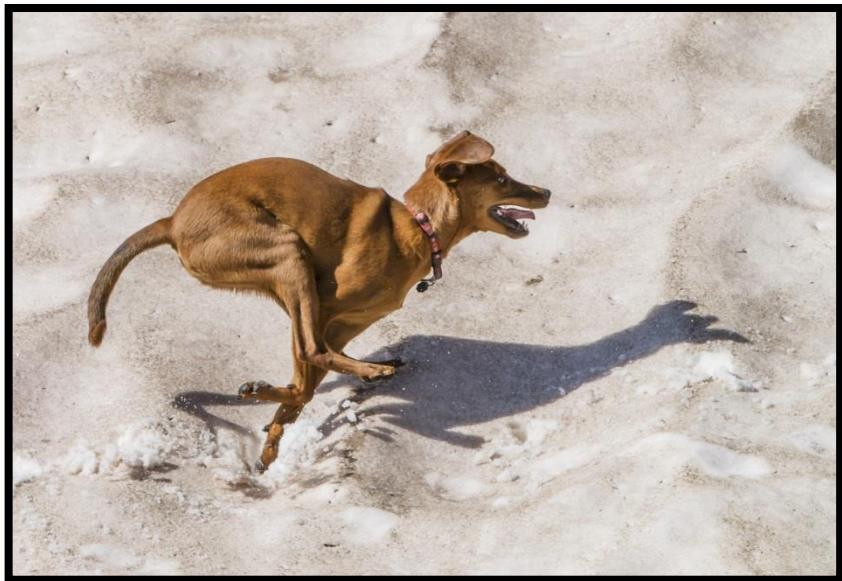
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Hummingbirds – 1/4000 sec
to freeze the wings

Dog Park

- ❑ New experience
- ❑ Good substitute for wildlife
 - ▣ Portrait, action, interaction
- ❑ Emmet the dog model
 - ▣ Thanks to Carl Scofield and Leigh Girvin
- ❑ Rocky the rocket model
 - ▣ Thanks to Laurie Fisher

Rocky the Rocket



For the Dog Park Exercise

- Try to capture
 - ▣ Portraits
 - ▣ Action
 - ▣ Interaction
- Use AUTO if that works for you
 - ▣ But also try experimenting with Tv and set for higher shutter speeds of 1/1000 to 1/1500 sec to stop action
 - ▣ Select continuous burst mode
- Reconvene at xxxx for the critique

Most of All

- Have fun

- ❑ Sign up for my Newsletter – 4 times a year
 - ▣ Sign up sheet.
- ❑ Business Cards
- ❑ Art Alive Gallery, La Cima Mall, 500S. Main Street, Breckenridge, next to Park and Main restaurant
- ❑ Presentation can be downloaded from website
 - ▣ www.richardseeleyphotography.com