



# Wildlife Photography in Your Own Backyard

September 14, 2018 – Michael J. Glagola



# Introduction



ALL of the images in this presentation were taken by me at my home. This presentation will address how to attract and photograph the wildlife in your own backyard. This presentation has three parts:

1. Attracting Wildlife & Where to take Photographs
2. Gear & Setting up your Camera
3. Tips on Photographing Wildlife

# Photographic Skill = Knowledge + Experience

- It is NOT enough to just take lots of pictures. To become a better photographer, you must carefully analyze your images, identify their deficiencies and determine how to improve them.
- The more pictures you take and carefully review the more your photos will improve
- Have reasonable expectations
  - Improving takes time
  - Regarding wildlife photography
    - It's low percentage photography; really good shots aren't common
    - The goal is not 90%+, instead its improving your success rate from <<10% to >20%
- Learning how to capture images of wildlife at a precise time of your choosing comes only from lots of preparation, practice, patience, and analysis.





# Luck In Photography



- *there is NO SUCH THING AS LUCK in photography, there is only preparation combined with opportunity*
- *the more prepared you are and the harder you work, the luckier you get!*
- *success is 90% preparation and 10% perspiration!*



# Wildlife Photography's TEN P's

**Proper Prior Preparation,  
Planning, “Phlexibility”, and  
Patience Provides for the  
Possibility of “Phabulous”  
Photographs**



# Part I

## Attracting Wildlife & Where to Shoot





# Attracting Wildlife - Considerations

- **Why Attract Wildlife?** It stacks the odds in your favor by creating conditions which attract the specific “critters” you want to photograph
- **Typical Local Backyard Wildlife (common/rare)**
  - Large animals: deer, woodchucks, and foxes / bobcats, turkeys, and coyotes
  - Small animals: squirrels, rabbits, snakes, frogs, and turtles / raccoons, opossum, and chipmunks
  - Birds: hawks, owls, woodpeckers, cardinals, goldfinches, chickadees, finches, wrens, hummingbirds, and juncos / orioles, pileated woodpeckers, indigo buntings, herons, vultures, and falcons
  - Insects: butterflies, moths, dragonflies, bees, praying mantises
- **Location Selection**
  - Intended subjects are nearby and have easy and safe access
  - Lighting is good
  - The bait/lure is within range of where you will position your camera to take the photographs
  - Your camera’s position from which you will take photos is a comfortable place to sit, observe, and take pictures for long periods of time
  - Your selected location does not disturb the wildlife



# Feeders/Bait/Lures/Food

- Research the web for what food your intended subjects like
- Make sure feeders always have food and are kept clean



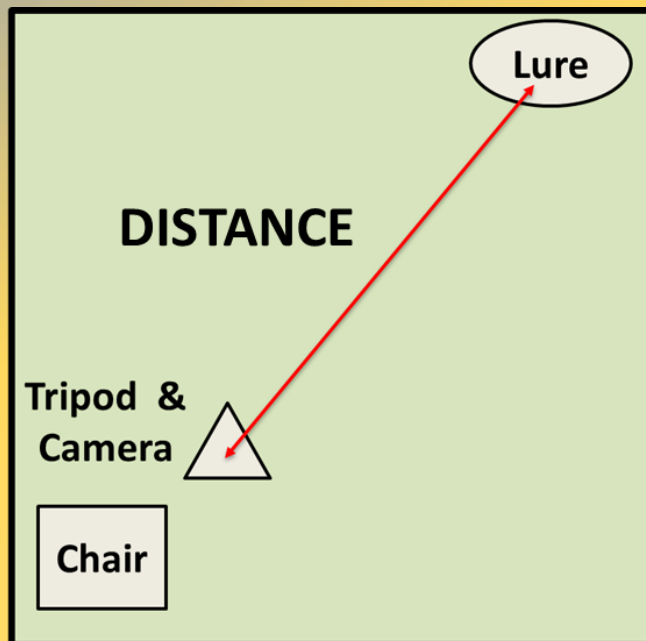
- Make sure your feeders sized to exclude “unwanted feeders” like squirrels, crows, starlings, and others
- Select feeders appropriate for the animal you intend to feed
- **Feeding attracts predators!**





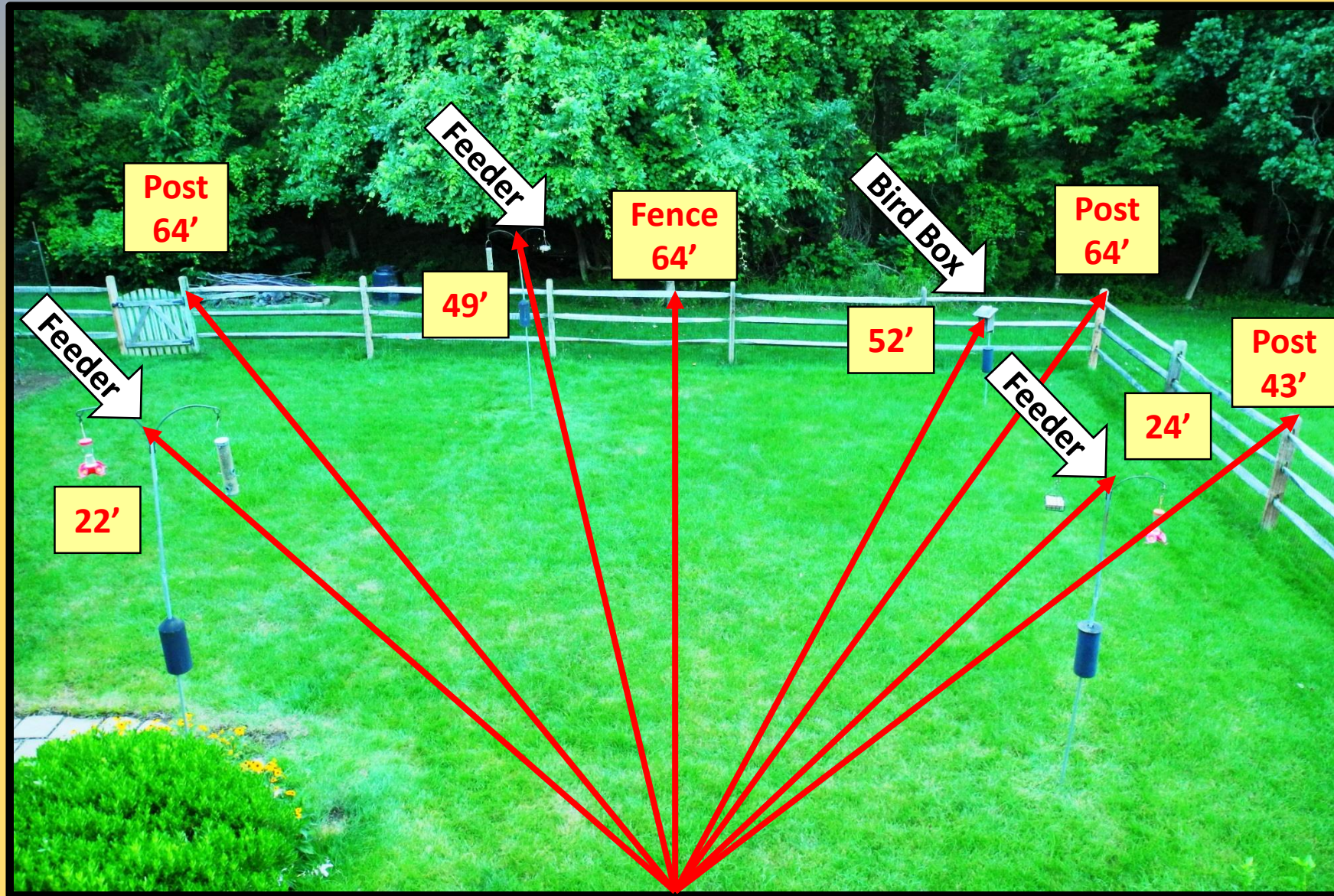
# Where to Photograph From

- The most basic solution is a camera and a chair near your “bait”
- Rooms with windows facing your backyard make great blinds
  - Upper floor windows provide the advantage of height/better view
  - Lubricate the windows (easy to open and minimizes noise)





# My Yard - Distances from the Camera





# Working a Wildlife Photography “Location”

- You must be patient, persistent, and observant
  - Invest time to observe your subjects and learn their behavior
  - Learn/capture the times of day when present and absent
  - Watch for “Tells” - precursors to specific behaviors you intend to photograph





# Part II

## Gear for Wildlife Photography



# Equipment for Backyard Wildlife Photography

- Most people think that your ‘photo gear’ has a great impact on the outcome
  - Equipment doesn’t take photographs, people do – unknown
  - “There is nothing worse than a brilliant image of a fuzzy concept.” - Ansel Adams
  - Equipment cannot make a bad photo better, but it does make taking good photos EASIER
- Mandatory Equipment – a camera and a place to take pictures in your backyard
- Optional Items (items that make shooting easier) – a long lens, tripod with ball head or gimballed head, cable release, “off-camera” flash with support, smartphone or wildlife guidebooks, and a comfortable chair



# Cameras and Lens

- **Camera Features**

- Fast focus
- Short shutter lag
- High shutter speed frame rate or “burst” shutter speed mode
- Interchangeable lens or a zoom lens of at least 200mm (35mm equiv.)
- External shutter release
- Capability for external flash
- Tripod socket

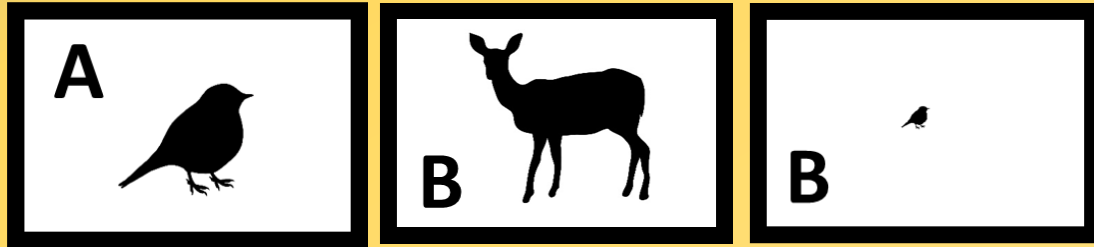
- **Lens Features**

- Longer is better
- Fixed focal length vs. Zoom
  - Fixed focal length lenses have faster f-stops
  - Zooms can vary composition; fixed cannot
  - The longer the lens the more \$ spent
- How long a Lens? It is a trade off
  - What are you photographing
  - How many pixels is your sensor
  - How much do you want to spend

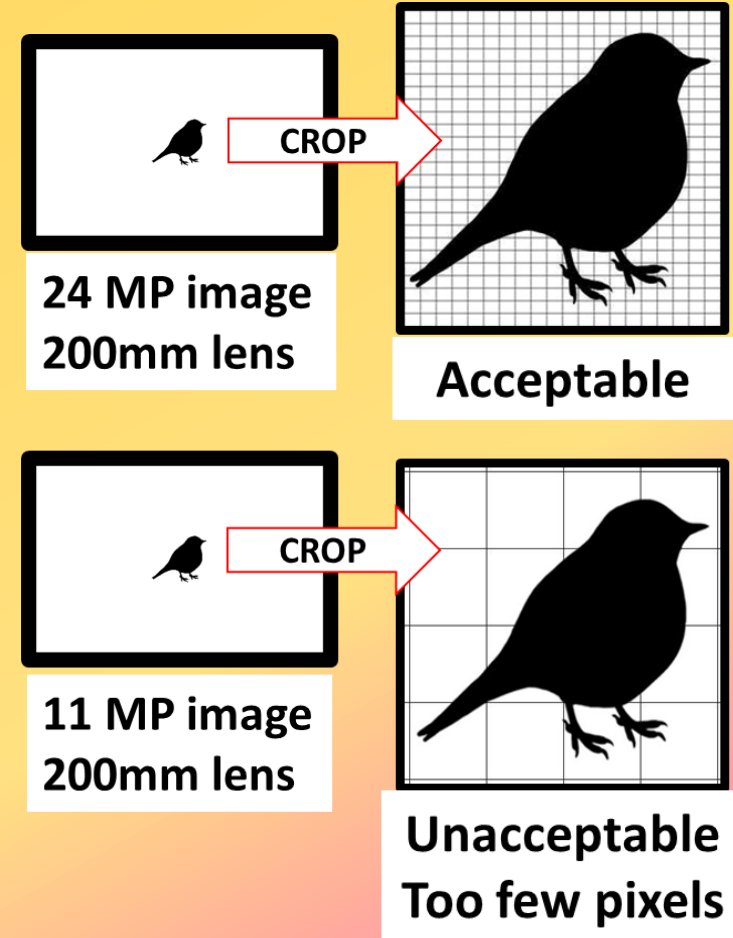


# The Trade-Offs: Length, Pixels, \$\$

- The larger the subject, the less focal length needed; the smaller the subject, the more focal length needed
- Select a long lens with a focal length that can make acceptable sized images of the wildlife you intend to photograph AT the distance you expect to be able to take photographs



- The more pixels in the image, the more the image can be cropped/expanded without a noticeable loss of quality and conversely, the fewer pixels, the less it can be cropped/expanded and still maintain quality.

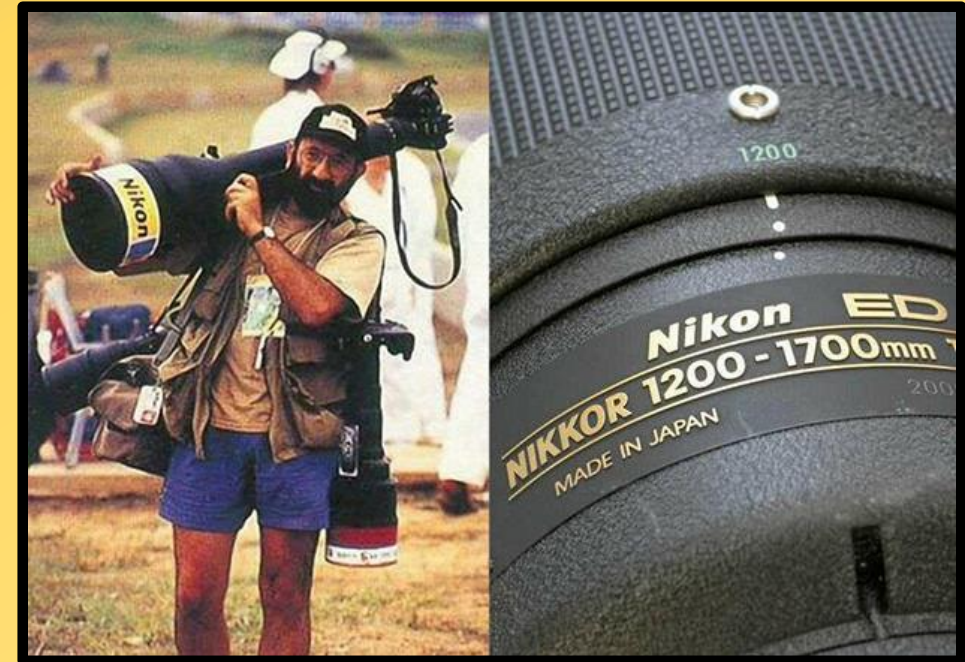


- Longer focal length, faster f-stop, wider range = more size, weight, & \$\$
- Consider not only the financial cost but the physical “cost”. Does the lens you want support your style of wildlife photography?



# “Ultimate” Long Lenses

- In case you were wondering what you could get if \$ is not an issue
  - Nikon 1200-1700mm f5.6-8 lens, weight: 35.2 lbs.
  - Sigma 200-500mm f2.8/400-1000mm f5.6 lens (comes with a dedicated 2x multiplier), weight: 34.6 lbs.
- Immediate questions that come to mind
  - Where do you get a tripod able to safely support 40+ lbs.?
  - In addition to the weight of the lens, how much does the heavy duty tripod weigh?
  - Where do you get the crane to position the lens on the tripod?
  - What is the added cost of the special health insurance to cover one’s added risk of back injury?
- If you want to buy either
  - The Nikon is no longer made; in 1990 the price was \$75,000. Since very few were made, expect to pay MORE!
  - The Sigma new currently sells for \$26K.



# Tripods and Tripod Heads

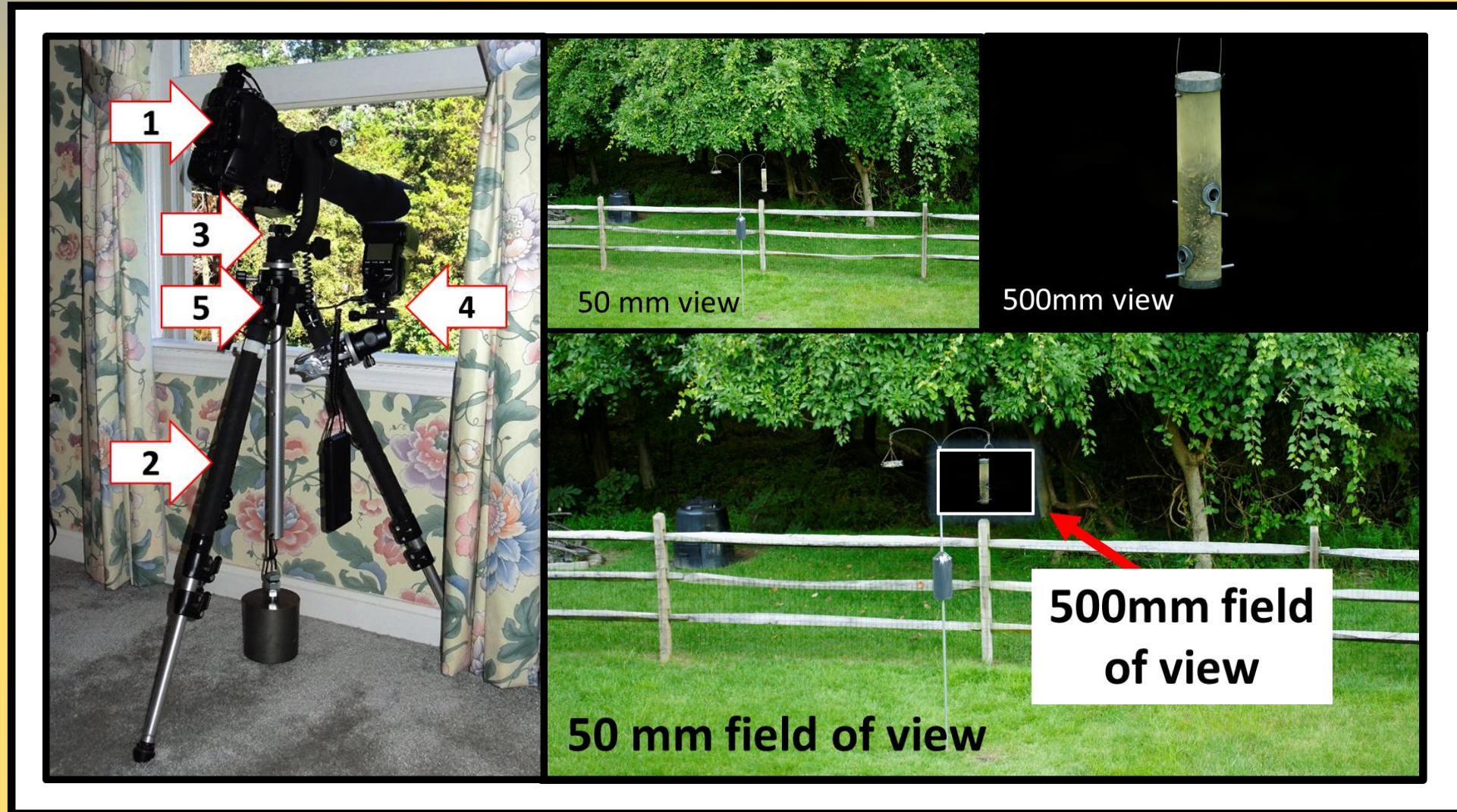
- Tripods
  - MUST be sturdy and stable
  - At home, weight NOT an issue
- Ball Head (Traditional choice)
  - Must be smooth and have adjustable friction drag control
  - High CG of camera lens combination is extremely top heavy; camera movements must be made carefully
- Gimbal Head
  - Relatively new; not common
  - Great for long lens; CG of camera/lens combination is low and stable
  - Expensive unless one buys a “knock-off”





# My Gear

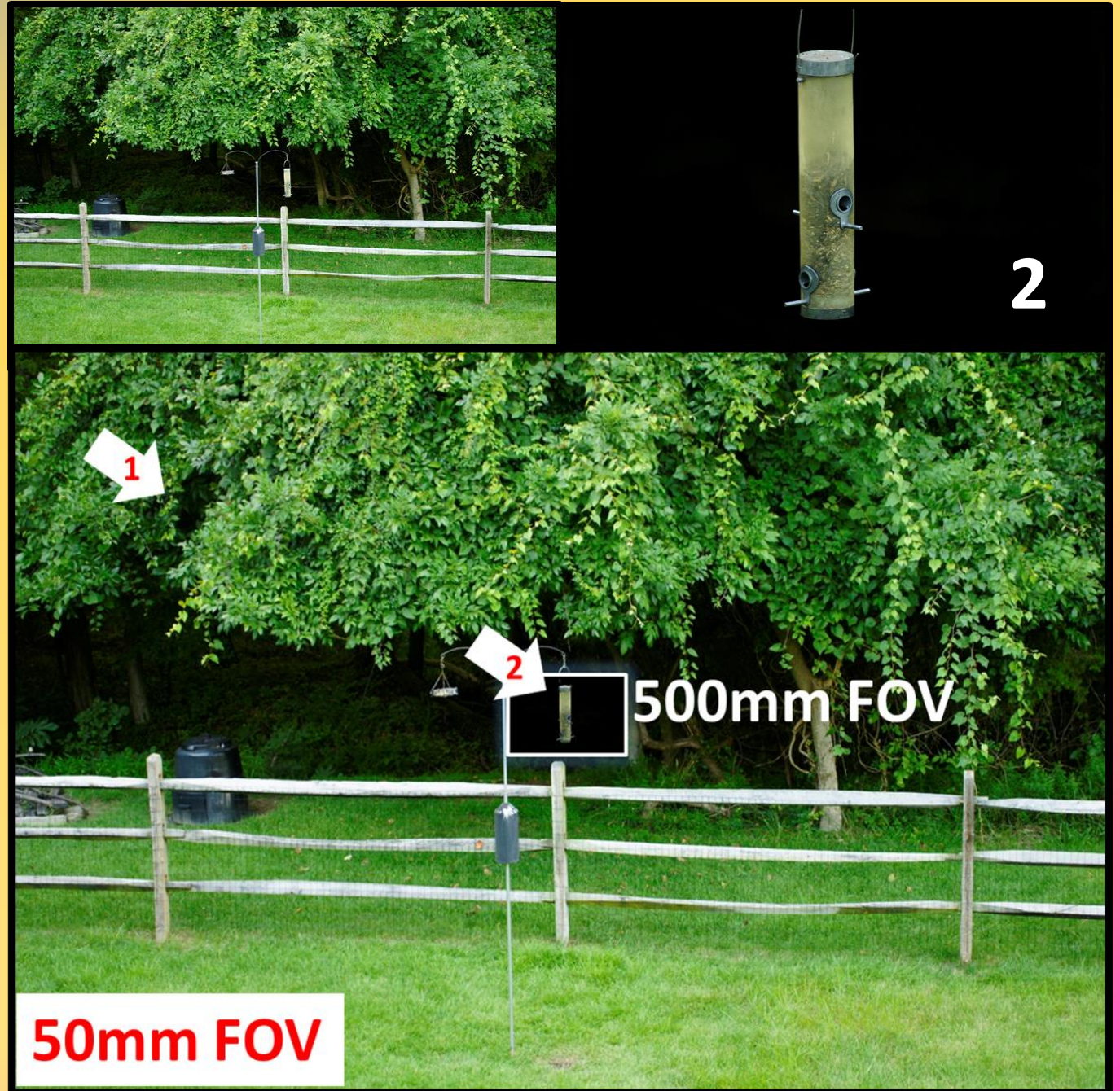
1. Sony α700 DSLR with Sigma 50-500mm Zoom
2. Manfrotto aluminum tripod model 3021 & 16 lb. weight with Gimbal Head
3. Sony HVL-58 AM Flash Unit & External battery pack
4. Manfrotto super clamp/ball head combination flash mount
5. Electronic camera cable release





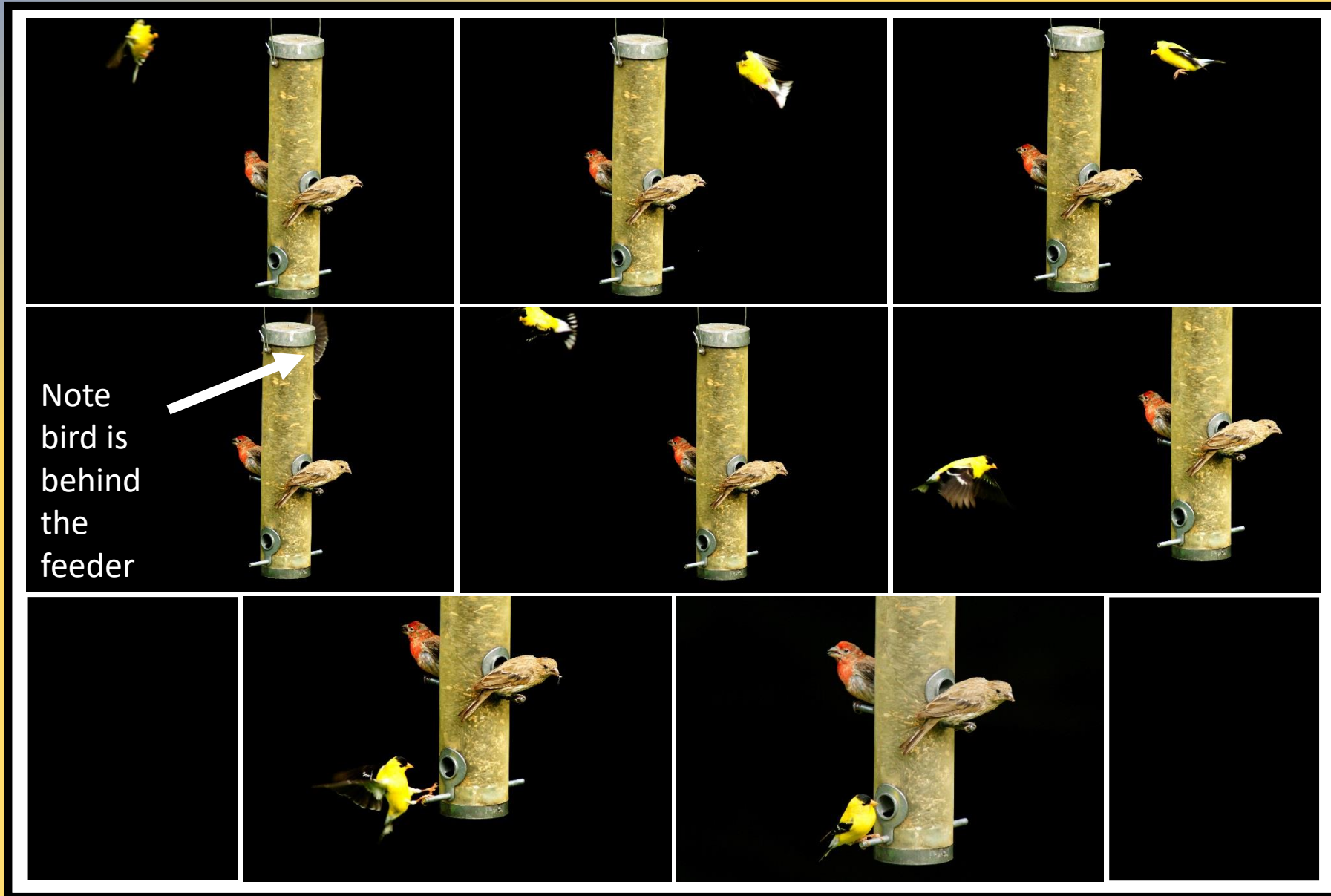
# “Heads-Up” Shooting

- Camera aligned and focused on specific pre-set point. When subject enters the field of view (1), activate the camera’s shutter using the cable release and take a sequence of photos using “burst/high speed” mode. Note: photographer is NOT looking through the viewfinder (2)
- Benefit of “Heads-Up” Shooting – significantly better chance of seeing a bird flying towards the feeder and activating the shutter earlier/faster than when looking through the viewfinder



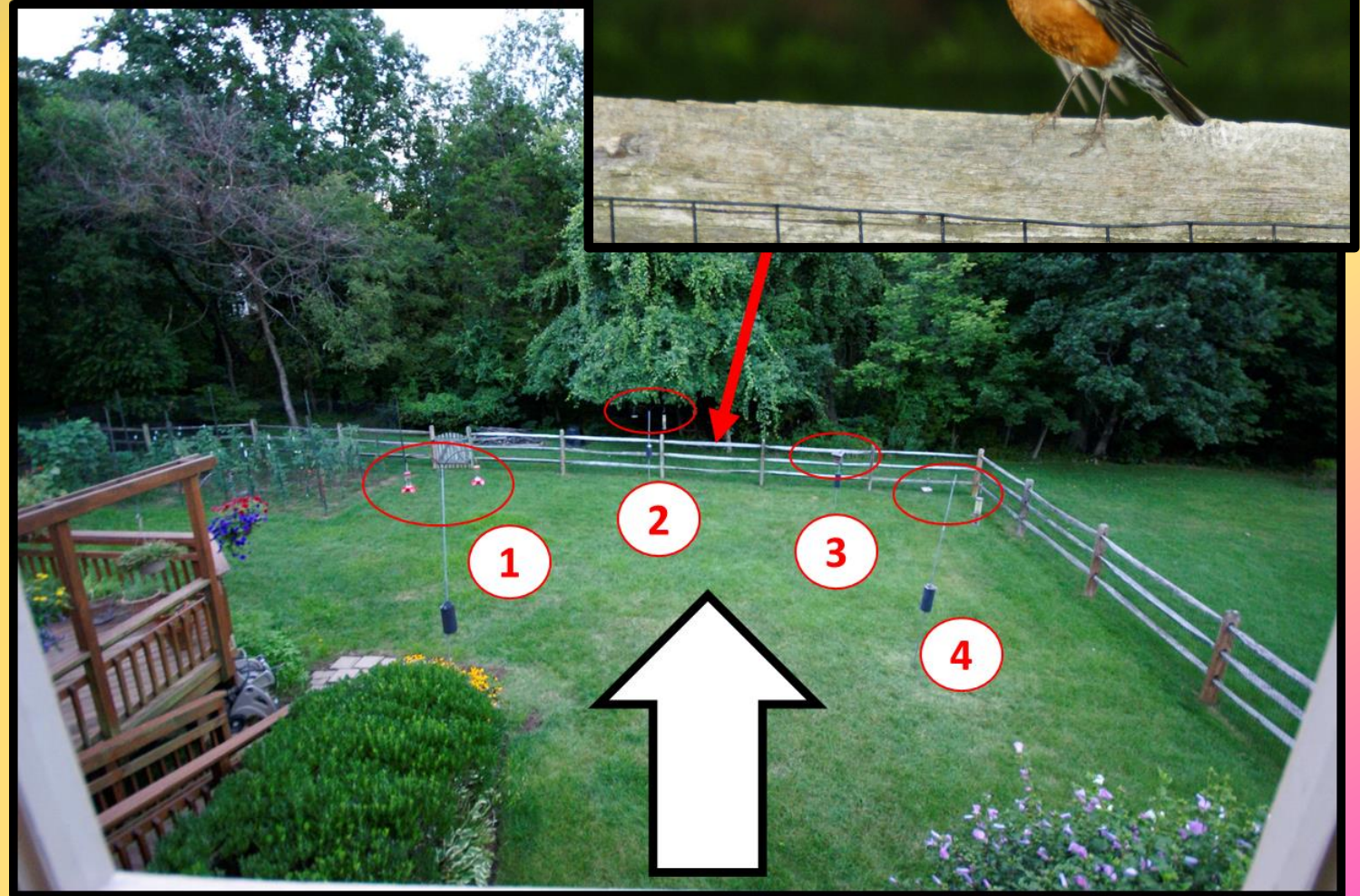


# “ Heads-Up ” Example Sequence



# The Benefits of Flash

- At 8:20PM @ ISO 800 light is very poor - 15mm lens, 1/6 second @ f4
- A single powerful flash, pointing directly into the center of the yard, allows photography of all locations in the yard with a 500mm lens and an exposure of 1/200 second @ F6.7 with an ISO of 800





# Part III

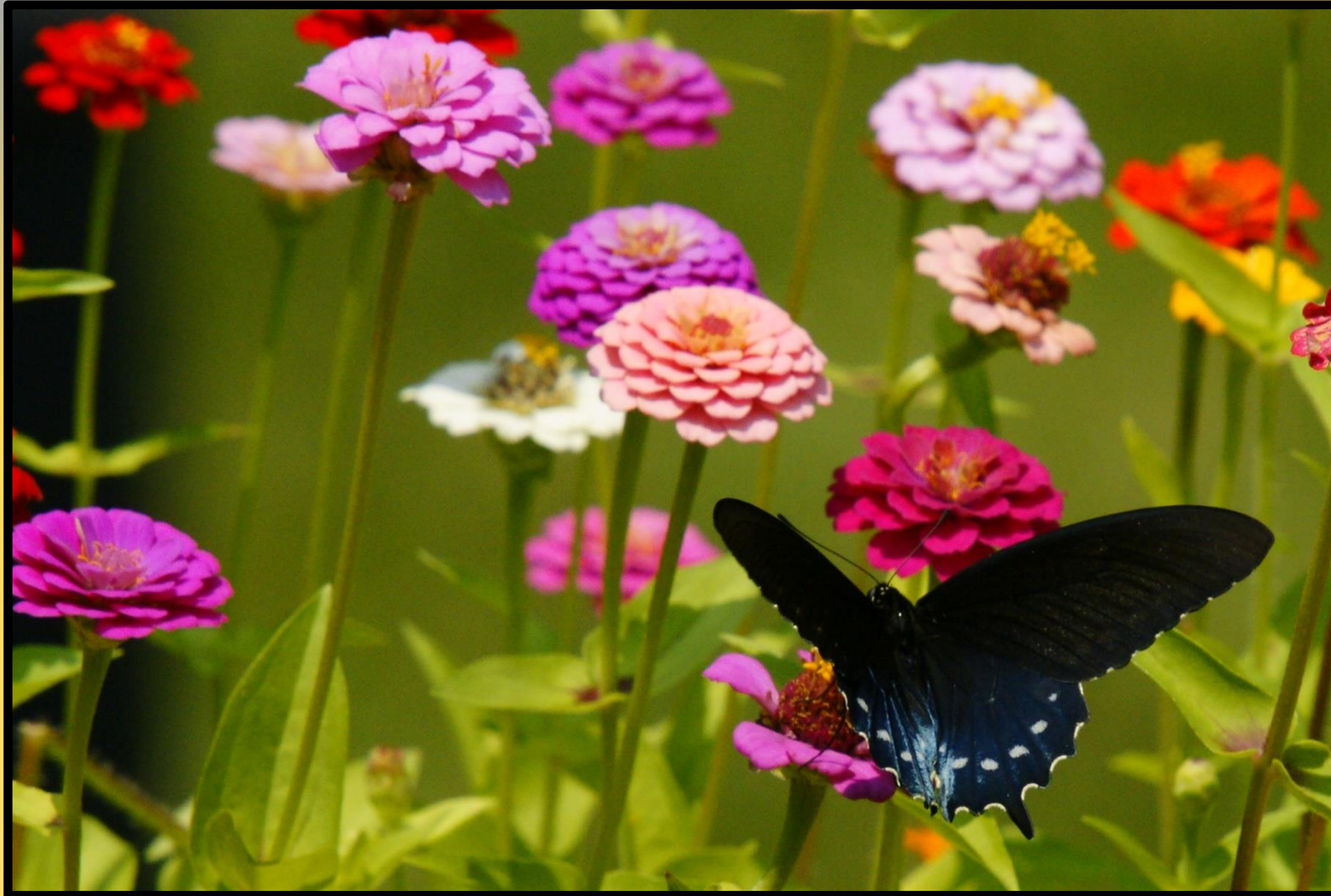
## Photographing Wildlife

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## Tips & Techniques



# Wildlife Exposure



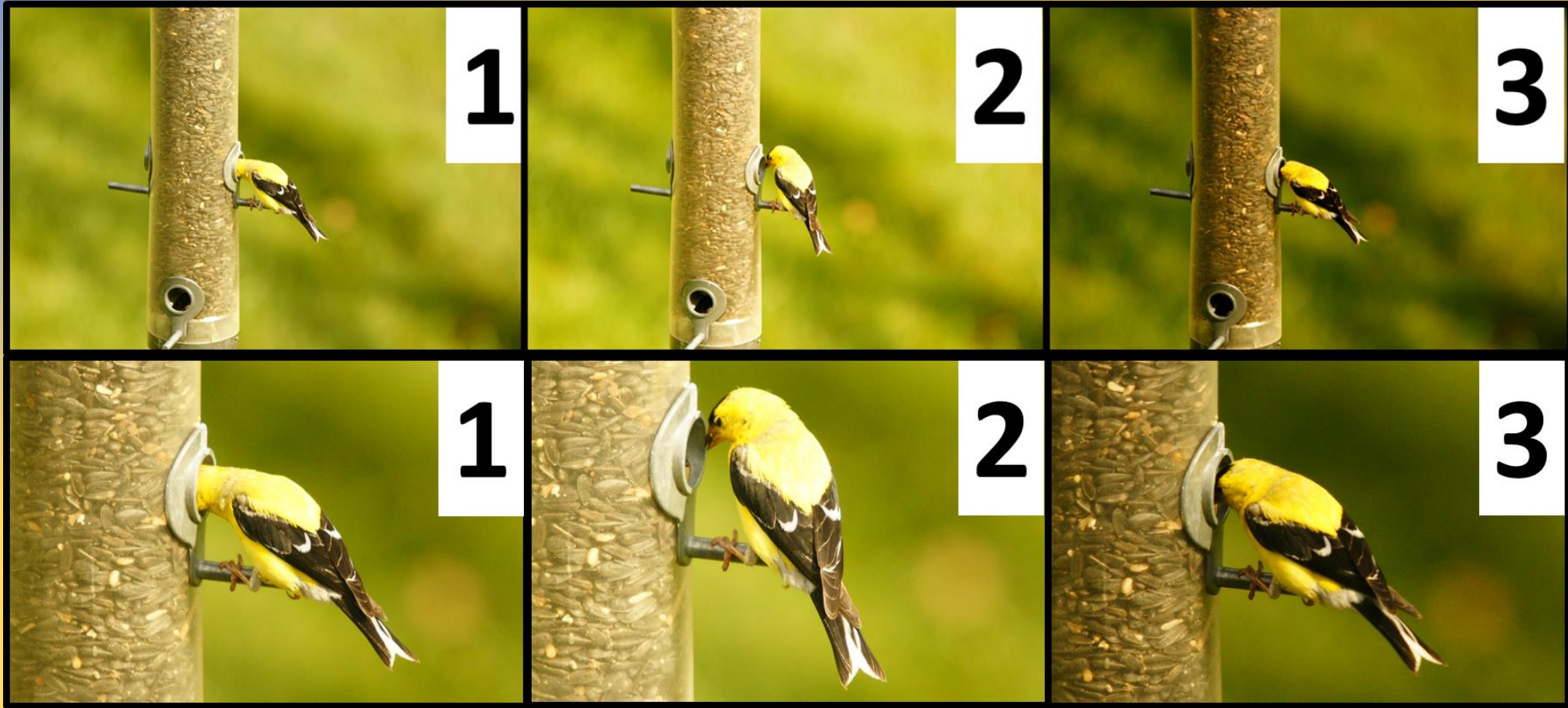


# Exposure

- Taking a properly exposed image can be one of the most difficult problems of wildlife photography.
- Large animals are usually not a problem
  - Because their coat is usually a form of camouflage, their color matches the background
  - They are LARGE so even if against a dissimilar background they dominate the scene for exposure purposes
  - Matrix metering usually provides accurate exposure
- Small creatures (especially birds), on the other hand, often have distinctive and gaudy coloration that is significantly different (lighter or darker) than the surrounding background. This significant difference in reflectance makes setting the right exposure far more difficult



# Matrix, Center Weighted, and Spot



**Matrix – subject  
overexposed**

**Center - Weighted –  
subject overexposed**

**Spot – Subject OK**  
**SPOT the best result**

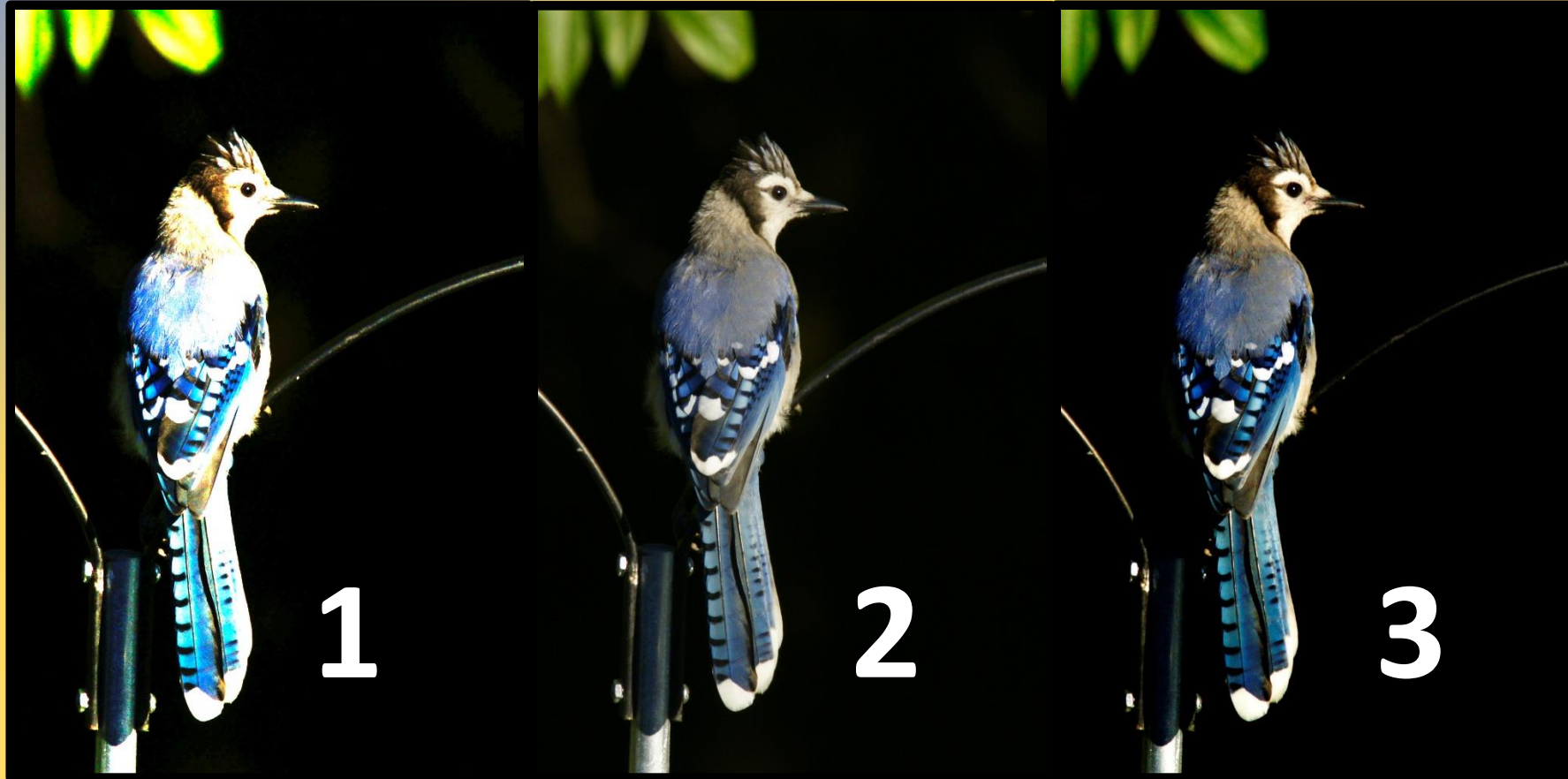


# Spot Metering with Exposure Compensation

- Best solution - Spot meter, determine exposure compensation needed, adjust the exposure appropriately and use that setting in current and similar circumstances
- Example: Spot meter @ -1EV exposure compensation allows all the detail and color in the bird to be properly exposed
- Be aware that with spot metering the exposure compensation setting is affected by the reflectance of the subject and the size of the subject being metered
- The setting doesn't have to be perfect; just close enough that "photo shopping" the image can do the rest



# Spot Meter - Example 1



1. Matrix Meter sets on background; subject is grossly overexposed
2. Spot metering Exposure Bias: -1 EV
3. Spot metering Exposure Bias: -1 EV + Photoshop Curves (Linear Contrast) to increase color



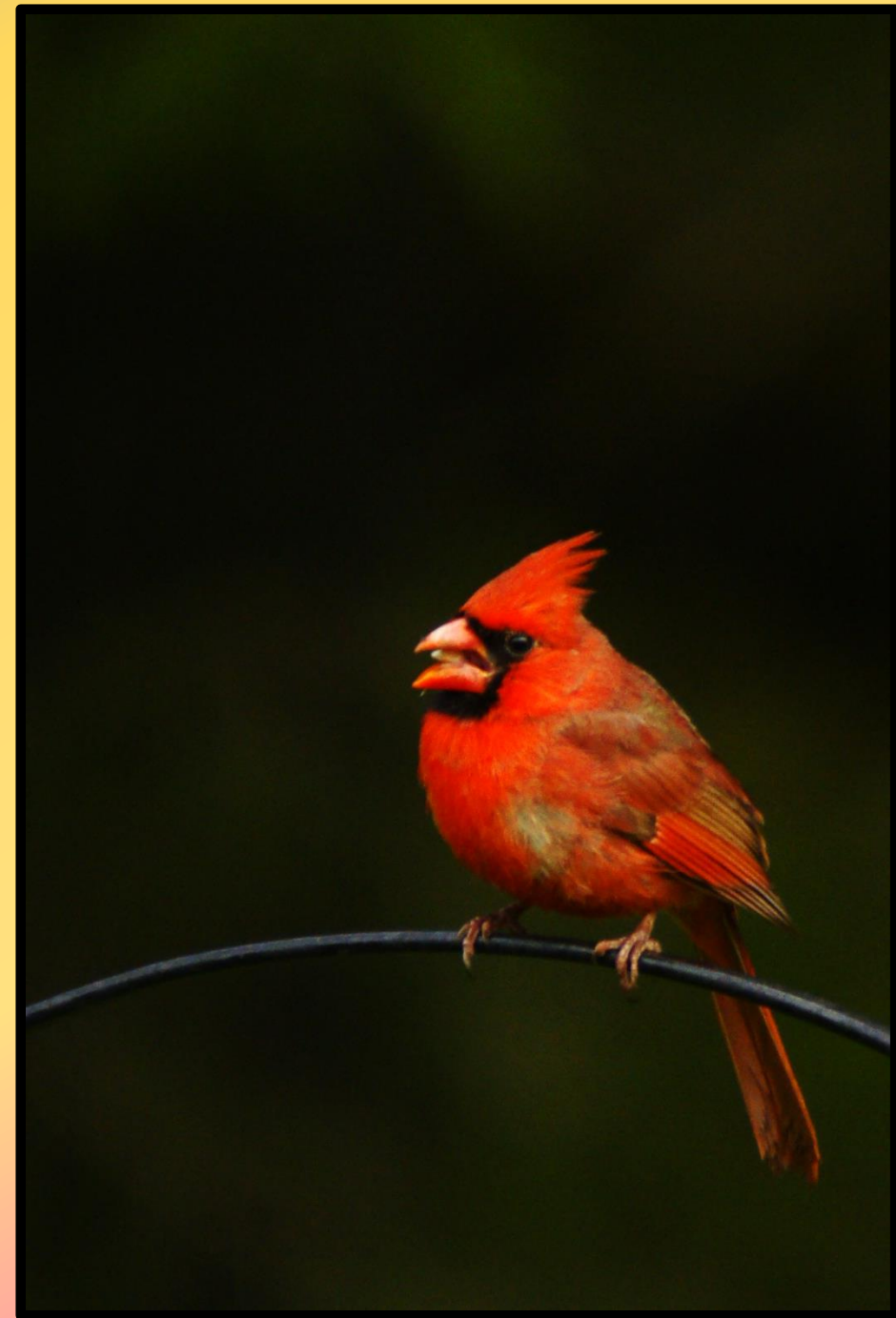
# Spot Meter - Example 2



1. Matrix Meter: Overexposed subject (reflectance meter tries to make “Black” gray)
2. Exposure Bias: -1 EV (still too light)
3. Photoshop Curve Increase Contrast to darken “darks”

# Exposure - Summary

- When taking pictures of wildlife, special care must be taken with the exposure settings
- While large animals are usually easy to get 'right', small animals can be very difficult; be observant and carefully review your initial shots to be sure you are properly exposing the subject
- A combination of Spot metering & exposure bias to compensate for the reflectivity of the subject is often the easiest and best way to get the "best" exposures of small subjects





# Wildlife Focusing



# Wildlife Focus Issues

- Large Animals

- While they can move fast, typically move at a speed where it is usually not a problem
- Large animals often are so large that at certain angles, their body length exceeds the depth of field of the lens

- Small Animals

- Often move extremely fast; if you cannot get them in focus instantly, you miss the shot
- Small animal's body size rarely exceeds the depth of field of the lens





# Why Focus is ALWAYS a Concern

- **Conditions that make focus difficult**

- Small wildlife rarely stands still; extremely limited time to take the shot
- Low light = slower autofocus
- Longer lens (smaller f-stops) = slower autofocus
- Longer lens tend to “hunt” for focus
- Longer the lenses, the less the depth of field (DOF)

50mm f6.7 @ 50' is 27.5' to 274.0' (246.5' total DOF)

100mm f6.7 @ 50' is 41.5' to 62.8' ( 21.3' total DOF)

200mm f6.7 @ 50' is 47.6' to 52.7' ( 5.1' total DOF)

500mm f6.7 @ 50' is 49.6' to 50.4' ( 0.8' total DOF)

- **Solutions/TIPS**

- Focus on the Eye – if the eyes are in focus, the animal is “in focus”
- “Pre-Focus & LOCK Focus” - focus on something that the wildlife is likely to visit (like a feeder), hold/lock the focus, and take the picture the instance the wildlife shows up (use if activity at the selected spot is high)
- “Manual Pre-Focus” – focus on something that the wildlife is likely to visit (like a feeder) and then once focused on that spot shift focus to manual so that it will not change (use if activity is low or light conditions are poor)



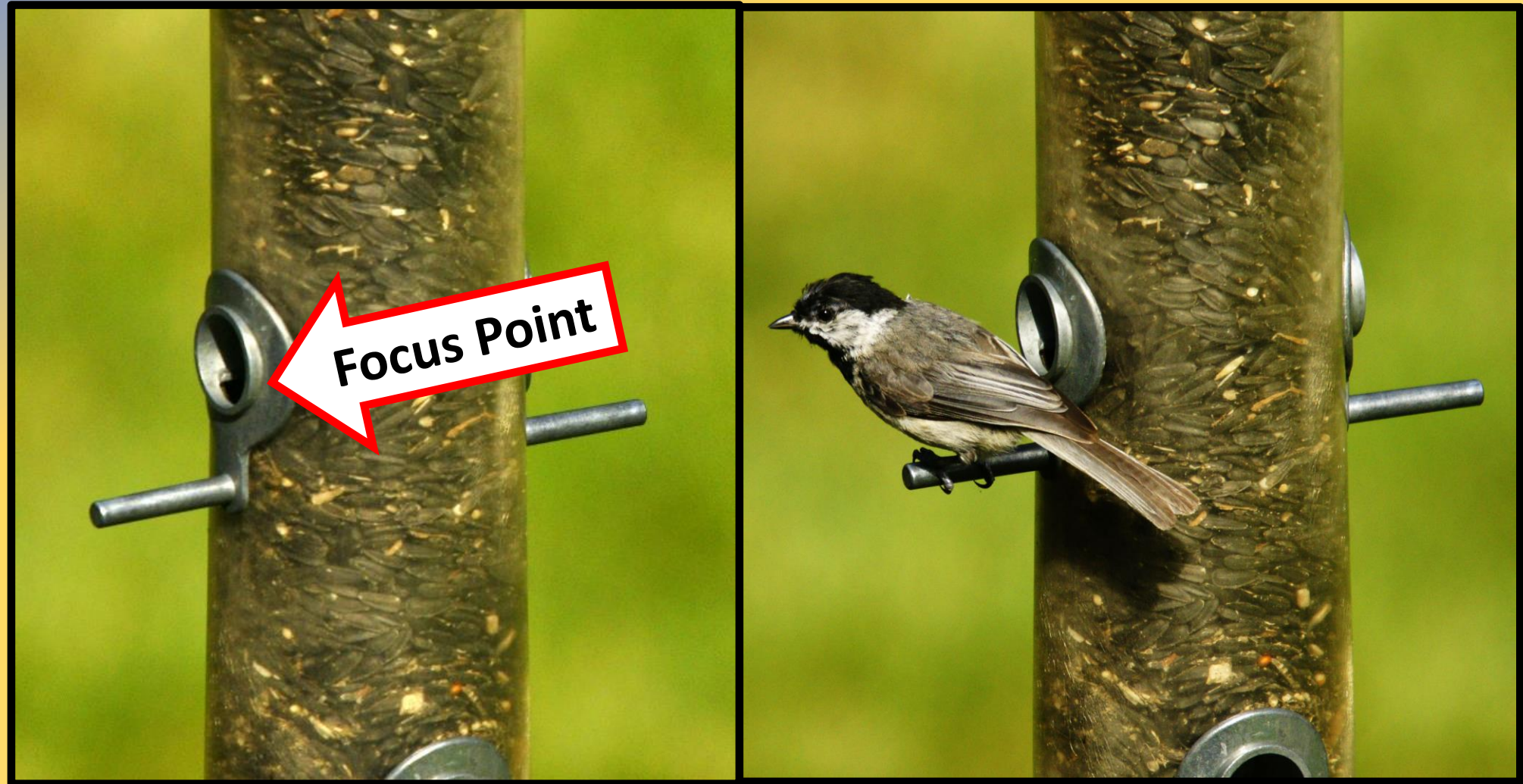
# If the Eyes are in Focus...



1. While the tail is clearly focused, the eye looks fuzzy and the result is an image which 'looks unfocused'
2. The eyes are focused and the tail is not; the image 'looks focused'



# Spot Focus



Bird at focus point is “in focus”



# Another Benefit of Spot Focus

Spot Focus not only allows for reducing the time it takes to focus, it enables taking photographs of small wildlife while in motion that is too fast for even the fastest autofocus system!





# Focus - Summary

- Wildlife presents a unique set of difficulties for the photographer
  - You have to photograph the animal “as is”; you cannot ask the animal to stay still or return to some pose
  - You must be prepared to focus quickly
- Remember
  - If the eyes of the animal are in focus, the subject will look focused
  - Spot focus and hold/lock or spot focus and switch to manual



# Action Photography of Wildlife





# Taking Photos of Moving Wildlife

- Some of the very most incredible wildlife photographs are those that capture wildlife in motion
- Wildlife action photography is a combination of previously described techniques and careful planning so that the photographer is **prepared** to capture wildlife subjects in motion
- Critical is an understanding of the behavior of the wildlife subjects. By observing, understanding and anticipating the behavior of specific wildlife one can often predict how they move thus enabling the photographer a higher probability of capturing the “action”.



# Wildlife Action Issues

- Large Animals
  - Can move fast, however usually move at a speed where not a problem
  - When they do move quickly, usually can pan the camera and get the shot
- Small Animals
  - Move extremely fast and rarely stay in one spot for very long; if not in focus right away, you may miss the shot
  - Because they are small, often must zoom in so close that a quick burst of speed by the small animal will often result in its movement totally out of the image before the photographer can react.





# Why Action Shots are Difficult

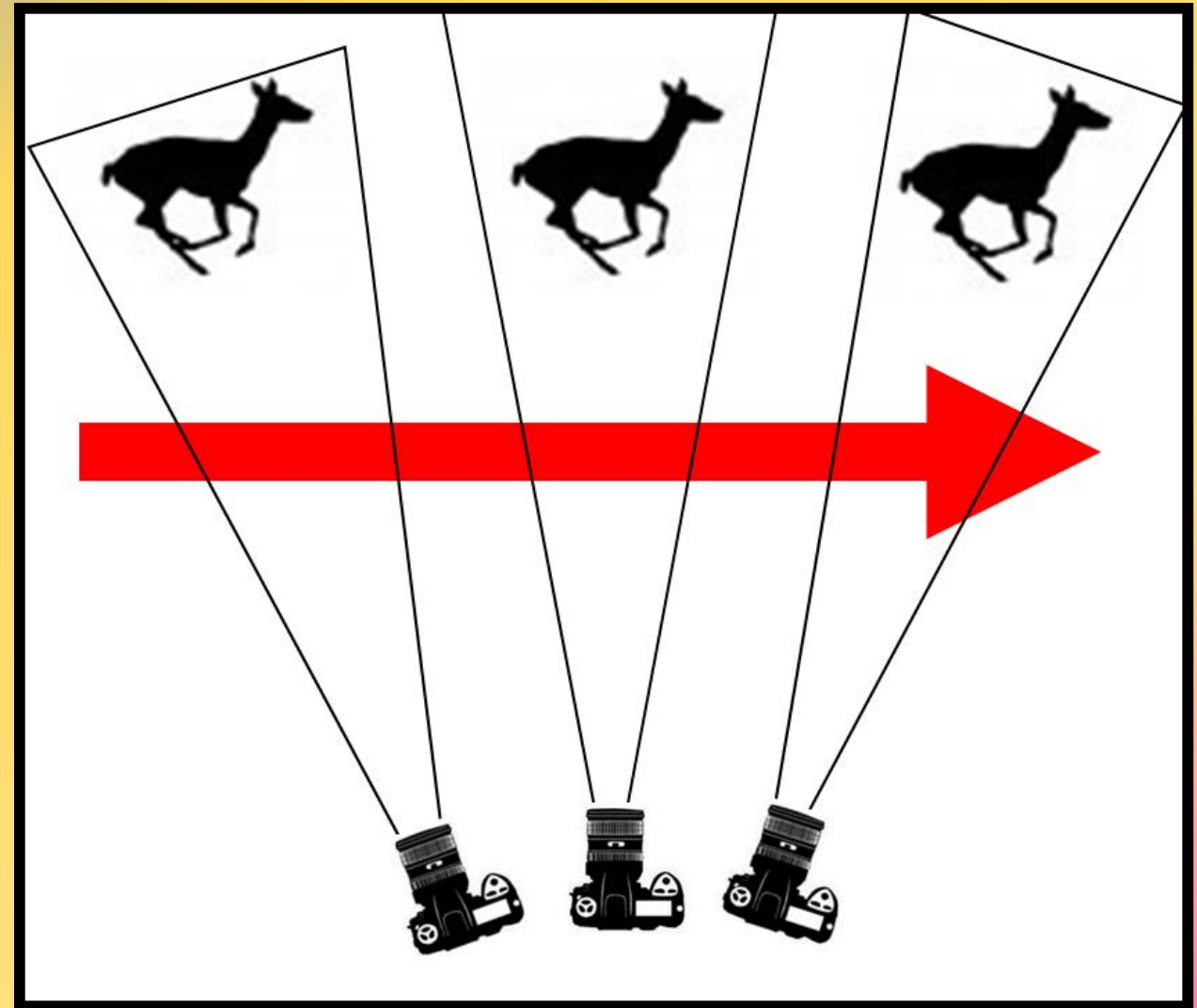
Digital cameras due to autofocus and auto exposure have a variable lag time between when the shutter release is pushed and when the shutter operates

- While less on DSLRs than other digital cameras, it definitely is NOT inconsequential
- To get good action shots of wildlife
  - understand the characteristics of your camera and take the necessary steps to minimize this shutter lag interval
  - understand the behavior of the wildlife subject in order to better anticipate its behavior and movements



# Large Animals – Panning the Camera

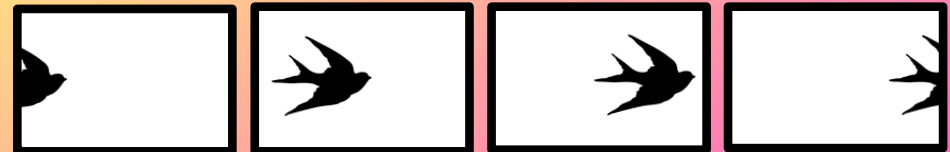
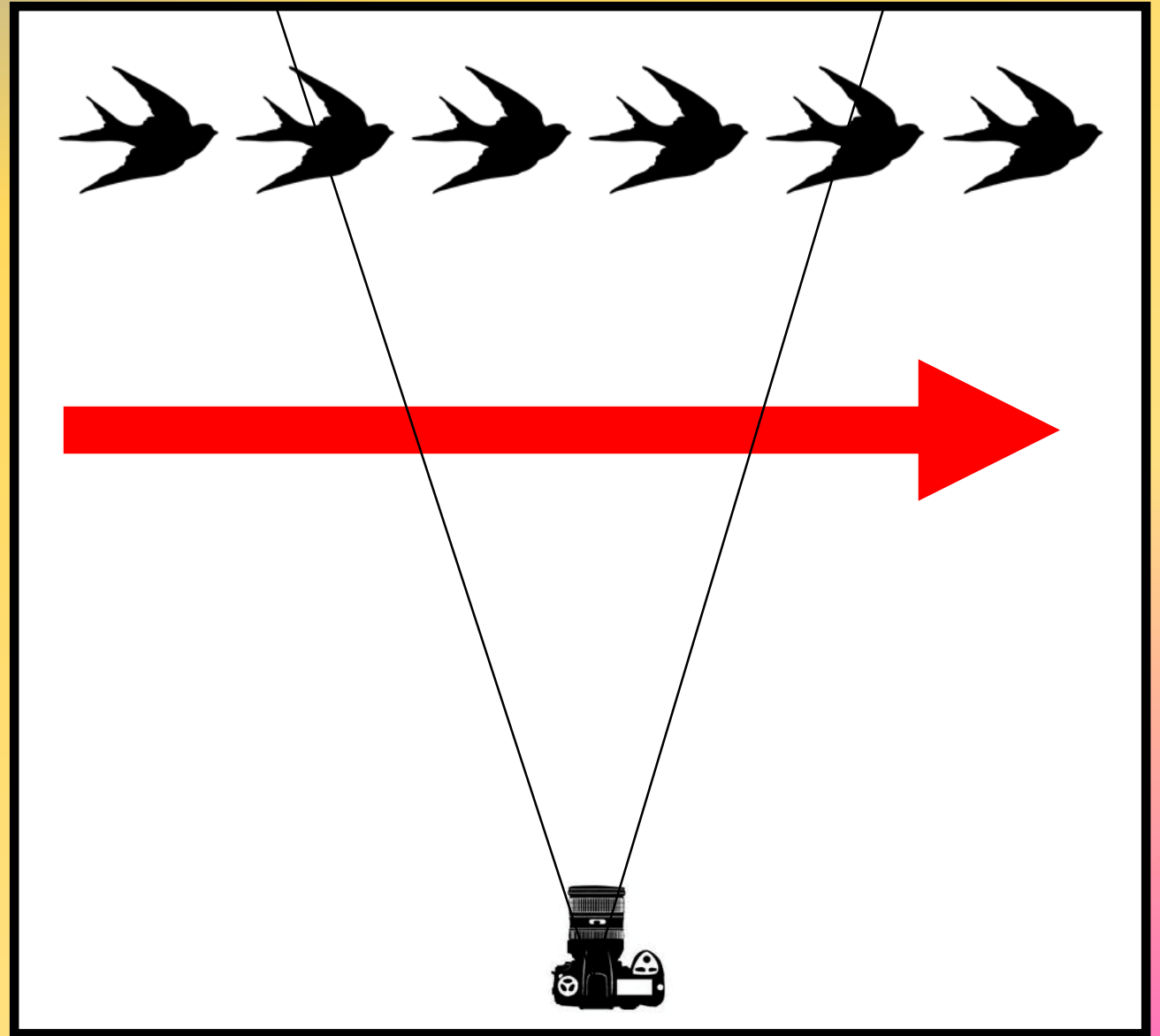
- Be prepared to pan the camera with the movement of the large animal
- The camera follows the motion of the animal





# Small Animals – Spot Focus

- Set up the camera and spot focus on some point in space
- Photographs the small animal as it moves through the prefocused field of view of the camera



# Wildlife Action “TIPS

- To freeze the action optimize the exposure trade-off between depth of field and fastest shutter speed possible
- Use the Spot Focus techniques described earlier (Spot – Hold/Lock or Spot -Manual) to minimize focus induced delays
- Use the “burst” mode to shoot as many pictures as possible in a limited amount of time
- Be prepared to pan the camera in order to capture the movement of large animals
- Use the “Heads Up” technique described in Part II to photograph small or rapidly moving animals



# Panning to Capture Action

Panning makes it possible to capture the fox as it quickly moves from right to left.





# Burst Mode & “Heads-Up” Shooting Example 1



- Camera Spot Focused on top of bird box; Blue Jay “in focus”
- Photographer in “Heads Up” mode sees Bluebird diving on Blue Jay and activates shutter using remote shutter release
- Camera takes sequence of images in focus (1, 2, & 3)



# Spot Focus, Burst Mode, & “Heads-Up” Shooting Example 2



This sequence captures the House Finch approaching the feeder and then backing off



# Shutter Speed and Freezing Action

- The faster the shutter speed the more likely the motion of the subject will be “frozen” in time
- A small amount of blur caused by the fast motion of the subject gives one a “feeling” of speed
- Avoid too much “freeze” or ‘blur’
  - Some images without any blur just don’t look “right” or fail to capture a sense of movement
  - Too much blur results in just a blurry image





# Wildlife Action - Summary

- Capturing wildlife “in motion” can make great photos
- Shutter Speed, ISO, and f-stop must be carefully considered when “stopping action”
- Remember to minimize the shutter lag of your camera; spot focusing and presetting exposure helps to reduce this interval
- Observe your subjects and learn their behavior in order to anticipate how and when they will move
- Use burst mode to maximize the number of images taken
- Use camera panning and spot focusing when appropriate
- A cable release and shooting “HEADS-UP” gives one a far greater view of the scene and as a result a much better chance of photographing wildlife “in action”





# Flash for Wildlife Photography







# The Benefits of Flash

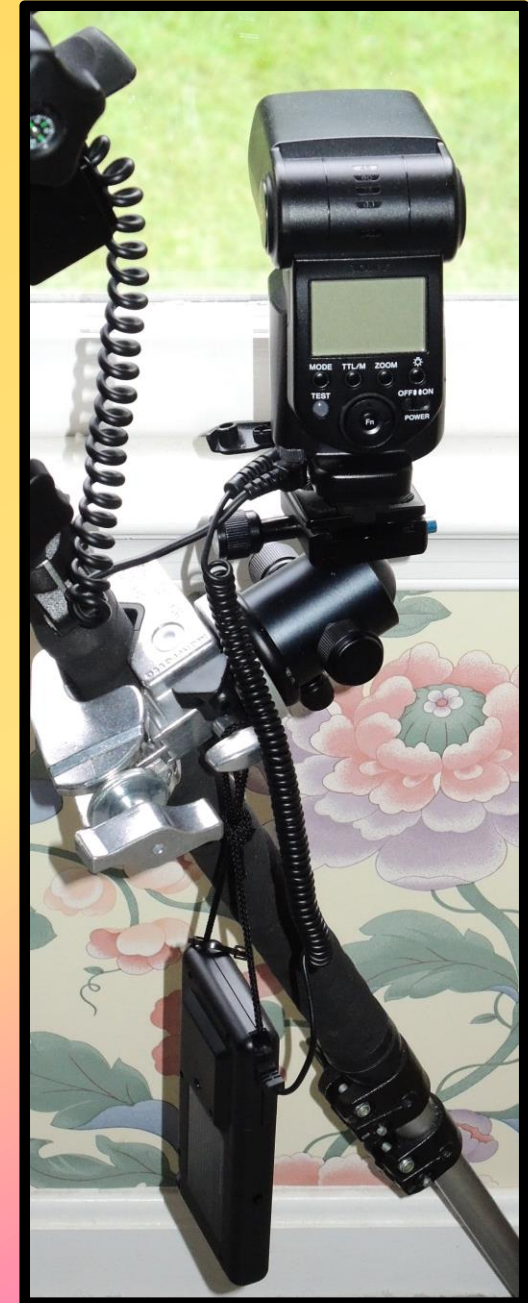


Extends the opportunities for photography

- Allows photography when it is too dark
- Fill flash eliminates shadows and enhances contrast
- Enables stop action in low light
- In my experience rarely impacts wildlife

# Flash Issues & Considerations

- To use flash for wildlife images usually requires the power of an external unit; built-in flash typically has insufficient power.
- Using flash requires both anticipation of the need and preparation. If not ready to use flash when needed, the time required to set up will always result in missed opportunities/
- High ISO (800+) and a powerful external flash often can obtain good wildlife images at distances of 50 feet or more.
- The limitation of flash is the time it takes to recycle for the next flash. Even with an external battery pack, the recycle time rarely is less than one second.
- When firing the flash in rapid succession, care must be taken to not fire the flash so rapidly that the electronics overheat and are damaged.
- External flash mounted on a camera is usually a top-heavy, clumsy combination. It is easier to mount the flash “off-camera” and use a remote sync connection cord.





# Flash for Additional Light

- # 1 NO flash
- #2 with flash
  - Sony A700
  - Sony HVL-58AM Flash
- 27 flash images were taken before hawk left



# Fill-Flash

- #1 out of direct light/in shadow is flat with dull, washed out color
- # 2 fill flash provides extra light that enhances color, contrast, and definition







# Flash to Stop Action

- # 1 no flash – bird is blurred
- #2 bird image is sharp and defined
- Light from flash stops action



# Wildlife Flash - Summary

- Inexperienced photographers rarely think of using flash for wildlife photography. To better understand and fully appreciate all its capabilities, experiment using flash while photographing wildlife
- Flash capabilities
  - Adds light when it is too dark
  - Fill light reduces shadow; adds color and contrast
  - Stops action





# Conclusions



- Wildlife Photography is not difficult; it just requires careful preparation, planning, observation, and an understanding of multiple photography techniques
- A lot of wildlife frequents your backyard; it is a great place to photograph wildlife
- Set up a blind in a window and some wildlife lures and spend a little time each day photographing wildlife. By combining knowledge with experience you will quickly become a more skilled wildlife photographer.

# Final Thoughts

***-“Your first 10,000 Photographs are your worst.”***

**Henri Cartier-Bresson**

***-“You don't take a photograph, you make it.”*** Ansel

**Adam**

***-“Which of my photographs is my favorite? The one I'm going to take tomorrow”*** Imogen Cunningham

***-“Perishability in a photograph is important in a picture. If a photograph looks perishable we say, Gee, I'm glad I have that moment.”*** John Loengard  
***-patient wildlife photographers are “lucky” wildlife photographers unknown***





# Wildlife Reference Materials

- **The Cornell Lab of Ornithology Online Bird Guide**  
<http://www.birds.cornell.edu/onlineguide/> provides illustrations, information, range maps and sound clips of birds. With web access and a smartphone this is available almost anywhere (probably the best site for birding on the web)
- **Petersen Field Guides** – THE VERY BEST manuals for visual identification
- **Audubon Society Field Guides** – Not as good as the Petersen for visual identification but more detailed information on habitat, mating season, etc.
- **Gardening for Birds and Butterflies (Better Homes and Gardens Garden Store)** – Great source for idea how to attract birds and insects with plants, feeders, bird boxes, etc. (a seasonal magazine)

# General Photographic References

- Take Your Best Shot (Popular Photography): Essential Tips & Tricks for Shooting Amazing Photos [Paperback] by Miriam Leuchter (2011)
- The Complete Photo Manual: 300+ Skills and Tips for Taking Great Pictures [Paperback] by Popular Photography (2012)
- Wildlife Photography – The art and Technique of Ten Masters Edited by Ann Guilfoyle with text by Susan Rayfield, (1987)
- The Art of Photographing Nature by Martha Hill and Art Wolf (1993)
- The Nature Photographer's Complete Guide to Professional Field Techniques by John Shaw (1989)
- The New Manual of Photography by John Hedgecoe (2003)
- Kodak Digital Photoguide (2007)
- Kodak Guide to Digital Photography by Rob Sheppard (2009)
- Kodak New Pocket Guide to Digital Photography (2007)
- Color Management by Bruce Fraser (2003)



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