## WILDLIFE PHOTOGRAPHY: TIPS & TECHNIQUES

SHENANDOAH PHOTOGRAPHIC SOCIETY, MAY 2020 by Chellie Hyre

### **GEAR**

Cameras with a fast frame rate (10 frames per second or faster) are an advantage when you photographing wildlife, especially action and birds in flight (BIF). Cameras with high resolution and fast frame rate will require fast cards (check the read/write speed) with higher storage capacity ... keep this in mind or you'll be cursing your camera when you are missing photo opportunities while the buffer is full and dumping to your cards or you have to stop and change cards because they don't have enough space.

Although prime lenses (200 mm, 400 mm, etc.) supposedly offer the highest image quality, I prefer zoom lenses (I use a 70-200 mm f/4 lens and a 100-400 mm lens) for wildlife because they are lighter and I can carry fewer lenses when travelling. There are also 150-600 mm lenses that have gotten good reviews. If I use them on my crop sensor camera (Canon 7D mark ii) the range is extended by the crop factor (1.6X) so I don't use a teleconverter. If you are using a full frame sensor camera then you might want to explore using a 1.4X or 2X teleconverter to extend your zoom lens range further.

I occasionally use a tripod and gimbal head (Jobu Jr. 3). If you have heavy lenses and/or will be photographing in-place for an extended period of time (BIF, blinds etc.), consider using a tripod/gimbal setup. Otherwise, I usually find it easier and less frustrating (i.e., more mobile) to photograph wildlife hand-held.

### **CAMERA SETTINGS**

Aperture – I usually choose a wide-open aperture (f/2.8 if you have a fast lens, f/4 or f/5.6) because it lets the most light in (so I can use faster shutter speeds and lower ISO), but also as a stylistic choice. Using an aperture in this range provides a depth of field (DOF) that helps isolate the subject from the background (blurry background/bokeh). Remember that besides aperture, DOF is also dependent on the focal length of your lens and the distance to your subject. A rule of thumb for wildlife is to have everything in focus from the tip of the nose to the back of the ears, and the eyes definitely need to be sharp. You may need to stop down your aperture (from f/4 to f/8 for example) when dealing with different focal planes, for example - large animals, long-nosed or antiered animals, or groups of animals. Stopping down may also make it easier to focus on distant subjects or animals in action.

Shutter speed – A rule of thumb is to use a minimum shutter speed of 1/maximum focal length for still subjects. I prefer to keep things simple, so I use a minimum of 1/500 second for still subjects, and a minimum of 1/1000 for moving animals (depends on how fast they are moving). For BIF, you might need 1/2000 or faster.

ISO – Image quality is best at lower ISOs. However, do not be afraid to use a higher ISO when needed; I have successfully photographed African wildlife at night with ISOs up to 12,800. Most modern cameras and software handle noise/noise reduction well as long as your image is well-exposed in camera to start with. I often use auto ISO in quickly changing light (such as animals moving between sun/shade or tree/sky).

Focus settings – For focus mode, choose continuous shooting (not single shot). For focus area, I generally choose single point and use the joystick to move the focus point where I want it. I often use a

bigger focus area (one point surrounded by 4-8 other points) for fast-moving animals. Many cameras have advanced focus tracking settings (including animal eye AF!) that can improving focusing. I use back button focus to separate the focus from the shutter. I also capture at least three frames each time to increase the chance of having at least one image with eyes open, ears/legs positioned better, slightly sharper, etc.; the differences are subtle but worth it to me to take the extra frames.

# DO YOUR HOMEWORK!

One of the most important aspects of wildlife photography has nothing to do with the camera. Before photographing wildlife (especially if you are spending money to travel and photograph specific species), take the time to learn about their location/environment, biology, and behaviors. For example, flight zones (how closely you can safely approach an animal without stressing them) may depend on whether they are a predator or prey species. Know where you are going to find animals (and baby animals if that is your goal) – don't be "that guy" who is upset that there are no polar bears in Antarctica:). Know what biologic/seasonal behaviors are taking place – egg-laying vs chick raising, migration, breeding season, antlers covered in velvet vs bare vs slough vs drop, "active times" at zoos (feeding times, low activity/animals moved indoors in summer heat), etc. Know where and when animals search for food – for example, bears foraging or salmon-hunting, puffins and eels, meerkats at sunrise, foxes and birds of prey near field/crop edges (and how they hunt), etc. Knowing these details can really help you be prepared for getting the images you envision.

Another thing that is super important and will make your wildlife experience more enjoyable – PRACTICE! Learn how to use your gear (and how it performs) in different weather conditions, your tolerance for rain, snow, cold, etc., how to photograph with rain covers, gloves, etc., and how to change your camera settings quickly and at night. Practice action on kid sports, traffic/moving cars, or local parks - Canada geese and squirrels may not be exciting, but they are abundant and can make good wildlife practice subjects. Zoos can also provide good practice opportunities.

And one more tip – find a good guide! They know where the animals are likely to be, their behavior patterns, etc.

#### WHERE TO GO

Although not very exotic, we have plenty of nearby wildlife photography opportunities. Don't overlook backyards and local parks. The State Arboretum (Blandy) has lots of birds and wildlife, and I'm betting the new trails at the Museum of the Shenandoah Valley will be awesome as well. Virginia has 14 national wildlife refuges to explore, as well as lots of state and local parks, Shenandoah Natl Park, and Assateague Natl Seashore. The National Zoo in D.C. and the Baltimore Zoo and Baltimore Aquarium are good day trips. There are lots of "special" places as well – wolf sanctuaries in PA/NJ, eagles at the Conowingo Dam in MD, butterfly gardens at the public gardens, and wildlife rehab/conservation centers (Owl Moon Raptor Center, Blue Ridge, Front Royal, etc.), just to name a few. And of course, I have to put in a plug for travel, either in the U.S. or internationally, for even more fantastic opportunities, especially if you want to photograph a particular species.

# **PHOTOGRAPH WITH INTENT!**

We all get excited when we see wildlife (OMG a moose!) and start snapping away. That's fine, but after you get that first photo (or 10) out of the way, it's time to stop and think and play. The most successful and interesting wildlife images are usually made purposefully, with intent. Decide on your purpose/style – do you want a photojournalistic image or a portrait? If your goal is a portrait, do you want to showcase just the animal (and as the whole animal or as a "fill-the-frame" headshot-type image) or

show the animal (as a smaller component of the image) in its environment? Are you interested in capturing action of certain behaviors (running, jumping, fighting, flying)? Thinking about your end goals and using the techniques below will help move you from "snapshot" mode to photographing with intent and improve your wildlife photography.

### **ALL ABOUT THE LIGHT**

Photographing in soft light (golden hour, overcast light) where there are no harsh shadows and a multitude of exposure settings will work is easy. But don't forego opportunities at other times of day. Photographing animals in mid-day can be successful and provide colorful, contrasty images - make sure that the animal (or you) are positioned so that the animal's face and eyes are well-lit, there is good detail/contrast in the skin/fur, and there are no dark shadows on the animal. Using backlighting for rim light or silhouettes can provide interesting images also.

# **COMPOSITION COUNTS**

The same "rules" apply for wildlife as for many other subjects – make your images interesting by creating a visual journey using composition techniques such as rule of thirds, leading lines, balance, patterns, and repetition. Think like a painter and simplify the image – get rid of distracting elements and colors as you look through the viewfinder. Give your subjects space to look into in the frame. Watch for mergers and tangencies – where is your subject lined up in relation to the horizon or background? For silhouettes, check for clear outlines – no overlapping subjects or missing parts (can you see all the legs?). Parts do matter – for example, if the feet are interesting/important, make sure they are in the frame. If you choose to exclude parts (cropping), do it intentionally – generally mid-joint is best. Composing in layers (deliberate foreground/middle/background) also adds interest. With a group of animals, odd numbers are considered more interesting than even numbers, and separation between animals in a group can add interest because the viewer's eye can explore each animal in the image rather than viewing the group as a single subject.

### MAKE A CONNECTION. TELL A STORY.

The easiest way to make a connection between the subject and viewer is to have the animal looking at you. When capturing wildlife images, the eyes should be in focus and well-lit (bonus for catchlights!). If you are having trouble focusing on the eyes (for example, dark eyes on a dark face), try focusing on something in the same plane of focus (neck, top of head, chest) that has more contrast. Photograph animals at eye-level or ground level for a stronger connection. Watch your angles — animals walking away from the camera or looking away (unless they are doing something interesting) tend to be less successful. Storytelling images can take more patience and sometimes luck, but they are worth it. Instead of photographing "an animal" think about photographing "the animal doing something" (e.g. photograph verbs, not nouns:)). Capture an interesting behavior (polar bear rolling in the snow, bird flapping wings before flight), peak of action (jumping, fighting, pouncing), animals doing something funny, or animals interacting with each other (mates, moms with babies).

# **GET CREATIVE!**

Wildlife photography is not all about getting the "perfect" magazine cover or competition image. Explore ways to capture wildlife more creatively. For example, try "panning" flying birds and running animals using slow shutter speeds (1/60 second is a good starting point). Use your images in other ways – create watercolor or pencil sketches in post-processing, add textures and painterly backgrounds, or use them in composites. Once you start thinking creatively, you'll begin to pre-visualize and capture images that you wouldn't otherwise take because they're imperfect as photographs, because you see their artistic/creative potential.

### **TIPS FOR BIRDS IN FLIGHT**

Most of the information in this presentation also applies to BIF. In addition, knowing more about bird behavior (take-off and landing into the wind, species cues like the "pre-flight poop") can be very helpful. You may need to "commit" to either an action photo or a still photo (photograph with intent:)) in some situations because you won't be able to compose and focus fast enough for both scenarios (for example, groups of birds or birds in dark trees pre-flight). BIF is one scenario where I intentionally compose wider and leave room to crop the final composition in post-processing to decrease the chance of cutting off parts. There are big debates among bird photographers with regard to wing positioning; photograph multiple frames and see what is most pleasing to you. Ditto with wing tip sharpness — although it's awesome to nail an image where a fast-flying bird is perfectly sharp, showing a bit of blurriness at the wing tips can make an image feel more natural.

#### TIPS FOR PHOTOGRAPHING CAPTIVE ANIMALS

Photographing captive animals at zoos, aquariums, conservation centers, etc. can be fun and provide some unique opportunities. There are lots of debates in photographic communities about whether captive animals should be considered wildlife, whether "baiting" animals (for example, snowy owls and eagles catching fish have been hot topics) for photography is ethical, and whether images featuring captive animals should be allowed in wildlife photography competitions. If you plan to enter images from captive or "baited" animals in a competition, make sure to check the rules to make sure they are allowed and/or what disclaimer statements may be needed.

When photographing through bars and wire, if you use a telephoto lens, a wide aperture, and position your lens as close to the fence opening as you can, you can generally focus "through" the fence so it is not visible in the image. This is easier to do when there is no direct light on the bar/wire/fence.

When photographing through glass, use a rubber lens hood and position your lens against the glass. The rubber hood will protect your lens (and the glass) better than your regular hood and can cut reflections better. Watch your reflection and reposition your body at a different angle if needed to either avoid a reflection or in some cases, to help block out a reflection.

### AND FINALLY, THE SECRET SAUCE ...

Have LOTS and LOTS of patience. Wildlife photography is not usually an "instant gratification" type of endeavor. Take the time to enjoy the experience of being in the animal's environment and the awe of being in their presence.

Always have your camera ready. This means camera out of the bag, lens on, lens cap off, empty card, full battery, and settings dialed in close. I often leave my camera turned on the whole time (especially with my mirrorless, which takes longer to start up than my dSLR). Being prepared is key ... you will miss great opportunities if you wait until an animal is doing something interesting to get everything set up.

Follow your heart. And have fun. Don't make social "likes" and competition wins your main goal. Photograph subjects you are passionate about and that enthusiasm/emotion will be present in your images.