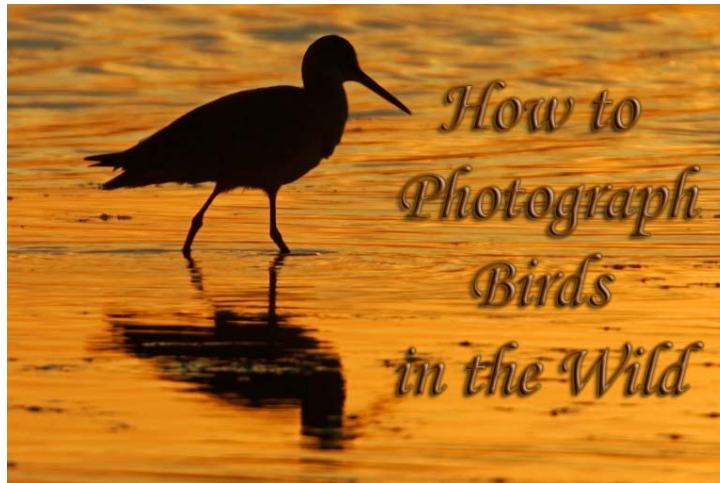


"How to Photograph Birds in the Wild"



Jerry Fornarotto
November 14, 2006

*When you Photograph
Birds in the Wild
there is some
Preparation Needed*

1. Whenever you are planning to photograph birds you have to do some homework. This is true for any serious type of photography.

*Google
the area
you are visiting*

2. The place I like to start with is "Google". I'll Google the area I am visiting. For example, if I am planning a trip to Florida I'll type in the search bar "Birding in Florida". From here you will be lead to sites like "Corkscrew" or "Merritt Island". At this point you can refine your search.

*Look for Websites
Dedicated to Birding*

*birderworld.com
gorp.away.com
Americanbirders.org
camacdonald.com/birding*

3. Another way to start your research is to visit dedicated birding websites. Here are a few.

*Find Out When
Photo Tours
and
Birding Tours
are Going to the Region*

4. Visit Art Morris's website, "Birds as Art". If he is leading a tour to Fort DeSoto the first week of March you can bet that is the peak time for birding in this area of Florida. Also take a look at Outdoor Photographer in the "Travel & Workshop" section. If you find photo tours going to Bosque Del Apache the last week of November, then this must be the prime time. You can also look in any birding magazine for a list of tours.

Research books and Magazines

Birder World
Sibley Field Guide to Birds
Stokes Field Guide to Birds
Smithsonian Institution
Birds of North America

5. Field books are valuable sources of information. I recommend Sibley's

Get Familiar

Once you know what species you will see
Look them up in your Bird ID book
Be able to recognize them from memory
Know what environment they like
What, when, where do they feed
What time do they prefer
What time of the day are they most active
Where do they roost
Where do they nest

6. You did your research of the area you want to visit. You now know the best time to go and what birds you will see. Find the birds in your field guides or bird ID book. Study them. Be able to recognize them from memory. Know what environment they like. Know their feeding habits. Know their activities and their sounds.

Family ARDEIDAE	Species <i>Ardea herodias</i>	Length 46–52 inches	Wingspan 77–82 inches
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GREAT BLUE HERON

Often called “crane” or “blue crane” by locals, the Great Blue Heron is the largest, most widespread, and best-known heron in North America. Its size, long yellowish bill, and mostly bluish gray body readily distinguish it. In the breeding season several long black occipital plumes adorn the back of the crown. In south Florida a paler white-headed form was formerly considered a separate species called Ward’s or Wurdemann’s Heron. An all-white morph with yellowish legs found in southern Florida is called the Great White Heron and formerly was also considered a separate species.

• SONG Mostly silent except at colonies, where it makes series of squawks and low croaks.

• BEHAVIOR In flight the long neck is folded back into a compact S-shape typical of other herons and egrets, and the long legs trail far out behind the short dark tail. Feeds by standing still in water for long periods and grabbing fish and other animals that come within range of a lightning thrust of its daggerlike bill, or by walking slowly along waterways or through marshy vegetation or grassy fields.

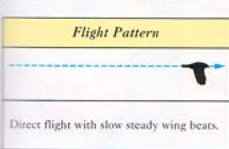
• BREEDING Monogamous. Colonial.

• NESTING Incubation 25–30 days by both sexes. Semialtricial young remain in nest 65–90 days. Fed by both sexes. 1 brood per year in the North, 2 per year in the South.

• POPULATION Stable, common, and widespread.


• CONSERVATION This species and other “long-legged waders” have benefited from state and federal protection, particularly of breeding colonies.





Flight Pattern



Direct flight with slow steady wing beats.


Nest Identification


Shape 


Location    


Sticks • lined with twigs and leaves • usually in trees 20–60 feet above ground or water; sometimes in low shrubs; rarely on ground, rock ledges, or coastal cliff

• built by female from materials gathered by male • 2–7 pale blue or light bluish green eggs; oval to long oval, long elliptical, or subelliptical; 2.5 inches long.


Plumage 

Sexes similar 

Habitat 

Migration Northern birds migrate 

Weight 5.7 pounds



long, stout yellowish bill


white face

bold black line on both sides of crown

black-and-white streaks on midline of foreneck

blue-gray body


chestnut “pants”



WURDEMANN'S HERON


short tail

blackish yellow legs




JUVENILE

Similar Birds

 SANDHILL CRANE

Bald red crown; bushy tail coverts; flies with neck extended.



7. This is a sample page from “Birds of North America”. On the top of the page you will find the “Family Name, Species, Length or Height and the bird’s Wingspan”. On the top right corner is a scaled silhouette of the bird compared to the height of the book. Under that is an image of a subspecies of the bird. In the center is a good photograph of the bird with a description of body parts. On the top left is a synopsis of the bird, followed by “Song, Behavior, Breeding, Nesting, Population and Conservation”. On the bottom left you can find the “Flight Pattern and Nest Identification”. Looking at the bottom right of the page is an image of a similar bird and a map color coded by seasons. Under the map is a description of the bird’s nest, including the material, height off the ground, where they like to build their nest and the description of their eggs. Across the bottom is a quick reference guide. Along the outside edge of the page is a place to record notes.

Camera Equipment

Know how it works before you leave

100-400mm

600mm

Tripod

Whimberley

Flash

Flash Extender

High Speed Camera and Flash Cards

1.4 Tele-extender

Quantum Battery

8. Know how your equipment works before you leave home. Reread your manuals. The lenses I use most of the time are 100-400mm, my 600mm, a dedicated flash with a flash extender, a high speed camera and high speed flash cards. A Wimberley will give you a lot more movement than you can get from a ball head. A tripod that is sturdy enough to hold the weight of your entire rig. I prefer to use a 1.4 tele-extender. The 1.4 tele-extender is much sharper than the 2.0 tele-extender. If you are shooting rapidly you will need an external battery to supply power to the flash, such as a Quantum battery.

Flash Cards Speeds

www.robgalbraith.com

Flash Extenders

www.rue.com

9. I have mentioned a high speed camera and high speed flash cards. I like to photograph birds in the high speed drive mode. My camera can record 8.5 frames a second and a buffer of 40 frames. That means the most images I can capture is 40 consecutive images at a rate of 8.5 images per second in one burst. Speed is important when photographing birds in flight or when there is a lot of action happening. How fast the camera can download the files onto the flash card and how fast the flash card can read those files is imperative. To find this information about your camera or the camera you are planning to buy, visit the manufactures website or call their tech department. For the speed of the flash card with a particular camera visit Rob Galbraith's website. The Flash-extender can be purchased from LL Rue.

400_{mm} VS 500_{mm}
500mm will Produce an Image
56% Larger than a 400mm

500_{mm} VS 600_{mm}
600m will Produce an Image
44% Larger than a 500mm

400_{mm} VS 600_{mm}
600mm will Produce an Image
125% Larger than a 400mm

10. Image size is a function of the square of the focal length; $500/400=5/4$, so 5 squared divided by 4 squared= $25/16$. $25-16=9$, the increase in the image size is $9/16$ or 56%. Adding a 1.4 teleconverter will increase a lens focal length by 96%. A 2x will increase an images size by 4 times.

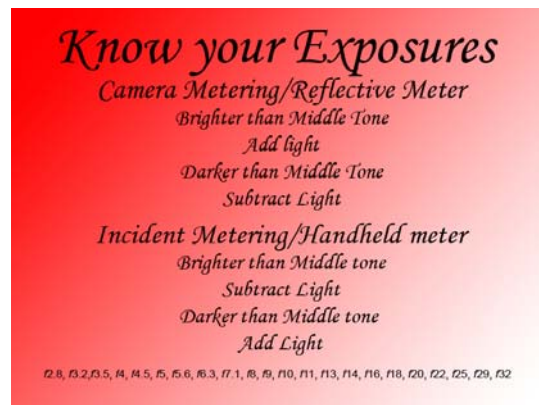


KwikCamo.com

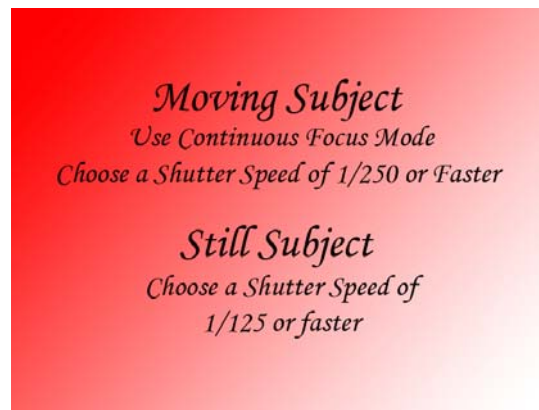
11. Camouflage covering can be a big help. Here is one type of cover. LL Rue also sells covers, blinds and camo covers for lenses.



12. For hot weather dress cool, and protect yourself from the sun. There are lots of new types of fabrics that are light weight and have a UV protection value. In cold weather dress with breathable types of clothing in layers. Cotton and wool fabrics are not ideal clothing to wear. They make you perspire and leave you feeling wet and cold. Have the correct foot wear for the terrain. Bring rainwear and hand warmers with you. When you are done shooting after a few hours, place the hand warmers in a zip lock baggie. When the warmers are deprived of oxygen the chemical reaction is stopped and they can be used again. Bring along tick & mosquito spray and don't forget sunscreen.



13. Your camera has a built in reflective light meter. It measures the light reflected by the subject. A reflective meter assumes everything in the viewfinder is middle tone. This is why when you take a picture of something white it comes out grayish, and something black comes out muddy or off black. Here is my suggestion to overcome this problem. To keep whites white you must open up or add light by using a larger f -stop than the camera meter is suggesting (do not change the shutter speed). To keep blacks black you must stop down or subtract light by using a smaller f -stop than the camera meter is suggesting (do not change the shutter speed). If you are using an incident light meter (handheld light meter), the principles are different. An incident light meter measures the light falling on the subject. Set your camera to Manual Mode. Select the shutter speed that will suit the shooting situation. Dial in the aperture that will make the correct exposure. Open up or add light when shooting a white or lighter than middle tone bird. Shooting a black or darker than middle tone bird, stop down or subtract light. It is possible to make exposure compensations without taking your eye from of the viewfinder. My f -stops are set in 1/3's. By turning the compensation wheel and counting the clicks I have made my compensation. Most of you are thinking. "I can make those adjustments later in Photoshop". Yes you can, but at a price. You would be adding noise to your image. If you blow out the whites, you can not recover the details lost. For more information about exposures I suggest you read Art Morris's book "The Art of Bird Photography". Note: Opening up the lens means changing to a larger lens opening (a lower f -stop number). Stopping down the lens means changing to a smaller lens opening (a higher f -stop number).



14. Some birds fly very quickly, some fly very slowly. The more time you spend observing birds the better you will become at choosing the right shutter speed.



15. For moving birds set your camera to Continuous Focus Mode. This will help you track the bird better. A bird such as a pelican flying parallel would suggest a shutter speed of 1/1000 to 1/2500. This will most likely freeze all motion. Shooting the same pelican at a distance of 200 feet you can use a slower shutter speed and as it gets closer you can increase the speed. Birds standing still require a slower speed. Don't forget to sync your camera and flash speed. When using a flash-extender decrease the flash output by $1^{2/3}$. For information about high speed flash syncing read the article by Naturescape.com.



What Makes a Sharp
IMAGE

16. Bird photographers are looking for a **razor sharp** image. Sometimes you may elect to create an artistic rendering of a blurred bird. Having wing tips blurred can emphasize movement. If your aim is to be a successful bird photographer and score nines you have to have extremely **sharp, crisp** images. Factors that produce constant sharp images are; 1) Lens quality; 2) focusing; 3) shutter speed; 4) subject movement; 5) aperture; 6) sturdy tripod. For the best technique when handholding a camera, stand with your legs apart and one foot forward. Tuck your bent elbow at your side.



Focusing

Focus on the Eye
Check the Depth of Field
Tip of the beak to the
end of the Tail
all in Focus

17. When viewing wildlife photos or even photos of models we make immediate eye contact with the subject. Make the eye your focusing point. If you have your camera set to multiple focusing zones your focusing point will be the side of the bird. The bird's side will be closer to the sensor and due to the large focal length of the lens the depth of field will be short. Ultimately leaving the eye soft. I activate only one focusing point and place that point on the eye. Use your depth of field preview

Locating Birds

You did all the Planning, Studying,

Watch for other Birders and Photographers

Watch for Crowds

Stop and Listen

Stop and Scan

Learn to Pish

18. Ok, you have done all your homework. We are on location. Now you have to find the birds. I have found that birders like to brag. They'll tell you all their favorite and most rewarding spots. On the other hand if you ask photographers he or she will be very secretive. However they will give themselves away by their numbers. When you see a crowd something is happening. When you are alone in the field, stop, listen and scan. The birds will give themselves up. Pishing is imitating bird calls to attract birds. I use bird calls downloaded onto my iPod and broadcasted through external speakers.

Once at a Location

Shoot-Shoot-Shoot

Identify the Birds Later

www.birdersworld.com

PSA Nature Division

Identification Service

Dan Charbonnet

ddrc3@msn.com

19. Shoot, shoot, shoot. Birds move their heads and their inner eyelids incredibly fast. You never know which frame is the one that will score the nine. When encountering a new species try not to get too excited about it. Shoot, shoot, shoot. ID it later. If you are a member of PSA, Dan Charbonnet, offers a fee identifying service. For more information about this service visit, <http://www.psa-nature.org/services.html> scroll to IDENTIFICATION SERVICE and click the icon. This service is available only to PSA members.

Pay Attention to the Environment

Sun

Low-On your Back

Tide

High-Low-Incoming-Outgoing

<http://tbone.biol.sc.edu/tide/>

Backgrounds

Not Busy

Not Bright

Color of the Water

Does it complement your Subject

Weather -?

20. Pay attention to your surroundings. You want the sun low in the sky and in back of you. When shooting by water check the tides. Some birds will feed at low tide, some at high tide. Incoming or out going can be a factor to feeding habits. Here is a link for tide charts. Be observant to backgrounds. You don't want a busy or bright background with hot spots. The color of the water or sky can complement or detract from your subject. The weather can be severe in some areas. Be cautious. Use clouds to filter bright light.

Move Slowly

Slowly get closer

Watch their Behavior

21. Approach birds slowly and patiently. Take a few steps, stop and take a few pictures. Repeat this till you are in the range of your lens. As you are moving observe the bird posture and behavior. If it looks relaxed proceed, if it looks nervous, stop and wait. Do not stress the bird. You will be surprised how close you can get with slow small steps.

Shoot from the best
PERSPECTIVE

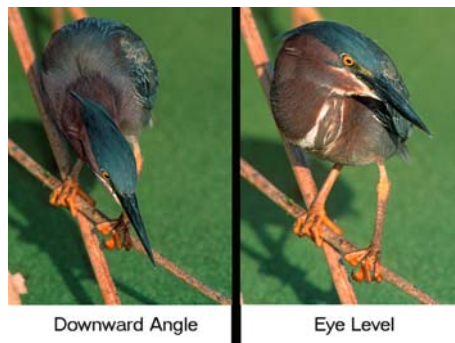
22. Having the bird at the right angle is as important as shooting models. You must have a connection between you and the bird.



23. Here is an example of two images of the same bird. I waited for the bird to turn its body towards the camera.



24. I took these two images while panning with a 100-400mm lens handheld. The angled view shows more dimension and a connection with the subject.



25. Shooting down on a bird is not a pleasing angle. I lowered my tripod and waited for the Green Heron to lift its head.



Busy Background

26. A busy background takes your interest away from the subject.

Top Ten

- 1. Understand your subject and let them adjust to your presence*
- 2. Be conscious of the light*
- 3. Look at the ordinary, capture the extraordinary*
- 4. Take many images*
- 5. If it is not working - Change*
- 6. Respect Nature*
- 7. Research the location*
- 8. Know your equipment*
- 9. Have a connection with your subject*
- 10. Story, Story, Story*

27. 1) Understand your subject and let them adjust to your presence. Study your subjects before you see them in the field. Don't stress them. 2) Be conscious of the light. Shoot when the sun is low in the sky. Keep the sun at your back. 3) Look at the ordinary, capture the extraordinary. Keep watching a bird. Wait until it does something unusual, such as feeding, preening or bathing. 4) Take many images. You will never be sure which one is the perfect shoot till you review them later. 5) If it is not working - Change. Look at your images after a shoot. For example, if you see a problem caused by shutter speed or focusing do not go out to the field the next day and shoot the same way. Learn by your mistakes and make changes. 6) Respect nature. Do this by not littering, damaging vegetation, and or disturbing the wildlife. Research the location. Use the internet & books. 8) Know your equipment. Read your manuals. 9) Have a connection with your subject. Set up your subject as if you were shooting a model. 10) Story! Take pictures of the bird doing something. These are the shots that will be nines.