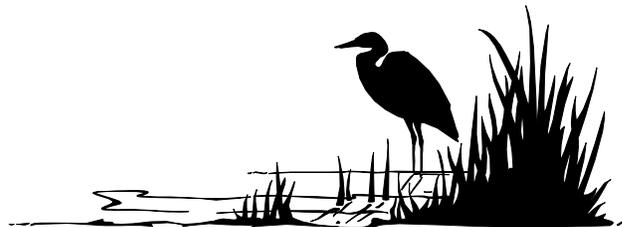


NATURE'S VIEW:

Quick Tips for Better Nature Photography

by
JIM CLARK

*"The question is not what you look at, but what you see."
Henry David Thor*



Introduction

Ah, nature. The wildlife. The wildflowers. The deep blue skies. The mountains, lakes, and deserts. The rushing tide along the beach. And of course, the sunrise over a sea of golden-stemmed prairie grass. Who could not get excited about the great outdoors, our nation's natural heritage?

Well, there's not many folks who don't have some interest in nature and their degree of intrigue covers the spectrum, ranging from those with a hard core passion for nature to folks just interested in seeing the big "critters" and then moving on to something else. Whether you love the excitement of rafting down a raging river, hiking along a trail lined with a rainbow of colorful wildflowers, trekking through a fog-shrouded cypress swamp searching for a rare bird, or if you simply like to watch a spectacular sunrise or sunset, all of us have some fascination with nature. Heck, even those people scared of spiders, snakes, and other crawly things have an interest. They'd have to be interested if they're scared!

The statistics are proving this point, too. Americans are visiting our national wildlife refuges, national forests and parks, and other public lands in increasing numbers each year. Interest in nature photography has grown dramatically in the past 25 years. Recent surveys estimate more than 14 million Americans participate in some form of nature photography. Granted, most probably just do the routine "point, click, and move on" method, but a growing number of folks are taking a more serious approach to nature photography.

With camera models, lenses, and hundreds of accessories that practically do everything for you, many take on the task of nature photography thinking it is as easy as pouring a cup of coffee. Add in the emerging technology of digital photography and you have another reason folks decide to get into nature photography. The profiles of prominent nature photographers in nature and photography magazines and television shows add to this medium's allure. There is something romantic about nature photography: Working outside, surrounded by snow-capped mountains, and documenting nature's grandest moments for others to see...What a life!

Yes, there is quite a bit of appeal here. But capturing images that pack a punch requires a combination of photographic skills and equipment, creativity, knowledge of the natural world, and personal commitment. It doesn't matter if you are working with film or digital, there are concepts of photography you must understand.

"One way to open your eyes to unnoticed beauty is to ask yourself, What if I had never seen this before? What if I knew I would never see it again?"
Rachel Carson



There is also a personal requirement as well. Do you possess the personal initiative, tolerance, patience, time, and practice that nature photography demands? Nature photography is fun, indeed, but it requires work, too.

For successful nature photography, you must become adept at meshing subject, composition, angles, and lighting to create a powerful image. Once you become skilled at the technical aspects of photography, the real challenge starts with capturing compositions that will convey an emotion in the viewer.

Whether you are just photographing insects in your backyard or traveling to the far reaches of the world to capture images of exotic landscapes, there are basic concepts, that if you take the time to learn and practice, will improve the quality of your images. This guide offers basic tips and techniques to help you capture images of nature. If it piques your interest and you want to learn more, check out the nature photography magazines and books listed in this guide for more in-depth coverage.

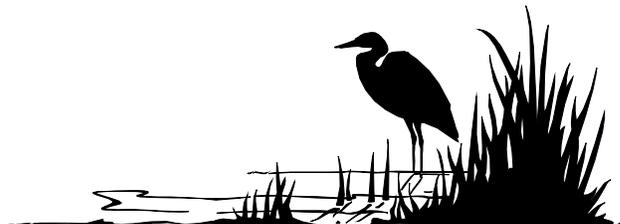
The most important piece of advice I can offer you is to respect our wildlife and wildlands. Never do anything that will harm or disturb wildlife or their habitats. There will always be another scene just around the bend of the trail to photograph.

And don't let nature photography stop you from simply enjoying your time in the great outdoors. Even if you don't get the image you want, just remember, it doesn't get any better than this!

Jim Clark
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U.S. Fish and Wildlife Service
National Conservation Training Center
Shepherdstown, West Virginia

<http://www.jimclarkphotography.com/>

*"One touch of nature makes the whole world kin."
William Shakespeare*



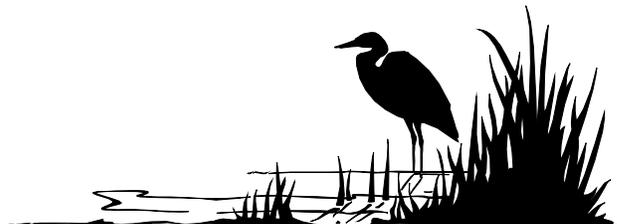
Nature's View: Quick Tips for Better Nature Photography - Guidelines, Equipment, and Sources of Information

Personal Traits of a Nature Photographer:

- ◆ Respect for the natural world -- **First and Foremost, Do No Harm**. If your actions may result in disturbing an animal or site, move on. There's always something more interesting around the corner.
- ◆ Love and passion for the outdoors.
- ◆ Patience (that's extremely patient...).
- ◆ Tolerant of bad weather and the other "nasties" nature will throw at you (that's extremely tolerant...). Nature photographers understand that when rained upon, the body doesn't melt...
- ◆ Able to endure early mornings (that's extremely early...) and late evenings (dinner can wait...).
- ◆ Knowledge of the natural world and a continual thirst to learn more. Why photograph nature if you don't know what you are photographing? You do know what you are photographing, don't you?
- ◆ Willingness to learn the techniques, practice, learn more techniques, practice, learn new techniques, practice, learn old and new techniques, practice, learn more techniques, etc. Get the picture? With digital photography, you need to learn even more technical concepts (white balance, file size, file format, etc.)
- ◆ Want to include nature photography as one of your fortes? Then in addition to the above qualities, I recommend you learn how the professionals do it. Mentor a pro. Study their photographs in calendars, magazines, and books. Attend workshops or seminars. Watch videos. Read nature photography books and magazines. Visit the home pages of the pros. Don't copy the pros in how they photograph. Instead, develop your own style. This will take time to acquire, but the fun part is the journey, not the destination.

"There is no place like springtime in a marsh. I like to just sit back and let it tell me all its stories."

Karen Hollingsworth

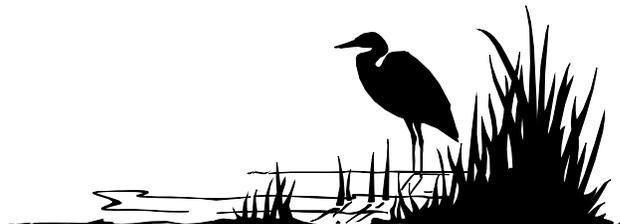


When purchasing a camera (film or digital), look for these features:

- ◆ Manual override of automatic functions.
- ◆ A camera model that has or accepts a complete line of lens and other accessories. The more you get into nature photography, the more you will discover that you need an array of accessories to help you capture that defining moment. Stick as much to the camera's line of lenses and accessories as you can.
- ◆ Depth of field preview button and mirror lockup (some newer models may not have a mirror lockup feature).
- ◆ Exposure compensation dial (lets you override the camera's exposure reading when using Program, Aperture, or Shutter Priority settings. Compensation dial does not work when camera is in manual mode).
- ◆ Exchangeable viewfinders or focusing screens (useful to exchange different types of focusing screens -- grid lines, plain, etc.). Nice option to have, but not critical.
- ◆ TTL Metering System: Most 35mm cameras now have "through the lens" metering. Especially useful are those cameras with spot, center-weight, and matrix (evaluative) metering capabilities. Many of the advanced and higher-priced models have matrix metering systems that do a pretty good job of metering a scene correctly, even those scenes that are lighter or darker than a neutral tone. Spot-metering is especially useful for fine-tuning your exposure readings. Despite all the claims, however, you'll usually have to do some adjustments to your exposure reading to render a correctly exposed image. The amount of adjustment will vary with the brand and model of the camera.
- ◆ Accepts a cable release. Some of the newer cameras require an electronic cable release instead of the standard mechanical variety. Regardless, this accessory is useful to have available.
- ◆ Motor drive, which is especially useful for wildlife photography. Many of the newer camera models have built-in motor drives. Not necessary, but useful.

"To the attentive eye, each moment of the year has its own beauty, and in the same field, it beholds, every hour, a picture which was never seen before, and which shall never be seen again."

Ralph Waldo Emerson

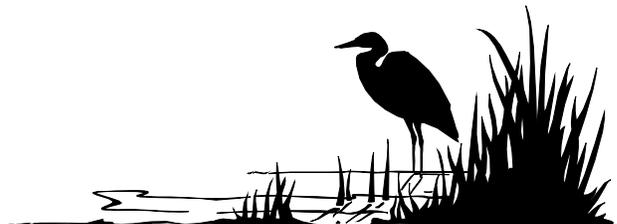


- ◆ Auto-focus capabilities. Not necessary, but it is amazing how fast the newer models are. Predictive auto-focus technology is simply amazing for capturing images of birds in flight or animals on the run. This type of technology allows the camera to “focus-track” on the animal as it passes across your viewfinder. Takes some practice to become good at it. Avoid using auto-focus for landscape or closeup photography – best to just do manual focusing in these situations.

Lenses for nature photography:

- ◆ **Wildlife:** Telephoto lens with a focal length of 300mm or larger. The faster the lens (bigger apertures) the better, but remember the cost goes up, too. Consider getting a tele-converter for your telephoto. Make sure it is the same brand as the lens. With a 1.4X tele-converter expect a one stop loss in light; a 2X converter, the two stop loss. For large telephotos, consider those with tripod collars – the lens is mounted on the tripod instead of the camera; makes the lens more steady on the tripod and makes it easier to do vertical compositions.
- ◆ Telephoto zooms in the 80-200mm, 75-300mm, 100-300mm, and 80-400mm range are good for wildlife photography, especially for capturing what is referred to as *wildlife scenics* or *environmental portraits*. For mammal photography, you’ll need at least a 300mm or 400mm. For bird photography, focal lengths in the 500mm and 600mm should be considered. There are several lenses, both single focal length and zoom, on the market today that offer “vibration-reduction” or “image-stabilization” technology. This allows you to hand-hold these lenses and photograph at 2 - 3 stops slower than normal. These are great lenses for photographing birds in flight. Remember, in using a digital camera, the focal length is increased by a factor of 1.3 to 1.5, effectively making a 600mm f/4 lens and 900mm f4 lens.
- ◆ For photographing smaller critters, such as spiders, insects, and frogs, consider purchasing a true macro lens in the 100mm to 200mm range. The longer the focal length, the more space between you and the subject, which mean less disturbance to your subject and a narrower angle of view, which means less background clutter. A good alternative is to use “closeup diopters,” which attach to the front of your lens.

“A nature lover is someone, who, when treed by a bear, enjoys the view.”
Anonymous



Caution: Though many zoom lenses claim to have “macro” capabilities, they really don’t. I only know of one really true “macro” zoom lens on the market at this time (70-180mm Nikkor).

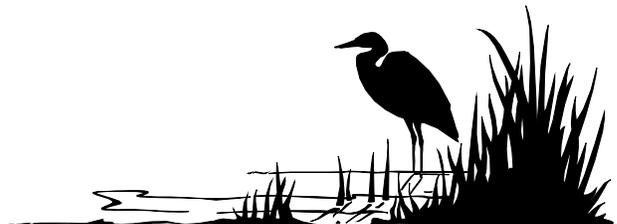
- ◆ **Landscapes:** Consider adding a wide-angle in focal lengths of 24mm or less (the new wide-angle zooms are something to consider, especially the 17-35mm or 20-35mm type), and a 80-200mm zoom for isolating a scenic. Other zooms to consider include 24-120mm, 70-300mm, 100-300mm, and 80-400mm. Telephotos in the 300mm-400mm are also good for isolated scenic compositions. Again, consider fixed focal lengths and zoom telephotos that have a tripod collar, which makes doing vertical compositions much easier. Placing the lens instead of the camera body on the tripod increases stability as well.

- ◆ **Wildflowers and Closeups:** Wide-angle lens, a macro lens (they usually come in 50mm, 105mm, and 200mm focal lengths -- I recommend one of the longer macros, which gives you more working distance between you and the subject) and/or closeup diopters, which are a cheaper but effective alternative to purchasing a macro lens. Bellows or extension tubes are other alternatives to consider. Remember what I said above about the claims many zoom lenses have about their macro capabilities -- they don’t! The Nikkor 70-180mm is the only true macro zoom currently available. Macro lenses and closeup diopters are great for capturing images of patterns and abstracts (closeups of tree bark, lichen patterns on rocks, water droplets on a leaf). Macro lenses are good for doing landscapes and portraits as well.

Basic accessories for nature photography:

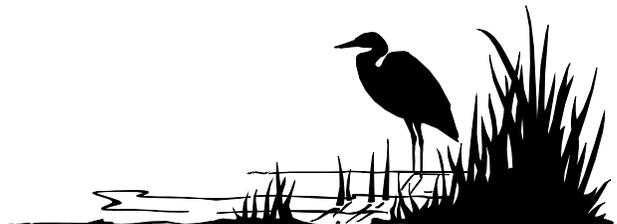
- ◆ **Tripod.** This is the number one accessory you should purchase. Get the sturdiest one you can afford and one that can reach up to your eye level. Also get one whose legs can splay straight out so the tripod can be positioned at ground level. Tripod heads are available in two models: The tilt/pan head and the ball & socket head. The later is much better for photographing wildlife -- less levers and knobs to operate. Most folks are going for the ball and socket head these days. You must make a habit of using a tripod to ensure sharp images. There’s no way around it folks...use that tripod! Carbon-fiber tripods are much lighter than their counterparts, but of course, they are much more expensive. Image stabilization lenses from Canon and vibration-reduction lenses from Nikon are great, but they don’t replace the need for a good, sturdy tripod.

“Those who contemplate the beauty of the earth find reserves of strength that will endure as long as life lasts.” Rachel Carson



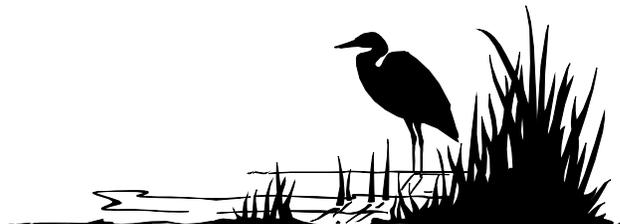
- ◆ Quick release plates. These plates save time by making it easier and much faster to remove and replace a camera or lens on the tripod.
- ◆ Cable release. A cable release helps reduce vibration when photographing in low light situations and when using slow shutter speeds and small apertures. Cable releases are especially useful in landscape and closeup photography. Using a tripod along with a cable release increases your chances for getting a sharp image. Some of the newer camera models may only accept electrical cable releases.
- ◆ Flash. Get a flash with TTL (Through the Lens) fill-flash capabilities. Fill-flash is useful when photographing wildlife, giving the final image a little “pinch” of light to reduce shadows and to place a “catch light” in the animal’s eyes. A tele-flash extender, which throws the flash out further, may be helpful in these situations. Most new flash units offer automatic fill-flash capabilities, which can be adjusted to allow more or less fill. In most situations, having the flash off the camera is preferable, so consider getting a flash bracket and synch cord. Full or fill- flash is useful for insect and flower photography, too. Some folks are even using fill flash for landscape photography (putting a bit more light on the foreground “anchor” subject). Today’s new flash models makes using fill-flash a breeze.
- ◆ Filters. The most used filters are polarizer, split neutral-density, and warming (81A and 81B). Get the best quality filters you can afford. Don’t compromise on quality! Remember, you are putting another layer of glass in front of your lens. Why have an expensive lens only to cover it with a cheap filter? And use those Skylight and UV filters only when you need them. Don’t rely on them as “protection” for the front of your lens. Remember what I just said about putting a cheap piece of glass in front of your expensive lens? And by the way, how clean are your filters? Keep filters as clean and smudge free as your lenses and camera bodies! There are now polarizing filters on the market that have a built in warming filter. Reviews so far have been good.
- ◆ Rain cover for your camera and lens. This can range from a shower cap to a plastic bag to specialty “rain” hoods and covers. Keep a small towel in your camera bag to help keep your camera and lens dry during light drizzle.

*“All my life through, the new sights of Nature made me
rejoice like a child.”
Marie Curie*



- ◆ Padded camera bag or camera back-packs. For nature photography, the camera back-packs are the way to go. Consider models with extra padding, lumbar support, and adjustable straps. Go for the water resistant models. And get this, with the exception of black models, most packs are neutral in color, so they can be used for metering!
- ◆ Micro-fiber cleaning cloth. These are much better than lens cleaning tissues. And don't forget a cleaning brush (the basic squeeze-bulb type). Advice: Never, never touch the inside of your camera, including the mirror.
- ◆ Knee Pads. These are great when you are on your knees photographing flowers or closeups. Get the type with Velcro straps, which makes it easier to put on and take off. Knee pads can be purchased at any hardware store.
- ◆ Miscellaneous: Gray card, rubber bands, twist-ties, jeweler's tool kit, small flashlight, photo-vest, window mount or beanbag, Allen wrenches, notepad and pen, cassette/digital recorder, shower caps and plastic bags of various sizes, extra batteries/power packs. Don't forget a first aid kit for your vehicle.

*"Nature gives to every time and season some beauties of its own."
Charles Dickens*



Sources of Information:

Magazines

- ◆ Outdoor Photographer
- ◆ Nature's Best
- ◆ Nature Photographer
- ◆ Balian's PhotoWorld
- ◆ Popular Photography
- ◆ Petersen's Photographic
- ◆ Shutterbug
- ◆ PC Photo
- ◆ The Biological and Technical Journal for Wildlife Photographers
- ◆ The Natural Image
- ◆ The Digital Image

Books

Angel, Heather. Outdoor Photography 101 Tips and Hints : 101 Tips and Hints. 1998. Silver Pixel Press.

Angel, H. How to Photograph Flowers .1998. Stackpole.

Angel, Heather. How to Photograph Water. November 1999. Stackpole Books.

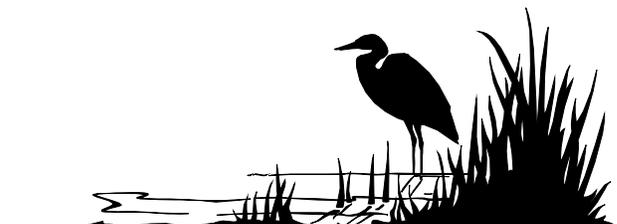
Angel, Heather. Natural Visions: Creative Tips for Wildlife Photography. 2000 Allworth Press.

Bidner, Jenni & Meleda Wegner. The Best of Nature Photography: Images and Techniques from the Pros. 2002. Amherst Media.

Braasch, Gary. Photographing the Patterns of Nature. 2000. Amphoto.

Burian, Peter and Robert Caputo. National Geographic Photography Field Guide: Secrets to Making Great Pictures. 1999. National Geographic Society.

*"I only went out for a walk and finally concluded to stay
out till sundown, for going out, I found, was really going in."
John Muir*



Campbell, Charles. *The Backpacker's Photography Handbook: How to Take Great Wilderness Pictures While Hiking, Climbing, and Skiing*. 1994. Amphoto.

Coe, Chris. *The Art of Landscape Photography*. 1999. Fountain Press.

Constant, Alan. *Close-up Photography*. 2000. Focal Press.

Davis, Paul Harcourt. *Photographing Plants and Flowers*. 2002. Watson-Guption Publishers.

Fielder, John. *Photographing the Landscape: The Art of Seeing*. 1996. Westcliffe Publishers.

Fitzharris, Tim. *The Sierra Club Guide to 35mm Landscape Photography*. 1996. Terrapin Books.

Fitzharris, T. *Nature Photography: National Audubon Society Guide*. 1996. Firefly.

Fitzharris, T. *The Sierra Club Guide to Close-Up Photography in Nature*. 1998. Sierra Club Books.

Folsom, William. *The Art and Science of Butterfly Photography*. 2000. Amherst Media.

Gardner, Mark & A. Wolfe. *Photography Outdoors: A Field Guide for Travel and Adventure Photographers*. 2nd Edition. 2003. The Mountaineers.

Havelin, Michael. *The Practical Manual of Captive Animal Photography*. 2000. Amherst Media.

Hedgecoe, John. *Photographing Landscapes*. 2000. Collins and Brown.

Hicks, Paul. *Photographing Butterflies and Other Insects*. Fountain Press Ltd. 1998.

Holmes, Judy. *Professional Secrets of Nature Photography*. 2000. Amherst Media.

Kahn, Cub. *Beginner's Guide to Nature Photography*. 2002. Amherst Media.

"Nature is often hidden, sometimes overcome, seldom extinguished."
Francis Bacon



Lepp, George. *Beyond the Basics: Innovative Techniques for Outdoor/Nature Photography*. 1993. Lepp and Associates.

Lepp, George. *Beyond the Basics, II*. 1997. Lepp and Associates.

McDonald, Joe. *The New Complete Guide to Wildlife Photography: How to Get Close and Capture Animals on Film*. 1998. Amphoto.

McDonald, J. *The Wildlife Photographer's Field Manual*. 1992. Amherst Media.

McDonald, J. *Designing Wildlife Photographs: Professional Field Techniques for Composing Great Pictures*. 1994. Amphoto.

Middleton, David. *The Nature of America : Images by North America's Premier Nature Photographers*. 1997. Amphoto.

Morris, A. *The Art of Bird Photography : The Complete Guide to Professional Techniques*. 1998. Watson-Guption Publishers.

Norton, Boyd. *The Art of Outdoor Photography: Techniques for the Advanced Amateur and Professional*. 2002. Voyageur Press.

Peterson, B. "Moose." *Nikon Guide to Wildlife Photography*. 1993. Silver Pixel Press.

Peterson, B. "Moose." *Wildlife Photography : Getting Started in the Field*. 1998. Silver Pixel Press.

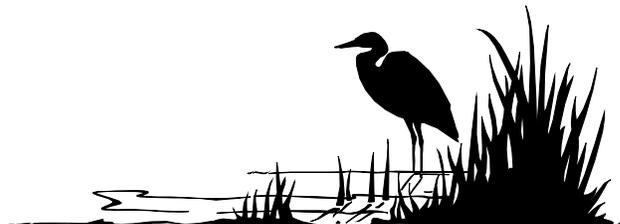
Rokach, Allen and A. Millman. *The Field Guide to Photographing Birds*. 1995. Amphoto.

Rokach, A. and A. Millman. *The Field Guide to Photographing Flowers* . 1995 Amphoto.

Rokach, A. and A. Millman. *The Field Guide to Photographing the Seasons*. 1998. Watson - Guption.

Rokach, A. and A. Millman. *The Field Guide to Photographing Trees*. 1995. Amphoto.

*"There is no season such delight can bring, As summer, autumn,
winter, and the spring."
William Browne*



Rotenberg, Nancy and Michael Lustbader . How to Photograph Close-ups in Nature. September 1999. Stackpole Books.

Rowinski, Jim. L. L. Bean Outdoor Photography Handbook. 1999. The Lyons Press.

Rue, Leonard and L. Rue. How to Photograph Wild Animals in the Outdoors. 1996. Stackpole Books.

Schaub, George. How to Photograph the Outdoors in Black and White. 1999. Stackpole Books.

Schaub, G. How to Photograph in Natural Light. 2000. Stackpole Books.

Shaw, J. Closeups in Nature: The Photographer's Guide to Techniques in the Field. 1987. Amphoto.

Shaw, J. Focus on Nature: The Creative Process Behind Making Great Photographs in the Field. 1991. Amphoto.

Shaw, J. Landscape Photography: Professional Techniques for Shooting Spectacular Scenics. 1994. Amphoto.

Shaw, J. The Business of Nature Photography. 1997. Amphoto.

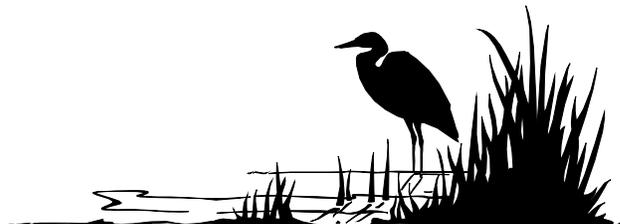
Shaw, J . John Shaw's Nature Photography Field Guide. 2000. Watson-Gutpill.

Simmons, Rulon. National Geographic Photography Field Guide: Birds. 2002. National Geographic Society.

Sweet, Tony. Fine Art Nature Photography: Advanced Techniques and the Creative Process. 2002. Stackpole Books.

Waite, Charlie. Seeing Landscapes : The Creative Process Behind Great Photographs. 1999. Amphoto Books.

*"Never does nature say one thing and wisdom another."
Juvenal*



West, Larry and J. Ridl. How to Photograph Birds. 1993. Stackpole Books.

West, L. and J. Ridl. How to Photograph Insects and Spiders. 1994. Stackpole Books.

West, L., W. Leonard and P. Larrison. How to Photograph Reptiles and Amphibians. 1997. Stackpole Books.

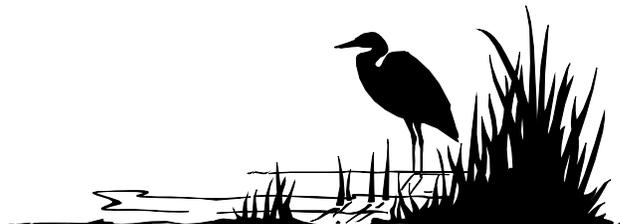
Wolfe, Art & M. Hill. The Art of Photographing Nature. 1993. Crown Trade Paperbacks.

Instructional video tapes about nature photography are available. John Shaw has a series of instructional nature photography videotapes. Other nature photographers, such as Art Wolfe, Galen Rowell, Frans Lanting, Joe MacDonald, Mark Warner, and Scott Campbell also have nature photography videotapes. Check the advertisement section of the photography magazines listed above for more information on how to order these videos.

To help find outstanding locations for photographing nature, check out the “Wildlife Viewing Guides,” a state by state book series published by Falcon Press. These guides were created through the National Watchable Wildlife Program, a unique partnership initiative between several private, state, and federal organizations, including the U.S. Fish and Wildlife Service.

Each guide describes the state’s top wildlife viewing areas, which usually are also some of the best nature photography locations. Other regional guidebooks from National Geographic and Smithsonian Institution Press are excellent references for discovering great places to photograph nature. For national wildlife refuges, check out “Guide to National Wildlife Refuges” by Laura and William Riley (Collier Books, 1992) and the national wildlife refuge guidebook series by the National Audubon Society.

“Many go through the meadow, but few see the flowers in it.”
Ralph Waldo Emerson



The **Photo Traveler Newsletter** and **Photo Traveler Guides** are additional sources of information about photography hot spots in national wildlife refuges, national parks, state parks, and other locations in North America. See their ads in the magazines listed above.

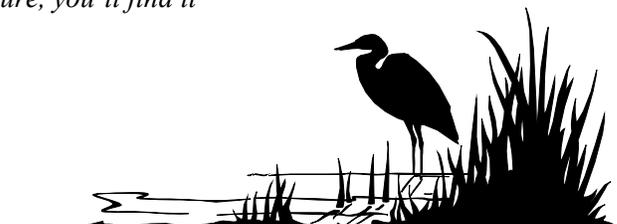
The World Wide Web has thousands of listings under Nature and Wildlife Photography. Examples include www.naturephotographers.net, www.moose395.net, and www.vividlight.com.

For information about public lands, explore the web sites for the U.S. Fish and Wildlife Service - National Wildlife Refuge System (www.fws.gov), National Park Service (www.nps.gov), U.S. Forest Service (www.fs.fed.us), and the Bureau of Land Management (www.blm.gov). Two other great web sites to explore are the Great Outdoor Recreational Page (www.gorp.com) and the National Scenic Byways and Highways (www.byways.org).

The North American Nature Photography Association (NANPA) is the only organization in North America to focus solely on nature and environmental photography. NANPA strives to provide education, foster professionalism and ethical conduct, gather and disseminate information, and promote nature photography as an art form and a medium of communication for the sciences, nature appreciation and environmental protection. For more information, call (303) 422-8527 or write NANPA, 10200 44th Ave., Suite 304, Wheat Ridge, CO 80003-2840. NANPA publishes a bimonthly called "Currents." NANPA's home page is www.nanpa.org.

*"When tugging at a single strand in nature, you'll find it
attached to the rest of the world."*

Anonymous



Nature's View : Quick Tips for Better Nature Photography - General Techniques

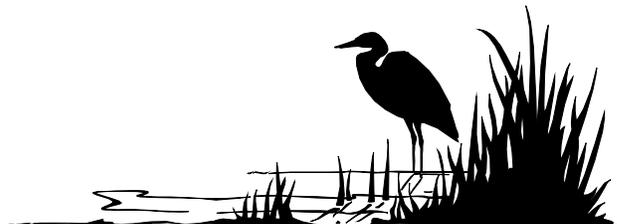
1. Determining proper exposure of a scene is probably the most troublesome aspect of nature photography. And it shouldn't be. Most of the time your camera will properly determine the correct exposure of a scene, but it is important to remember the camera meter tries to read everything as a neutral (also called medium) tone. There will be times when the camera's reading will be off the mark for a light or dark subject/scene. Although many nature subjects are neutral in color, there are quite a few exceptions (black bear, snow, polar bear, etc). Knowing when the camera's exposure determination is wrong and the ability to make the proper exposure reading is what separates a good image and from a really great one. Take time to learn how to do this and to adjust your exposure reading to reflect the true tonality of the scene/subject.

For example, if your camera is reading a snow-dominated scene, it will think the scene needs less light (since snow is lighter than neutral), and therefore the camera will suggest an exposure to make the scene darker than it should be. Your snow scene will be a grayer tone instead of the true white you see. The opposite holds true when the camera determines exposure for a dark subject, like a black bear. It will read the bear as darker than neutral, and it will suggest an exposure to make the bear lighter than it should be. In this situation your image will be overexposed.

2. Learn to determine the different ranges of tonality and how to properly set exposure for them. If the primary subject in the viewfinder is light in tonality (snow scene, a white flower), increase exposure; for dark subjects (black bear, buffalo), decrease exposure. Now, how hard was that? How much exposure compensation you dial in will vary with the camera model.

One way to adjust exposure is to meter directly on the subject, and if it's light, add exposure; if it's dark, decrease exposure. This is where the exposure compensation dial comes in handy if you are using the aperture or shutter priority mode on your camera. The degree of compensation depends on how dark or light the subject or scene is. You'll have to do some trail and error tests to see how your camera meters tonality.

*"Nature tells every secret once."
Ralph Waldo Emerson*



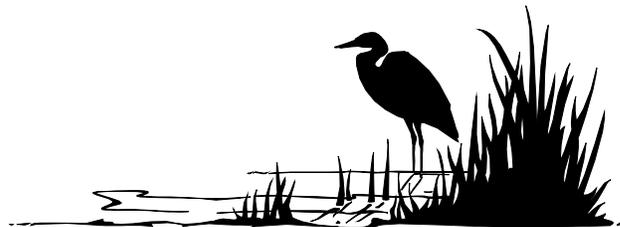
Another method is to meter on something that is neutral in tonality and use that reading. Some exposure compensation may still be necessary to ensure details in texture and color are rendered correctly. In this case, you would do the opposite of what was explained in metering directly on the subject. For a darker subject, you would open up a bit to get detail, while for a lighter object, you would decrease exposure a bit to retain detail. For more information on metering, check out the books listed in this guide. Once you get the hang of determining the proper tonality of a scene or subject, watch out! You are on your way to great photographs! You just have to decide which method – metering on the subject or metering a neutral tone in the scene – works better for you.

3. Use a sturdy tripod. End of statement. Let me repeat for those who might have missed it: **USE A STURDY TRIPOD**. Buy the best you can afford and if at possible, get one that extends up to your eye level. Tripod heads come in two types: the standard pan/tilt head and the ball & socket head. Though most folks these days are opting for the ball & socket head, the choice is a matter of personal preference.

And one other thing about using a tripod: Don't become afflicted with the "lazy tripod disease." Don't always take the picture from where you first place your tripod. Look around and check other locations, viewpoints, and angles. Take the camera off the tripod, explore the scene and once you discover a good angle or composition, place the camera back on the tripod. Many folks get too comfortable with just automatically setting the tripod up and snapping the image without any thought as to whether or not there might be a better angle or location to photograph. Tripods like to be in charge – but don't let them!

4. For increased depth of field (the range of distance in your viewfinder appearing sharp), use smaller apertures (larger numbered f/stops). This requires slow shutter speeds, so refer to tip number 2 above. Learn what "hyperfocal distance" is and how it can help you determine depth of field. Most of the books listed above will explain this concept and discuss other methods for ensuring increased depth of field. This concept is especially important in landscape photography when you want everything in the image sharp, from front to back. Refer to the chart below:

"Nature is not a competition. It doesn't really matter, when you go out, if you don't identify anything. What matters is the feeling heart."
Richard Adams



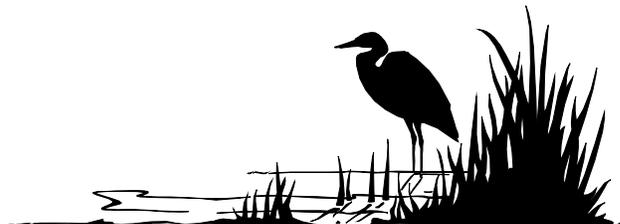
Hyperfocal Chart:

Set the indicated distance in feet for the chosen f/stop on the focus mark on the lens. Do not refocus the lens. The depth of field will begin at half the distance between the camera and the number of feet set on the lens. For example: A 50mm lens set at f/32: the lens is set at 10 feet, so everything from 5 feet to infinity will be sharp.

Focal Length	F/8	F/11	F/16	F/22	F/32
15mm	3.08 ft	2.24 ft	1.80 ft	1.30 ft	0.90 ft
16mm	3.50 ft	2.54 ft	2.10 ft	1.50 ft	1.00 ft
17mm	3.95 ft	2.87 ft	2.30 ft	1.70 ft	1.20 ft
18mm	4.43ft	3.22 ft	2.60 ft	1.90 ft	1.30 ft
20mm	5.47 ft	3.98 ft	3.2 ft	2.30 ft	1.60 ft
24mm	9.60 ft	7.00 ft	4.70 ft	3.30 ft	2.30 ft
28mm	10.71 ft	7.79 ft	6.30 ft	4.50 ft	3.20 ft
35mm	20.40 ft	14.80 ft	10.00 ft	7.00 ft	5.00 ft
50mm	41.40 ft	30.30 ft	20.20 ft	14.30 ft	10.10 ft

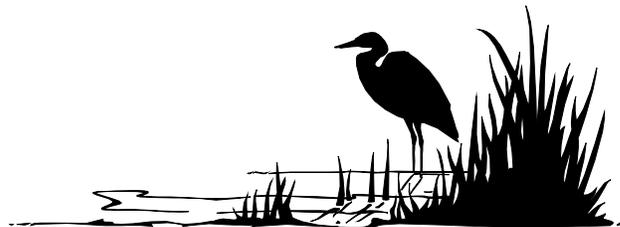
5. Do just as many vertical compositions as you do horizontal compositions. Remember tip number 2 above when doing this. Some subjects – giraffes, egrets, and trees – are better as vertical compositions. Get into the habit of doing both.
6. Before setting up your tripod (see tip no. 2) and snapping the picture, take time to explore the scene from all angles. Consider the direction of the lighting (front, side and back). Try photographing from a different perspective. Instead of photographing at eye level, compose the scene from a lower or higher level. Refer to number 2 above. Also be sure to look behind you! You may see a totally different scene to photograph. Even after you have snapped the picture, take a look above, below, and behind to see if there is another composition worth photographing.

*“In nature there are neither rewards nor punishments --
there are consequences.”*
R.D. Ingersoll



7. Before snapping the shutter, ask yourself the following questions: What is it about the subject or scene you like? What is it you want to capture on film? Are there several approaches I can take – including using a different focal length – to record the image? Are there more than one image or composition I can make? Once you can answer these questions, then proceed to tip number 7, while keeping tip number 2 in mind.
8. Great photographs involve images that are (1) sharp and focused, (2) powerful, but simple in composition, and (3) absent of distracting elements. Identify the primary elements of the scene that attracted you in the first place. Avoid including too much in the final composition; you'll only end up confusing the viewers as to what you wanted to convey in your photograph. An acronym to keep in mind when photographing nature subjects is **DIS - Define** what it is that catches your eye, **Isolate** on the most important part of the scene, and **Simplify** the scene by eliminating distracting elements, especially those in the background.
9. Use shapes, forms, lines, and patterns in your composition to lead the viewer on a visual journey through the image. Look for interesting combinations of color, light, and texture. Add dimension by composing an image that conveys depth, and for more dramatic images, consider incorporating contrasting colors in your composition, such as red and green, or blue and yellow. Use interesting foregrounds to lead the viewer into a scene.
10. The best times to photograph are during early morning and late afternoon to early evening. With a few exceptions (overcast skies or light drizzle, for example) midday is the worst time to effectively capture great photographs. But there are techniques you can use at midday to capture good photographs (see 17 below). For cloudy or misty days, the colors become more saturated and rich, and contrast is reduced, eliminating shadows. These days are great for photographing fall colors, wildflowers, and scenics that exclude the sky.
11. Back to the tripod mess again (Tip no. 2, remember?): Consider placing the tripod at a lower level than what you normally use. Most of the time we set the tripod at our own height. To get a different perspective, set it as low to the ground as you can, but make sure nothing impedes your view of the main subject.

*“How strange that Nature does not knock, and yet does not intrude!”
Emily Dickinson*



Another good reason for placing the tripod at a lower level is to help reduce vibration and shake, especially during windy conditions. To help my tired, old knees withstand the cold, hard ground, I wear kneepads, which can be purchased from a local hardware store.

12. When photographing from a boardwalk, be alert for the “boardwalk shake” - a dreaded malady that occurs when other folks are walking on the boardwalk. Just the slightest vibration can create an unsharp image. Most of the time you can feel the boardwalk vibrating even before you see or hear the other folks. Just wait until they have passed or stopped, and when you don’t feel the vibration, resume your photography.
13. Keep those lenses clean -- use lens cleaning tissue or the new micro-fiber cleaning cloths (my preference). Blow on the lens before wiping and I would strongly suggest you breathe on the lens before wiping it with the cloth or tissue. And be careful with the lens cleaning fluid -- if you use it, place it on the tissue, not directly on the lens. And use it sparingly. Be sure to keep your camera body clean too, but stay away from touching the inside of your camera. I would not recommend putting lens cleaning fluid on the micro-fiber cleaning cloths.

Caution: If you use canned air, don’t use it to clean the inside of your camera -- you could damage the shutter curtain and mirror.

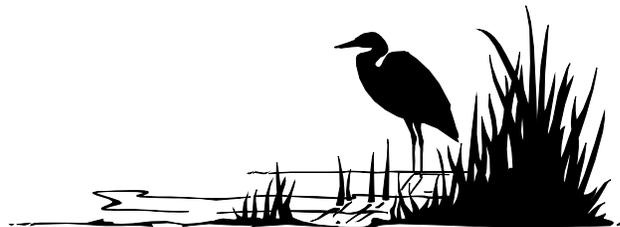
14. Use your lens shade to protect the front element of your lens -- in addition to reducing flare from the sun, they help absorb any bumps and knocks to your lens. And one thing about those sky-light or UV filters that the salesperson was emphatic about you buying and keeping on your lenses: Don’t fall for it. Putting a cheap piece of glass on the front of your expensive lens will only degrade the quality of your images. Use filters only when you need them, and this includes sky-light and UV filters. If you are going to be in a sandy or salt-water environment, I would recommend using one of these filters to protect the front element of your lens. Otherwise, take them off and use your lens shade/hood instead to protect the front element of your lens. Also remember, to remove the batteries in the camera if you are not going to use it for a few weeks.

“For real company and friendship, there is nothing outside of the animal kingdom that is comparable to a river.”
Henry Van Dyke



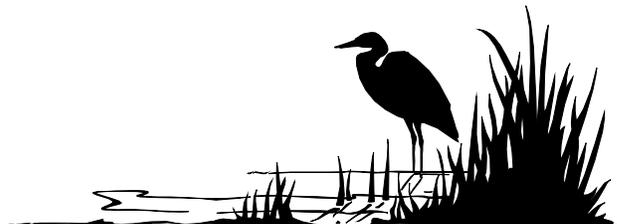
15. It takes more than a mastering of photographic techniques to create a good image. You have to develop a vision, a style, a perspective -- one unique to you. Developing this vision can take time, but it will only surface if you get out there, experiment, take risks, learn from your mistakes, and try again. As one renowned nature photographer says, "Photography is 90 percent seeing and 10 percent photographing. If you can't see it, you can't photograph it."
16. Know what you are photographing. It becomes a tad bit embarrassing if someone asks you what that flower or critter is in your photograph and you can't tell them. Build a collection of natural history books and nature field guides. Keep a file of the brochures and checklists you get when visiting national wildlife refuges and national parks. There's no doubt about it: In addition to mastering the technical aspects of photography, the more you learn about nature, the more your photography will improve and the more fun you will have. One way to become skilled in natural history is to simply go outside and explore, experience, and learn about this wonderful, wild world of ours. Rain or shine, snow or extreme heat, experience all that nature has to offer and you'll become a better naturalist. Keep a child-like curiosity in your heart and an appetite to learn more. Once you know the technical aspects of this craft, then you can spend more time with the challenge of creating powerful images. But, you must and should know what it is you're photographing. Be a naturalist first, a photographer second.
17. Learn to use different angles of lighting to improve or enhance your composition. Don't always use frontlighting (when the light is behind you); experiment with sidelighting, where the light is coming from the left or right of you; or backlighting, where the lighting is in front of you. Sidelighting highlights texture, while backlighting is great for creating silhouettes. Backlighting is also great for translucent subjects such as autumn leaves. Sidelighting and backlighting will require some exposure compensation.
18. Back to photographing at midday. Although it usually is not the best time of the day to photograph nature, there are exceptions (overcast and misty days) and techniques you can use. For example:
 - When too much light falls on the subject, use a translucent material to place between the main light source and the subject. This will diffuse the light, reducing contrast. Use tissue paper, a white umbrella, or a commercial diffuser.

*"Mountains are earth's undecaying monuments."
Nathaniel Hawthorne*



- Photograph the scene when clouds obscure the sun, even for a fleeting moment. If you are ready, compose your shot and wait for passing clouds to pass over the sun. Again, contrast is reduced and color saturation is enhanced. Again, overcast days are great for photography.
 - Work in shadows cast by you, by a boulder or tree, or a building. In these situations, consider using a warming filter to eliminate the bluish tone to the scene.
 - To counter the high contrast of mid-day, use fill flash. Fill flash balances the light falling on the subject by lighting up the shadows. Use the ambient light reading and add fill flash at less than full power. For most mid-toned subjects, consider a -1 to -1.3 setting; for lighter than mid-tone, consider -1 ½; and for darker than mid-tone, consider -2/3 to -1. Fill Flash will also add a catchlight to the eyes of the animal you are photographing.
 - Get closer to your subject. This might help eliminate highlights and deep shadows. This will also simplify your composition, which always makes for a better image.
 - Consider doing backlighting when the sun is high. Backlighting can add variety to your images by creating rim lighting on your subject (feathers of a bird or fur on a deer). Photographing this way through translucent leaves is very effective in popping the composition.
 - Use reflectors to bounce light onto your subject. Reflectors come in gold and silver and they help balance the light between shadows and highlights. Crumbled up aluminum foil works well, too.
20. For example, patterns create a sense of rhythm, harmony, and unity. Patterns can either be the primary element of the composition or a secondary, supporting element. Use viewpoint, focal length, and framing to develop a pattern composition. Example: In photographing close-up composition of field of flowers, look for repeating shapes that will fill the frame. Avoid showing the entire plant, tree, or background. Fill the frame!

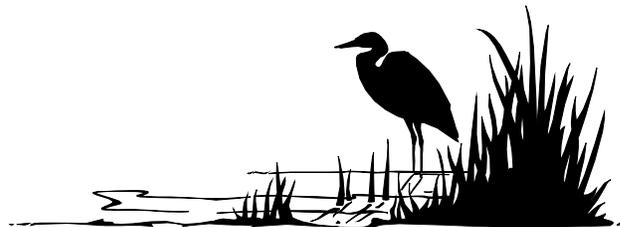
*“Nature is always hinting at us. It hints over and over again.
And suddenly we take the hint.”
Robert Frost*



Nature's View: Quick Tips for Better Nature Photography - Wildlife

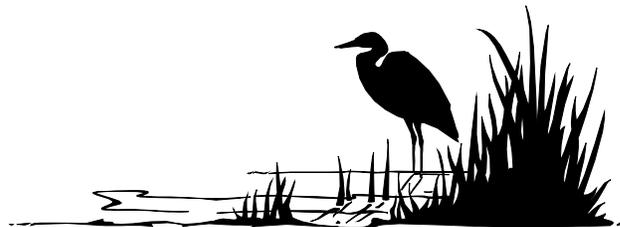
1. First, do no harm. Never do anything to harass or disturb an animal, its young, nest, or habitat. Photography is always secondary to the welfare of the animal. Set an example for others to follow. When in doubt, walk away -- another opportunity will always come along later.
2. When visiting a national wildlife refuge, national park, or on any other public lands, be sure you know what the rules and regulations are for approaching wildlife. Also keep in mind all wildlife are potentially dangerous -- use those telephoto lenses and keep a respectable distance from these creatures. And please be courteous and considerate of other visitors. Share the experience!
3. When photographing an animal, move slowly and avoid making sudden movements. Avoid making a straight line approach to the animal. Patience is the key in photographing wildlife and I mean lots of patience. Always keep Tip No. 1 above in mind and if your presence causes the animal to change what it was doing before you got there, then stop walking toward the animal. Learn to read an animal's body language so you'll know when you are getting too close. Remember what I said about learning the natural history and behavior of wildlife? Knowledge of an animal's behavior becomes useful in anticipating activity.
4. Focus on the eyes -- everything else can be out of focus or soft, but if the eyes are not sharp, your photograph will be for naught. Try to photograph the animal when it has a "catch light" in the eye - the reflection of the sun in the animal's eye. This is especially important for those critters who don't have colorful eyes.
5. Instead of always attempting to get the tight, close-up portrait shots, try to include some of the animal's habitat into the image. These are called "wildlife scenics" or "environmental portraits." An 80-200mm zoom lens works well for this. Did I mention using a tripod somewhere in this document? Just curious... Become skilled at learning how to use "negative/blank" space in your compositions. Although you do want to "fill the frame" with each photograph, the proper placement of blank space in the composition can be very powerful. For wildlife photography, make sure to allow some negative space in front or behind the critter, depending on where it is looking.

*"The best thing about animals is that they don't talk much."
Thornton Wilder*



6. Although there are no hard and fast rules in photography, there are guidelines to consider in composing an image. One is to avoid always placing the subject in the center of the viewfinder. Instead, compose the image so the animal is off-center, leaving space in front or behind the animal. Learn to use the rule of thirds to improve the composition. Divide the viewfinder into a series of two horizontal & two vertical lines. The intersection of these lines are the most visually appealing positions for subject placement. Simply put, consider placing the subject in the left or right third portion (upper or lower position) of the frame.
7. For most wildlife shots the key is to stop movement (unless of course, you want to emphasize flight or running), so opt for large apertures and fast shutter speeds. A faster film speed (ISO 100 or 200) helps here. I do think a sturdy tripod would help here, don't you? If you are going to emphasize movement, use a slower shutter speed and be sure to follow your subject by panning the camera. Continue panning even after you have depressed the shutter.
8. Use your tripod! Once you get into a habit of using it, you'll rarely photograph without one. When using the tripod, set it as low as you can. This makes it even less prone to vibration and it gives a different perspective to the scene, usually the animal's viewpoint of how it sees the world. An exception to the tripod mandate is when you have to hand-hold the camera to photograph an animal running or in flight. Again, when photographing from a low position, make sure nothing is obstructing the view – it's amazing how little sticks and such can appear in the final image. Some lenses now have a vibration reduction or image stabilization system, which helps to render a sharp image even at slower shutter speeds. Consider one of these lenses if you plan to do quite a bit of action and flight photography.
9. Most wildlife are active during the early morning and late afternoon to early evening hours. We can't do much about this folks. Just remember, these times of the day and evening are magical, and once you start experiencing it, you'll regret all those times you slept late during your teenage years. As an added bonus, while everyone else sleeps their lives away, you'll have the place all to yourself! And the quality of your images will be fantastic.

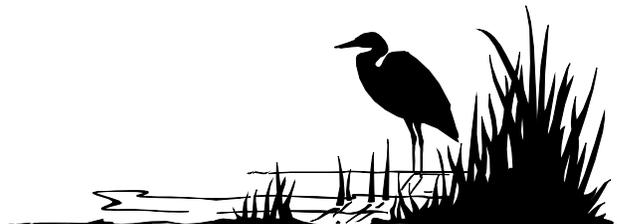
*"If I were a painter, I would go to nature for all my patterns."
Thomas Bewick*



10. Exercise patience. Be observant and before long you'll start anticipating what the animal will do next. Tip No.11 below tells you how!
11. Learn about the wildlife and the location you are photographing. Better yet, go beyond just recognition and learn about the natural history of the species and the ecology of the area you plan to photograph. If you photograph at a national wildlife refuge, national park, national forest, or state park, spend time at their visitor centers to learn more about what they have to offer. Some will even send information to you before your trip. But watch out – you might learn something! Call them ahead of time to find out about the current weather conditions, latest wildlife sightings, closures, etc. And of course, the Internet offers an unlimited source of information about these places, too.
12. Learn to photograph in different lighting situations: frontlighting, backlighting and sidelighting. **Frontlighting** is the typical situation when you have the sun directly behind you. **Sidelighting** is when the sun is at an angle to you (usually left or right). This type of lighting adds texture and depth to the composition. Some exposure compensation may be needed in this type of light. **Backlighting** is when the sun is in front of you. You must add exposure above what the camera meter tells you in this situation. Backlighting helps to create “halos or ring lighting” around your subject and it is also used to create silhouettes. If you do silhouettes, it's important that the silhouette is discernible! Make sure the critters are separate and not merged in the composition. To reduce the chance of flare, use your lens hood.
13. Use your car as a blind. Many wildlife images in books, magazines, and postcards were taken when the photographers were in or next to their vehicles. Some of the best photography occurs along the roads and auto-tour routes on national wildlife refuges and national parks.

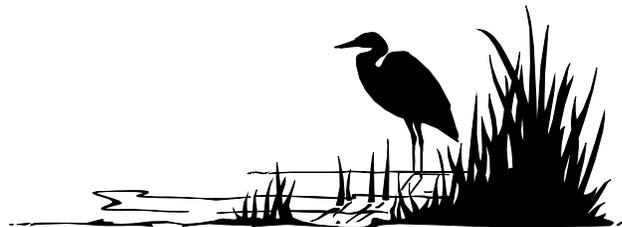
It's quite simple: Drive slow and look ahead for a potential subject. When you do see something, slow down until you get in position to photograph. Use a beanbag, pillow, coat, or window mount to steady your camera and lens. Turn off the engine before you photograph (make sure you are in a designated turnout area so you don't block traffic), be quiet and as still as you can, and please be considerate of the other vehicles ahead and behind you.

*“Animals are such agreeable friends -- they ask no questions,
they pass no criticisms.”*
George Elliot.



14. Remember to do both horizontal and vertical compositions. Tall, slender birds such as herons and egrets lend themselves well to vertical compositions.
15. Film speeds in the 64 to 200 ISO are good for capturing wildlife images. I prefer film rated 100 ISO – they are not as grainy as they use to be. If lighting is good, you can even use the 50 ISO films. You can push film as well -- setting an ISO 50 film to 100 ISO or a 100 ISO film to 200 ISO. Just remember to shoot the whole roll with the new ISO reading and let your film processor know what setting you used. Tripod, tripod, tripod....Right?
16. Use fill flash to add a catch light to an animal's eye. Dial in just enough flash to provide a tinge of light to hit the animal's face. To prevent a silhouette of a back-lit animal, use fill flash. Fill flash will also compress the contrast range in the scene.

*“There is not a sprig of grass that shoots uninteresting to me, nor anything that moves.”
Thomas Jefferson*

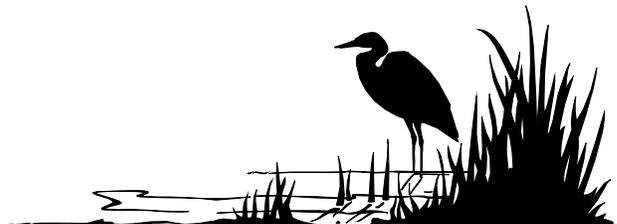


Nature's View: Quick Tips for Better Nature Photography – Wildflowers

1. Never, ever photograph a wildflower if it means trampling or destroying it or other flowers. Stay on the trails and if photographing a flower may result in damaging it or other flowers, then simply don't do it! There are other photographic opportunities down the trail or just around the corner. I guarantee it!
2. Want great wildflower images? Then use a tripod! Use a cable release to trip the shutter and if your camera has one, use the mirror lockup to further reduce vibration. The camera's self-timer can be used as a backup if you don't have your cable release. Small apertures (for increased depth of field) and the wind, which always seems to stir up more when you are finally ready to snap the picture, also requires an extra dose of patience on your part.
3. In setting up your composition, remember to "fill the frame." For a different perspective, consider using selective focus to soften the image. Open the aperture to put the background out of focus and then focus on the flower's stamens, pistils or petals.
4. When photographing flowers in sunny weather, consider backlighting the subject or use a diffuser to reduce contrast. Unless the flower or field of flowers are evenly lit throughout, the image will not be as good. If the background is too distracting or cluttered, consider using fill-flash to render the background black.
5. Remember your tones -- brighter than a neutral tone, increase your exposure. For tones darker than neutral, decrease your exposure. White flowers - increase exposure; dark flowers - decrease exposure. You can do this by adjusting either your aperture or shutter speed setting, or by doing a combination of both. If you are using the aperture or shutter priority mode, you can also adjust exposure by using the exposure compensation dial. **Caution:** When using Aperture Priority Mode on your camera, you may not be able to use the mirror-lockup feature. Check your camera's operating manual.

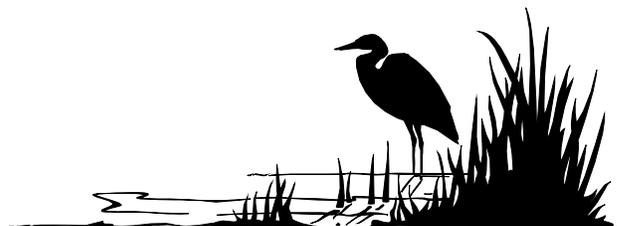
*"When you have seen one ant, one bird, one tree,
you have not seen them all."*

E.O. Wilson



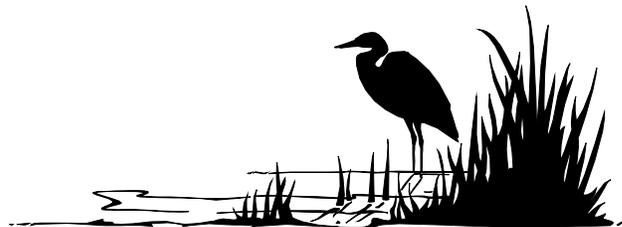
6. Instead of always doing closeups of flowers, consider wide-angle scenics of a field or bed of flowers. Use a flower or other object (log or rock) in the foreground to lead the viewer through the image. Shoot low and at an angle. Vertical compositions work well here, too. And I tell ya, the ole' tripod comes in handy here! And if you can do it, consider positioning a wide-angle lens under the flower and get an ant's point of view!
7. Use lower rated ISO films. This means very slow shutter speeds, especially when you use small apertures. A slight breeze can become a gale-force wind in the micro-environment of a flower, so exercise patience...eventually the wind will calm down, if only for a few seconds. So be ready! Remember what I told you about using a tripod? You may want to seriously consider it in this situation. Note: Some of the newer, faster films (rated 100 ISO) are suppose to be just as fine-grained as the slower films, so you may want to give them a try. Suggestion: On those windy days, take some images anyway! Use the wind to your advantage create abstract patterns of the flowers swaying in the wind. Use slow shutter speeds to enhance the pattern.
8. Welcome bad weather! Some of the best flower photography occurs during overcast, foggy, and drizzly days. Colors become richer and contrast is reduced. In light rain or drizzle use an umbrella, towel, or plastic cover over your camera and lens. Special rain covers for cameras and lenses are also available. Note: Avoid including too much of the sky in your image if you do photograph during overcast days. One method to reduce contrast between a bright sky and a neutral or dark-toned landscape is to use a split neutral-density filter.
9. Use a polarizing filter to reduce reflection from leaves and to saturate colors. Remember, this filter costs you 1-2 stops of light, so don't use it if it doesn't enhance the composition. When photographing a scene in shade or during cloudy weather, consider using a warming filter (81a or 81b) to "warm up" the scene. These filters remove the bluish, cooler cast to the scene, restoring a warmer tone to the composition.
10. To increase your chances of a sharp image with good depth of field, place your camera parallel to the subject you are photographing and use the smallest aperture possible.

*"You can't be suspicious of a tree, or accuse a bird or a squirrel
of subversion or challenge the ideology of a violet."
Hal Borland.*



11. Instead of always photographing flowers straight down, try capturing them at an angle.
12. To create a “Monet” feel to your composition, emphasize selective focus by using larger apertures, focusing on one flower and placing the flowers in the foreground and background out of focus. Use slower shutter speeds to record the movement of flowers in a light breeze.

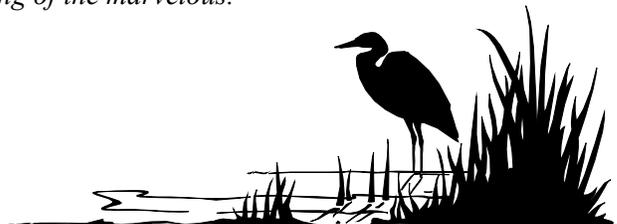
“The environment of solitude is a human need rather than a luxury or plaything.”
Robert. S. Yard



Nature's View: Quick Tips for Better Nature Photography – Landscapes

1. Landscape images should emphasize depth of field – the range of distance in a scene appearing to be in sharp focus. To achieve this, small apertures and slow shutter speeds will be required. To ensure sharp images, use a sturdy tripod (sounding familiar to you by now, isn't it?). In case you forgot your cable release, use the camera's self-timer.
2. For maximum depth of field set your lens at the hyperfocal distance (the area of the scene that will be in focus, which is usually everything from infinity to $\frac{1}{2}$ the hyperfocal distance). This concept, which takes a little getting use to and requires much more discussion, is covered in most nature photography books, including those listed above.
3. Use the depth of field preview button to determine how much of the scene is in focus and adjust the aperture to get the depth you desire. This approach takes some getting use to as well, especially since the viewfinder will get progressively darker as the aperture is decreased. If your lens has a depth of field scale, learn how to use it, although most of the newer auto-focus and zoom lenses no longer have these scales. Depth of field scale cards are available from various sources listed in the back of the many photography magazines.
4. When using a polarizer with a wide-angle focal length of 24mm or less, vignetting might occur along the upper right and left portions of the image. Either use a longer focal length to eliminate the vignetting, place a foreground object (overhanging branches of a tree, e.g.) on the upper right or left portion of the composition, or don't take the picture!
5. Don't put those cameras away during cloudy, foggy, or rainy weather. Fog accentuates the mood and mutes the colors, instilling a sense of mystery, silence, and solitude to the composition. Scenes nestled in early morning fog have a softer color, resulting in pastel compositions. Light rain and mist induces vibrant hues, reducing contrast, saturating the colors, and creating even, "shadowless" light. When photographing in fog, you'll need to add a little more exposure than what the camera suggests. An added bonus -- everyone else will be inside and you'll have the whole place to yourself once again! What a deal!

*"In all things of nature there is something of the marvelous."
Aristotle*



Overcast skies act as a giant diffuser, reducing or eliminating contrast. Although I do most of my shooting in early morning and late afternoon, during light overcast days I can shoot all day. Use a polarizer to eliminate reflections from water, leaves and rocks.

6. To reduce contrast during overcast days, make sure you avoid including too much of the sky, which can be several stops brighter than the landscape you are photographing. **Quick tip:** When shooting a forest scene during overcast days, shoot directly into the forest, leaving out as much of sky as possible. Remember, if the scene is shrouded in fog, you must adjust your exposure.
7. To avoid flare spots, use a lens shade (also called lens hood). Sometimes you can further reduce hot spots and flare by using your hand or a hat to block the sun's rays from striking the front of the lens. Just make sure your hand or hat doesn't appear in the viewfinder, especially when using a wide-angle lens.
8. Use something in the foreground to give the image a sense of depth. A boulder, tree, flower, etc. will do the job. Use these objects as an anchor for the composition; something to lead the viewer into the scene. Shoot deep scenes – those that have a foreground, middle ground, and background in the composition. The more space between the three, the more appearance of depth will occur.
9. Frame the subject by putting something in the foreground, in one or more corners of the frame. The more corners you use, the more exaggerated the depth will appear. The best framing elements are usually darker than the primary element. Most of the time the framing element is much more effective when placed in the upper portion of the viewfinder. Only use the framing element if it compliments, not competes, with the primary subject of the composition.
10. Search for lines, angles, and forms to add drama to your composition and to help lead your viewer's eyes on a journey through the image. Look for texture, patterns, and abstracts, too. Zoom lenses work well for this, and if you plan to get close, consider using a macro lens or closeup diopters to record those abstracts and patterns.

*"We have not inherited the world from our forefathers --
we have borrowed it from our children."
Kashmiri Proverb*

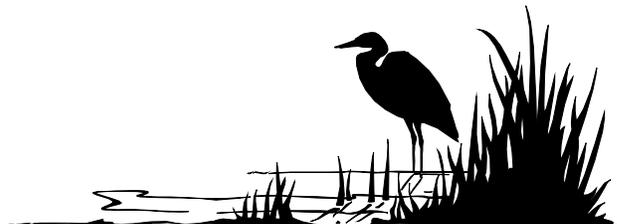


11. When photographing sunrises and sunsets, consider using a lens other than your wide-angle. The most effective and dramatic sunrise/sunset images are made with longer focal lengths -- 200mm and larger. Take your exposure away from the sun and then bracket to get the color intensity you desire. **Important point to remember:** Never look directly into the sun. You need your sight to take photographs. Enough said, okay?
12. Speaking of wide-angle lenses: Some of the most dramatic and inspiring landscape photographs are made without a wide-angle lens. Try to “isolate” portions of a scene by using a telephoto or zoom lens. Focal lengths from 80mm to 400mm are very effective in creating isolated scenics. Longer focal lengths will also mean a narrower angle of view, which helps eliminate distracting background clutter. Identify the important elements of the scene and compose your image by using a telephoto to isolate on these elements. Again, if you do use these longer focal lengths, you’ll need to use a tripod. I also strongly suggest using a cable release. Oh yeah, make a habit of doing both vertical and horizontal compositions.
13. Use a polarizer to darken blue skies, eliminate reflections from water, leaves and rocks, and enhance color saturation. Using a polarizer results in losing 1-2 stops of light, which means slower shutter speeds. Aren’t you glad you’re going to be using a tripod now?

Note: When photographing landscapes already bathed in exceptionally blue skies (like when you are photographing at high altitudes in mountainous regions), use caution when using a polarizer. Sometimes in these situations your image will come back and the sky will be completely black. In these situations you may have to lessen the polarization you apply to the scene.
14. Avoid composing an image comprised of 50% sky and 50% landscape. Instead of centering the scene in your viewfinder, either emphasize the sky by lowering the horizon, or emphasize the landscape by raising the horizon. And make sure your horizons are level! You are not going to convince too many folks that water flows uphill! If your camera permits changing focusing screens, consider using a grid (architectural) focusing screen, which can help ensure level horizons. A small bubble level also helps here.

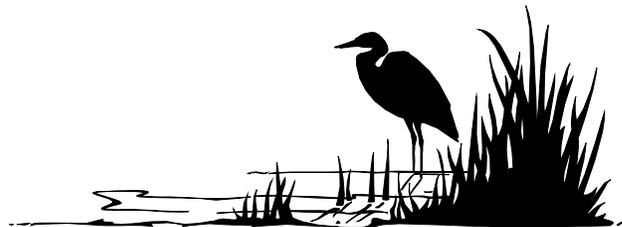
“Our ability to perceive quality in nature begins, as in art, with the pretty. It expands through successive stages of the beautiful to values as yet uncaptured by language.”

Aldo Leopold



15. Avoid always photographing at your eye level -- place the tripod at a lower or higher angle for a more dramatic effect. Again, make sure nothing obstructs the view, unless you want it to. Remember to look at all angles, including up, down, and behind you.
16. Analyze the scene. An image with a few, strong elements in the composition is much better than one with several elements. The bottom line here is to simplify the composition and avoid distracting elements. Don't confuse your viewer.
17. The best light for landscape images occurs during early morning and late afternoon to early evening. Wake up you sleepy head! There are some nice alarm clocks that are gentle to the ears, so don't miss the opportunity to see and photograph something wonderful!

*“Life on earth is a delicate balance of interdependent creatures.
None can be ignored, for the least appreciated sometimes turn
out to be the most important.”*
Merlin Tuttle



Nature's View: Quick Tips for Better Nature Photography – Close-ups

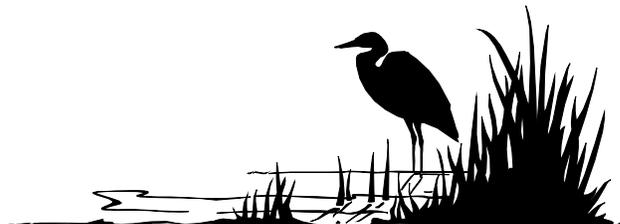
1. Closeup photography is just as exciting and challenging as any other type of nature photography. Subjects for doing closeup photography are just outside your door. You don't have to travel to the far reaches of the globe to find them. But you know what? Yep, you guessed it – to get really great images of closeups in nature, the ole tripod is going to be important to have.
2. The key to capturing powerful closeup images is to train your eyes to notice the subtle arrangements of form, shape, pattern, and color around you. They are everywhere, from the interesting patterns of furrowed bark on a loblolly pine, to the colorful arrangement of lichen on a rock, to the delicacy of dew drops suspended on a spider web.
3. Sometimes you might become overwhelmed by the scene in front of you. One way I start discovering patterns is by viewing the scene through my camera. Simply put the camera up to your eye, look through the viewfinder, and start exploring the scene. It works! You'll be amazed at what you will see.
4. For closeup photography, macro lenses are a tremendous benefit. To photograph in the world of closeups, you need a lens that permits close-focus. Most "normal" lenses don't permit this. True macro lenses, however, do. They come in various focal lengths, primarily 50mm, 105mm and 200mm. The longer the focal length, the more working distance you will have between you and the subject. The longer focal lengths also reduce the angle of view, which helps reduce background clutter. There is only one true "macro" zoom lens currently available on the market today.
5. Although I recommend a true macro lens for closeup photography, there are other alternatives for getting closer including closeup diopters, bellows, and extension tubes. Bellows and extension tubes cost light (up to a stop or more), whereas closeup diopters, which attach to the front of your lens, do not.
6. In closeup photography, depth of field is measured in fractions of an inch. This is where a sturdy tripod comes in handy and a cable release wouldn't hurt either. And you know, you're going to have to work with those small apertures, too.

*"Never a day passes but that I do myself the honor
to commune with some of nature's varied forms."
George Washington Carver*



7. Try to use an f-stop of 16 to render most of the scene sharp. With such a limited depth of field, it is up to you to determine what part of the scene should be sharp. If you cannot get the complete subject in focus, then decide which part of the subject is important to the composition and focus on that.
8. When doing closeup photography, experiment with the composition – you don't always have to include the whole subject in the frame. One method for avoiding lack of depth of field is to just work on a portion of the subject. Tease your viewers and make them figure out what they are seeing: Portions of a leaf, the edge of a petal, or the back of a caterpillar.
9. To increase your success of sharp closeup images, choose subjects that lack depth and make sure your camera's film plane remains parallel to the subject. Or choose an angle that minimizes depth – instead of a “head-on” angle, try a side view.
10. Keep it Simple! Remember the acronym for landscape photography, DIS? Do the same for closeup photography - **Define, Isolate, and Simplify**. Attempt to make the composition appealing by emphasizing only one or two competing elements in the scene.
11. Soft natural light is great for increasing color saturation and creating a “soft” look to the composition. Avoid contrasty light. Again, a simple, powerful image lacks harsh shadows and brightness. Uniform light is much preferred.
12. Remember to determine the tonality of the scene and make compensation for lighter or darker subjects.
13. Be patient! For those subjects bound to the whims of movement, wait for the wind to subside before you press the shutter.
14. Remember to do both vertical and horizontal compositions if the subject warrants it.

*“Getting up too early is a vice habitual in horned owls, stars, geese
and freight trains.”
Aldo Leopold*

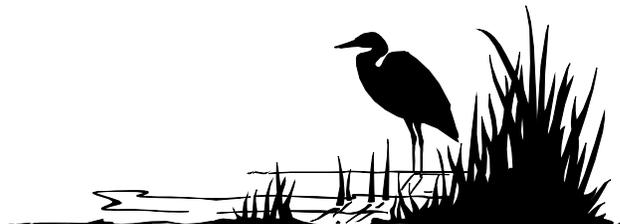


15. Look for shapes, lines, curves, repetitions, colors, forms, and angles in creating your composition. Remember the rule of thirds – Avoid always centering the main subject in the composition, unless of course the center is the strongest placement. If the composition involves lines, make sure the lines lead the viewer into the composition and to the center of interest.
16. An odd number of subjects in the composition tends to create a more powerful image than even numbers. Three seems to be an ideal number.
17. The shapes of lines in the composition will convey different traits: vertical lines convey power; diagonal lines denote action; s-curves equal grace; and horizontal lines impart tranquillity.
18. Eliminate background clutter in your composition. Remember a simple image with only one or two primary elements makes for a much more powerful composition. Watch for hot spots caused by the reflection of leaves, blades of grass, etc.

Conclusion: That's it folks. Now get your gear together, find a place to explore, and start capturing the best nature has to offer you. What are you waiting for? You're excused.

Oh, one last thing – Have Fun!

*“Hold out your hands to feel the luxury of the sunbeams.”
Helen Keller*



NATURE'S VIEW: QUICK TIPS FOR BETTER NATURE PHOTOGRAPHY - Principles of Ethical Field Practices: These principles were developed by the North American Nature Photography Association (NANPA) to encourage all who participate in the enjoyment of nature to do so in a way that best promotes good stewardship of the resource.

ENVIRONMENTAL: KNOWLEDGE OF SUBJECT AND PLACE

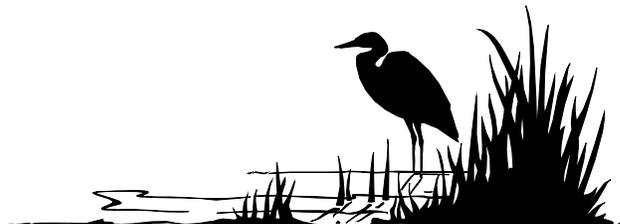
- ◆ Learn the patterns of animal behavior.
- Know when not to interfere with animals' life cycles.
- ◆ Respect the routine needs of animals.
- Remember that others will attempt to photograph them, too.
- ◆ Use appropriate lenses to photograph wild animals.
- If an animal shows stress, move back and use a longer lens.
- ◆ Acquaint yourself with the fragility of the ecosystem.
- Stay on trails that are intended to lessen impact.

SOCIAL: KNOWLEDGE OF RULES AND LAWS

- ◆ When appropriate, inform managers or other authorities of your presence and purpose.
-Help minimize cumulative impacts and maintain safety.
- ◆ Learn the rules and laws of the location.
-If minimum distances exist for approaching wildlife, follow them.
- ◆ In the absence of management authority, use good judgement.
-Treat the wildlife, plants and places as if you were their guest.
- ◆ Prepare yourself and your equipment for unexpected events.
-Avoid exposing yourself and others to preventable mishaps.

INDIVIDUAL: EXPERTISE AND RESPONSIBILITIES

- ◆ Treat others courteously
-Ask before joining others already shooting in an area.
- ◆ Tactfully inform others if you observe them engaging in inappropriate or harmful behavior.
-Many people unknowingly endanger themselves and animals.



- ◆ Report inappropriate behavior to proper authorities.
-Don't argue with those who don't care; report them.
- ◆ Be a good role model, both as a photographer and a citizen.
-Educate others by your actions; enhance their understanding.

