

**Wildlife and Movement** – Don't expect your point-and-shoot to deliver great shots of birds and mammals on the move. Most serious wildlife photography requires SLRs with big (expensive) interchangeable lenses firing away at 10 frames per second. Some of the super-macro point-and-shoot cameras do indeed deliver fine wildlife shots. But focusing is sometimes an issue: the camera is too slow to focus. Yet your greatest challenge for wildlife, particularly birds, is freezing motion. It requires a *fast shutter*. Otherwise your shots will be blurry—not out of focus, but rather showing motion blur. I shot this Gray Jay, for example, at a shutter speed of 1/2000th of a second. *If your subject is moving, your first thought must be to make your camera fire with a fast shutter.*



Many point-and-shoots won't allow you yourself to set the shutter speed. This limits your wildlife options. But if you're shooting herps or mammals trotting or other slow stuff, you do have a few options. If your camera doesn't have a dial allowing you to move into *shutter-priority mode* (S or Tv) or *aperture priority mode* (A or Av), you're stuck with what the camera decides for a shutter speed and lens opening. You can, however, trick your camera into a faster shutter. Use one of the **scene modes** for "sports" or "kids and pets" or something similar that suggests movement; your camera should respond with a faster shutter. Or boost your camera's ISO setting to upwards of 800 or even 1000 or higher. This should force the camera to choose a faster shutter. It will also add graininess to your shot.

**Macro Photography** – Point-and-shoot cameras are practically hand-held microscopes. In some ways they are more versatile than big SLRs with macro lenses. Here are the four most important things to know about using your point-and-shoot to take close-up shots of little things.

- **Macro Mode** – Switch your camera into close-up mode with the *tulip* button. Zoom out to full wide angle. **Then move your camera as close as possible to what you want to shoot.** This is a macro shot. Zooming in with your camera's telephoto lens is *not* a macro shot. In fact, many point-and-shoots won't work in macro mode if you zoom the lens.
- **Disable the Flash** – Most of the time you won't want your camera's flash to fire because it often ruins a close-up shot, flooding it with too much light. So find the little *lightning bolt* button and order your flash never to fire. Recognize, however, that you might now have inadequate light for your particular photo at the settings (shutter speed and lens opening) you need. So it helps to be outside; or if you're indoors add light to your shot with a lamp or by moving to a window.
- **Depth of Field** – You must understand depth of field in order to accomplish good macro photography. (See my Photography Fundamentals fact sheet.) When you're in close, depth of field is minute, often a fraction of an inch. The smaller your lens opening (higher f-stop number) the greater your depth of field. Even so, you must be careful when you shoot. In the shot of an Spiny Oak Slug Moth (*Euclea delphinii*) caterpillar, I set my lens opening extremely small: F-16 in order to get everything in focus. Even so, the top of the dime is a bit blurry—out of my focusing range. Notice the shallow depth of field in this shot to the right of what I think is *Platanthera psychodes* (Purple Fringed Orchid). Very little of this flower is in focus. But it's okay. I shot it with an open lens: F-4.
- **Stability and Motion Blur** – Be solid for macro shots. Standing in a bog, swaying back and forth, will often put you out of focus because your depth of field is so shallow. So use a tripod or, if you're hand-holding, get on one knee and brace your elbow to steady the camera on your other knee. Press gently, so as not to jerk and move your camera, when you expose the shot. To avoid creating your own motion blur, you'll often need fast shutter speeds in macro mode—at least 1/250<sup>th</sup> with an SLR and 1/100<sup>th</sup> for a point-and-shoot.



**Sunrises and Sunsets** – This is all about reading light. Your camera has at least three modes of measuring the light in the photo you're about to take. (See my Photography Fundamentals fact sheet.) One way to get a great sunrise or sunset shot is to measure light *only on the sky* because that's what's spectacular in your image. You'll set the exposure set right for the sky—and everything else be damned. The dark foreground usually doesn't matter (unless there's a person there, whom you might hit with some soft light from your flash). So *spot meter on the sky*.

Consider the two sunrise shots below (from Monhegan Island, Maine). On the left, I spot-metered on the sky. In this metering mode, my camera measured light *only* on the sky, nothing else. I really didn't care that the foreground was in large part in silhouette (darker in the photo than in actual life). I really wanted the sky to be right. On the right is same shot in grid- or matrix-metering mode. In this mode, the camera measures light from the *entire scene*. That means it also considers the dark foreground. When the camera "sees dark," its response is to try to lighten the scene. It does so by either slowing the shutter, opening the lens, or boosting the ISO (or some combination of the three). In its effort to properly expose the foreground (you can see, for example, that the lighthouse itself is a bit more revealed), we've lost the rich color in the sky.

If you've got a person in the foreground of a sunrise or sunset shot, do the same thing: meter on the sky. But then pop up your flash and throw a little fill-light on your subject. The flash won't alter the sky or the lighthouse (or beach or snowy scene, as the case may be), but it should throw enough light on your subject so that he or she won't be in silhouette. Some cameras allow you to adjust the amount light your flash throws out (flash exposure compensation); it's often good to dial down the flash in these situations. Soft light is good light.

