

Ten General Tips for Point-and-Shoot, Mega-Zoom Insect Photography

1. Use the camera's viewfinder (rather than the LCD screen). It will help you find and keep the target insect in view as you zoom in for the shot, and it will help keep the camera stable for better image quality.
2. Viewfinders sometimes suck battery life. So buy two extra batteries if you'll be in the field a lot and away from electricity. (Be cautious about after-market batteries: they're hit or miss on quality.) And if you're away from electricity, turn off the camera's GPS (if it has the feature) because it sucks battery life.
3. Light matters — a lot. You'll get far better images in direct morning or evening sunlight. (Mid-day light tends to be harsh for photography, but even that's better than shade.) Considering using your flash when you're within 10 feet or so of the insect, even in daylight. (But see the next item about flash and burst mode.)
4. Shoot in burst mode: lots of images in rapid fire. Some point-and-shoots have various kinds of burst modes. The "high-speed" burst might actually be too many frames per second, but the "low-speed" burst is sometime too few frames per second. Might as well go high (or go home).
 - Note that on most point-and-shoots **the flash won't work in burst mode**. (Good point-and-shoot cameras might give you one firing of the flash in burst mode — maybe not). But I can guarantee you that some day you'll turn on your flash and you won't for the life of you know why the hell it's not firing. It won't be firing because your camera is in burst mode. Set it back to single-shot mode so that your flash will work.
5. Buy good SD cards that write data fast (because you'll be shooting burst mode).
6. Set your metering to *center-weighted* or *spot*.
7. Use the zoom. Rather than using the camera's macro mode (the "tulip" setting), which requires you to be very close to the insect, and risk scaring it away, stand back and zoom the lens. You'll soon discover some minimum distance away from your bug at which you can get the camera to shoot at full zoom. If the camera won't focus at full zoom, either back away from your insect or zoom out the lens a bit and try focusing and shooting again.
8. Shoot APERTURE PRIORITY (not shutter priority). This means that you yourself set the lens opening (f-stop). Open the lens **as wide as it will go**, probably f2 or f5.6 or so. As you zoom, the lens will stop down on its own (maybe to f4 or f6.3 or so). But leave the lens wide open when you shoot insects. Here's why:
 - You need to gather light for decent photos, and for that you need an open lens. If you know about depth of field, don't worry about it with insects at a distance — it's only an issue when you're in close using the camera in macro mode. When you are father away, depth of field is not an issue; so open the lens wide.
 - If your insect is moving, you'll need a relatively fast shutter speed. In aperture priority mode, a wide open lens gives you more light to the sensor, and as a result the camera chooses a faster shutter speed.
 - You also want a low ISO because these are point-and-shoots, after all, whose sensors suck at high ISO (above 400 or so). **You really need to keep your ISO as low as possible with these cameras**. But at lower ISOs, your camera isn't as sensitive to light, which is why you need to open the lens (and let more light reach the sensor).
9. In APERTURE PRIORITY, you'll set ISO somewhere between 100 (if you've got sun) and 400 (if you're in the forest) or maybe 800 or higher (if it's really cloudy or dim). Open the lens wide. Your camera will, on its own, select a corresponding shutter speed based on whatever ambient light you've got. For stationary insects, you can get away with slow shutter speeds, even 1/60th of a second. Here's why: These mega-zooms are basically big lenses with electronics attached, including **serious image-stabilization**. As long as your insect isn't moving around a lot, you can probably get shots in burst mode at crazy-slow shutter speeds while hand-holding these cameras. If your insect is moving, well, you've got other problems because it's REALLY TOUGH to shoot insects in flight. If the insect is nectaring or crawling, fire away in burst mode and hope for a good shot among the many. You'll often get one.
10. Point-and-shoots have lots of buttons and menus. Some of the buttons are programmable — you can assign camera setting to them. Most also have a quick menu. The key thing to know is that you should never need to get into your *menus* to change the settings I mention above. You should do it all on the fly with buttons. Don't get bogged down in menus: You'll miss your shot at Ivory-billed Woodpecker (well, actually you won't because it's extinct, but you get the idea).

