

# Technology and the Modern Naturalist...

It occurred to me, whilst online to order some new toys (My motto: He who dies with the most toys, wins!), that modern technology has pretty much transformed wild-life watching and nature study and enjoyment. Regardless of your particular passion or pursuit, or whatever the object thereof, a few modern conveniences have made nature, well, a tad more convenient.

Take as an example the photos that accompany these columns—they're all taken with digital cameras that offer not only better, cheaper photos than ever before, they also give instant feedback that wasn't even a dream just 10 years ago. You can review the photo just taken, after the subject has fled, often unidentified, and immediately be able to put a name to the subject, unlike the "old days" when it would take at least a day (but more likely a week or two) to see the photos and be able to say "remember when we were at..."

"Freedom from Film" also lets us take more photos since the initial cost of the camera is similar, be it film or digital, but the cost per photo is practically nil. Contrast this with shooting slide film—I shot Kodachrome 64 for more than 20 years—when it cost \$12 for 36 shots (if you ordered your film in quantity!) and you wouldn't take a single frame without being absolutely certain that the shot would show what you were seeing. For example, I never would've wasted film to try to capture action shots of butterfly behavior but now I have many excellent shots.

Further, the data stored with digital photos are an instantaneous database—records of when you

took the shot, all of the conditions and photo settings and, if you pay attention to the details when you offload the images from the camera, you can add location, ID and other data as well.

It's a l-o-n-g way from waiting up to 2 weeks for your film to come back from New Jersey, proofing on a light table, entering the shot data manually in a spreadsheet (or 3 x 5 cards!), printing labels and applying them or—for those of us who remember using those index cards—writing the info (invariably wrong as soon as you're done) directly on the slide frame. We won't even consider the storage space issue for all of those slides...or widescreen, HDTV, DVD quality digital video!

Other toys that make our modern pursuits more enjoyable and informative include GPS units that will pinpoint a location to within about 10 feet or so, fantastically clear binoculars that will now close focus to within 3 or 4 feet instead of the 15 – 20 feet of days of yore (my little Pentax Papilio 6.5 x 21 pair focus down to 16 inches so I no longer even carry a hand lens—if I can hold it in my hand I can focus on it, in stereo!, with these little babies), and handheld weather stations that provide wind speed, direction, barometric pressure, and relative humidity in addition to maximum and minimum temperatures!

Not for one single second would I return to the days of "Kodak bondage," dead reckoning (that is, guessing a location to within about a mile or so, even with the full set of topos that you brought along),



*Black Swallowtails, Papilio polyxenes, like this male nectaring at a Texas Thistle, Cirsium texanum, rarely stop moving their wings to pose. Cheap digital photos mean you can often get a good frame like this if you take 20 or so photos in burst mode—not something one does with film at \$12/roll!*

having to back up, then back up some more, and more again, to try to get that little butterfly on that blade of grass about a dozen feet away into focus ('cause you know that if you try to get close enough

to ID it with your naked eye, it will flee), and being doused and soaked through by the unexpected downburst when you're at least a mile from shelter!

We've come a long way, baby!