Photographic Essays of Place ~Critters with 6 (or 8) Legs~

by Roy Beckemeyer

"The answer must be, I think, that beauty and grace are performed whether or not we will or sense them. The least we can do is try to be there."—Annie Dillard

Our sense of place usually centers around the macroscopic: the landscape, trees, geological formations, buildings, animals, people that surround us. But there is an equally characteristic and unique microscopic aspect to our bioregion that is every bit as essential to the making of the macroscopic place that we can more easily perceive. I have always reveled in that tiny world: the insects, arachnids, and other small creatures that, for the most part, live well beneath our notice. Let me share them with you so that we can all celebrate them here.



A Bordered Patch butterfly—Chlosyne lacinia—on aster—Sedgwick County, Kansas.

From beautiful (above) to bold (next page), the tiny creatures that go about most of their business beneath our notice can be equally important and necessary, and may have an inherent aesthetic of their own. We need to look closely and learn.



The Bold Jumping Spider—Phidippus audax—Sedgwick County, Kansas.



A Cicada Killer wasp—Sphecius speciousus—Sedgwick County, Kansas.

Cicada killer wasps are designed to get our attention, and though they are large and fearsome looking, they are interested only in each other and in the cicadas that they capture, sting to paralyze, and place in holes they dig in the ground. They lay an egg on the cicada and the wasp larva feeds on the cicada and eventually pupates there.



Clouded Sulphur butterfly nectaring on aster—Colias philodice—Sedgwick County, Kansas.

As you look through these photos you will notice that some butterflies open their wings like the pages of a book, showing off the upper surface of the wings, others, notably the sulphurs (yellows,) rarely expose the upper surface, showing you only the "covers" or undersurface. But even

that side of them can reveal who they are. It takes careful seeing and observation skills.



Cloudless Sulphur butterfly on sage—Phoebus sennae—Sedgwick County, Kansas.



Common Checkered Skipper butterfly—Pyrgus communis—Sedgwick County, Kansas



Great Spangled Fritillary butterfly—Speyeria cybele on Purple Prairie Coneflower—Sedqwick County, Kansas.

Of course, the hidden world has its vegetarians as well as its meat-eaters. In the hidden world of insects, life and death struggles take place constantly. We tend to "like" the pretty butterflies flitting from flower to flower, but the insect predators can be likable as well, if not lovable.

The damselfly on the next page is an aquatic insect, living underwater in its immature stages, emerging as an adult to conduct its final life stages in the air. Damselflies take small insect prey on the wing or glean insects from

grass or leaves. Green lacewing larvae (page 10) often haunt flowers and stalk other insects there. They can be quite fond of aphids. They look sort of like insect versions of tigers.



A male Common Spreadwing damselfly—Lestes disjunctus—Sedgwick County, Kansas.



Green Lacewing larva—Order Neuroptera, Family Chrysopidae—Sedgwick County, Kansas

Insect wings take on a myriad of shapes and appearances. The butterflies are surfaced with colored



Dusted Skipper butterfly on aster—Atrytonopsis hyanna—Sedgwick County, Kansas.

scales that allow their wings to be patterned with all sorts of attention-getting or camouflage-providing schemes.



Dainty Sulphur butterfly on aster—Nathalis iole—Sedgwick County, Kansas.

Dragonflies have mostly clear wings but can have color patterns that result from dyes carried within their wing veins that spread between the upper and lower wing surfaces.



Neurothemis stigmatizans dragonfly—Bona Bona, Solomon Islands



Keyhole Glider dragonfly on his territory—Tramea basilaris—Kwa Zulu Natal, South Africa.



 $Burying\ beetle-Nicrophorus\ sp.-Arizona.$

Insects are responsible for cleaning up much of the earth. Burying beetles (previous page) bury carrion to provide food for their larvae. Dung beetles do the same thing with animal feces.

Damselfly and dragonfly females store sperm from mating and their eggs are fertilized as they are laid. Males have evolved behaviors that are aimed at seeing that rival males do not get a chance to mate with females before they have a chance to lay a clutch of eggs.



Rock Hooktail dragonflies in copula—Paragomphus cognatus—Kwa Zulu Natal, South Africa.



Common Spreadwing damselfly pair laying eggs in tandem after mating—Lestes disjunctus—Arkansas.

Here a male damselfly holds a female and travels with her while she makes slits in a plant stem and inserts eggs.



A robber fly (Diptera: Family Asilidae)—Promachus bastardii—Sedgwick County, Kansas.

Robber flies are predatory Diptera. They typically perch on vegetation and watch for prey to fly over. Then they fly up like little fighter planes, seize their prey with their spiny legs, and stab it with their hardened beak-like mouth. They often fall to the ground and grip the prey until it succumbs to the neurotoxins in the robber flies' saliva. There are proteolytic enzymes in the saliva as well, that dissolve the tissues of the insect prey. The robber fly then sucks up the resulting soup much as spiders do.

Dragonflies are also predatory insects, but they chew their food. Chewing insects have mandibles that open "up and down" as ours do, but their "teeth" move sideways to masticate their prey.



Male Twelve-spotted Skimmer dragonfly—Libellula pulchella—Konza Prairie, Flint Hills, Kansas.

Dragonflies' huge eyes reveal that they are sight predators. They often perch and watch for prey. When near water, males also find a perch overlooking likely egg-laying spots and watch for females.

We humans simply enjoy watching insects for their beauty. Here are some examples from around the world:



Painted Lady butterfly—Vanessa cardui (above), and Orange Sulphur butterfly nectaring on aster—Colias eurytheme (below)—both photographed in Sedgwick County, Kansas.





Little Yellow butterfly—Pyrisitia lisa—Sedgwick County, Kansas.



Noikomis Fritillary butterfly on thistle—Speyeria nokomis—Arizona.



Rhinocypha tincta damselfly (Old World Tropics family Chlorocyphidae)—Papua, New Guinea



A female Springwater Dancer damselfly—Argia plana—Scott State Lake, Scott County, Kansas.



Above: Robber Fly —Triorla interrupta—Konza Prairie, Flint Hills, Kansas. Below: Elegant grasshopper— Zonocerus elegans—Kwa Zulu Natal, South Africa.





Above: White-belted Ringtail dragonfly hunting from a barbed wire perch—Erpetogomphus compositus—Sevilleta National Wildlife Refuge, New Mexico. Below: White-lined Sphinx moth nectaring while hovering—Hyles lineata—Sedgwick County, Kansas.





A red-winged, red-bodied dragonfly stands out even in a thick cattail march—Neurothemis fulvia—Thailand.

Insect photos © by Roy Beckemeyer, taken with film or digital Nikon SLR cameras and 200 mm or 75-300 mm zoom macro lenses, some with strobe flash.

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