

# BASICS OF CLOSE-UP PHOTOGRAPHY WORKSHOP

by Don Bolak

## Equipment

- Tripod – no center post preferred, ability to get camera/lens within 12” of ground & camera at eye level (without center post extended)
- Equipment bag – sized for ability to carry and hold amount of equipment required
- Camera – must be able to mount on tripod, SLR with interchangeable lenses, off camera shutter release, flash bracket, depth of field preview, mirror lockup (optional)
- Tripod head – rated for weight of largest lens with camera, must hold camera still, 360° ball head
- Flash/strobe – fill flash & full flash, off camera capability (expandable power cord)
- Filters – close-up (diopters), polarizer (circular), warming (81A, B or C)
- Lenses – macro/close focusing capability, 180 or 200 mm macro, 200mm+ (fixed or zoom) with close up filter
- Gadgets – Plamp, diffuser/reflector (Photoflex 3 in 1), cable release, extension tubes, plexiglass wind screen
- Books – John Shaw’s *The Nature Photographer’s Complete Guide to Professional Field Techniques*, Larry West’s *How to Photograph Insects & Spiders*, Allen Rokach *Field Guide to Photographing Flowers*

## Basic principles

- Close focusing – function of distance of lens element from film plane (longer the distance, greater the magnification) & distance of lens from subject (closer to subject, increase size in frame)
- Angle of view – as distance between subject and lens decreases, angle of view (amount of area included in image) narrows, important for backgrounds & isolating subject
- Life size – film size equal to actual size of subject (1:1 ratio)
- Working distance from subject – how close do you want to get to your subject and how close will your subject allow you to get (ex. insects & spiders)
- Depth of field – controlled by f stop (lens aperture size), macro frequently requires f22+ to get sufficient amount of subject, available depth of field decreases as magnification increases
- Shutter speed – at f22+, low level of light allowed through lens, requires longer shutter speeds (1/2 second or longer is common)

- Subject angle versus film plane – subject that parallels film plane will maximize available depth of field
- Stabilize camera body – tripod, ball head, remote shutter release; at long shutter speeds – must minimize anything that will cause camera & lens to vibrate (wind, body movement, shutter slap)
- Stabilize subject – at long shutter speeds, subject cannot move during exposure; need minimal wind and/or way to hold subject still (Plamp, wind screen)
- Control light – diffusers (filter sun), reflectors & flash (add light)
- Background – eliminate distractions (hot spots, objects entering edge of frame), increase distance of subject from any background objects
- Composition – rule of thirds, direction, flow, number of subjects, selective depth of field

#### Other important considerations

- Location (make it easy to go shooting)
- Timing (need to shoot when conditions are right)
- Time of year (angle of sunlight, weather)
- Wind (the close-up photographer's enemy)
- Type of light (direct vs. filtered)
- Angle of light on subject (back, side, or front lighting)