

OPTIMIZING SHARPNESS

Opportunities for improving sharpness

1. Good camera techniques
2. Raw Processing
3. Additional Plug-ins

Camera Techniques

Minimize motion at both ends of the lens

1. Shoot fast enough to minimize your motion.
 - Minimum shutter speed = $1/\text{focal length}$
 - Unless you have VR/IS
2. For Action: Shoot fast enough to freeze your subject
 - Birds in flight: $1/1500^{\text{th}}$
 - Sports: $1/500^{\text{th}}$
3. For Still Life/Landscapes
 - Mirror up mode
 - Use a remote trigger or timer function

Camera Techniques

Shoot in the “sweet spot” of your lens

1. Typically 2 stops down from wide open (f8 – f10)
2. Fine tune your autofocus
(<http://www.reikan.co.uk/focalweb/>)

Move your focus point

1. Put your focus point on most important area
2. Aim for areas of contrast to aid autofocus.

Stabilize your rig

1. Tripod/monopod

Raw Processing



Adobe

1. **Amount** –The higher the number, the more sharpening you will see. Keep in mind that sharpening also increases noise. Range = 1 – 150.
1. **Radius** – the size of the sharpening area around the edges. The default value is 1.0 and will apply sharpening over 1 pixel around the edge. Increasing the radius spreads sharpening over more pixels around the edge, producing thicker edges. Optimal value depends on the subject.
1. **Detail** –controls the amount of sharpening on the “details” of the image. A small value only sharpens large edges, while a high value like 100 would sharpen even the smallest edges. Remember that higher numbers increase the noise. So be gentle.
2. **Masking** – Not every part of the image needs sharpening. When used with the “ALT” button, you can greatly limit the sharpening effects and control the noise a bit.

Raw Processing

Photoshop

1. Use layers and masks to apply sharpening “Locally”.
 - Sharpen only what needs to be sharp.

Plugins

1. Nik Sharpener Pro (Nik Collection: \$149, www.niksoftware.com)
2. Topaz Detail (\$39.99, www.Topazlabs.com)

Comparison

SOC



LR



Topaz

