Sharpening With Unsharp Mask

Unless your digital camera has been modified to specifically take infrared pictures, an infrared filter is in place over your camera's image sensor to block the infrared rays from the sensor. The filter gives more natural colors, but slightly blurs the image as perceived by the image sensor. UNSHARP MASK is a way to correct this "blurring". The UNSHARP MASK feature of Photoshop increases the apparent sharpness of your digital images by increasing the contrast along edges within the image.

UNSHARP MASK has three components:

1. THRESHOLD - Threshold affects when the sharpening occurs based on contrast of an edge. A low Threshold gives high sharpness, but it also sharpens noise and other artifacts. A high Threshold reduces small detail sharpness. Use a Threshold of 3 to 4. If there are any noise problems Threshold can be increased, but watch for the appearance of "grain" or noise in the images and keep the Threshold setting as low as possible.

2. RADIUS – Radius is where the sharpening occurs. It tells the program how far to look to find the contrast and is influenced by the size of the image. A large image has more pixels and will require a higher radius setting to have the same effect as when used on a smaller image. Images from 10MB to 30MB might require a radius setting of 1 or 1.5, maybe even up to 2.0. Images smaller than 10 MB should use a radius setting less than 1.0.

3. AMOUNT – Amount is the intensity of the sharpening. It should be higher when the detail is fine, when the Radius is low or when you need more sharpness from the subject. More sharpness will <u>NOT</u> correct a blurry picture, it just makes it look worse. A value between 130 and 180 is good for highly detailed images like rocky landscapes. Lower values are best for flowers and other smooth textured subjects.

Sharpening should be the last step before saving or printing the final image. If other corrections are done later, the effects of the sharpening might be exaggerated or minimized.