## Basic Digital Image Restoration

Larry Pepper www.Pepper-Photography.com 847-426-7377 llpepper@sbcglobal.net

- 1) Thoughts and Ideas
  - a) The computer is a sophisticated tool, but it is dumb. The image displayed by the computer is just a bunch of numbers, a collection of colored pixels
  - b) Many ways to accomplish repairs
  - c) Concentrate on what is important
    - i) Hierarchy of importance in an image is face, hands, body, background
  - d) Beg, borrow, steal, image data from other areas of image
  - e) Cropping images can reduce work
- 2) Equipment discussion
  - a) Computer
  - b) Software
  - c) Scanner (helpful but not necessary)
  - d) Digital tablet (helpful but not necessary)
- 3) Scanning tips
  - a) Output considerations: what is your desired output format
  - b) Rotate photo / document: to minimize defects
  - c) Consistent scanning: check your levels
- 4) File handling
  - a) File naming
  - b) Filing structure
    - i) Original
    - ii) Working versions
    - iii) JPEG folder
- 5) Image file type
  - a) JPEG, Joint Photographic Expert Group, is **NOT** the preferred format, lossy
  - b) TIFF Tagged Image File Format raster bitmap lossless
  - c) PSD PhotoShop Document proprietary format
- 6) Some common restoration challenges
  - a) Image too dark
    - i) **01 Bradbury Mary Ann** Duplicate image, Patch tool, Stamp, Healing, Threshold, Eye dropper, Layers, Adj layers, Blending modes, (Ferrotype image reversal)

- b) Image too light
  - i) **02 Baby Faded Small** Layers, Blending modes (Multiply)
- c) Color shift
  - i) Hiking images Automatic adjustments, Layers
  - ii) **03 Larry Pepper** Automatic adjustments
- 7) Photoshop Tools
  - a) PhotoShop Help menu
  - b) Drop Down Menus
    - i) Photoshop Help
  - c) Toolbox
  - d) Keyboard shortcuts *example* Control and Z
    - i) Nested tools denoted by triangle in lower right corner of tool button. Reveal these nested tools lower with Shift and command letter.
  - e) Palettes
    - i) History
    - ii) Layer F7
    - iii) Info F8
  - f) Clone tool S
  - g) Healing Brushes J
    - i) Spot
    - ii) Healing
  - h) Patch tool J
  - i) Selections, a selection is always made either by the user or by the program
    - i) Marquee
      - (1) Elliptical
      - (2) Rectangle
      - (3) Single pixel
    - ii) Feather
    - iii) Lasso
      - (1) Freeform
      - (2) Polygonal
      - (3) Magnetic
  - j) Rulers
  - k) Guides
  - l) Grid
- 8) Blending Modes
  - a) Blending Modes: Many tools have Blending Mode functionality.
  - b) Keyboard shortcut Shift and "+" or Shift and "-" to toggle through all of the modes, make sure the tool you want is active.

## Software:

Adobe Photoshop Elements http://www.adobe.com/products/photoshopelwin/ Photoshop CS3 http://www.adobe.com/products/photoshop/family/

Corel Ulead PhotoImpact X3 – Similar to Elements Paint Shop Pro Photo X2 – Similar to Photoshop CS http://www.corel.com/servlet/Satellite/us/en/Product/1181657927030

## **Books:**

Photoshop Restoration & Retouching, 3rd edition by Katrin Eismann New Riders Publishing ISBN#: 0-321-31627-4 Considered by some to be the bible of digital restoration. This book is for users with some Photoshop experience, and is written for Adobe Photoshop CS2.

*Digital Restoration from start to finish 2<sup>nd</sup> edition* by Ctein Focal press ISBN#: 978-0-240-81208-3 Excellent information.

*Photoshop Elements 5.0* by Barbara Brundage Progue Press/ O'Reilly ISBN 0-596-52728-4

How to Wow with Photoshop Elements 5 by Jack Davis, Mike McHugh and Wayne Rankin Peachpit Press ISBN # 0-321-48615-3 This book has many ideas, but for your best results the book should be read start to finish.

*The Photoshop Elements 5 Restoration & Retouching Book* by Matt Kloskowski Peachpit Press ISBN # 0-321-48165-8

Photoshop Blending Modes Cookbook for Digital Photographers by John Beardsworth O'Reilly Media, Inc. ISBN# 0-596-10020-5 http://www.oreilly.com/catalog/photoblend/index.html

Real World Digital Photography, 2nd edition by Katrin Eismann (Co-authored with Sean Duggan and Tim Grey) Peachpit Press ISBN#: 0-321-22372-1 (http://www.photoshopdiva.com/)

## **Internet Sites:**

<u>Adobe Support forum</u> has an PhotoShop Elements user forum www.adobe.com/forums <u>Catalogue of Books on PhotoShop Elements and other Computer /</u> <u>Software Instruction Books</u> http://www.missingmanual.com/

Adobe Photoshop Product Information http://www.adobe.com/

Paint Shop ProPhoto, Snapfish, and Other Image Editing Software. http://www.corel.com/

Adobe Studio Exchange All kinds of free stuff after you register on the site

http://share.studio.adobe.com/

MyJanee - Lots of tutorials and free downloads www.myjanee.com

More Tutorials - www.photoshopgurus.com/tutorials.html/

Sue Chastain – another website with lots of downloads and tutorials http://graphicssoft.about.com/

Scanner tips and info from a very knowledgeable person Wayne Fulton. http://www.scantips.com/

RetouchPRO forum on retouching images http://www.retouchpro.com/forums/