Advanced Aperture STAT

by Samuel Coniglio

Outline

- Fundamentals
- Workflow
- Advanced features

Fundamentals

- What is RAW
- Color Depth
- RGM vs CMYK
- Resolution
- Megapixels and printing

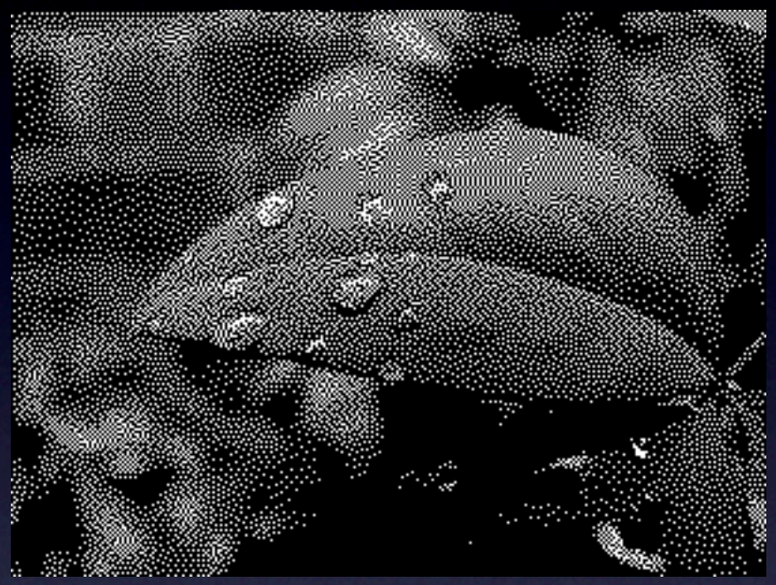
What is RAW?

- Uncompressed file format/direct from sensor
- Digital Negative
- Not directly usable
- Wider dynamic color range than JPG
- Includes metadata about image

.3fr (Hasselblad)
.raf (Fuji)
.crw .cr2 (Canon)
.tif .k25 .kdc .dcs .dcr .drf (Kodak)
.mrw (Minolta)
.nef .nrw (Nikon)
.orf (Olympus)
.dng (Adobe)
.ptx .pef (Pentax)
.arw .srf .sr2 (Sony)
.x3f (Sigma)
.erf (Epson)
.mef (Mamiya)
.mos (Leaf)
.raw .rw2 (Panasonic)
.cap .tif .iiq (Phase One)
.r3d (Red)
.fff (Imacon)
.pxn (Logitech)
.bay (Casio)
.rwz (Rawzor)

Color Depth

RGB color combinations of a single screen pixel



1-bit color (2^1 = 2 colors)

4-bit color (2^4 = 16 colors)

8-bit color (2^8 = 256 colors)

24-bit color (2^{24} = 16.7 million colors)

Current monitors cannot show beyond 24 bit color depth

32-bit color (2^{32} = 4.2 billion colors)

48 bit approaches the color depth of film

48-bit color (2^{48} = 281 trillion colors)

RGB vs CMYK

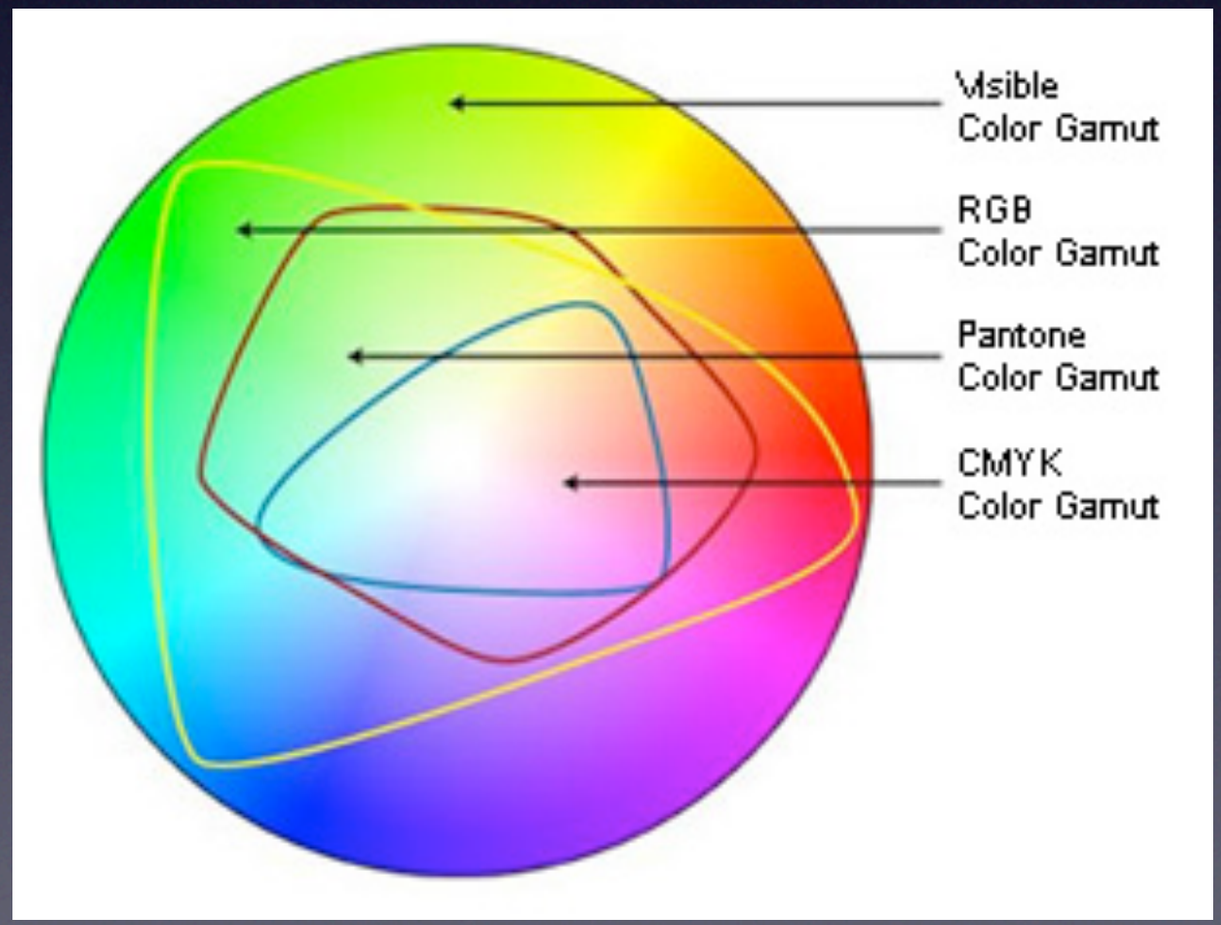
Computer screens

Red, Green
Blue

Printers

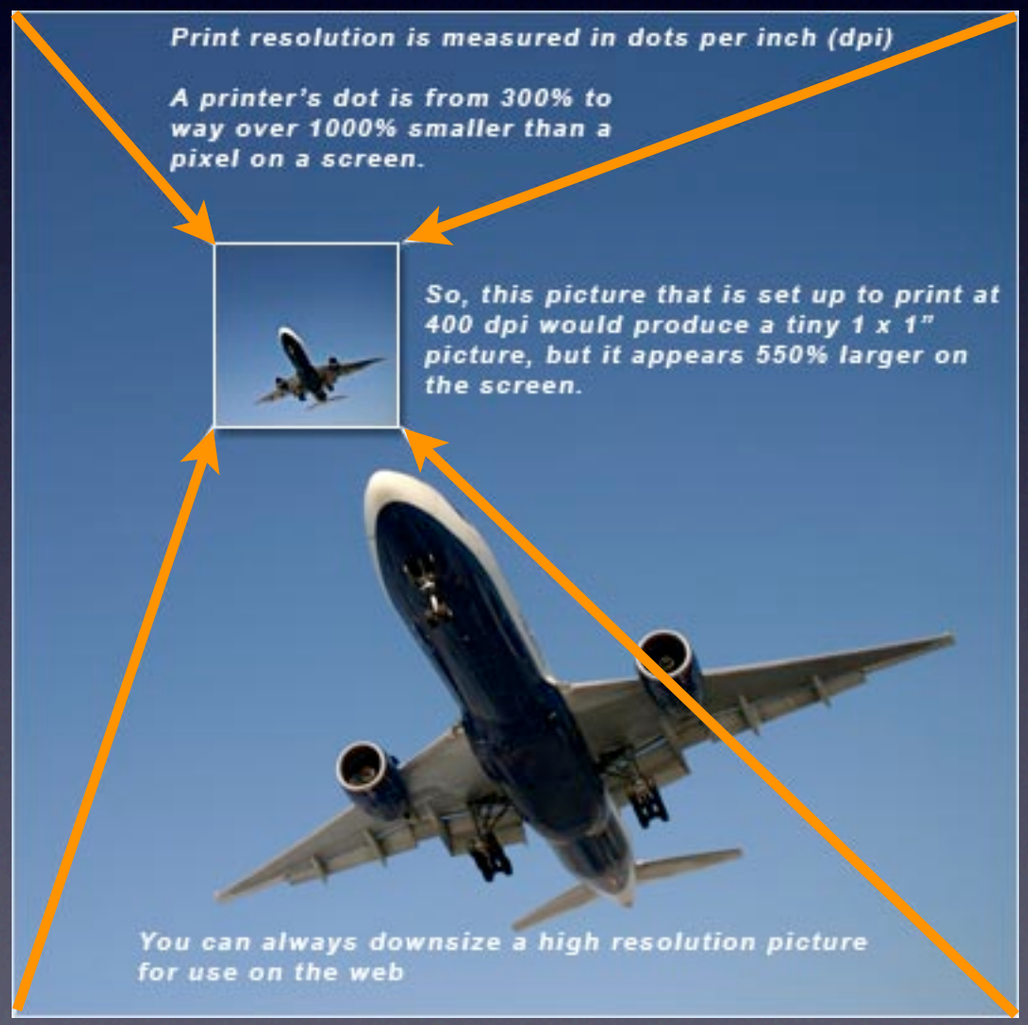
Cyan, Magenta
Yellow, blacK

Gamut: Limited range of the color spectrum



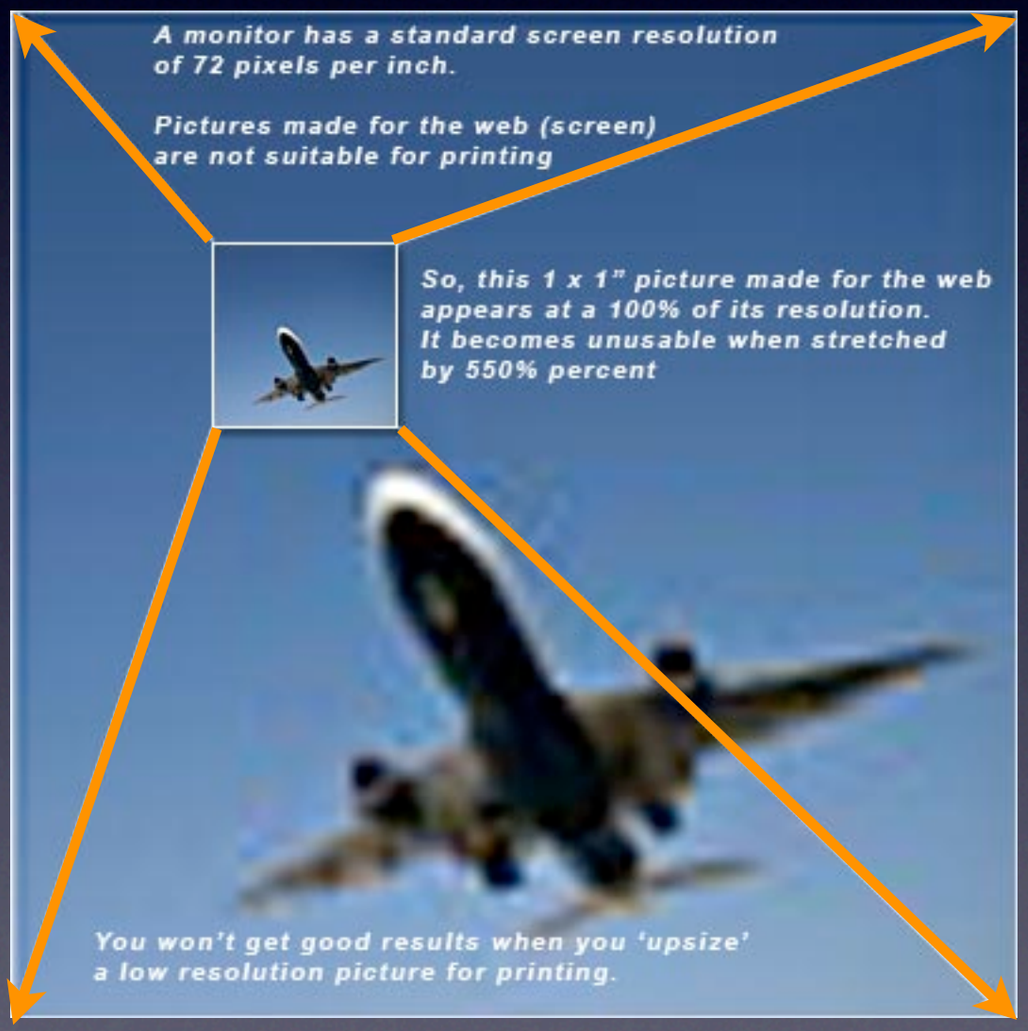
Resolution

print-resolution image



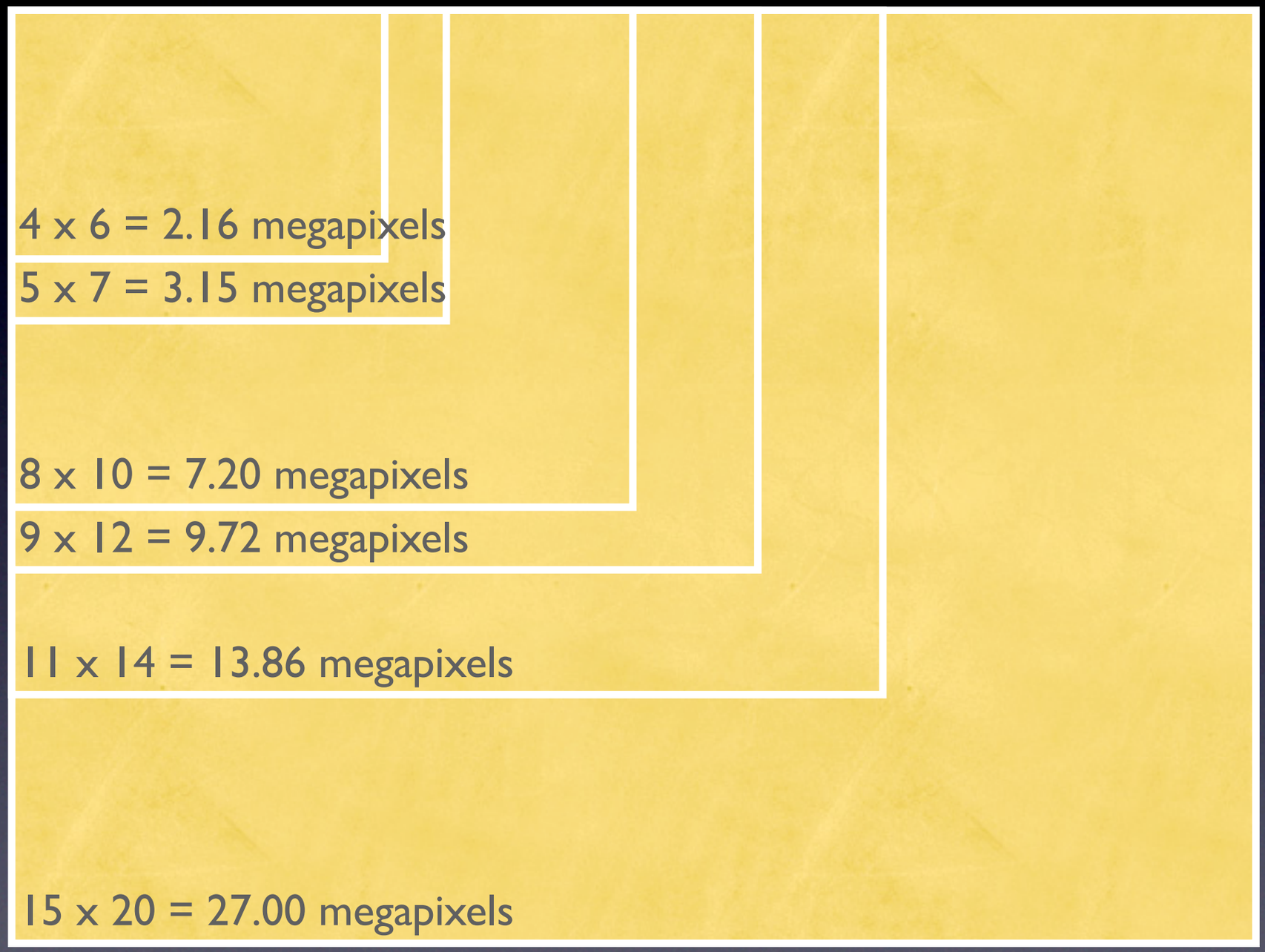
300 dpi = print quality

screen-resolution image



72 ppi = screen quality

Megapixels and Print Size*



* at 300 dpi (print resolution)

Aperture Workflow

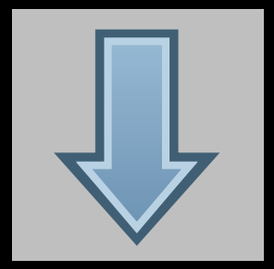
Import

Organize

Edit

Share

Advanced



Import Methods

- Camera
- Camera cards
- CD/DVD
- Hard Drive
- Internet
- iPhoto

Files Supported

- GIF
- JPEG / JPEG2000
- PNG
- PSD (8 or 16 bit)
- DNG
- RAW*
- TIFF (8 or 16 bit)

*See Apple's RAW support page for latest files:
http://www.apple.com/aperture/specs/raw.html

Import Screen

Import pane

Import arrow

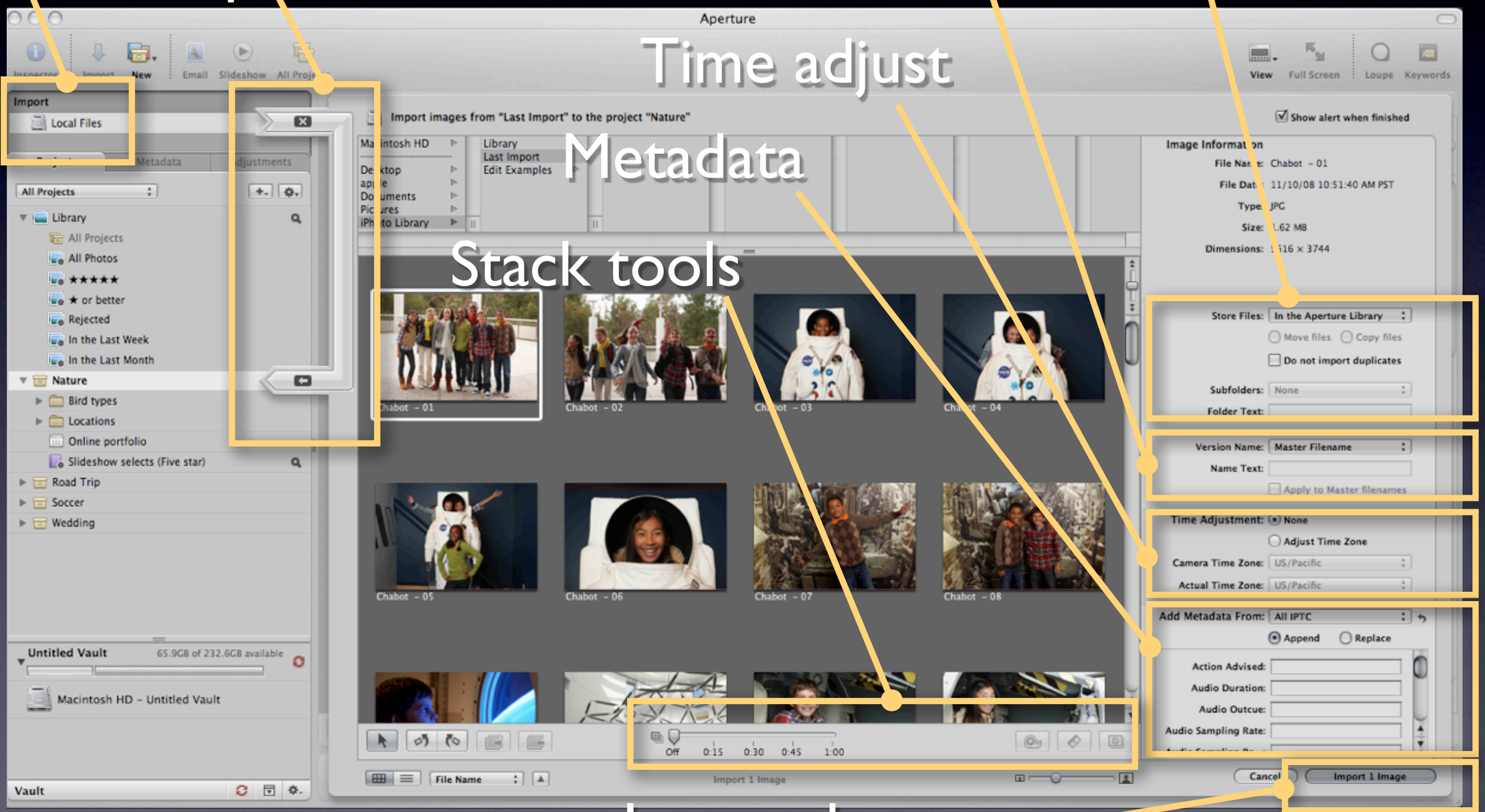
Storage location

Name

Time adjust

Metadata

Stack tools



Import button

Importing iPhoto Library

Full Import

- File > Import > iPhoto Library
- Events become Projects
- Albums and folders import
- Smart albums, books, slideshows, etc. do NOT import

Selected Photos

- File > Show iPhoto Browser*
- Select event, album or single photos
- Drag to a project

* iPhoto can import Aperture photos too!

Managed Library

Masters inside Library

Managed Library 1

or

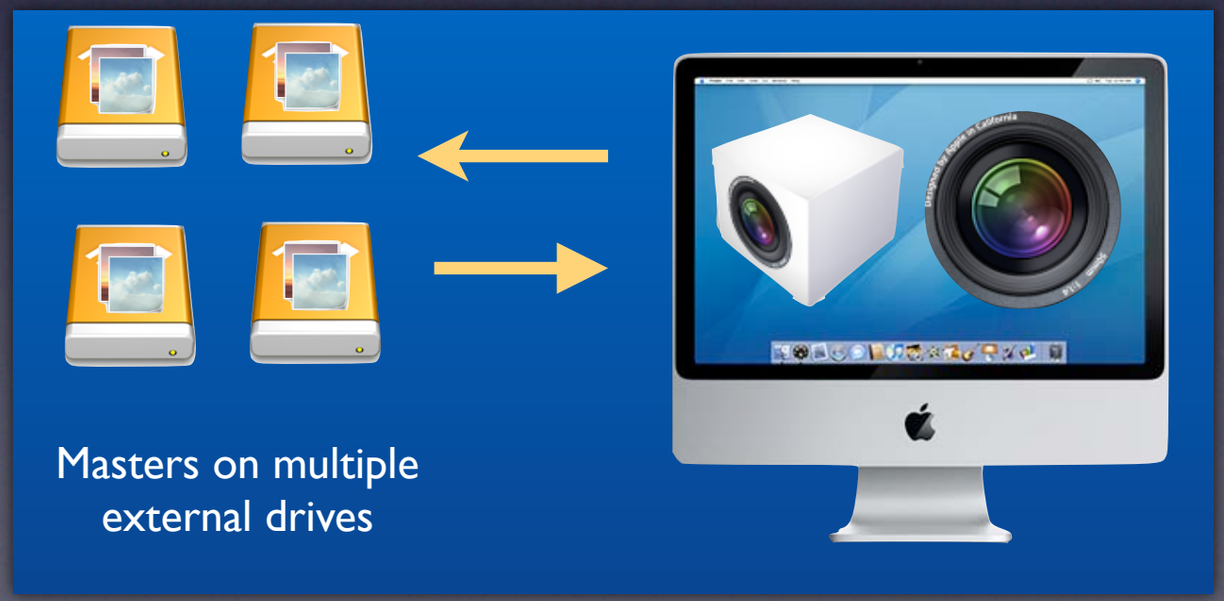
Library on external drive

Managed Library 2

Referenced Library

Referenced Library 1

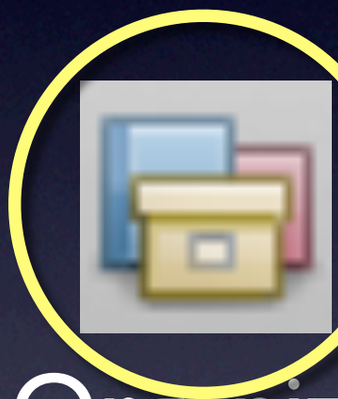
or



Referenced Library 2

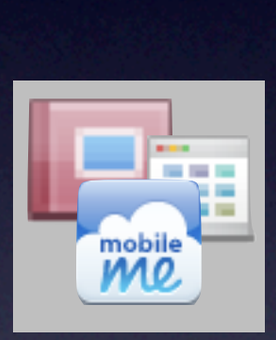
Aperture Workflow

Import



Organize

Edit



Share

Advanced

Organization tools

Projects

Folders

Albums

Smart Albums

★★★ Star Ratings

Metadata / Keywords

Stacks

Projects

- Aperture Projects = iPhoto Events
- Aperture Project similar to an entire iPhoto library
- Organize multiple Projects inside blue folders

Folders

Blue Folders = organize Projects, and everything outside a Project

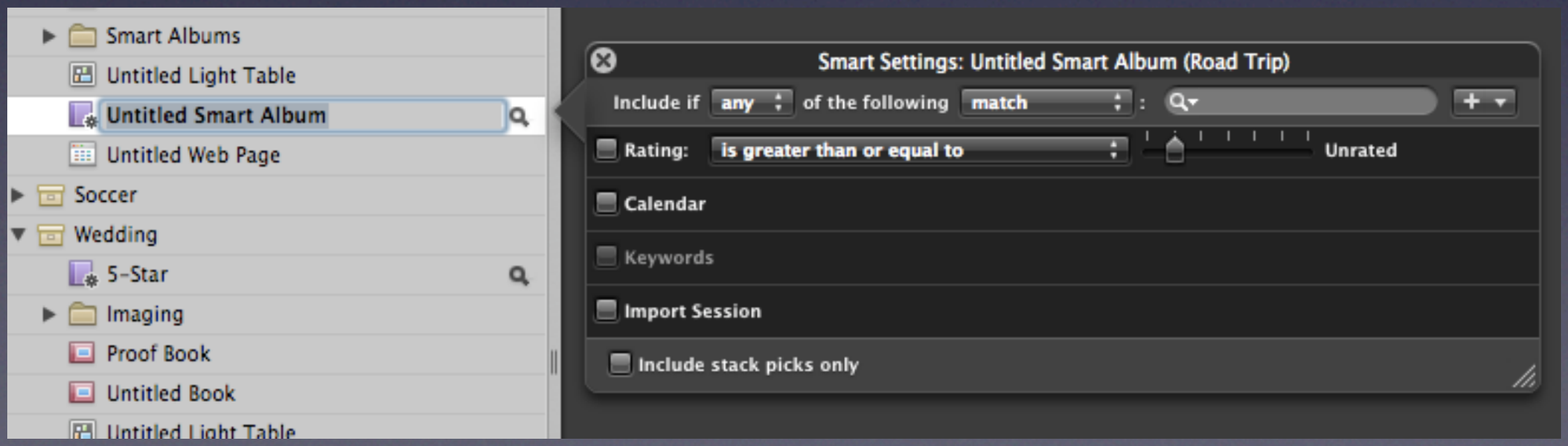
Yellow Folders = organize everything inside a Project

Albums

- Aperture Albums = iPhoto Albums
- Album photos are references to Project photos
- Album photos can come from multiple Projects
- Organize multiple Albums with Folders

Smart Albums

- Aperture Smart Albums = iPhoto Smart Albums
- Smart Album photos are results of a saved search
- Detailed Smart Album search criteria
- Organize multiple Smart Albums with Folders



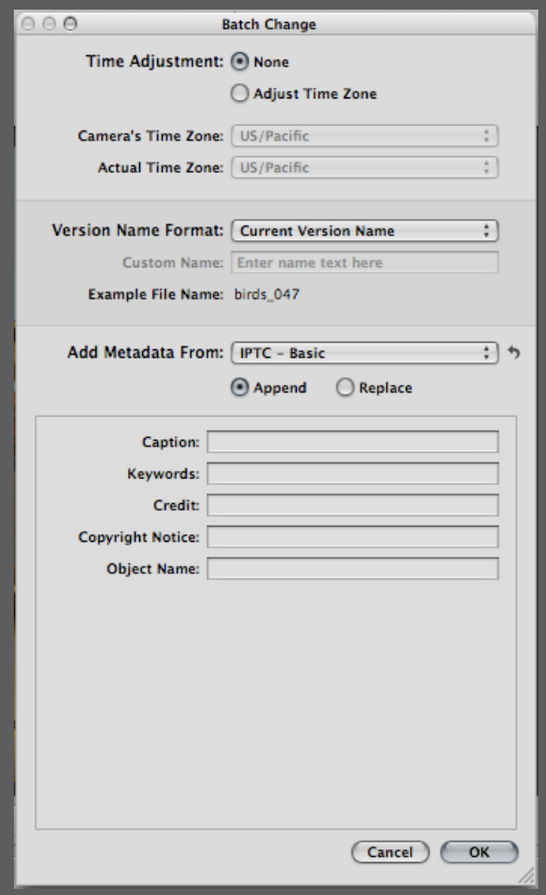
★Star Rating

- 0-5: zero to five stars
- 9: rejects a photo
- Combine with smart albums for quick filtering

Metadata

- Background information about a photo
- EXIF = camera data (F-Stop, shutter, etc.)
- IPTC = caption, keywords, location, etc.

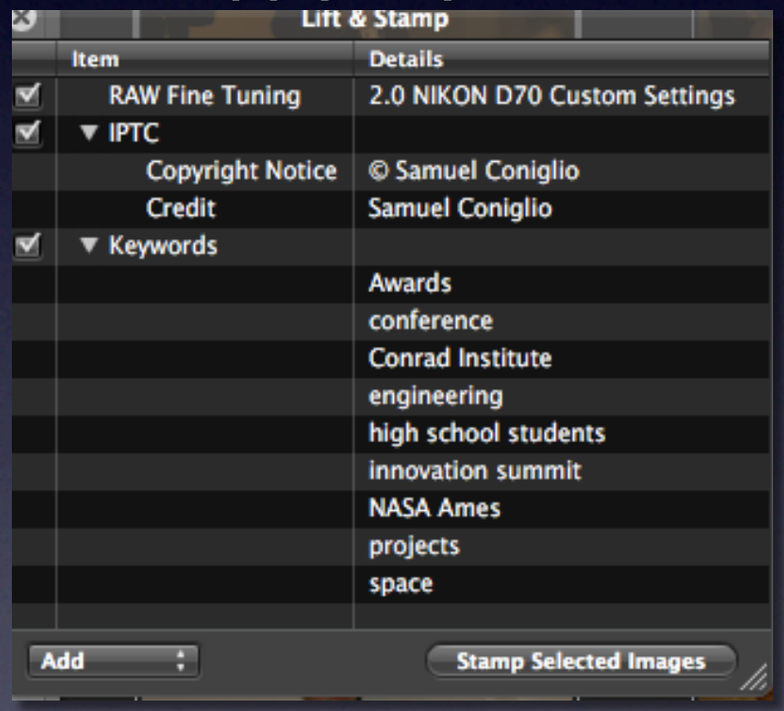
Use the Batch Change Command to apply bulk metadata changes



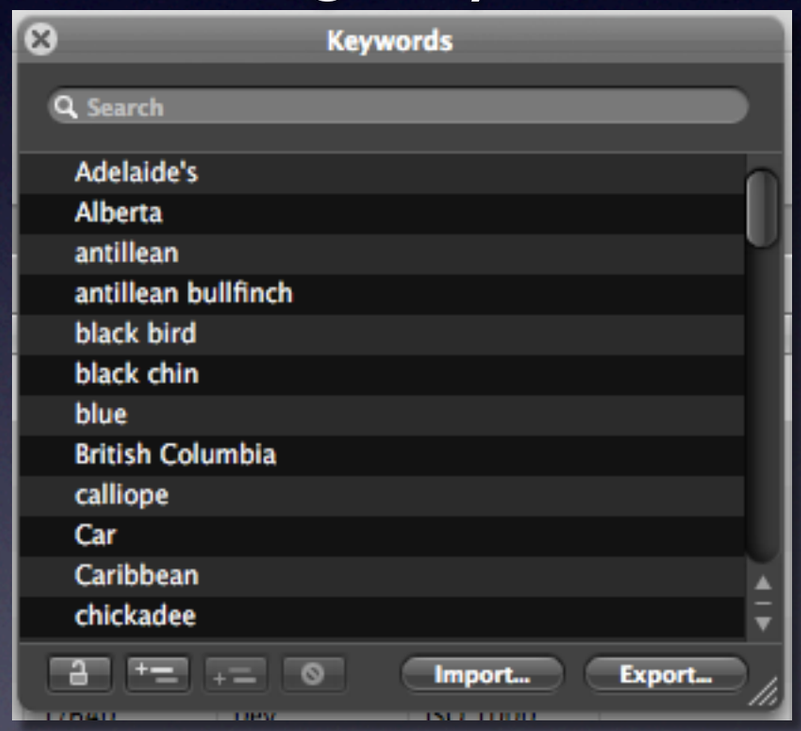
Keywords

Keywords help find photos

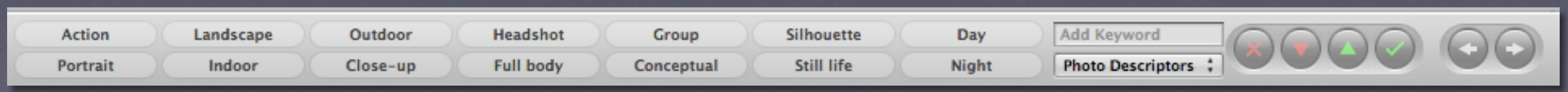
Use Lift and Stamp tools to apply keywords



Use keyword HUD to manage keywords



Use keyword controls to quickly assign keywords

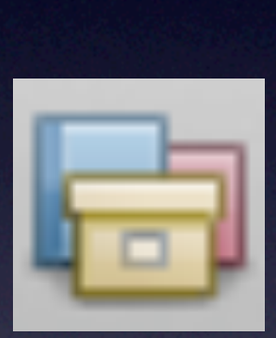


Stacks

- Great for grouping repetitive shots (bracketed images, similar look, etc.)
- Quickly hide unneeded images
- Only the “pick” of the stack is shown
- Create stacks during import or from the Auto-Stack command
- Stacks created by time (within 0-60 seconds of shooting)

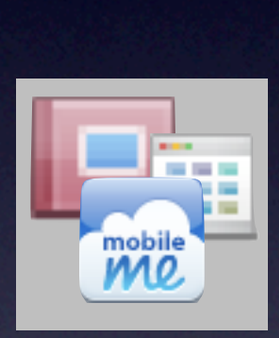
Aperture Workflow

Import



Organize

Edit



Share

Advanced

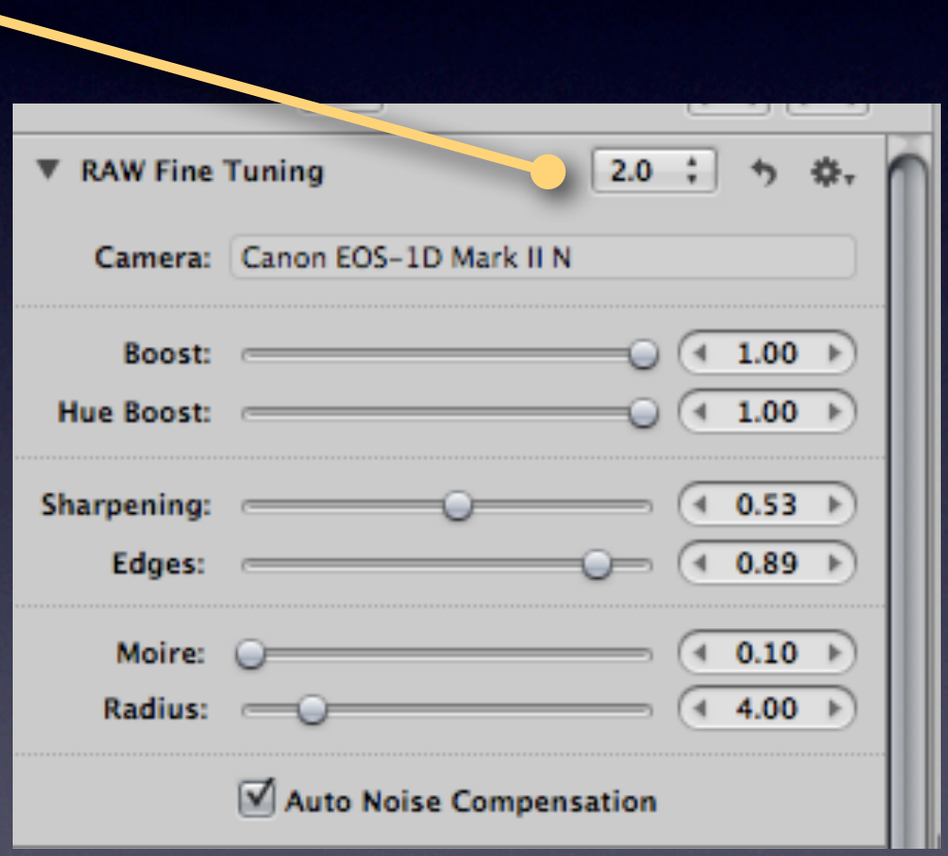
Adjustment types

- Built-in Aperture tools
- External editors (photoshop)

Raw Fine Tuning

RAW files are decoded for the screen.
These tools modify the decode process.

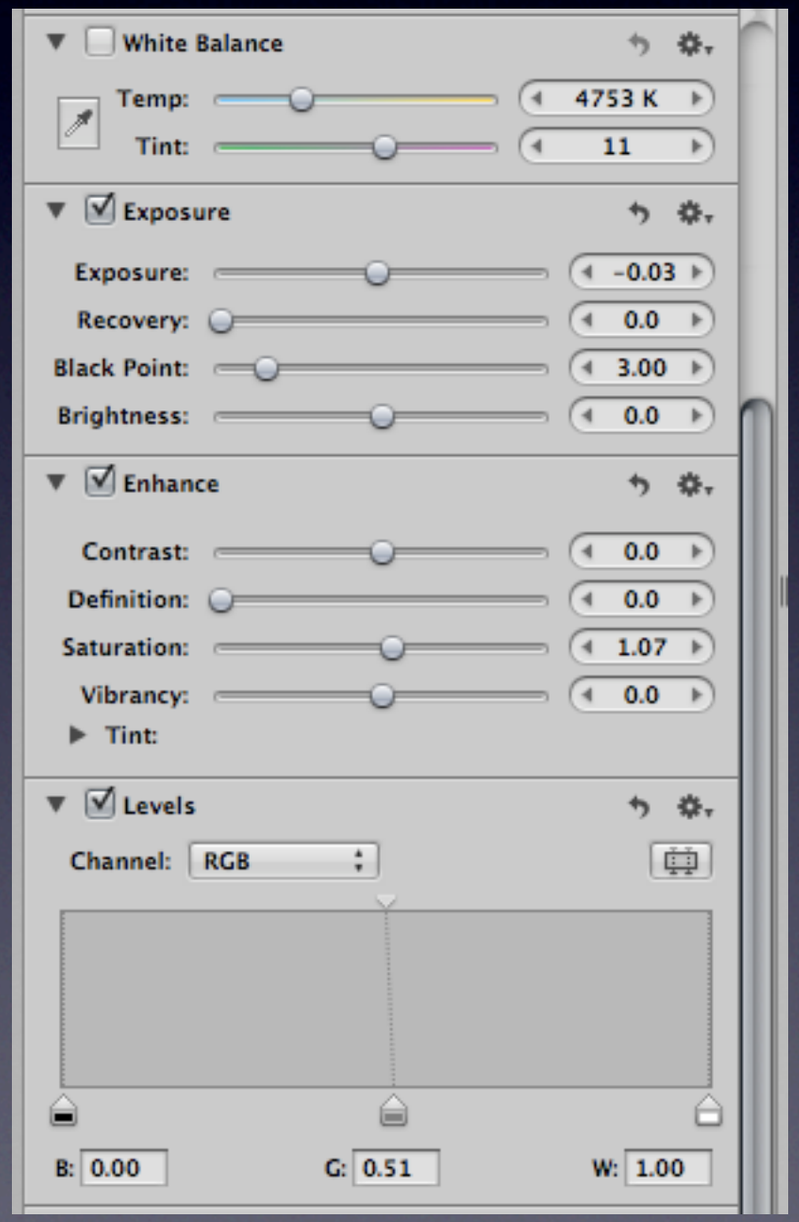
- RAW decode method (from different generations of Aperture or Adobe DNG*)
- Boost & Hue Boost: control contrast/ saturation & related hue
- Sharpening & Edges: control sharpen/ noise balance & edge increase
- Moire & Radius: reduce color fringing from RAW decode to screen
- Auto Noise Compensation: turn off to better control Moire



Common Tools

Use these tools in combination for overall image correction

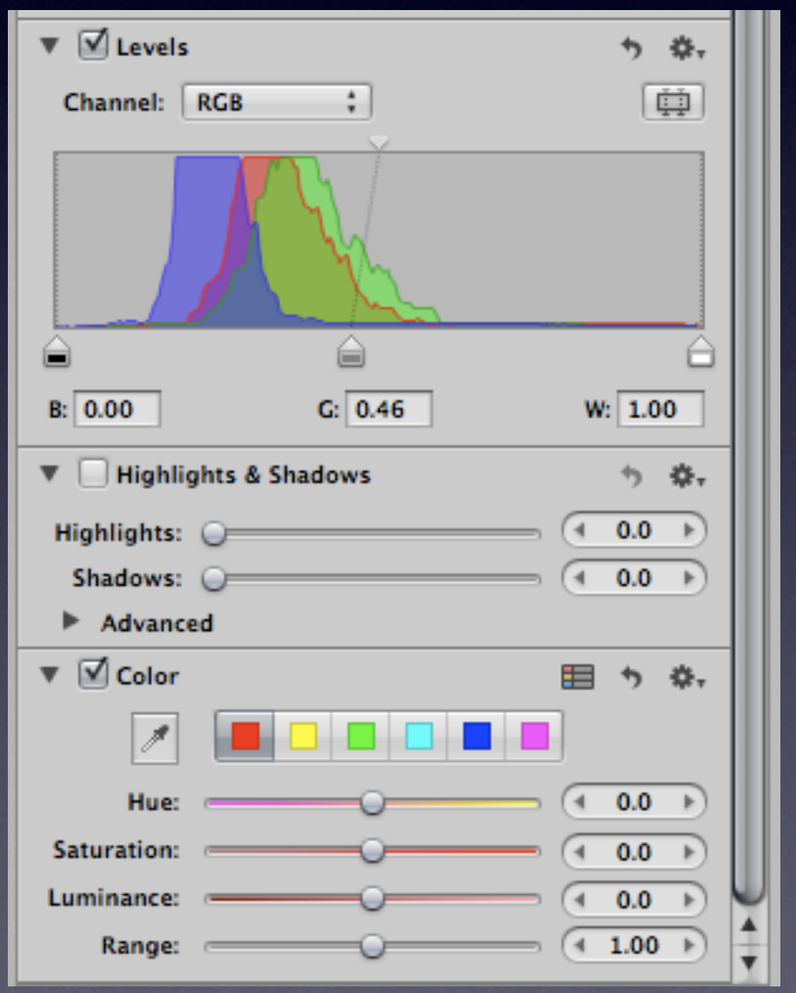
- White Balance: adjust color cast of overall image
- Exposure: correct blow outs or under exposure
- Enhance: Make photos “pop”
- Levels: increase/decrease highlights, mid-tones, shadows



Common Tools (cont.)

Use these tools in combination for overall image correction

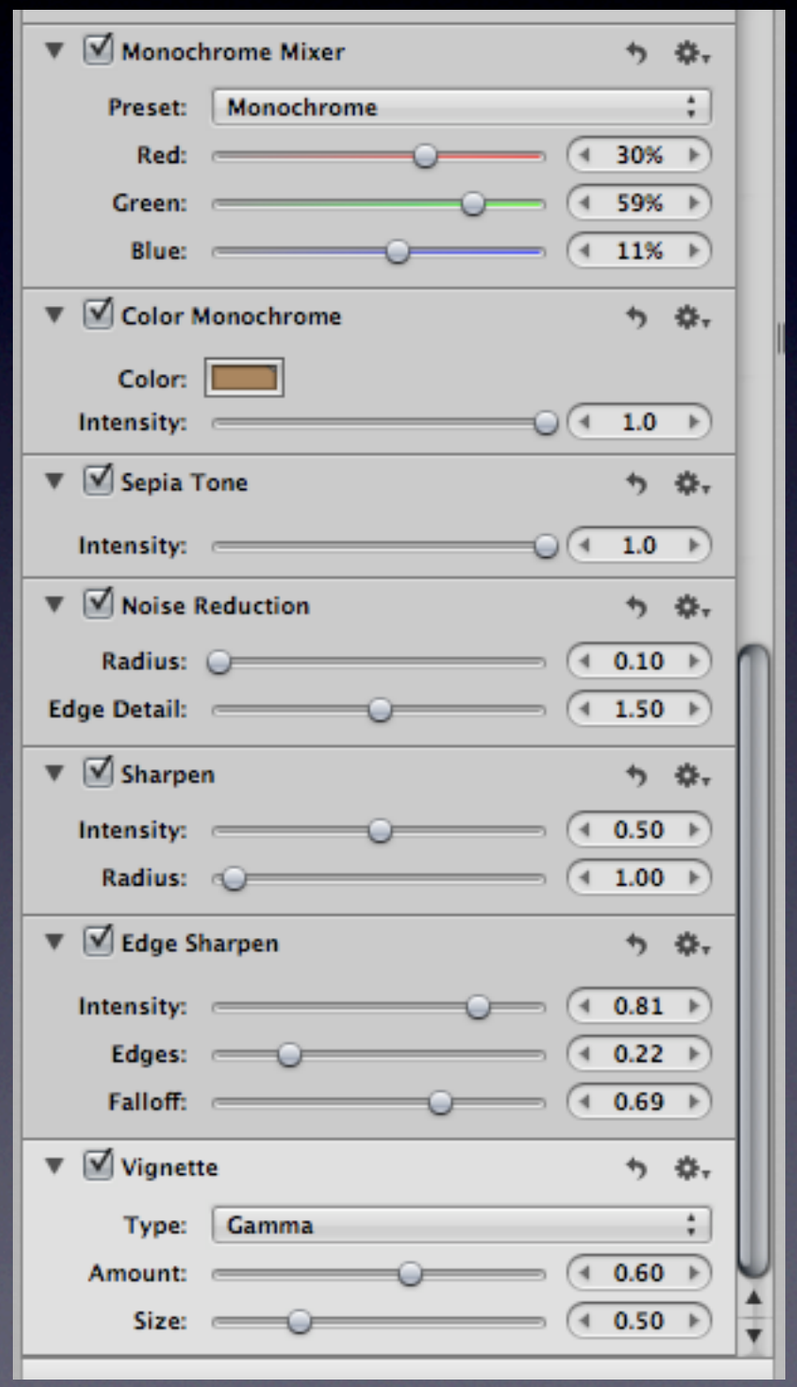
- Levels: increase/decrease highlights, mid-tones, shadows
- Highlight & Shadows: bring back hidden details
- Color: Increase/decrease or change completely a specific color



Extra Tools

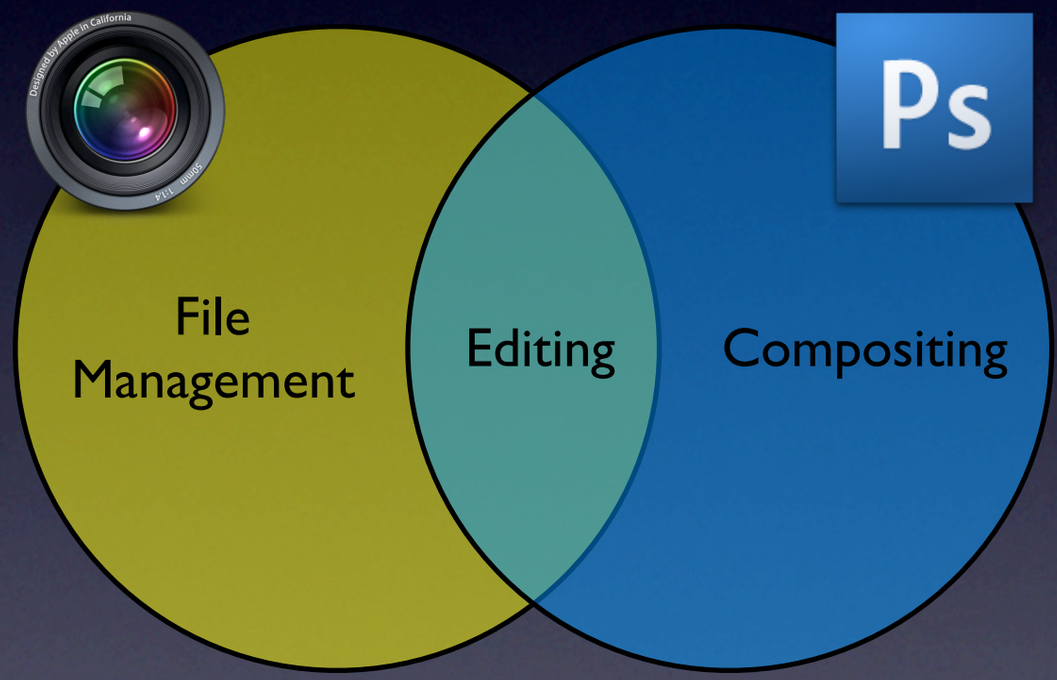
Use these tools for special effects

- Monochrome Mixer: creates a black & white photo, then adjust RGB channels
- Color Monochrome: choose a color, then slide to increase over photo
- Sepia Tone: increase sepia
- Noise Reduction: tone down grainy photos
- Sharpen: lightens/darkens contrast areas
- Edge Sharpen: same as sharpen, but only on extreme contrasts
- Vignette: Create a dark edges around photo



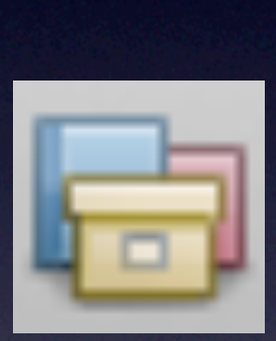
Aperture and PhotoShop

- Aperture tools edit entire photo
- Photoshop has greater range of editing
- PhotoShop as “plug-in” for Aperture!
- Connect in Aperture Preferences
- Images menu > Edit with > External editor



Aperture Workflow

Import



Organize

Edit

Share

Advanced

Sharing Types

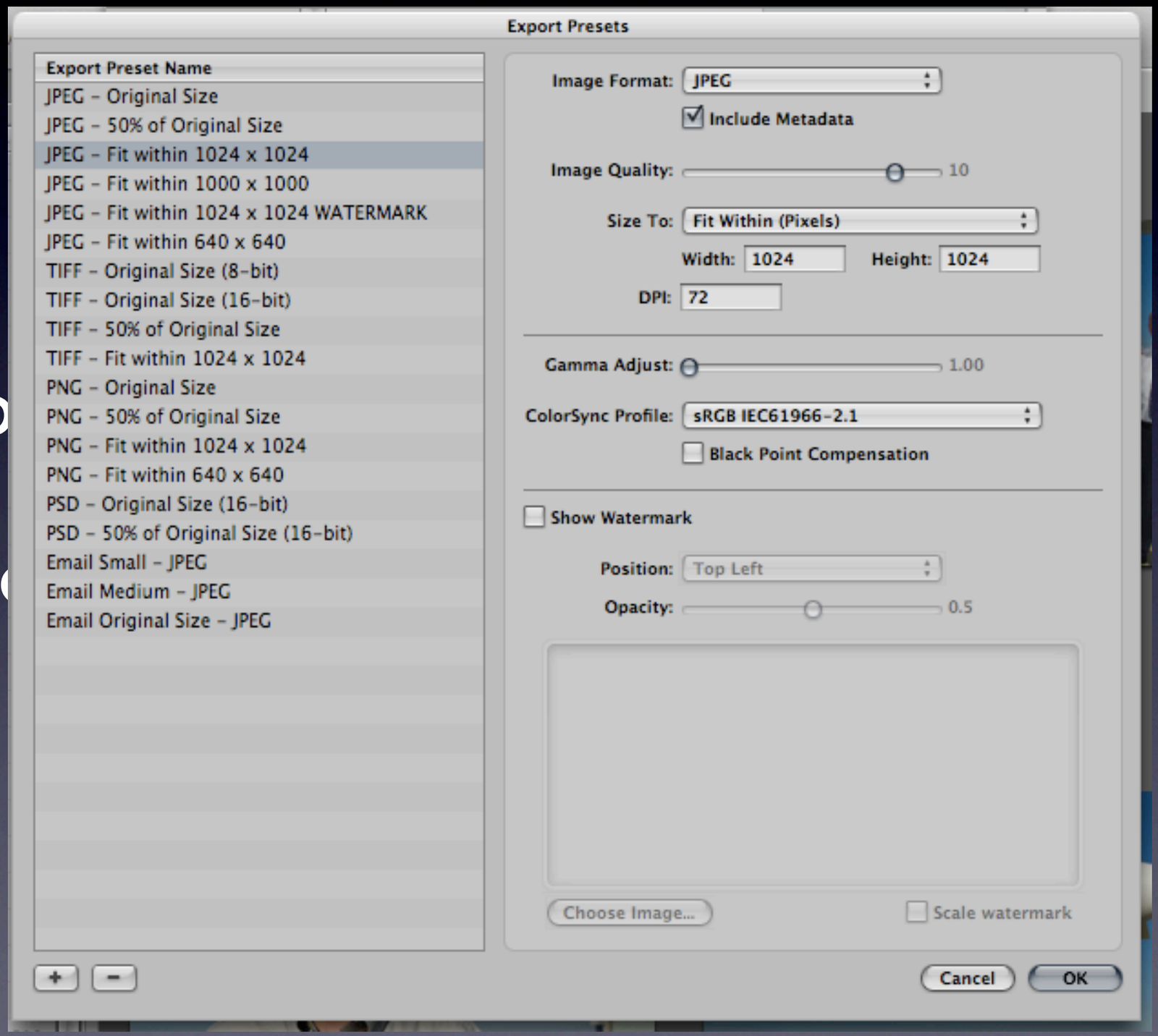
- Export version, master, metadata, project
- Light Table
- Printing/Proofing
- Web Page/Journal
- Book
- Vaults
- Mail photos
- Mobile Me Gallery
- Share with iLife & iWork
- Slide Show

Export Options

- Version: current version
- Master: original photo
- Metadata: keywords, IPTC only
- Project: collection of masters, versions, metadata, albums, books, etc.

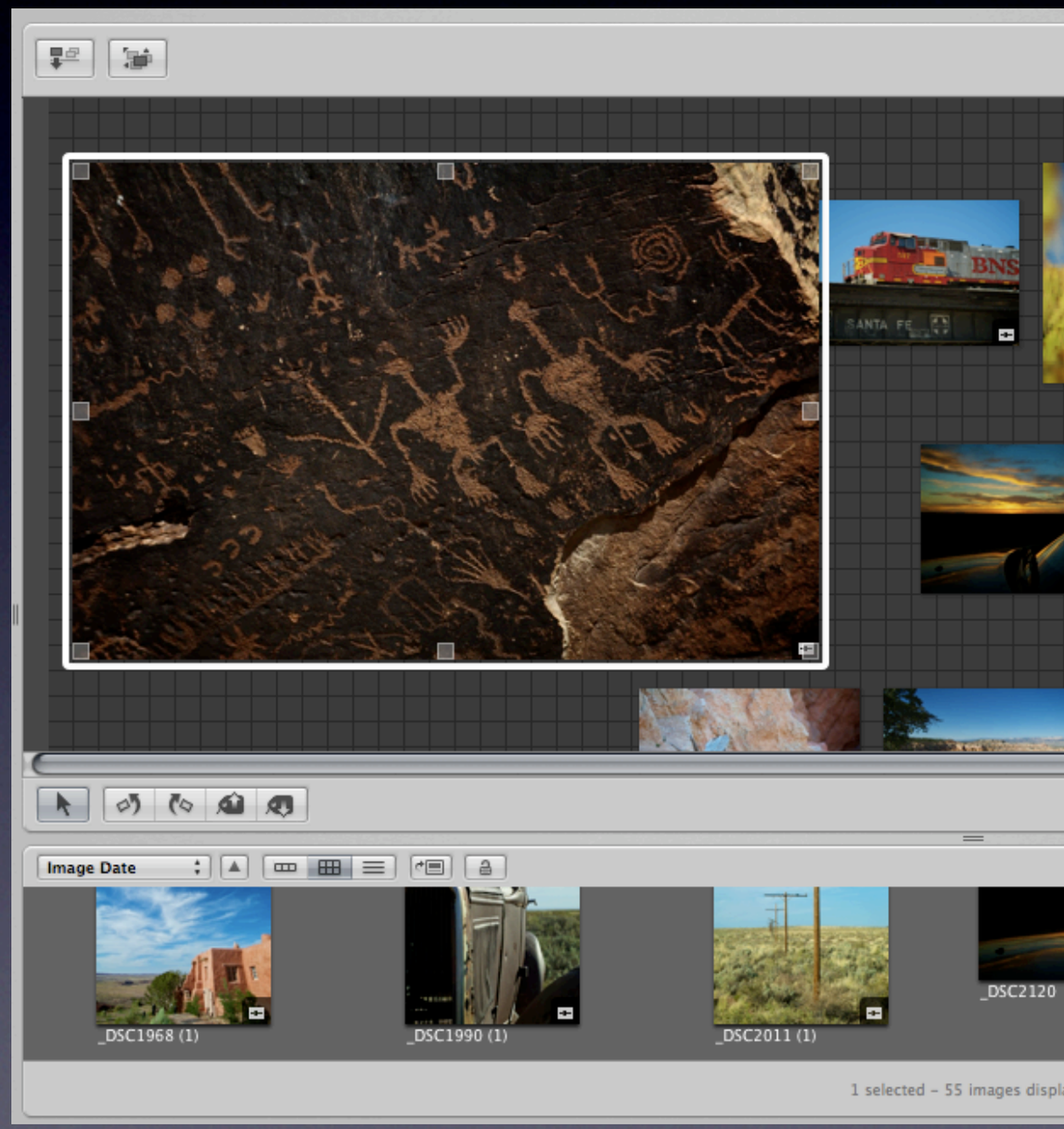
Export Version

- Choose exp
- Create custo



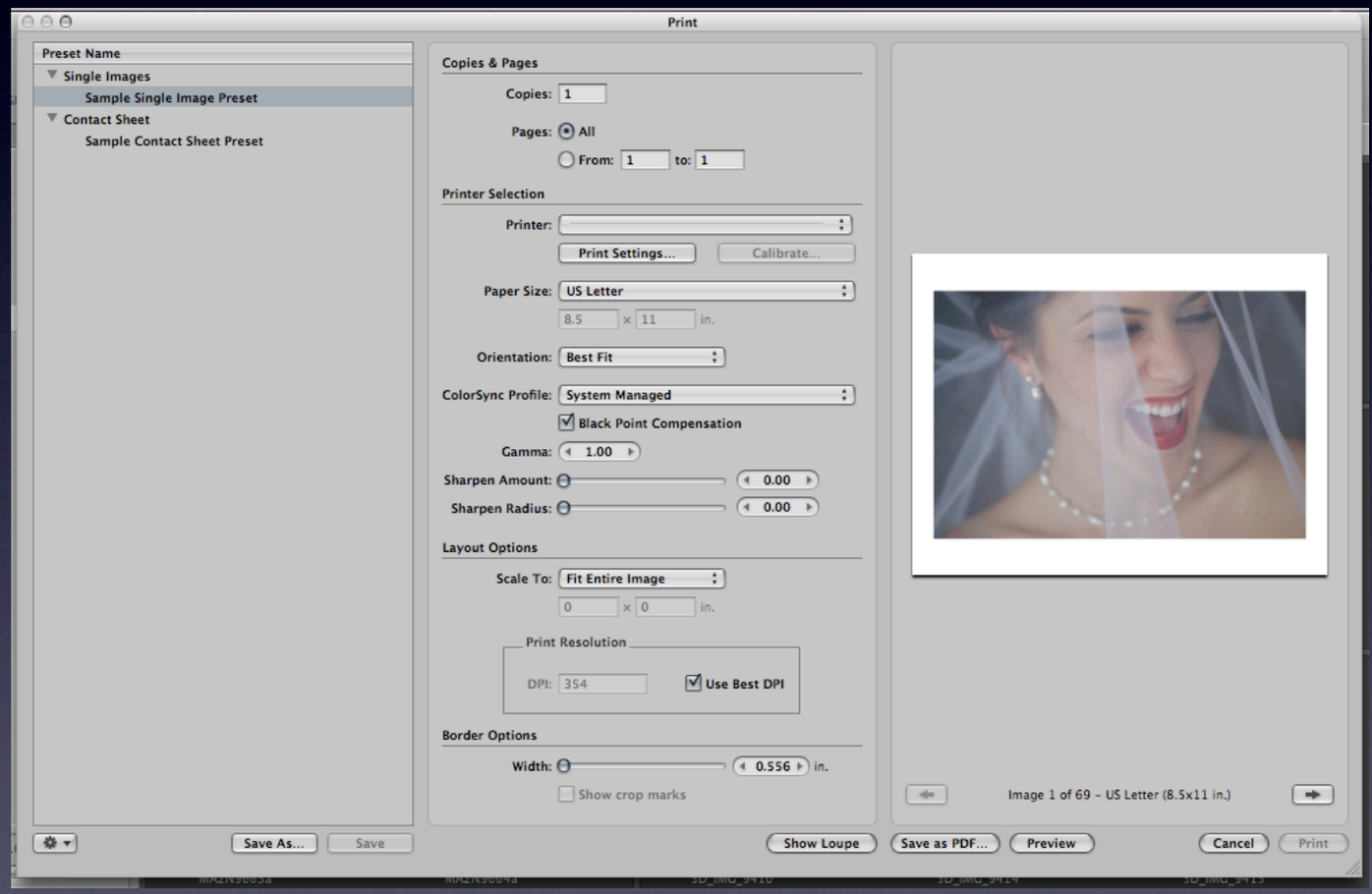
Light Table

- Digital version of a physical light table
- Arrange/resize images to review
- Arrange to create stories



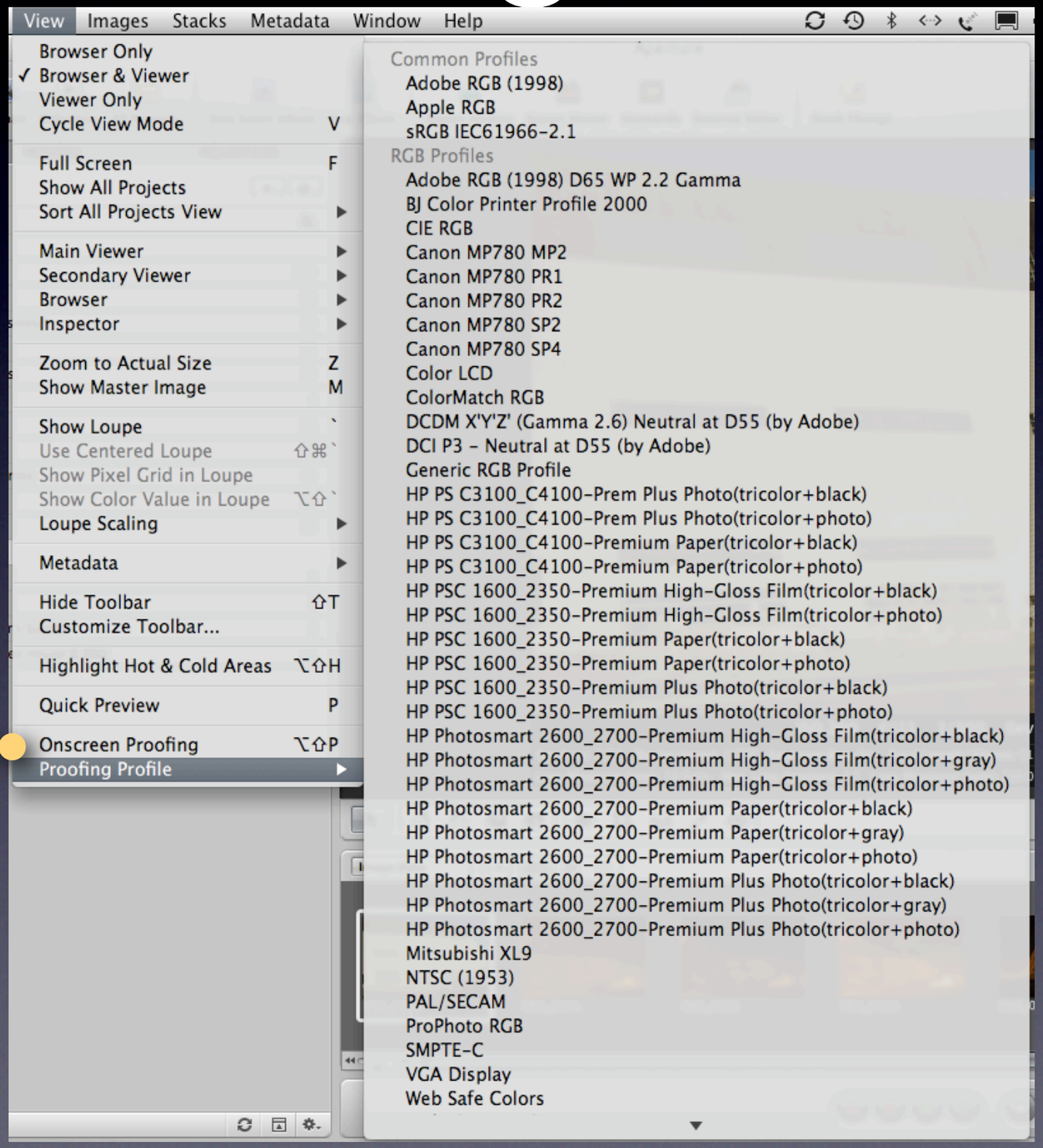
Printing

- Print images or contact sheet
- Create custom pre-sets



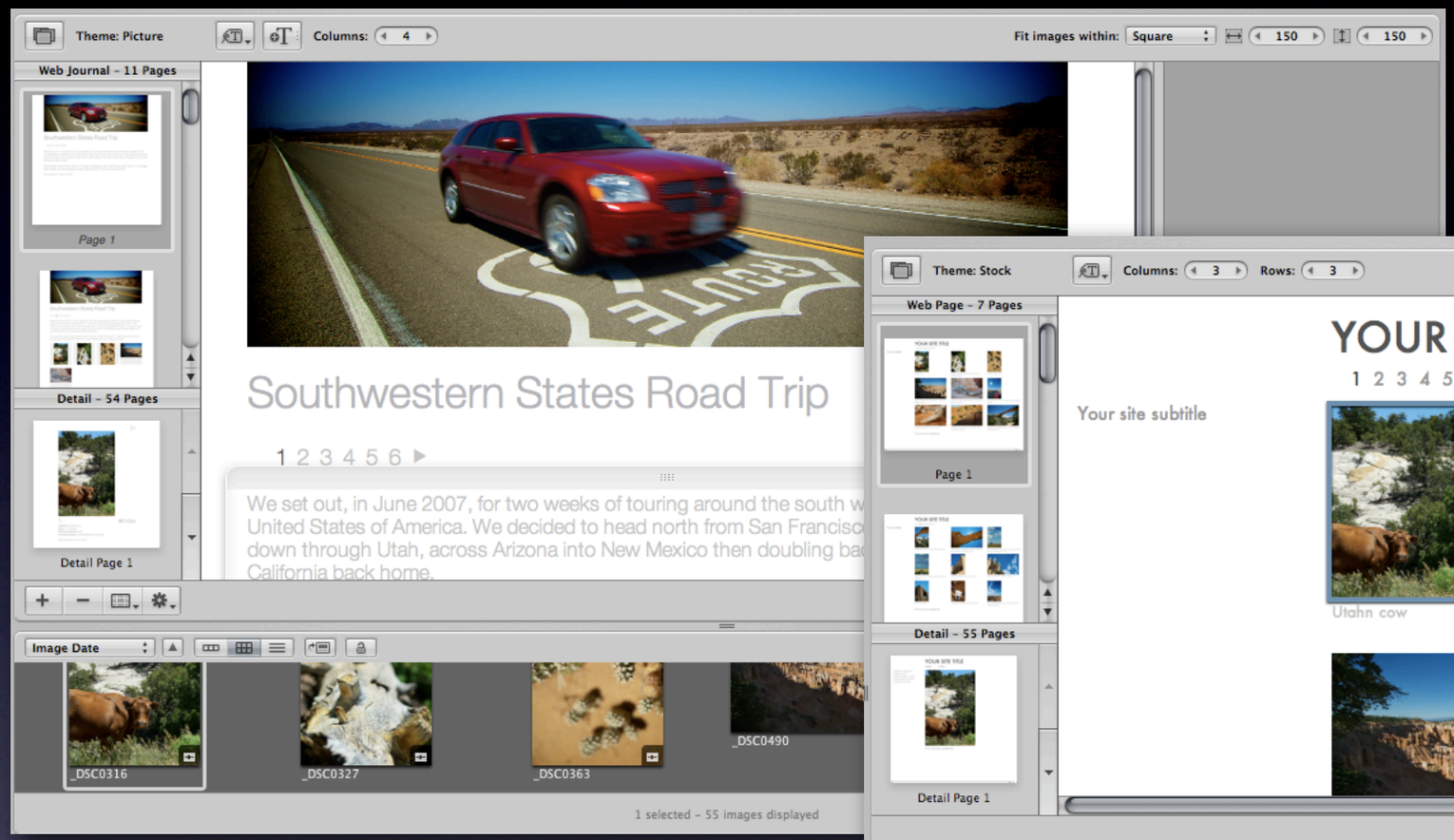
Print Proofing

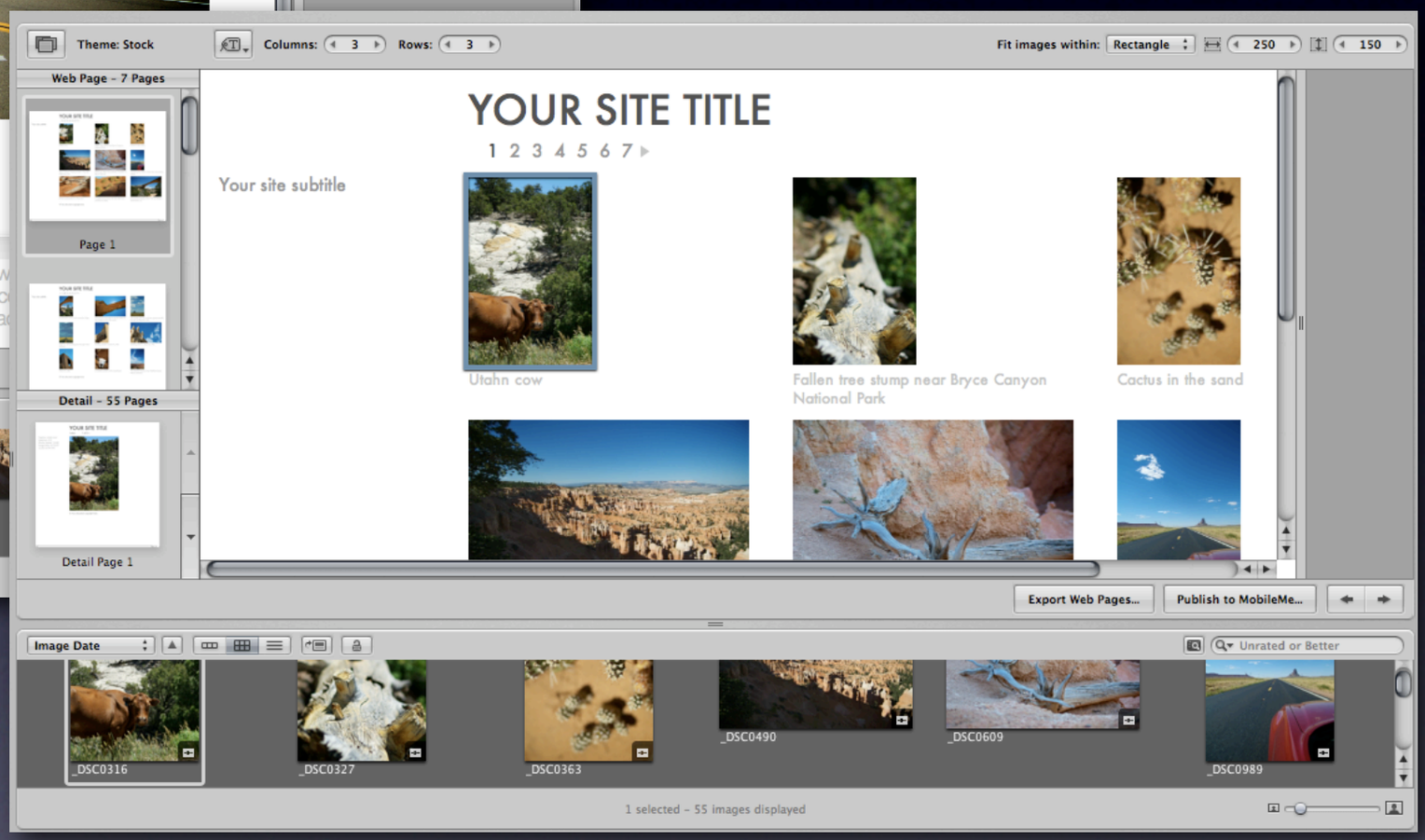
- Transforms image to match printer output
- Select Onscreen Proofing to preview proof



Web Journal:
a Photo blog*

Web Page:
a simple web gallery*

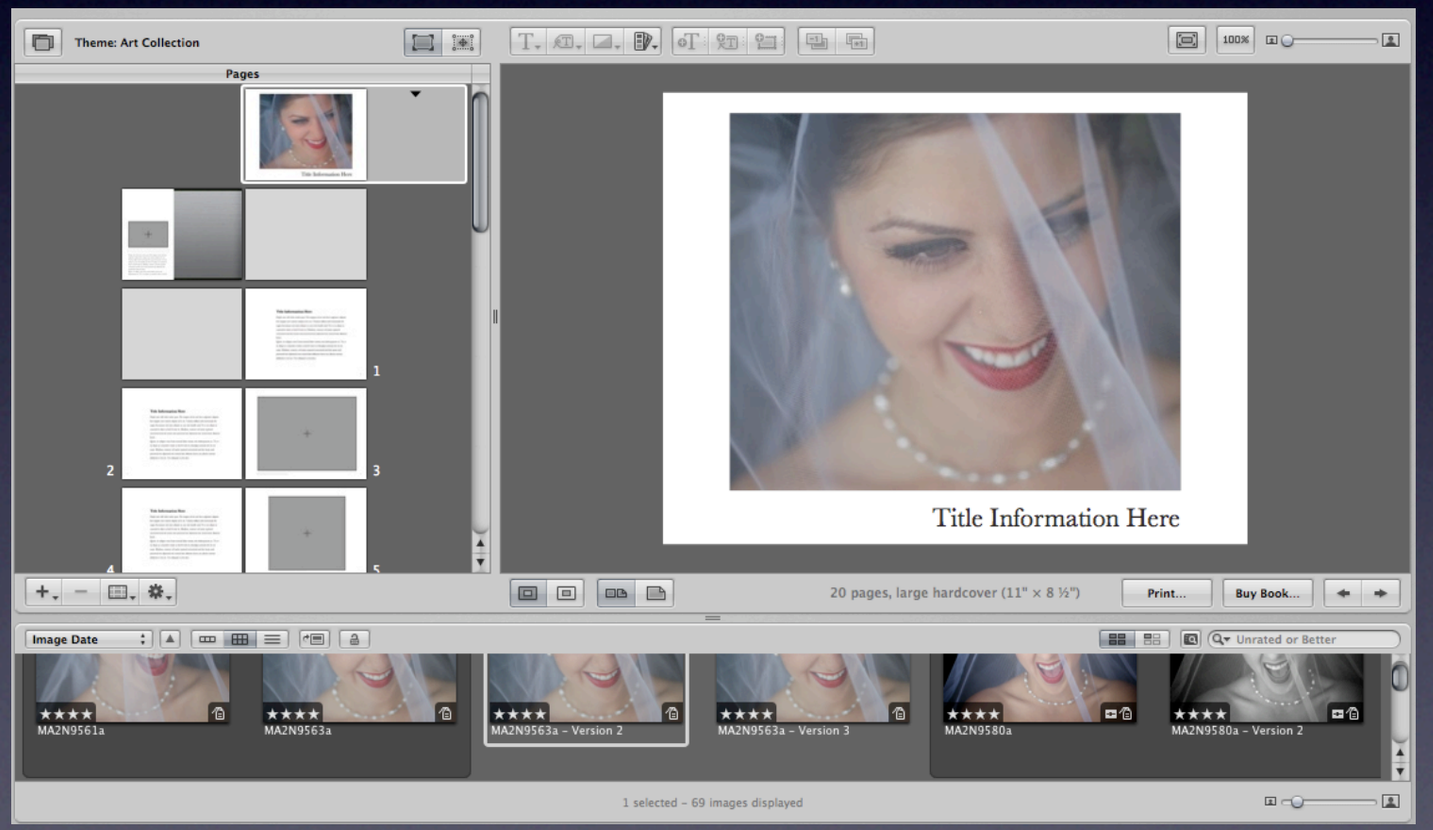




*Both use MobileMe

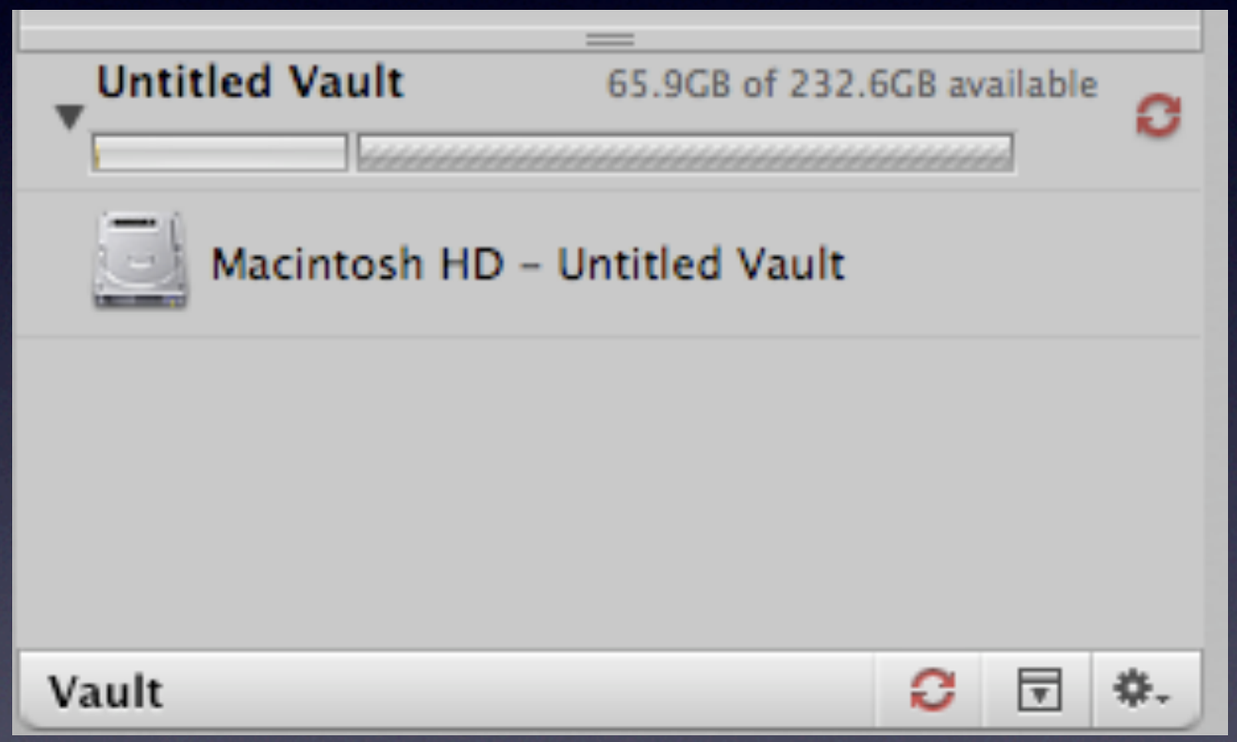
Book

- Similar to iPhoto
- Custom sizes, page content
- Overlapping images and text
- Two page spread



Vaults

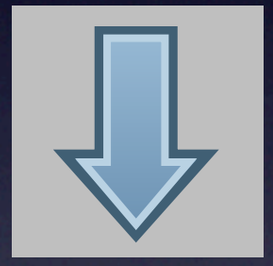
- Built-in backup system
- Managed photos only
- Multiple vaults on multiple drives possible
- Simple, Time Machine-like updates
- Manually run



Other Sharing Options

- Mail: just like other apps
- Mobile Me Gallery: just like iPhoto
- Share with iLife & iWork: Media Browser
- Slide Show: basic, designed for looking at photos, no distractions

Aperture Workflow



Import

Organize

Edit

Share

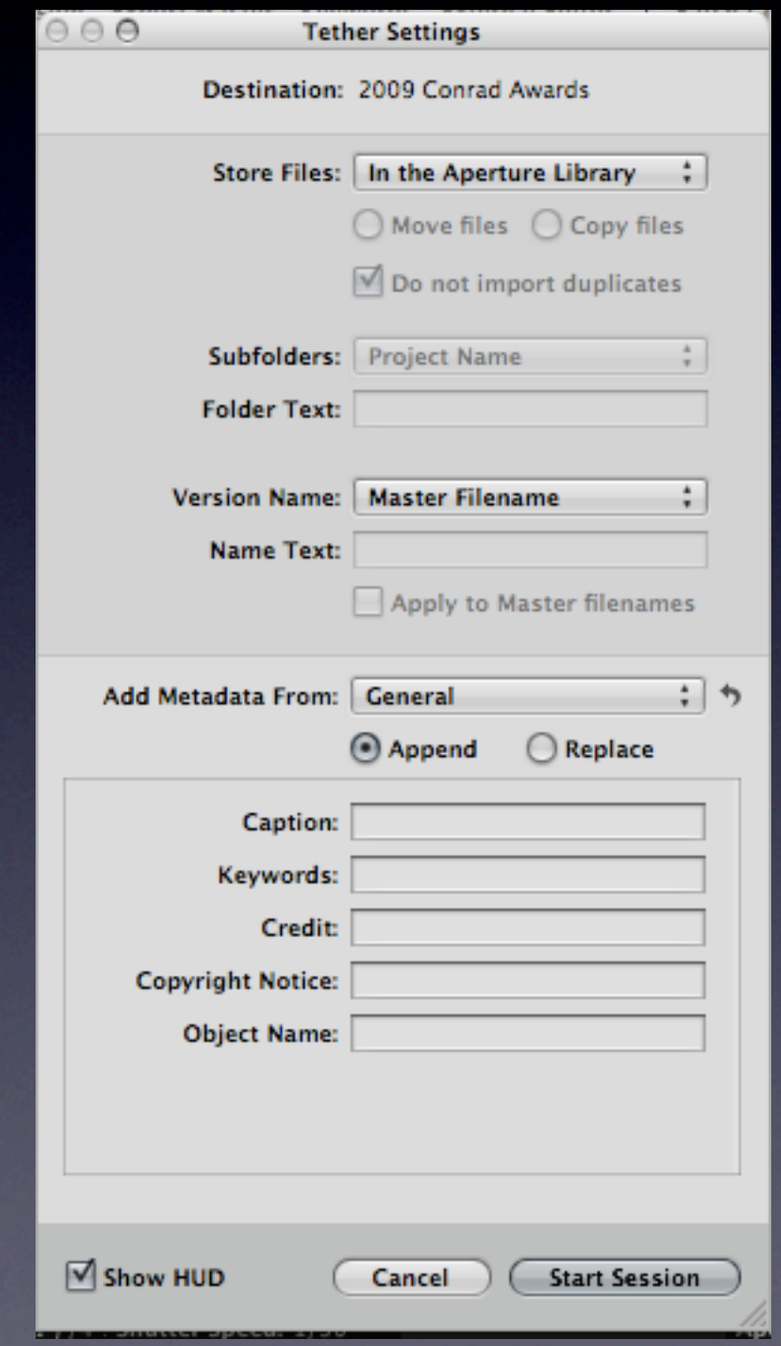
Advanced

Advanced features

- Tethered Shooting
- Automator Actions
- Relocate/Consolidate Masters
- Manage References files
- Export/Import Projects
- Third Party Plug-ins

Tethered Shooting*

- Configure camera for tethered shooting
- Plug in camera to computer
- Choose Project for photos
- File > Tether > Start Session



Automator Actions*

- Dozens of actions available:
  - Auto-export
  - Auto-compress
  - More!

*See more at-- http://automator.us/leopard/aperture/

Masters

Relocate Masters

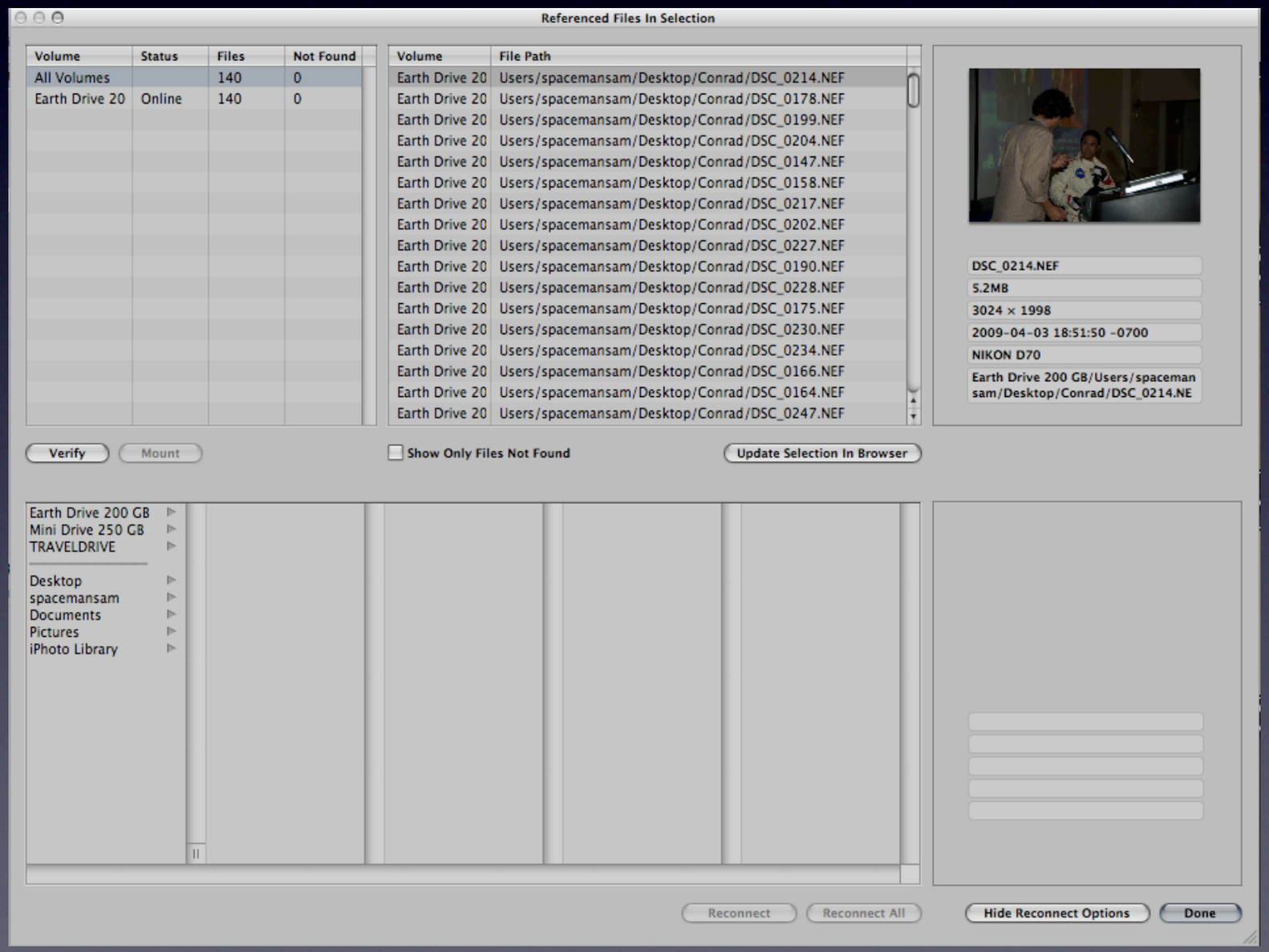
- Move masters outside library
- Relocate referenced files

Consolidate Masters

- Copy or move master into Library

Manage Referenced Files

Help find missing Master photos



Import / Export Projects

- Creates a complete package
- Masters, versions, metadata, albums, books, etc.
- Use to share projects
- Create a travel library!

Third-Party Plugins

- Dozens of enhancements:
- Filters & effects (Hydra HDR)
- Noise & Lens correction (Noise Ninja)
- Export (flickr, facebook)
- File Transfer (YouSendIt)
- Integration (Aperture to Final Cut Pro)
- Output (BurnToDisc)
- Automation (ApertureAssistant)
- Book/Web Themes

In-Class Project

- Practice importing photos
- Organize using the tools we discussed
- Edit the best photos using Aperture adjustments
- Create a slideshow of the photos
- Create a Book; edit the contents
- Export the photos; create a custom export preset
- Export the Project