

# Workflow Fundamentals

by  
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Presented to  
NVPC

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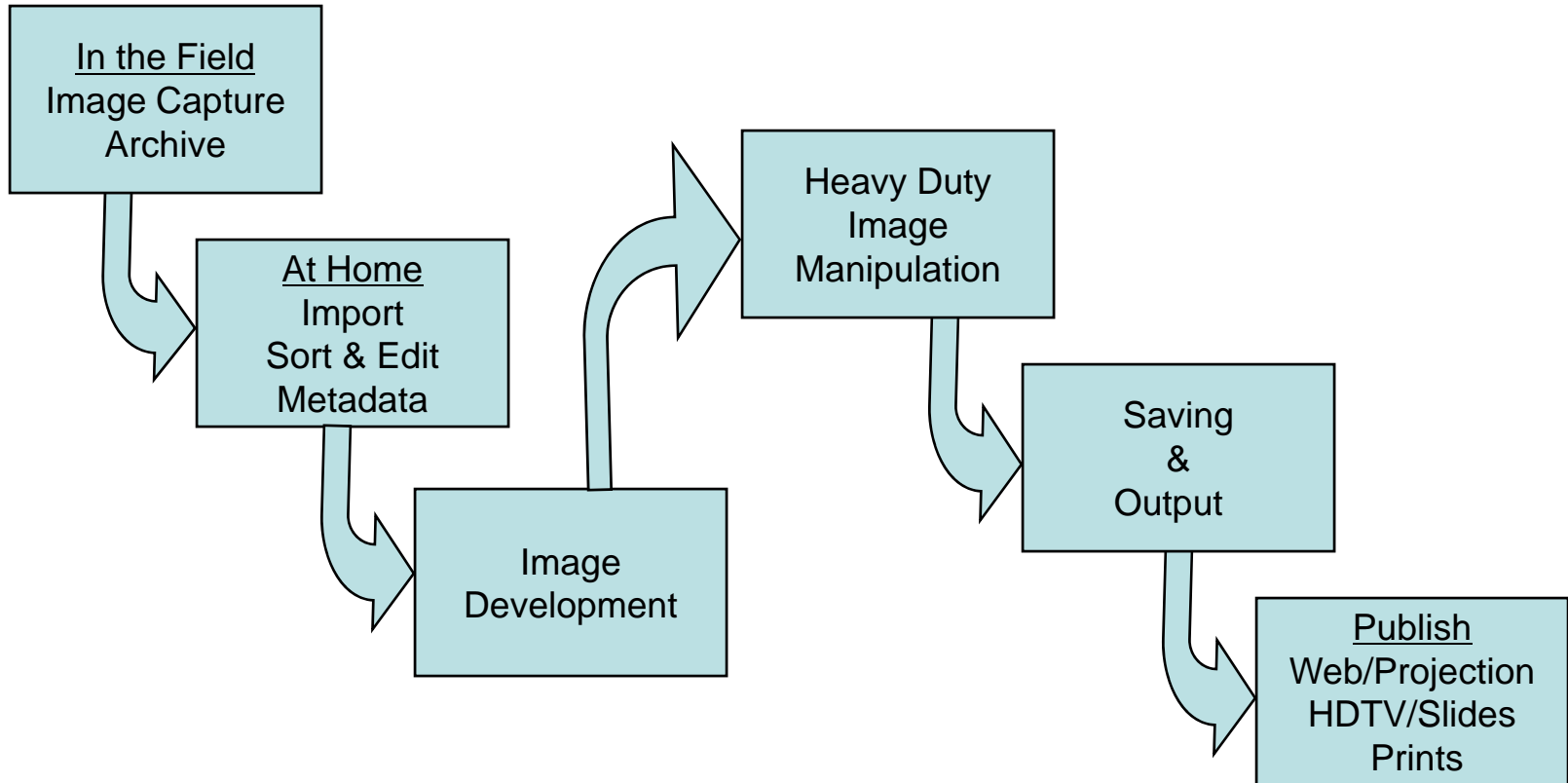
# The Purpose of a Good Workflow

- Organize photos and identifying information so you can find the “ONE” later
- Efficient procedure for sorting and dumping images
- Archiving and backing up your images to prevent catastrophic loss some day
- Storing images efficiently as you process

# My Workflow Based on the Following

- I shoot Nikon and store both JPEG and RAW in the field
- Mostly a weekend shooter
- Take 2 or 3 multi-week photographic vacations per year and shoot 1000 images/wk
- My focus is on large sized print output
- Secondary interest is large (30 to 60 minute) slide shows with music formatted for HDTV

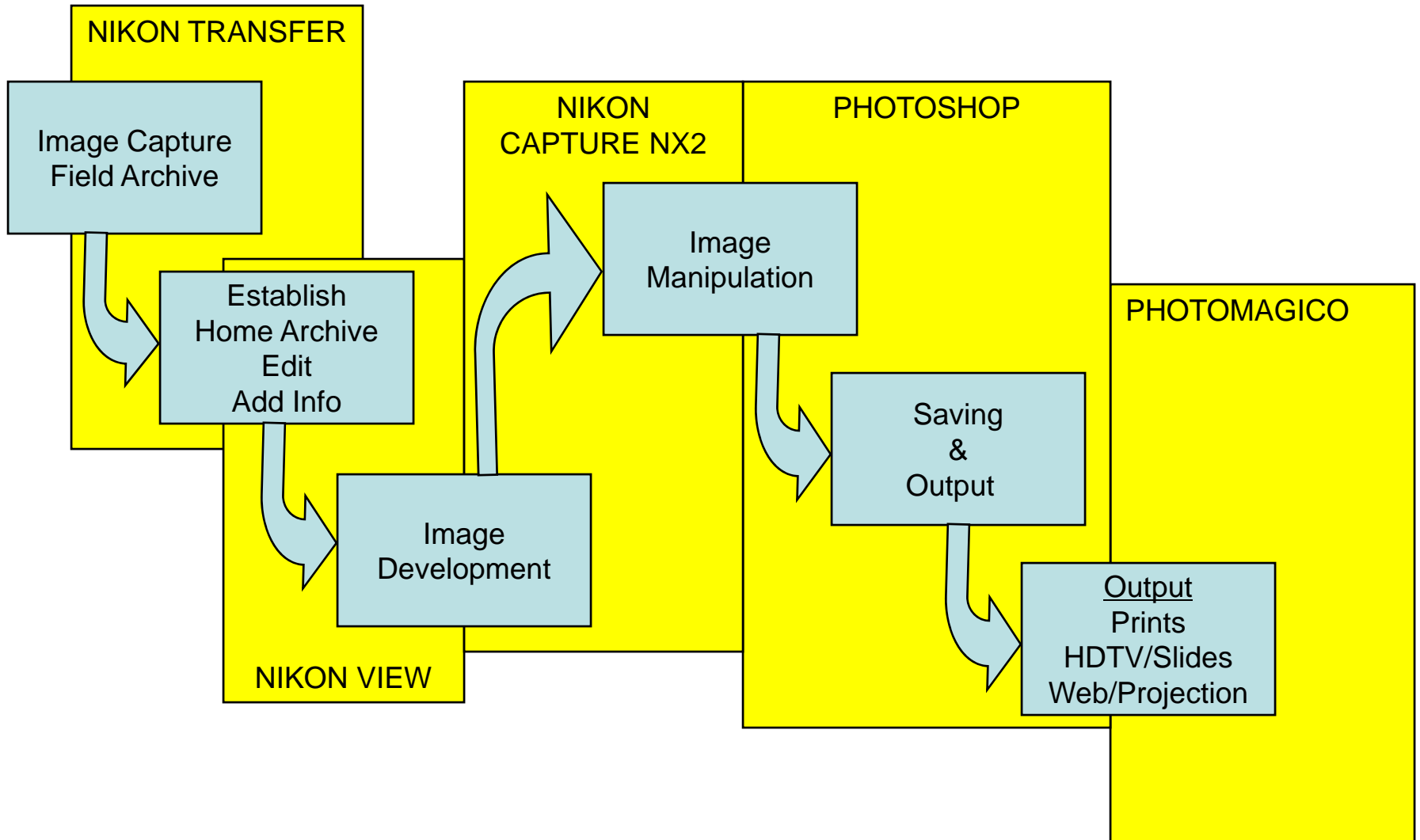
# Generic Workflow



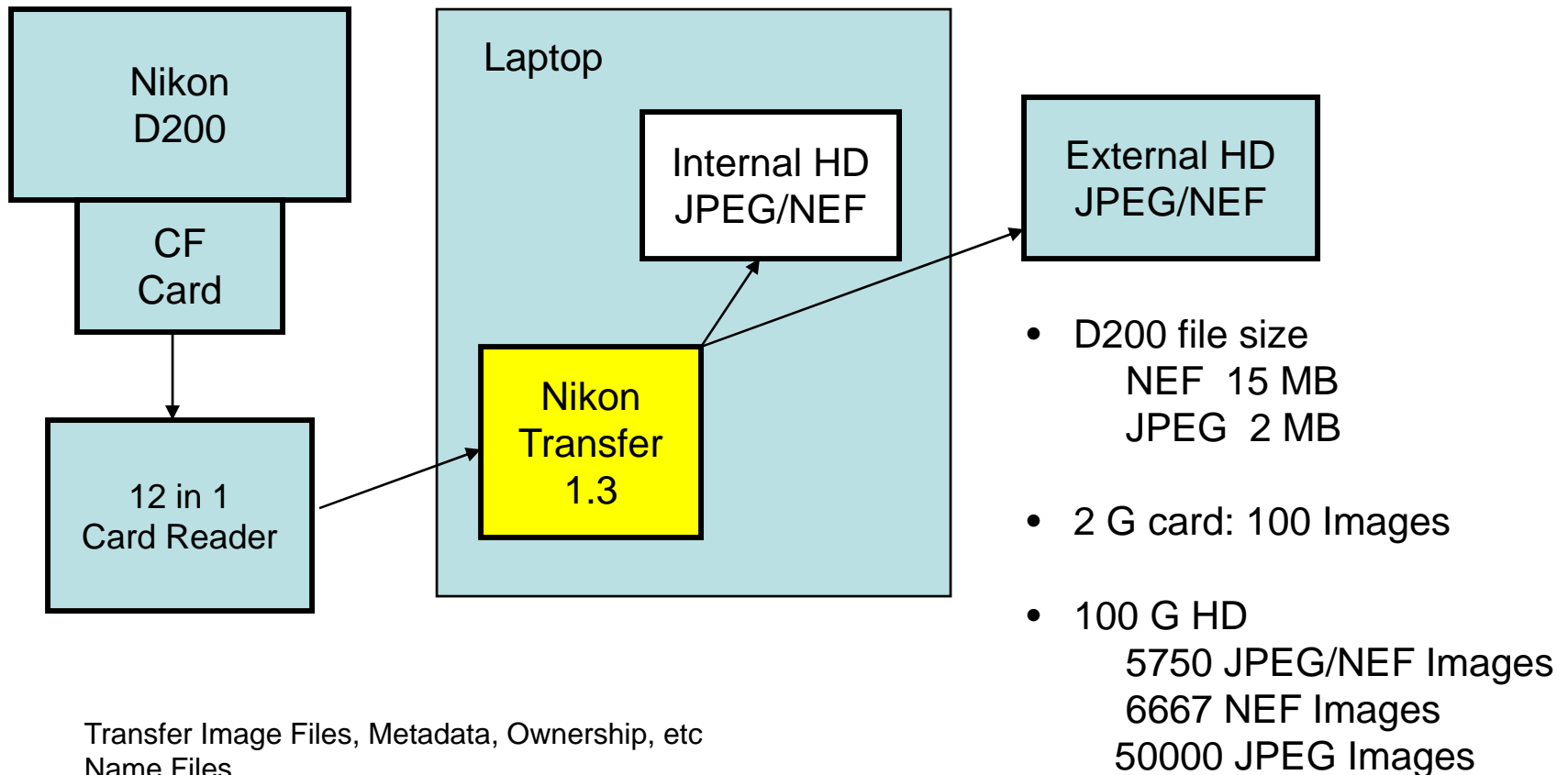
# Tool Inventory/Capability

	Nikon Transfer	Canon Zoom/ Image Browser	Breeze Browser PC Only	Picassa	Bridge	Nikon View	Nikon Capture NX2	PS w ACR	Photomechanic	Lightroom	Aperture 2	Photomagico(M) Photoshow (P)
Import	✓	✓	✓ PRO	✓	✓				✓	✓	✓	
Home Archive Sort/Edit Metadata			✓	✓	✓	✓			✓	✓	✓	
Initial Image Development RAW		✓ CR	✓	✓	Open ACR	✓	✓	✓		✓	✓	
Full Image Development Image Manipulation							✓	✓		✓ ?	✓ ?	
Saving/Output	N/A											
Publish			✓	✓ WEB			✓	✓	✓ WEB +	✓	✓	✓

# My Workflow Tools



# My Workflow: In the Field



Transfer Image Files, Metadata, Ownership, etc  
Name Files  
Append Location

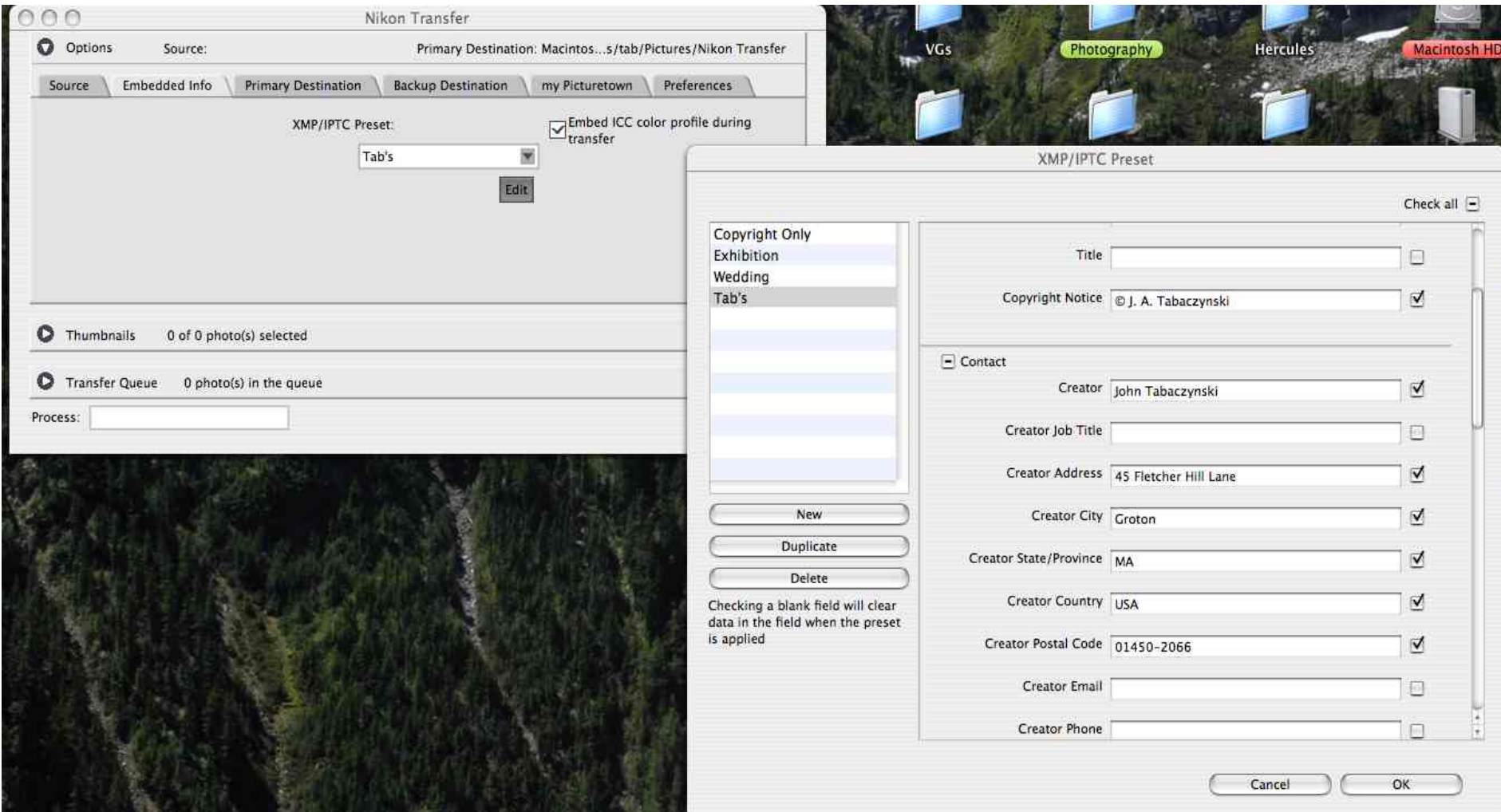
- Keep a field log w day-by-day info; location, features, flora/fauna etc.
- Each card goes to a separate folder dated YYMMDD#card using first image date
- Once Info transfer is confirmed, erase the card images and empty trash
- I store a JPEG & NEF, I am considering dropping the JPEG

# Import Demo

- Show 12 in 1 card reader
- Indexing each image
  - + Nikon: \_DSC1234 for JPEG and DSC\_1234 for NEF (Raw)
  - + Unique ID limited to the first 9999 images
  - + DSC can be changed in the camera shooting menu
- Use a helpful file name
  - + Look at Sto-It “August Camp” files
  - + Initially: YYMMDD#C based on first image, then break down into daily files
  - + Open TRANSFER
- Show & discuss Metadata
  - + EXIF (Camera data)
  - + File properties
  - + IPTC (Copyright, Owner, “Job ID”, location, etc)
- Compare to Bridge import



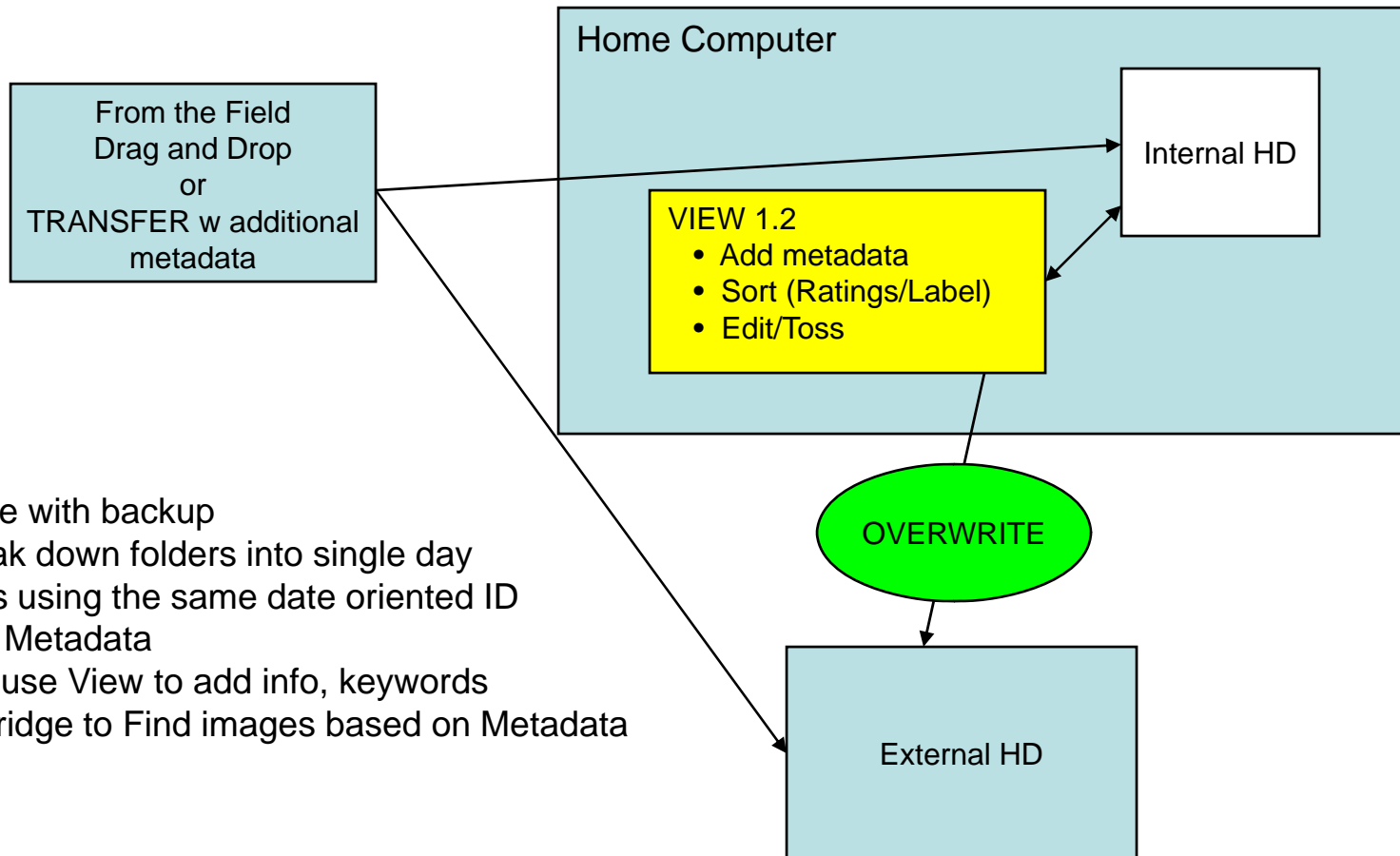
# Transfer is used to bring images off the card and append initial Metadata



# First Steps at Home

- Add info so you can find “THE IMAGE” later
  - Naming conventions
  - Metadata
  - Global file insert, subset insert
  - + Nikon Transfer, View, Photo Mechanic, Aperture, Picasa
- **Sorting, editing (dump the junk)**
  - + Nikon View, Bridge, Photo Mechanic, Lightroom, Picasa
- **Archiving**
  - + Hot storage
    - External HDs
  - + Cold storage
    - DVDs

# First Steps at Home



- Store with backup
- Break down folders into single day folders using the same date oriented ID
- Add Metadata
  - + I use View to add info, keywords
  - + Bridge to Find images based on Metadata

# First Steps Demo

- Show metadata & ITPC for both Bridge and View
  - + File/Camera
  - + XMP/IPTC
- Bridge reads View metadata, View cannot read all Bridge metadata!
- Finding stuff
  - + Bridge ▶ Edit ▶ Find
  - + View ▶ out of luck, use Mac Finder
  - + High claims for PhotoMechanic
- Show ratings, label

# Using View to Insert Metadata

ViewNX - /Users/tab/Desktop/Digital Workshop:NVPC/Workflow/Workflow examples/ex2 cardfull

Nikon Transfer   Focus Point   Play Voice Memo   Rotate 90°CW   Rotate 90°CCW   GeoTag   Capture NX 2   Print   Email   my Picturetown   SlideShow   Convert Files

Filter 0 1 2 3 4 5 6 7 8 9   NEF+JPG+NRW+TIF   Sort A.B.C

Selected: \_DSC8770.NEF (15.9 MB) | Filtering Off: 54 images displayed

**File & Camera Information**

Camera Info

- Device: Nikon D200
- Lens: VR 18-200mm F/3.5-5.6G
- Focal Length: 48mm
- Focus Mode: AF-S
- AF-Area Mode: Single
- VR:
- AF Fine-Tune:

Exposure

- Aperture: F/13
- Shutter Speed: 1/640s

**XMP/IPTC Information**

Title

Copyright Notice © J. A. Tabaczynski

**Contact**

- Creator J. A. Tabaczynski
- Creator Job Title
- Creator Address 45 Fletcher Hill Lane
- Creator City Groton
- Creator State/Province MA
- Creator Country USA
- Creator Postal Code 01450-2066
- Creator Email jngtab@charter.net
- Creator Phone 978-449-0263
- Creator Website

**Content**

Headline

Reset   Apply

Tag 0 1 2 3 4 5 6 7 8 9   2/54   No queued processes

# Using Bridge to find a slide with Metadata

The screenshot shows the Adobe Bridge interface with search results for the keyword "mountains". The main content area displays a grid of 12 image thumbnails, each with a star rating and a filename. The thumbnails are arranged in three rows and four columns. The first row contains four thumbnails: three with 2 stars and one with 4 stars (highlighted). The second row contains four thumbnails: two with 4 stars and two with 3 stars. The third row contains four thumbnails: two with 2 stars and two with 3 stars. The right-hand side of the interface shows a preview of the selected image, a metadata panel with a "Keywords" tab, and a list of keywords including "mountains" (checked).

Search Results

Search Results

Find Criteria: Keywords contains "mountains" in "ex2 cardfull"

Search Again

Stars: ★★, ★★★, ★★★★

Files:

- \_DSC8770.JPG
- \_DSC8770.NEF
- \_DSC8771.JPG
- \_DSC8771.NEF
- \_DSC8772.JPG
- \_DSC8772.NEF
- \_DSC8774.JPG
- \_DSC8774.NEF
- \_DSC8775.JPG
- \_DSC8775.NEF
- \_DSC8777.JPG
- \_DSC8777.NEF

Preview

Metadata Keywords

Assigned Keywords: mountains

- Events
  - Birthday
  - Graduation
  - Wedding
- People
  - People
- Places
  - New York
  - San Francisco
- Other Keywords
  - family
  - mountains
  - urban
  - wildlife

Located In /Users/tab/Desktop/Digital Workshop:NVPC/Workflow/Workflow examples/ex2 cardfull

# Light table in Nikon View for Sort/Edit

The screenshot displays the Nikon View software interface, showing a light table view of 12 photos. The interface includes a top toolbar with various functions like Nikon Transfer, Focus Point, Play Voice-Memo, Rotate 90°CW, Rotate 90°CCW, GeoTag, Capture NX 2, Print, Email, my Picturetown, SlideShow, and Convert Files. Below the toolbar is a filter bar with a color-coded filter (0-9) and a star rating filter. The main area shows a grid of 12 photo thumbnails, each with a red '1' icon, a star rating, and a filename. The photos are arranged in three rows and four columns. The first row shows four photos of snow-capped mountains. The second row shows four photos of a grassy hillside with people. The third row shows four photos of a mountain peak. The left sidebar contains a 'Folders' panel with a tree view of folders, including 'Recent Transfer', 'Primary Destination', 'Backup Destination', 'Desktop', 'Pictures', and a 'Workflow' folder containing 'Workflow examples' and 'ex2 cardfull'. The bottom status bar shows 'Tag 0 1 2 3 4 5 6 7 8 9', '2/54', and 'No queued processes'.

ViewNX - /Users/tab/Desktop/Digital Workshop:NVPC/Workflow/Workflow examples/ex2 cardfull

Nikon Transfer Focus Point Play Voice-Memo Rotate 90°CW Rotate 90°CCW GeoTag Capture NX 2 Print Email my Picturetown SlideShow Convert Files

Filter 0 1 2 3 4 5 6 7 8 9 NEF+JPG+RAW+TIFF Sort ABC

Drag favorite folders here:

- Recent Transfer
- Primary Destination
- Backup Destination
- Desktop
- Pictures
- Workflow
  - Workflow examples
    - ex1 snow
    - ex2 cardfull
    - ex3 Mtn Lake
    - ex4 mtn scene
    - ex5 shadow
- Hercules
- Lab Admin/Security memos
- LaCie Storage Manuals
- M&S
- MD Stuff
- MDA
- Outdoors
- PERU
- Photography
- Presentations/VGs
- SC Topics
- Sierra Club
- SN Topics
- SOFTWARE/UPDATES
- TAB Docs
- TV
- VGs
- White Papers
- Desktop (old)
- Dinner Talk
- Documents
- Documents (tab old)
- Energy/Climate

Metadata

Quick Adjustment

Selected: \_DSC8770.NEF(15.9 MB) | Filtering Off: 54 images displayed

1 \_DSC8770.JPG ★★

1 \_DSC8770.NEF ★★

1 \_DSC8771 ★★

1 \_DSC8772 ★★

1 \_DSC8773 ★★

1 \_DSC8774 ★★

\_DSC8775 ★★

\_DSC8776

1 \_DSC8777 ★★

1 \_DSC8778 ★★

\_DSC8779.JPG ★★

\_DSC8779.NEF ★★

Tag 0 1 2 3 4 5 6 7 8 9 2/54 No queued processes

# Using Bridge in light table mode

The screenshot displays the Adobe Bridge interface in light table mode. The main workspace is filled with a grid of image thumbnails, each with a star rating below it. The thumbnails show various landscape photos, including snow-capped mountains and green hills. The right-hand side of the interface features a 'Preview' panel showing a larger version of the selected image, along with 'Metadata' and 'File Properties' panels. The 'Metadata' panel shows technical details like f/13.0, 1/320, 2592 x 3872, and ISO 200. The 'File Properties' panel lists details such as filename, document type, and creation date. The left sidebar contains a 'Favorites' panel with a folder tree, a 'Filter' panel with sorting options, and a 'Labels' panel with a list of labels and counts.

**Content Panel (Grid of Thumbnails):**

- Row 1: **\_DSC8770.JPG** (★★), **\_DSC8770.NEF** (★★), **\_DSC8771.JPG** (★★★), **\_DSC8771.NEF** (★★★)
- Row 2: **\_DSC8772.JPG** (★★★), **\_DSC8772.NEF** (★★★), **\_DSC8773.JPG** (★★), **\_DSC8773.NEF** (★★★★)
- Row 3: **\_DSC8774.JPG** (★★★), **\_DSC8774.NEF** (★★★), **\_DSC8775.JPG** (★★), **\_DSC8775.NEF** (★★)
- Row 4: **\_DSC8776.JPG** (★★), **\_DSC8776.NEF** (★★)

**Preview Panel:**

**Metadata:**

- f/13.0 1/320 2592 x 3872
- 1 15.92 MB
- AWB ISO 200 RGB

**File Properties:**

- Filename: **\_DSC8773.NEF**
- Document Type: Camera... image
- Application: ViewNX 1.2 M
- Date Created: 7/20/0...7:57 PM
- Date File Modified: 2/8/09,...5:35 PM
- File Size: 15.92 MB
- Dimensions: 2592 x 3872
- Dimensions (in Inches): 10.8" x 16.1"
- Bit Depth: 16
- Color Mode: RGB

**IPTC Core:**

- Creator: J. A. T...ynski
- Creator: Job Title
- Creator: Address: 45 Fletcher Hill Lane
- Creator: City: Groton
- Creator: State/Province: MA
- Creator: Postal Code: 01450-2066
- Creator: Country: USA
- Creator: Phone(s): 978-449-0263

**Labels Panel:**

Label	Count
No Label	50
Red	52
No Rating	30
★★	50
★★★	22
Camera Raw Image	51
JPEG file	51
No Keywords	66
hiking	7
mountains	12
wildlife	22
7/22/08	22
7/21/08	48
7/20/08	32
Yesterday	1
2 days ago	2

102 items, 7 hidden, 1 selected



# My Steps

- Take each YYMMDDC# and break into individual day folders YYMMDD # identifier
- Insert missing metadata
  - + Job ID: August Camp 08, Peru 07, Kris wedding, Event blah blah
  - + Keywords: Family, friends, models, people, portrait, wildlife, flowers, mountains, seashore, scenic, urban, birds, winter, fall
  - + Subject: black bear, grizzly bear
  - + Country
  - + Location
  - + Category

# Initial Image Development

- During edit phase use Quick Fix feature of Nikon View
  - + Exposure correction
  - + WB
  - + Contrast/Sharpness
  - + D-lighting
  - + Color rendering
- Bridge: File ▶ Open in Camera Raw
- View and Bridge do NOT see each other's edits through the Raw file
  - + To get Nikon Raw edits into the Adobe world must go through a TIFF (or other) file

# DEMO: Initial Development

- Show Quick Fix capability
  - + Snow
  - + Mtn Lake
  - + Deep Shadow
  - + Mtn Meadow
- Show Bridge Raw editing capability

# Using Quick Adjust in Nikon View

ViewNX - /Users/tab/Desktop/Digital Workshop:NVPC/Workflow/Workflow examples/ex1 snow

Nikon Transfer Focus Point Play Voice Memo Rotate 90°CW Rotate 90°CCW GeoTag Capture NX 2 Print Email my Picturetown SlideShow Convert Files

Filter 0 1 2 3 4 5 6 7 8 9 NEF+JPG+NRW+TIF Sort ABC

Quick Adjustment Selected: \_DSC1196.NEF (15.4 MB) | Filtering Off: 2 images displayed

Exposure Comp. 1.7 EV

White Balance Shade

Fine Adjustment 8129

Tint 0

Picture Control Recorded Value Launch Utility

Sharpness 0

Contrast 4

Highlight Protection 0


Shadow Protection 0

D-Lighting HS None

Color Booster 51

People Nature

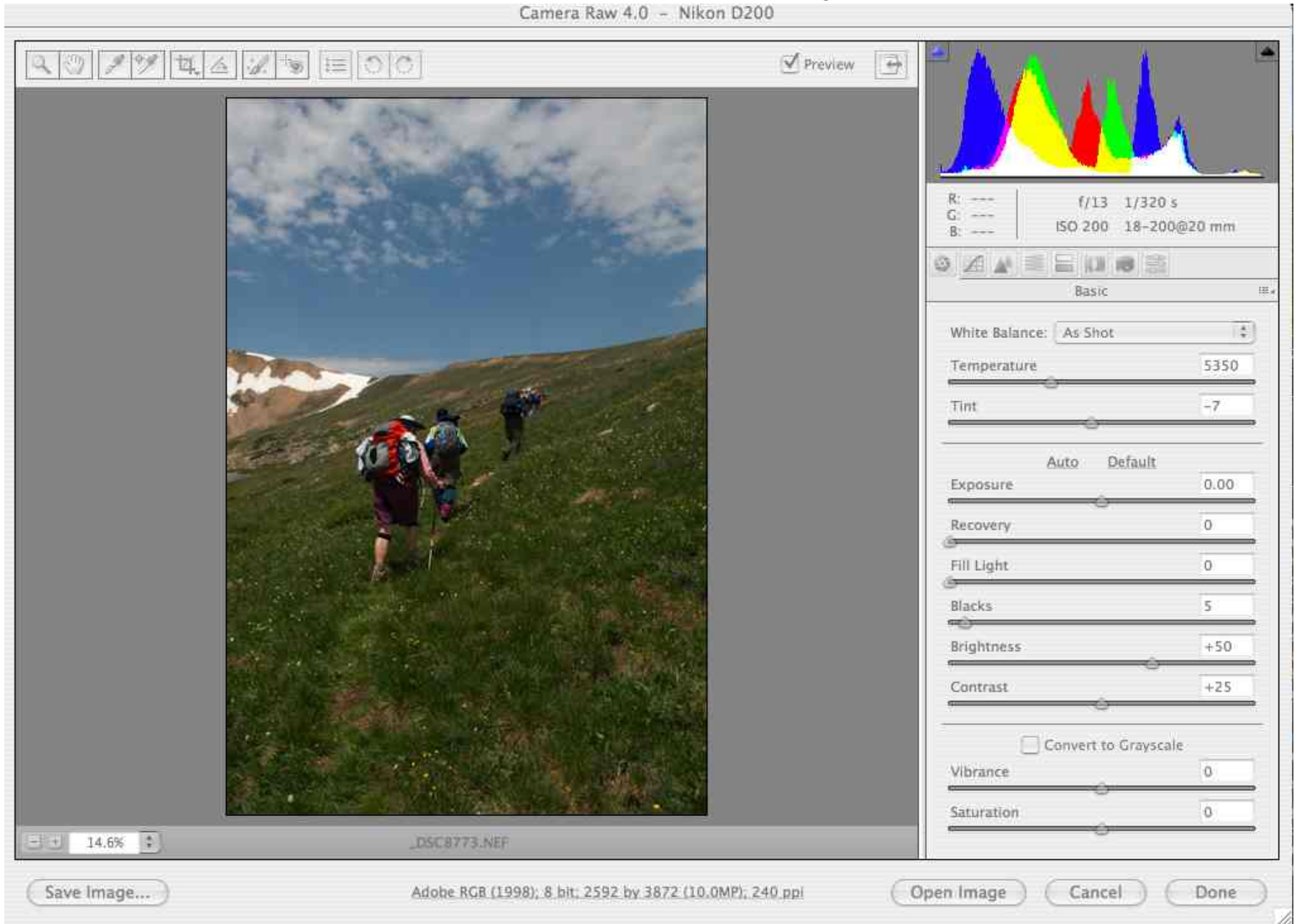
Reset Apply



2/2 No queued processes

# Adobe Camera Raw can Adjust NEF files

Camera Raw 4.0 - Nikon D200



The screenshot displays the Adobe Camera Raw 4.0 interface for a Nikon D200. The main window shows a photograph of three hikers with large backpacks ascending a grassy mountain trail. The sky is blue with scattered white clouds. The interface includes a toolbar at the top with various adjustment tools like crop, rotate, and zoom. On the right side, there is a histogram showing the color distribution of the image. Below the histogram, the camera settings are displayed: f/13, 1/320 s, ISO 200, and 18-200@20 mm. The 'Basic' tab is selected, showing various adjustment sliders and checkboxes. The 'White Balance' is set to 'As Shot'. The 'Temperature' slider is at 5350, and the 'Tint' slider is at -7. The 'Exposure' slider is at 0.00, 'Recovery' is at 0, 'Fill Light' is at 0, 'Blacks' is at 5, 'Brightness' is at +50, and 'Contrast' is at +25. There is a checkbox for 'Convert to Grayscale' which is currently unchecked. The 'Vibrance' and 'Saturation' sliders are both at 0. At the bottom of the window, there are buttons for 'Save Image...', 'Open Image', 'Cancel', and 'Done'. The status bar at the bottom indicates the image is in Adobe RGB (1998) color space, 8-bit, with dimensions of 2592 by 3872 pixels (10.0MP) and a resolution of 240 ppi.

White Balance: As Shot

Temperature 5350

Tint -7

Auto Default

Exposure 0.00

Recovery 0

Fill Light 0

Blacks 5

Brightness +50

Contrast +25

Convert to Grayscale

Vibrance 0

Saturation 0

14.6%

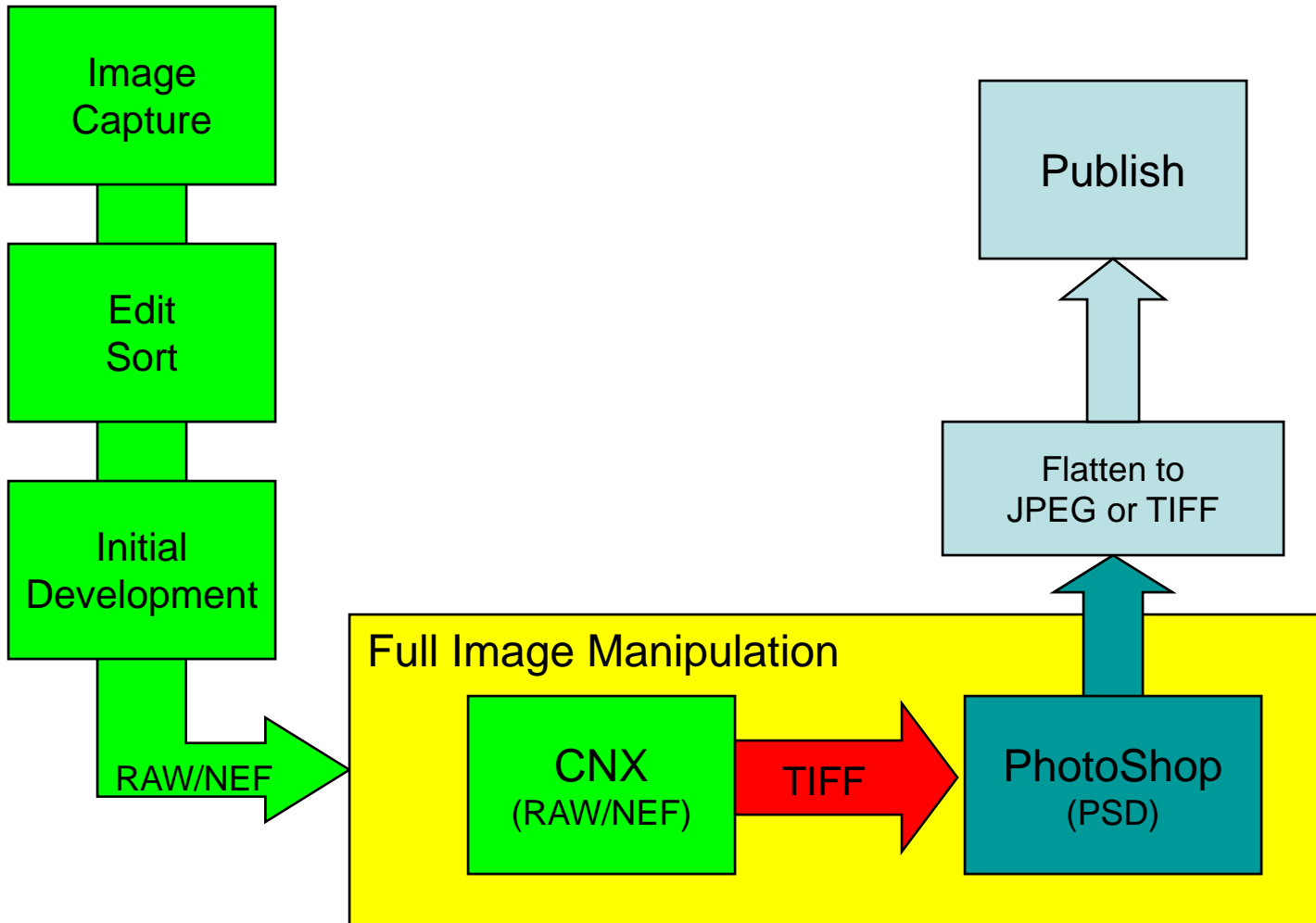
\_DSC8773.NEF

Save Image... Adobe RGB (1998); 8 bit; 2592 by 3872 (10.0MP); 240 ppi Open Image Cancel Done

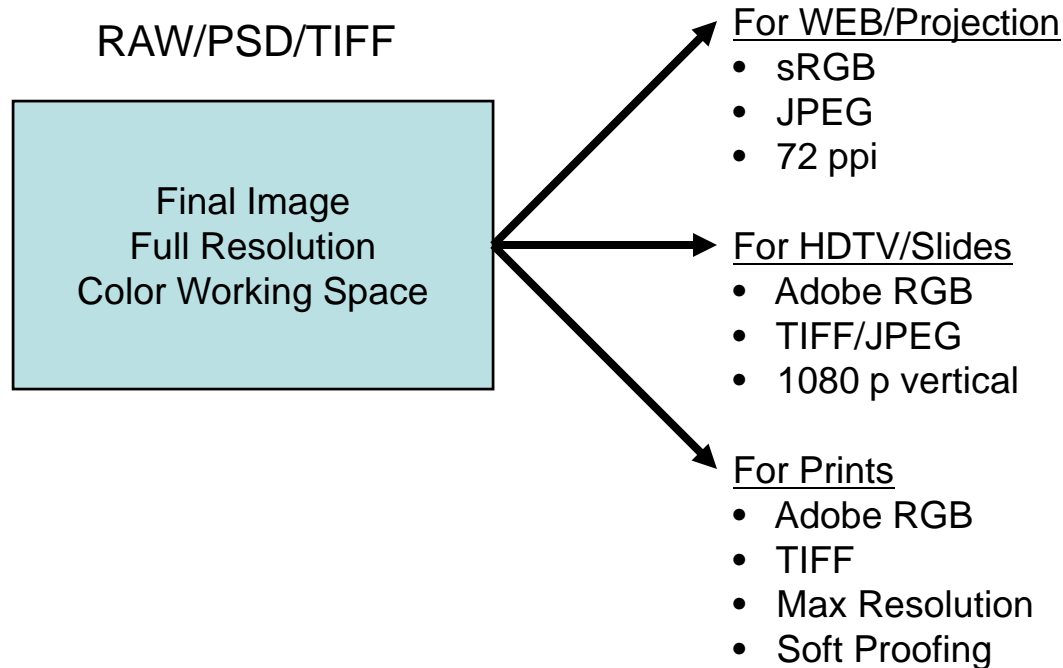
# Image Manipulation

- **Exploit the Heavy Duty Manipulators**
  - + Nikon Capture NX2, Photoshop
- **This stage has its own workflow**
  - + Contrast enhancement via USM
  - + Color correction
  - + Get info from Jason O'Dell's book
  - + Saving the basic corrected image
- **These features will be subjects of future classes**

# File Flow



# Publishing



- Save the original & final image w color profile before final publication steps
  - + Image size
  - + Resolution
  - + Format
  - + Color Space
  - + Output Sharpening



# References

- Jason O'Dell: <http://www.luminescentphoto.com>
- Luminous Landscape: <http://www.luminous-landscape.com/>
- <http://www.imagescience.com.au/Downloads/printerTestFiles.html>
- <http://www.outbackphoto.com/workflow/index.html>
- <http://www.digitaldog.net/tips/>
- Norman Koren: <http://www.normankoren.com/>
- Bruce Fraser
  - + <http://www.creativepro.com/articles/author/127446>
  - + Real World XXXX series of books on PS, CM, etc Search Amazon
- Amazon.com
  - + Search “Photographic workflow”
- Store-it Drive: [pexagontech.com](http://pexagontech.com)
- Nikon Download Center
  - + <http://www.nikonusa.com/Service-And-Support/Download-Center.page>