




How to Edit/Crop Your Digitized Photos

Open the folder from your FLASHDRIVE where you've stored your photos *If you have not already saved your pictures to your flash drive, do so now. The computer will not retain them once it is restarted. **OR download them from Google Drive** if that's where they're stored. If you download your photos from Google Drive, they will be in the Mac's **DOWNLOADS** folder.

- If you followed the *How to use Digitizer/Smart Shooter* Guide you should have 2 different file formats of the same exact photo. In order to move on, you need to decide which one you're moving forward with... but we'll make it easy for you.

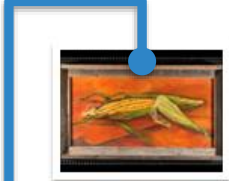


SSP_10.JPG

If ...

- you are happy with the photo exactly as it is...
- this is the only format of the picture you have...

***** Choose the JPG *****
Skip to the page 4.



SSP_10.NEF

If ...

- you plan on editing the picture before cropping it...
- you plan on printing...
- you want the highest quality possible...

***** Choose the NEF *****
Continue on to the following step.

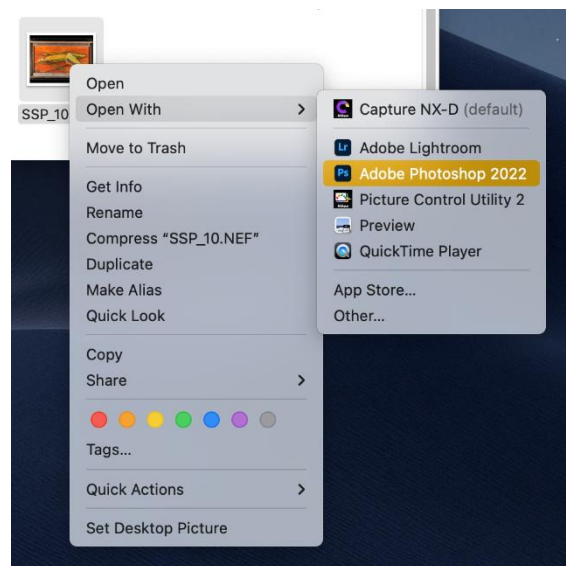
For more Information on the difference between **“.JPG”** and **“.NEF”** turn to the **Helpful Terms** page (7).

1. Right Click on the NEF file you would like to EDIT and/or CROP. From the drop-down menu, click OPEN WITH...

- Click **Adobe Photoshop**.
- This should open your **NEF** file in **CAMERA RAW** (A neat extension program of Photoshop).

2. Edit your photo.

- If you would like to edit your photo**, it is recommended that you do so before you crop it.
- If you don't want to edit your photo**, skip to page 3.
- The following are basic editing tools that may come in handy...





Full Screen Mode – Might as well use all the screen space provided! Click this to expand the window and get a better view of your photo for editing.

Edit – If this button is highlighted, it means the editing window (to the left of this tool bar) should be visible and accessible. This is where basic lighting and color adjustments can be made.

Crop – This is the button to click when you are ready to crop your photo (I will explain it in more detail in STEP 3).

Spot Removal (The Bandaid Button) – This button provides you with a circle in place of your cursor. If you hover the circle over an unwanted spot on your photo and click, this tool will “remove” the spot by replacing it with part of the photo that it believes matches the area.

Masking – If you’d like to manipulate only part of your photo, this button allows you to paint over an area to select and edit that specific portion of the photo.

Red Eye – This tool allows you to drag a small box over unwanted eye reflections, such as the common red eye effect, that occurs when a camera’s flash is used.

Snapshots – allows you to make multiple edits on one photo so that you can compare and save one or multiple versions of that photo.

Presets – Opens a window to the left with presaved edit settings, much like the filters you see on a phone’s photo editor. If you don’t know where to start, this may be a good place to experiment with editing styles.

****Tip:** *Hover your cursor over any tool you are unsure about, Camera RAW will explain and provide an animated example of most available tools.*

a. **When the EDIT button is selected**, you should see a window like this. This window provides you with all the basic lighting and color tools to manipulate your photo with.

***If you don’t know where to start, the **AUTO** and **B&W** options at the top of the window are a fantastic way to do so. They’ll do most of the work for you.

b. **If you don’t like the way you edited something hold COMMAND and press Z** on your keyboard to **UNDO**.

3. To CROP your photo...

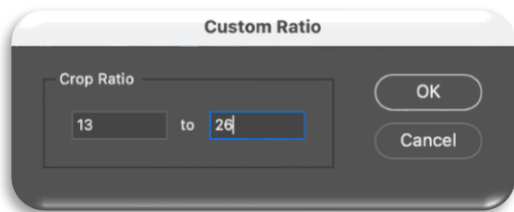
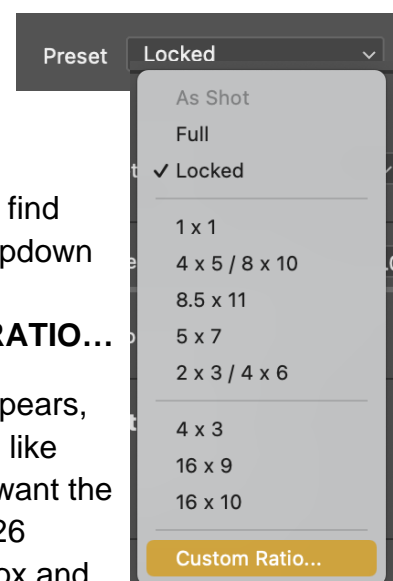
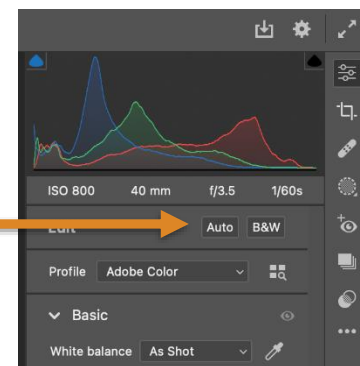
a. Click on the **CROP** icon from the tool bar on the right most side

b. Under the colorful graph at the top right, find where it says **PRESET** and click the dropdown menu beside it.


i. From the menu, click **CUSTOM RATIO...**

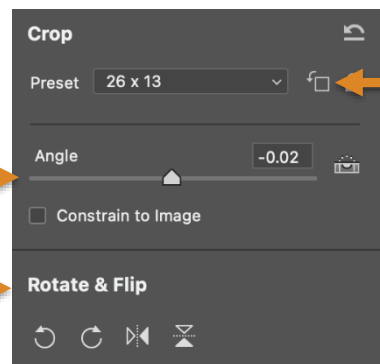
ii. When the **Crop Ratio** window appears, type in the dimensions you would like your photo to be. For example, I want the corn painting to be 13 inches by 26 inches, so I will enter 13 in one box and 26 in the other.

iii. Click **OK**.






- c. On your screen, a gridded box should have appeared.
 - i. Hover over the corners of this box until your cursor becomes a double sided arrow. When you see this cursor, click and drag to manipulate the **SCALE** of the box.
 - ii. Click near the center of this box and drag to **MOVE** it over your photo.
 - iii. Use this  icon to **ROTATE** the **CROP BOX**.
 - iv. Drag the triangle on the line under **Angle** to **STRAIGHTEN** or **TILT** your photo.
 - v. Use the buttons under **Rotate & Flip** to **FLIP** or **ROTATE** your **PHOTO**.
- d. Using the above methods to scale and move the gridded box, adjust until you see only the part of your picture that you want inside the gridded box and the rest is greyed out.
- e. When you are satisfied and ready to crop your photo, press **ENTER** on your keyboard.



4. How to Convert & Save your photo.

- a. Once you've got your photo cropped, edited, and ready to go click on the **Convert & Export**  icon.
- b. When the **SAVE OPTIONS** window appears, **change the following information (on the following page):**



DESTINATION

Save in Same Location to save your photo in the Smart Shooter folder or whichever folder the photo was in when you opened it in Camera RAW. **Save in NEW Location** if you would like to choose or create a separate folder to save cropped/edited photos in.

****If you chose NEW Location –** Navigate to the folder you would like to save it in, click on it, then click **SELECT**. **OR** click **NEW FOLDER** on the bottom left, then name, and select this folder.

FILE NAMING

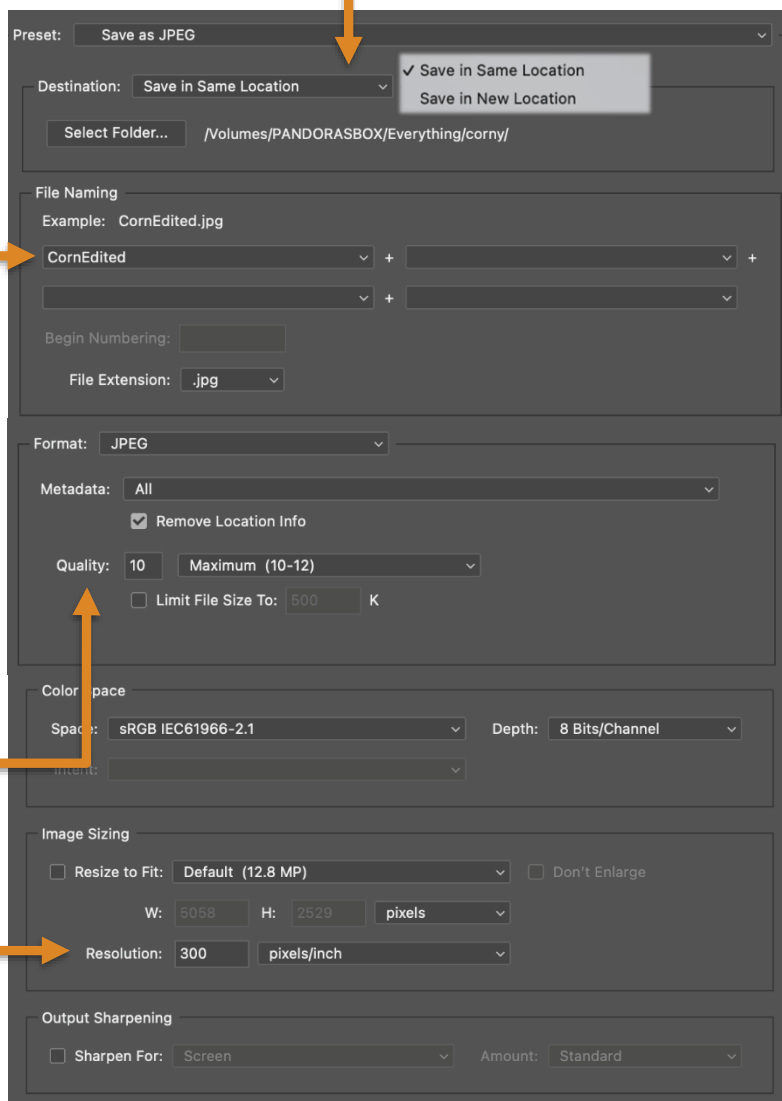
Change the name in the upper left box to something you will recognize as the edited version.

FORMAT

Change **QUALITY** to **10**

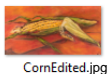
IMAGE SIZING

Be sure the number beside **RESOLUTION** is at least **300 PPI**
**Everything else should be okay as is.*



- f. Once you have changed all the above information, Click **SAVE**.

5. Camera RAW has generated 2 files you should be aware of.



- g. **The first is the JPEG** you saved with the above method. This is the finished photo you will use to print, send, or upload.



SSP_10.NEF SSP_10.xmp

- h. **The second is an .XMP** file near your original .NEF file. **DO NOT DELETE THIS!** For more information on .XMPs, see the Helpful Terms page 7.



Cropping a JPEG Image...

There are many ways to go about cropping JPEGs, but this is one of the easier ways to go about it.

1. Open Photoshop.

- Click **New File** in the upper left corner.
- When the New Document window appears, change the following information:

Name Rename your new file something you'll recognize as the cropped version.

Unit of Measure Change this to **INCHES**.

Width & Height To the dimensions you'd like to print the picture in the future. (For the corn, I want it to be 26 inches wide by 13 inches tall.)

Then select the **ORIENTATION** that makes sense to you.

Resolution 300 Pixels/Inch (PPI)

Color Mode RGB Color, and at least 16 bit.

2. Once you've changed this information, click OKAY.

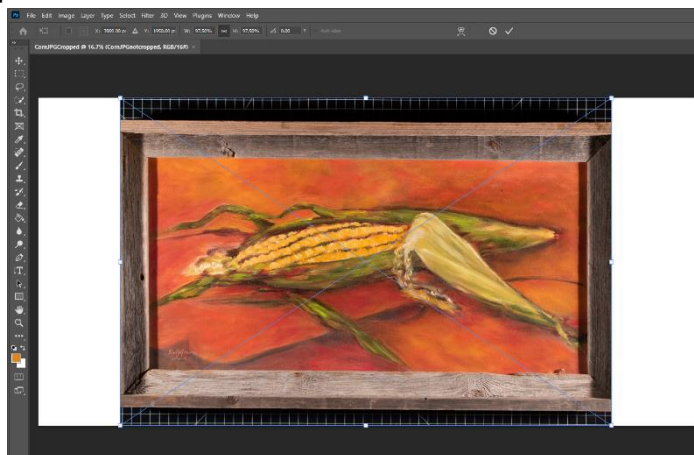
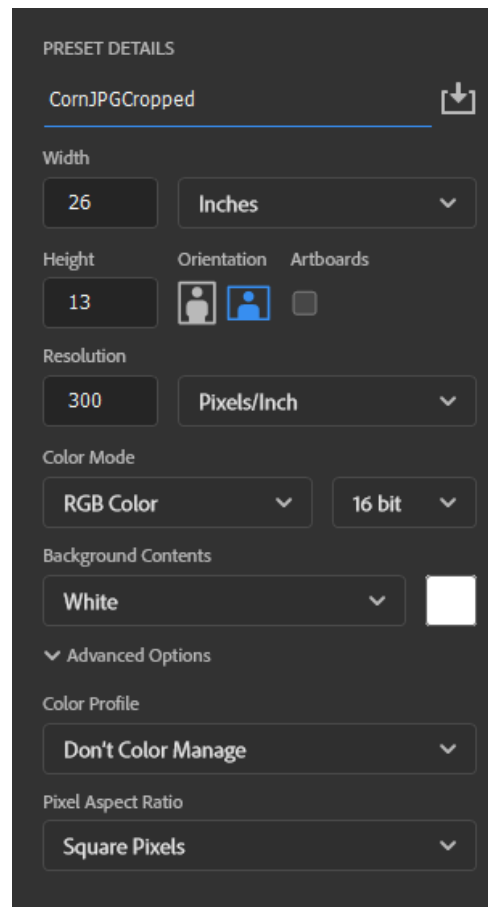
- Photoshop will generate a blank canvas to the dimensions you described.

3. Place the JPEG you desire to crop.

- To do this, click **FILE** from the upper toolbar.
- Click **PLACE EMBEDDED...**
- Then find and select the photo you would like to crop. Click **PLACE**.
- The picture should appear within the white space.

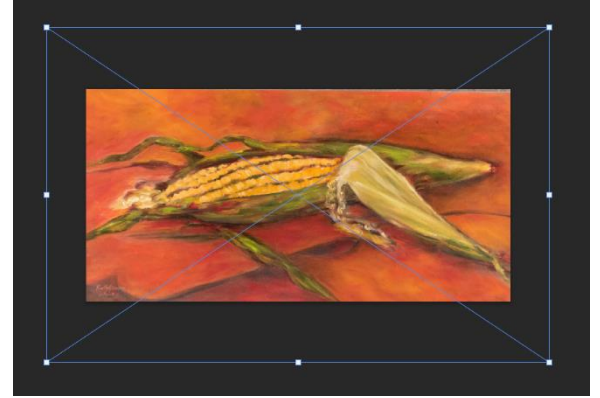
4. Resize the photo to fit within the canvas generated by your desired dimensions.

- Hover over one of the small white squares at the corners and edges of your picture. Until your cursor becomes a double-sided arrow.





- b. When you see this arrow, click and drag the small square out until it fills the white space. You may have to drag from multiple different corners and sides.
- c. You may also have to recenter your picture in order to fill the space as desired.
To do this, hover over the center of your photo, then click and drag it to where you need it.



*** This may take some back and forth of moving and resizing until you are satisfied with how it appears.*

5. When you are satisfied with your cropped picture, its time to **PLACE** and **SAVE!**

- a. Press **ENTER** on your keyboard to officially **PLACE** the picture. The blue highlight will disappear when its placed.
- b. From the upper toolbar, click **FILE**.
- c. Click **SAVE AS**. (*If the "Save to Creative Cloud" window appears, click SAVE ON YOUR COMPUTER*)
- d. Pay attention to the box beside **SAVE AS TYPE:**
 - i. Set it to **Photoshop PDF**.
- e. Click **SAVE**.



HELPFUL TERMS

- **RAW File** – A large, uncompressed, high quality, minimally processed file of captured data. This file stores more color and tone data for you, as the photographer, to edit later. Think of it as raw ingredients that you can manipulate.
- **.TIFF (Tag Image File Format)** – *Like* a RAW file; TIFF is beneficial if you want high quality photos and/or you intend to edit or manipulate them.
- **.NEF (Nikon Electric Format)** – Nikon's version of a RAW file. The digitizer has a Nikon camera, so this is what you'll see if you used our digitizer.
- **.CR2 (Canon Raw Version 2)** – Canon's version of a RAW file.
- **.XMP (Extreme Memory Profile)** – This file exists as a storage of the settings you changed or adjusted to edit the original RAW file. In other words, it is the code that tells the photo editing program how you would like it to look. This is very useful, especially if you would like to make multiple edits of the same photo because it will never delete the original data.
- **.JPEG** – This is a file most of us are familiar with. Most cameras and phones automatically take JPEGs unless programmed otherwise. This file, unlike its RAW friends, has already been manipulated (likely by the camera itself) and processed to delete what the camera believes is unnecessary information. In other words, the camera saves the picture in the way it thinks is best and then automatically discards much of the color and tone information we need to do high quality editing.

***Think of it like NEF is a bundle of RAW ingredients, JPEG is a premade meal.** XMP is the recipe that you recorded while manipulating RAW ingredients with your editing software. There is a lot more potential with ingredients, but a premade meal is nice and easy.

- **DPI/PPI** – This refers to how many Dots Per Inch or Pixels Per Inch. There is a slight difference between the two that we're not going to get into, but really the most important thing to remember is you want at least 300 dots/pixels per inch of your photo. 300 DPI is considered high quality and anything more is virtually microscopic, hard to notice, and inevitably unnecessary information.
- **RGB** – (Red Green Blue) Usually, RGB is the best format for digital design; ie. Websites, logos, social media... *However, the poster printer in the library reads and prints most true to RGB color format.*
- **CMYK** – (Cyan Magenta Yellow Key/Black) Usually, if your intention is to print, this is the color format you want to choose for the most accurate results; *however, the poster printer in the library reads and prefers RGB.*

***Note- Ratios are very important!** If the picture you digitized was originally 30" x 36", but you want a 24" x 36" print... You're going to be cutting 6 inches from somewhere- Stretching or squishing a picture to fit a size, even a tiny bit, can severely distort it. **Make sure whatever size you'd like is proportional to the original.**

Yes, This means math...