

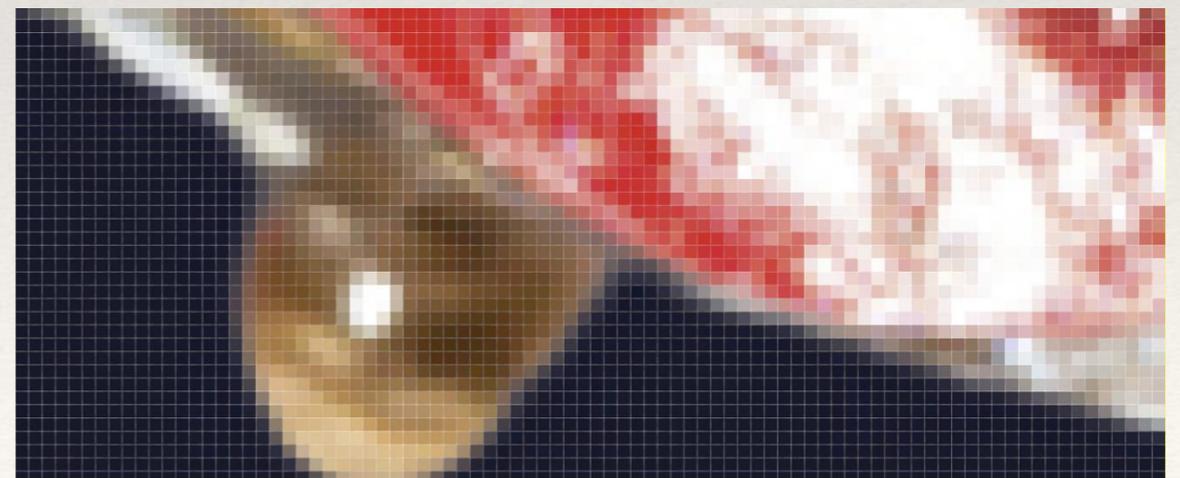
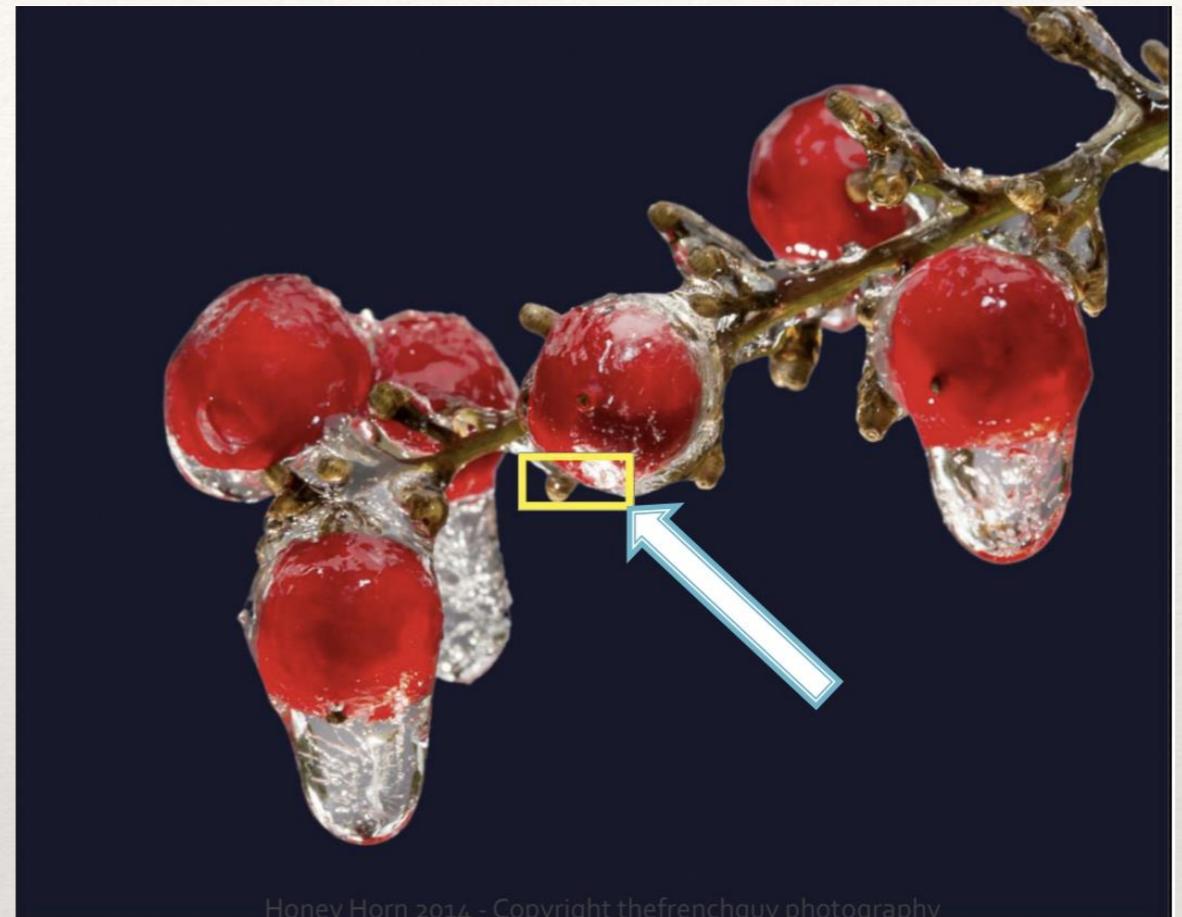
CCHHI

Sizing Image Files for Digital File & Print Competitions

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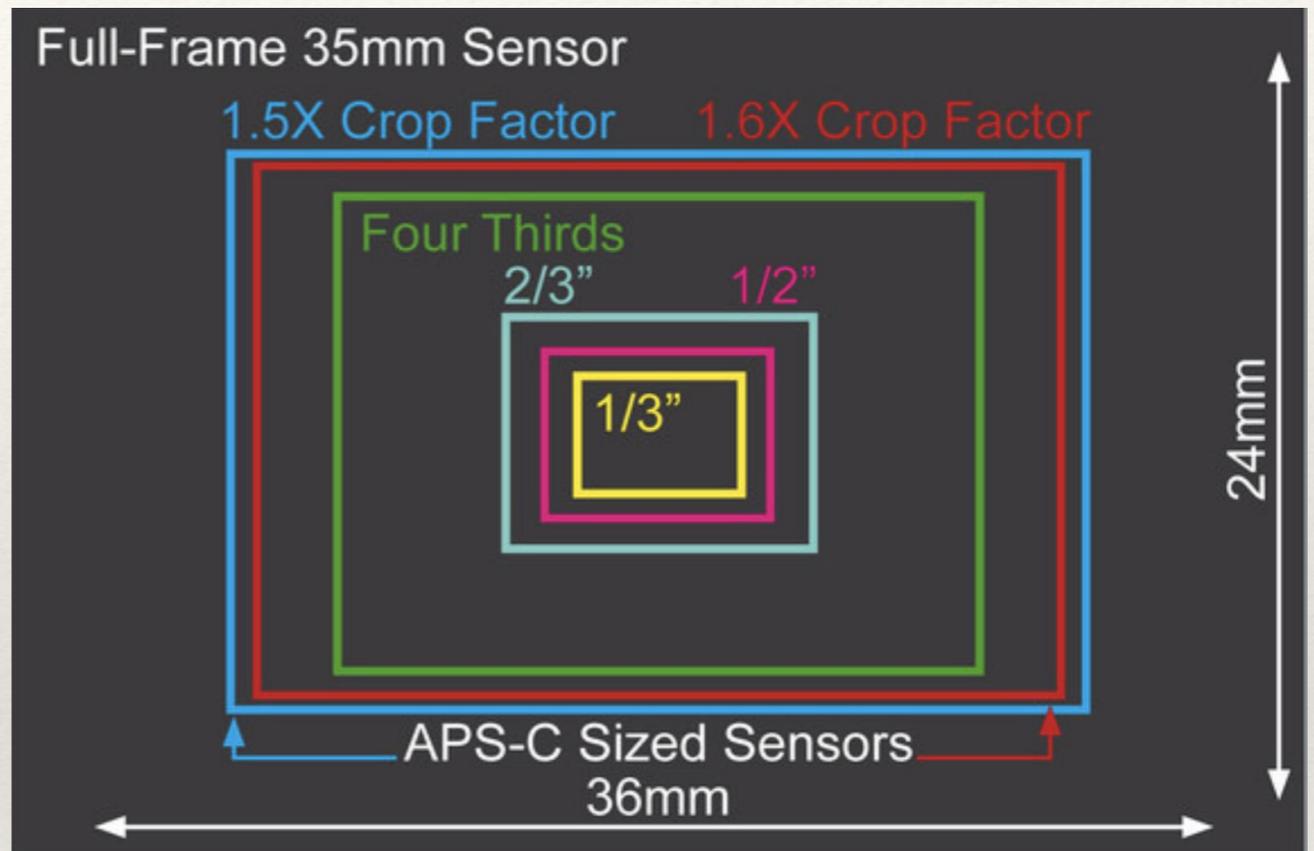
Pixels and Resolution

- ❖ Digital image files are composed of small squares of color called pixels
- ❖ The more pixels per image, the higher the resolution of that image and the larger it can be made without losing sharpness.
- ❖ The base resolution of your image is determined by the size and pixel density of your camera's digital sensor.



Sensor Sizes

- ❖ “Full Frame” sensors are based on the size of 35mm film
- ❖ “Crop Sensor” cameras have smaller sized sensors of varying pixel densities.
- ❖ Most common crop sensor cameras are perfectly capable of creating large enough image files for creating enlargements within the range accepted in CCHHI competitions.
- ❖ Full Frame sensors provide more margin for cropping a final image. Crop sensor cameras may require more careful in-camera composition.



Cropping and Size Adjustments

- ❖ There are three reasons your digital image file will probably require cropping and size adjustments:
 - 1.To achieve the composition you want in the final image.
 - 2.To comply with the digital file and print size requirements imposed by CCHHI.
 - 3.To fit the aspect ratio of the final image that you'd like to create.

Popular Crop Ratios

❖ Common Crop Ratios

- 16:9 Panoramic, 1920x1080 HDTV, 1280x720 HD
- 2:3 Standard Full Frame 35mm, 4x6, 8x10, 12x18
- 4:3 Four Thirds Sensors, Older TV & Computer Monitors
- 1:1 Square Format



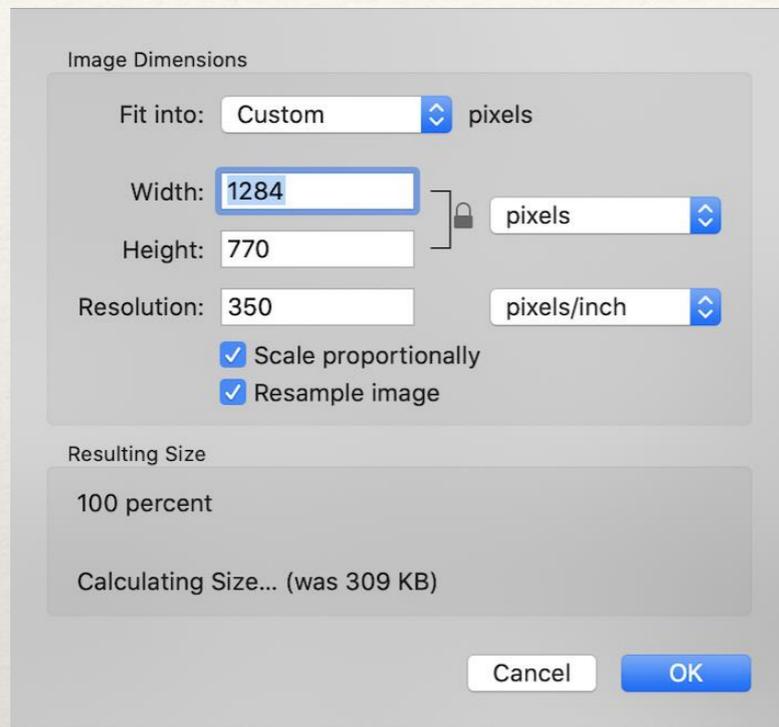
- ❖ SLR cameras may require you to leave room to sides for cropping to a desired image size.
- ❖ Most Mirrorless cameras allow selection of a crop ratio in-camera so final results can be visualized before taking the picture.
- ❖ Many cropping tools also allow selection of common aspect ratios.

Before Resizing

- ❖ Make a copy of your Edited Image at the Highest jpg quality.
- ❖ Determine the size of your image in pixels by finding the image data information in whatever processing tool you use - Usually called “Info”.
- ❖ Be sure that the edited image has the resolution to resize to the desired size, i.e. if your edited image is less than 1100 px on the long side it is too small.

Resize Tools

Mac - Preview



Tools > Adjust Size

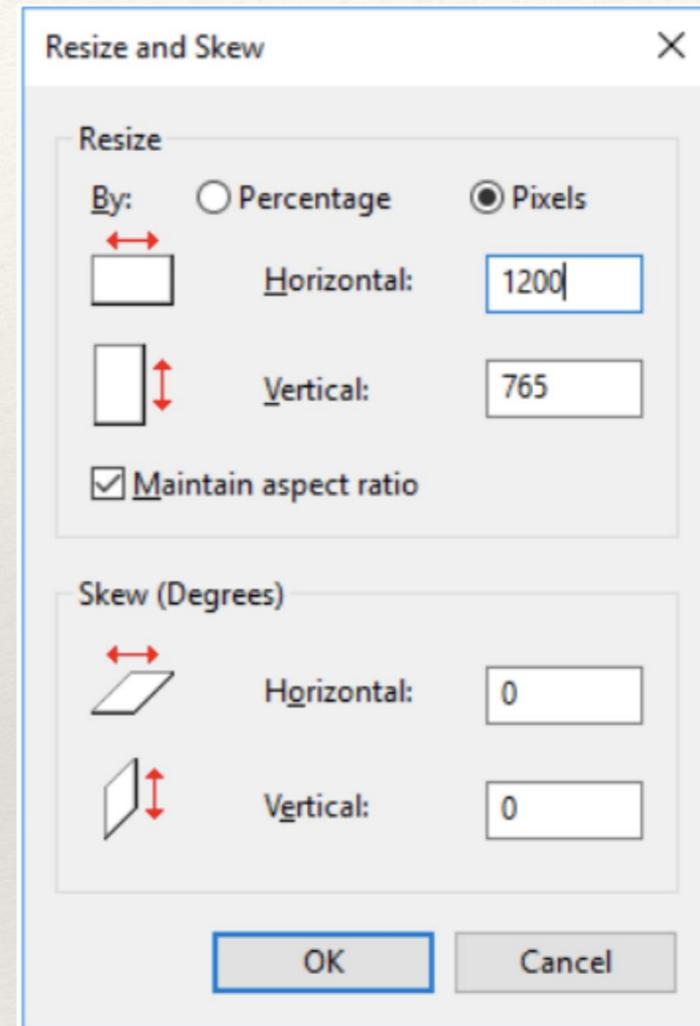
Select "Pixels"

Select "Scale Proportionally"

Enter desired width of long side in pixels.

Select OK

PC - MS Paint



Resize Tool at Top Left of Main Page

Select "Pixels"

Select "Maintain Aspect Ratio"

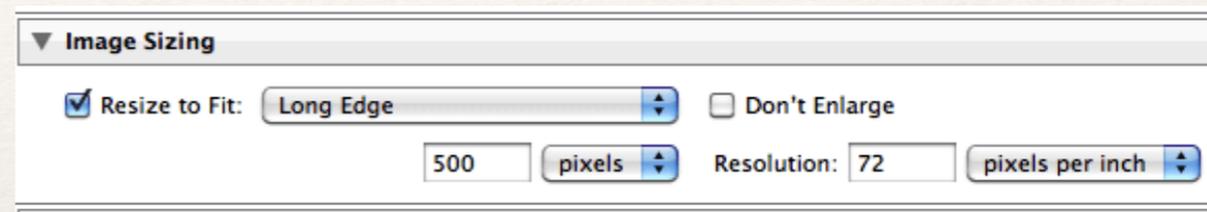
Enter desired width of long side in pixels

Select OK

Resize in PP Software

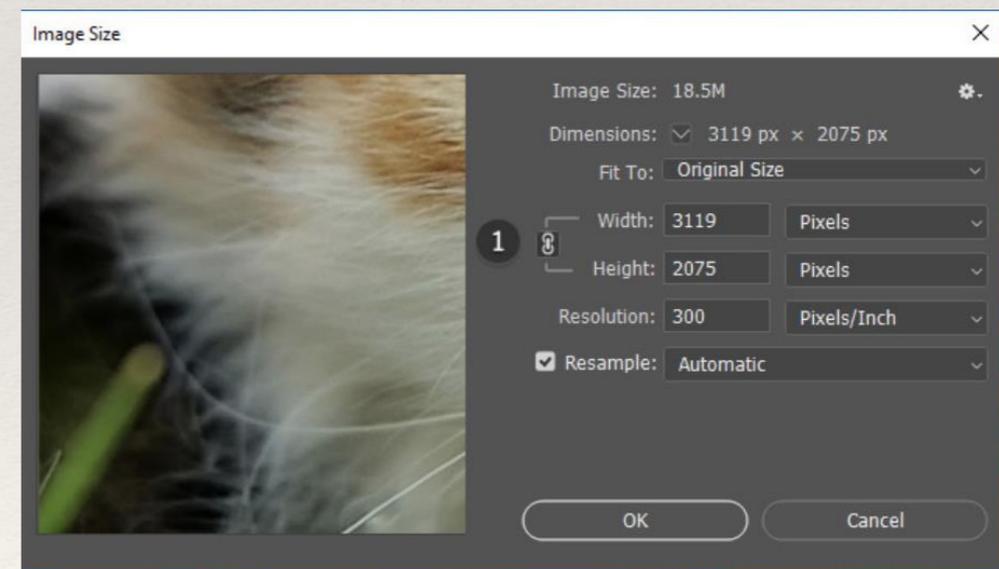
Lightroom

Select edited image in Library
Select Export at bottom left
“Select Resize to Fit”
Select “Long Edge”
Enter Long Edge pixels



Photoshop

Select “Image” > “Image Size”
Select “Pixels” as Measuring Unit
Be sure the Width and Height Units are locked
Click OK



Aspect Ratio and Common Print Sizes

Aspect Ratios & Print Resolution

Common Print Sizes (inches)	Aspect Ratio		Full Frame	APS-C (Nikon)	Micro 4/3 Sensor	Print Resolution	
	Aspect Ratio	Aspect Ratio 1.5	Aspect Ratio 1.5	Aspect Ratio 1.5	Aspect Ratio 1.33	Minimum Quality (150 dpi)	High Quality (300 dpi)
4x6	2:3	1.50	*	*		600 x 900 px	1200 x 1800 px
5x7	5:7	1.40				750 x 1050 px	1500 x 2100 px
6x8	3:4	1.33			*	900 x 1200 px	1800 x 2400 px
8x10	4:5	1.25				1200 x 1500px	2400 x 3000 px
8x12	2:3	1.50	*	*		1200 x 1800 px	2400 x 3600 px
9x16	9:16	1.78				1350 x 2400 px	2700 x 4800 px
10x15	2:3	1.50	*	*		1500 x 2250 px	3000 x 4500 px
12x16	3:4	1.33			*	1800 x 2400 px	3600 x 4800 px
12x18	2:3	1.50	*	*		1800 x 2700 px	3600 x 5400 px
12x22	12:22	1.83				2400 x 2700 px	4800 x 5400 px
20x30	20:30	1.50	*	*		3000 x 4500 px	6000 x 9000 px

Within CCHHI Competition Range

150 x Aspect Ration Short Side
150 x Aspect Ration Lone Side

300 x Aspect Ration Short Side
300 x Aspect Ration Lone Side

Remember

- ❖ Work with a copy of your edited image.
- ❖ Save copy as 'highest quality' jpeg image before starting
- ❖ CCHHI Digital Image Rules -Long side no smaller than 1100 px or larger than 1500 px.
- ❖ Be sure Aspect Ratio is locked before resizing to avoid distorted images.
- ❖ Horizontal images make best use of digital screen.
- ❖ Be sure your email application is sending 'Actual Size' image when submitting