

# Technology Tips

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## Question:

*How can I reduce the size of a digital photo using PhotoDraw? We have a digital camera which takes detailed photos that print well. But when I put the photos in a PowerPoint presentation, the file becomes so large that I have to wait a long time for the presentation to load and for the slides to change.*



## Answer:

When you edit photos from a digital camera, you may want to save two versions of each photo — one for printing and one for use in presentations or web pages. To print a photo, especially an enlargement for a display, you need a detailed version of the photo with a high resolution. On the other hand, to use a photo in a presentation or web page, you need a small file with less resolution. Here are the guidelines I use for saving digital photos:

Use	Resolution	Photo Size	File Format
Print	300 dpi printer: 72 – 120 ppi 600 dpi printer: 125 – 170 ppi 1200 dpi printer: 150 – 200 ppi (150 ppi is a good compromise)	At 150 ppi: 5 x 3 in: 750 x 450 px 6 x 4 in: 900 x 600 px 10 x 8 in: 1500 x 1200 px 14 x 11 in: 2100 x 1650 px	png
Power Point	72 or 96 ppi*	To fill the screen: Really old monitors: 640 x 480 px Old monitors: 800 x 600 px New monitors: 1024 x 768 px or more	jpg
Web	72 ppi	600 px maximum width for compatibility with old monitors**	jpg

dpi = dots per inch. Printers use several dots to represent each pixel in a photo; therefore, the number of dot per inch printed is larger than the number of pixels per inch in the photo.

jpg = a “lossy” compressed graphics file format that produces smaller-sized files appropriate for photos used in web pages and PowerPoint presentations

png = a “lossless” compressed graphics file format developed in 1996 that preserves detail needed for printed photos

ppi = pixels per inch

px = pixels

\* Older Mac monitors are 72 dpi; most new monitors are 96 dpi

\*\* If you want the browser to set aside space for the photo and load the text right away, you need to make the photo exactly the right size and code the size into the web page. Furthermore, UW Cooperative Extension web pages will not let you load a photo that is larger than 64 kb.

With that general background information, let’s look at the specific problem: how to reduce the size of a photo for use in a PowerPoint presentation. We will assume that you took a photo with a digital camera and that you want to use the photo to fill a whole slide in PowerPoint. We will also assume that you plan to give the PowerPoint presentation using a projector and laptop computer with the displays set for 1024 x 768 pixels. Here are the steps for reducing the size of the photo using PhotoDraw 2000, version 2:

- ① Open the photo in PhotoDraw and make any changes you want to the color or brightness.
- ② If necessary, crop the photo to remove extraneous material around the edge. To crop the photo, click the **Crop/Size** button on the toolbar and click **Crop by Shape** in the drop-down menu. On the right side of your screen in the crop dialog, click the **square shape** in the top row. The photo will be grayed out. When you move your cursor over the photo, it will be a cross shape. **Click and drag diagonally** to make a rectangle shape. To **adjust the size of the rectangle**, drag the handle in the middle of each side. If you want the photo to fill the whole PowerPoint slide, keep the width to height ratio approximately the same as your computer screen.
- ③ The next step is to reduce the size of the photo. **Right-click** on the photo and then left-click **Resize** in the menu that pops up. The Resize dialog will appear on the right side of your screen. Make sure that **Resize Picture** is selected in first box. At the right side of the **Units** box, click the down triangle and then click **pixels**.
- ④ Make sure that there is a **check** next to **Maintain Proportions**. Then type **1024** in the **width** box. Press the **Tab** key. PhotoDraw will resize the photo to be 1024 pixels wide and will calculate the new height of the photo. Look at the new number in the height box. If it is less than 768, you need to resize the photo by height rather than width. Go to step 5. If the height number is larger than 768, you are ready for step 6.
- ⑤ If the height of your resized photo was less than 768, type 768 in the height box. Then hold down the Shift key and press the Tab key. When you release the keys, PhotoDraw will resize the photo to be 768 pixels high and will calculate the new width.
- ⑥ The next step is to remove the extra height or width so that the photo is exactly 1024 pixels wide by 768 pixels high. Click **File** on the menu bar and then click **Picture Setup** in the drop-down menu. On the **Active Picture tab**, you will see a box labeled Picture Size. Click the down arrow at the right end of the **Picture Size** box and scroll down until you see **1024 x 768 pixels** in the drop-down list. Click 1024 x 768 pixels to select it. Click the **OK** button. A background box that is exactly 1024 x 768 pixels will appear behind the photo.
- ⑦ **Drag the photo** until the part that you want is over the background box. The background box delineates the area that will be saved as the final version of the photo.
- ⑧ The last steps are to save and close the file. Click **File** on the menu bar and then click **Save As**. Use the **Save In** box to navigate to the folder where you want to save the file. Type a name for the file in the **File Name** box. Click the down arrow at the right end of the **Save as Type** box. Click **JPEG** in the drop-down list. Click the **Options** button. At the bottom of the Options dialog, set the **Compression** level to **20**. Click the **OK** button. Click the **Save** button.
- ⑨ Close the file by clicking **File** on the menu bar and then **Close** in the drop-down menu. Do not edit and re-save the jpeg file. Every time you save a jpeg file, it is recompressed and detail is lost. If you must edit the photo, re-open the original.