

# Image editing with GIMP

GIMP stands for “the GNU Image Manipulation Program.” It can be downloaded and used for free (see handout on installing GIMP for Windows or Mac computers),

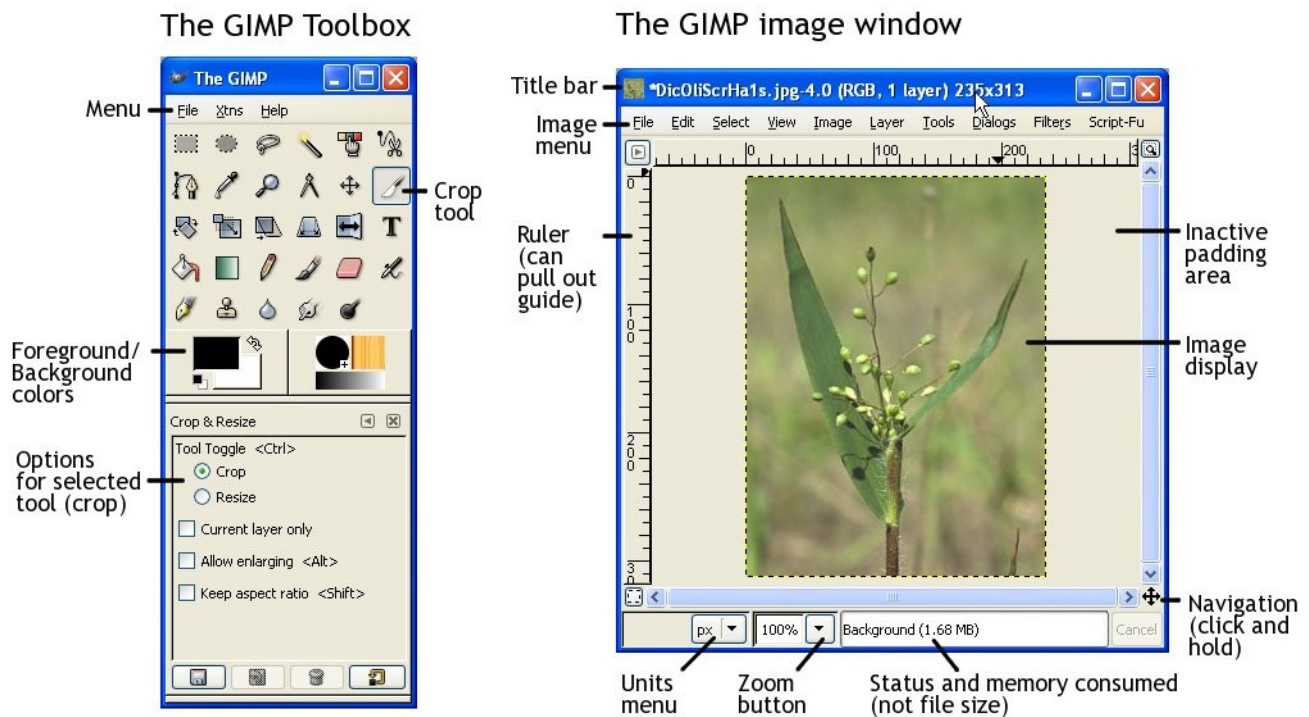
## Opening Gimp

Open GIMP either by double-clicking on the short-cut icon on the desktop or by going to “start > All Programs > GIMP > GIMP 2”

## The Toolbox and Image Windows

GIMP opens showing the toolbox window. Under the title bar is the menu bar, with “File, Xtns, and Help.” A tool palette containing icons for specific tools is located under the menu bar. Moving your cursor over and resting it on an icon will make a description of the tool appear.

To open an image, click “File > Open” in the GIMP toolbox menu and navigate to the file you want to open. The GIMP image window will appear.



## Saving a copy of an image

When editing images, keep your original so that you can go back to it if necessary. Save a copy of your original to work on. In the GIMP image window go to “File > Save a copy” and rename the file so that you don’t replace the original.

## Rotating the image

In the image window (the window in which the image opens), go to “Image > Transform >” and choose an option, e.g., “Rotate 90 degrees CCW.” If you make a mistake, go to “Edit > Undo...”

## Cropping the image

In the GIMP Toolbox window, click the knife icon (crop tool). Go to the image window and click (hold-down) and drag a box from the left top corner to the right lower corner of what you want to keep in your image. The crop dialog box may appear over your image. Move it to the side. To adjust the cropping box, drag one of the corners. Dragging upper left corner or the lower right corner will change

the crop size, dragging the upper right corner or the lower left corner moves the cropping box but does not change the size. When you are satisfied, go to the “Crop and Resize” dialog box and click “Crop.” Ignore the “Resize” button in the dialog box.

## **Scaling the image**

Your image is probably not shown at 100% in the image window. The percentage size at 100% shows every pixel on the screen, not print size. The size you should make your image depends on what you plan to use it for. For the web, or for viewing on a computer screen, the image can be much smaller in number of pixels than for printing. To zoom in on your image, change the percentage with the zoom button at the bottom of the image window.

To scale for web use, go to the image window menu, “Image > Scale Image...” to open the “Scale Image” dialog. The X and Y resolution should be 72 or 96 pixels/inch. You will usually need to reduce the “width” and “height” number of pixels. As an example, you might want to reduce the largest dimension to 500 pixels. The other dimension will automatically adjust to keep the proportions of the image when you click out of the area you changed. Click “Scale.” Change the zoom button to 100% to see how the image looks. Images should not be too large when you are using them on the web, because if a viewer has a slow connection speed, the image will take too long to appear in the browser.

To scale for print use, go to the image window menu, “Image > Print Size...” and change the X resolution to 300 pixels/in to see what that does to the width and height in inches. For a good-looking print, 300 pixels per inch is a minimum, you can set the resolution higher depending on your printer’s capability. If you set the resolution (in pixels per inch) higher, the inch size will be reduced. If you have a very large image file, you may want to set the resolution and then reduce the width and height.

## **Correcting exposure**

Exposure (the image is too dark or too light) can be corrected with different tools, but the best tools to use are “Curves” and “Levels.” To use either of them, go to “Tools > Color Tools > Curves” or “Tools > Color Tools > Levels.” In the “Curves” dialog box, you can pull the diagonal line up or down and see what happens with your image (be sure to have the “preview” box checked). If you want to try “Levels,” you can try pulling the sliders under the heading “Input Levels.” For more information on the tools, go to “Help.”

## **Correcting red eyes on people and animals**

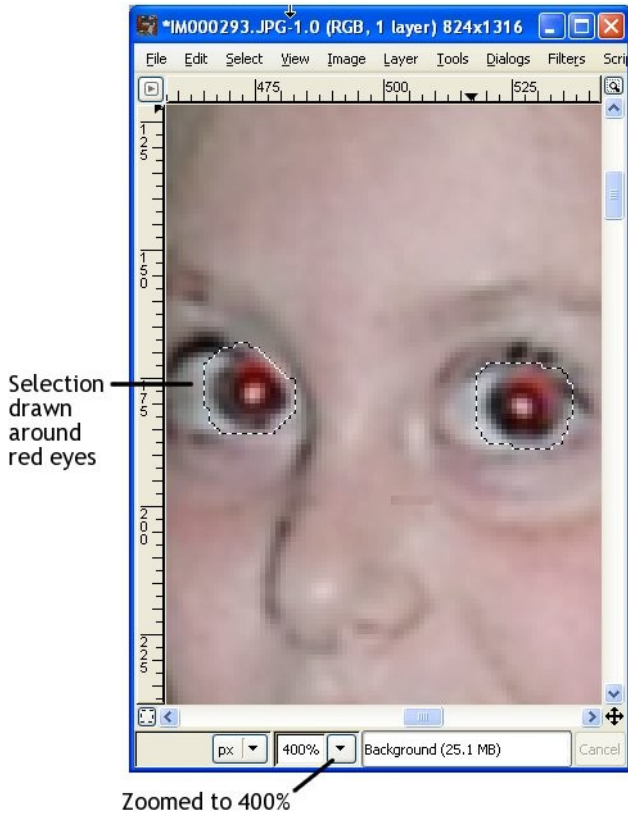
Zoom in on your image (bottom of the image window, change the percentage), It may look pixilated at a higher than 100% resolution. Don’t worry about that.

Go to the toolbox and choose the icon that looks like a lasso (“select hand-drawn regions” tool). Move the cursor to your image and draw (hold down on the mouse and let go when you reach the start of the circle you are drawing) a slightly oversized line around the red part of the eye. If you don’t get it right, click and start over. Hold the shift key down to add to the selection and draw a circle around the red part of other eye.

In the image window, go to “Select > Feather.” Enter 7 pixels in the box. Click “OK.”

In the image window, go to “Tools > Color Tools > Hue-Saturation.” Drag the slider to the right of “Saturation” to the left (most of the way or all of the way to the left). Click “OK.”

In the image window, go to “Select > None.”



## File formats and saving files

Image file formats:

JPG (or JPEG), pronounced “jay-peg,” file extension usually .jpg, is a lossy compression format, meaning that some information is lost with compression. This is the most commonly used format for photographic images on the web. Depending on the level of compression, the quality can be excellent or poor. Frequently images from digital cameras are saved in the camera as jpgs. If you are working with a jpg image, be sure to work on a copy of the original and save it. Every time a jpg is saved back as a jpg, the quality of the image decreases. If you want the highest quality possible, save the image as a TIFF file, modify it as you like, and then if you need a file for the web or a smaller file size, save the tiff as a jpg (keep the tiff as an archival file). You can set the quality of the jpg, the higher the quality, the larger the file size is.

TIFF, file extension usually .tif, is an uncompressed file format that is readable by many programs. TIFF is the preferred format for printing photographs.

XCF is the native GIMP format that can save layer information, etc. It is not readable by other programs, but is the format to use if you have layers and other information that you may want to use again, e.g., if you have text that you might want to modify in the future, that is difficult to do when the text layer is merged with the background. You may not have any layers, though, and then TIFF is the best format to save a file to for archival purposes.

8/21/2006