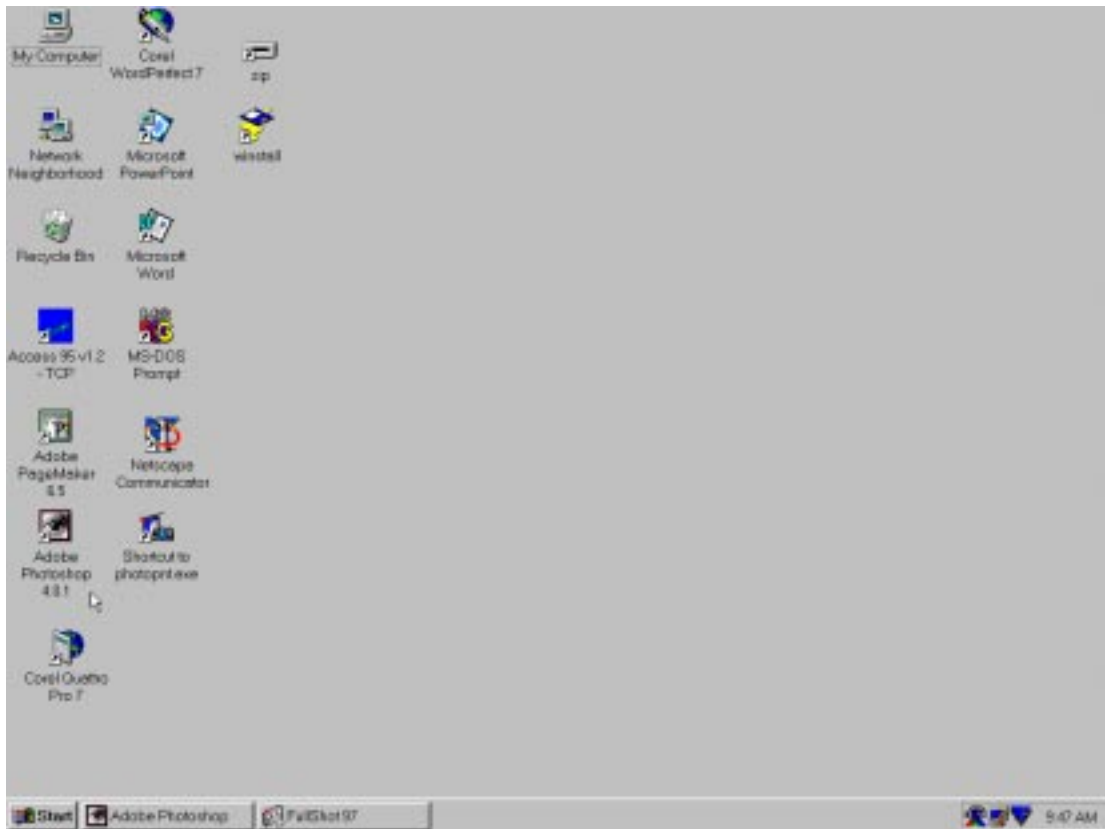
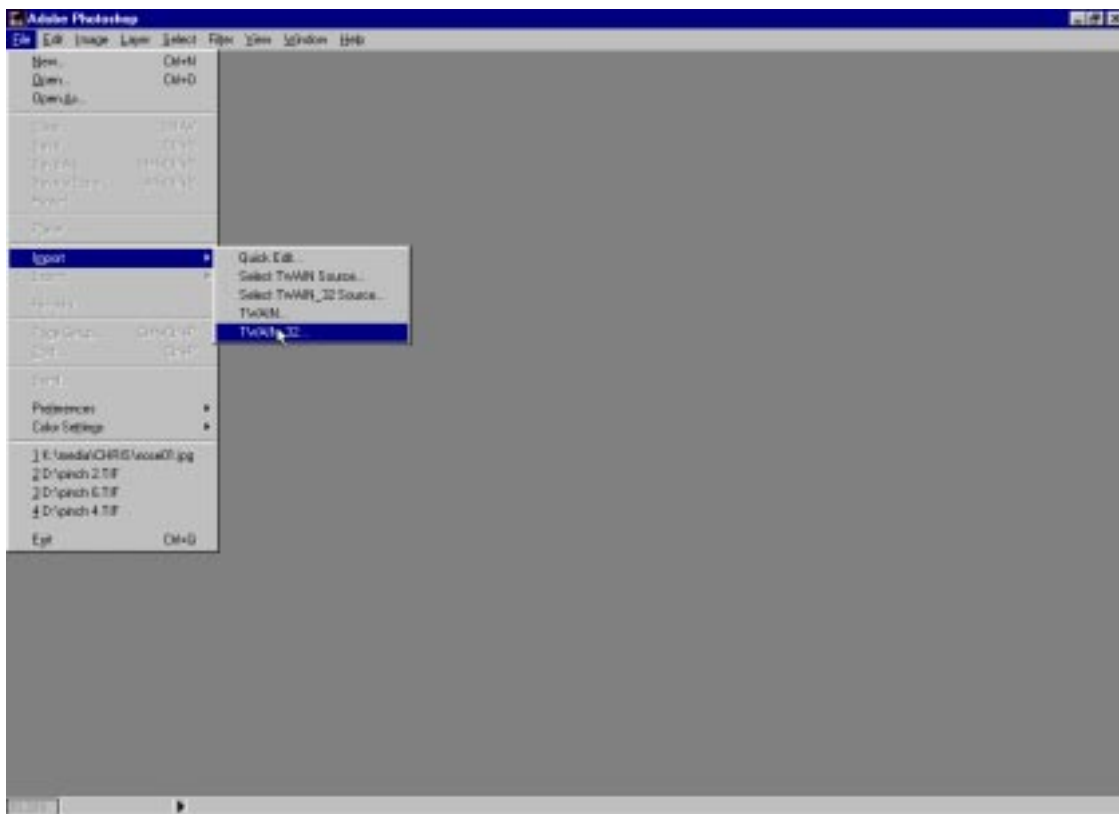


Scanning Through Photoshop

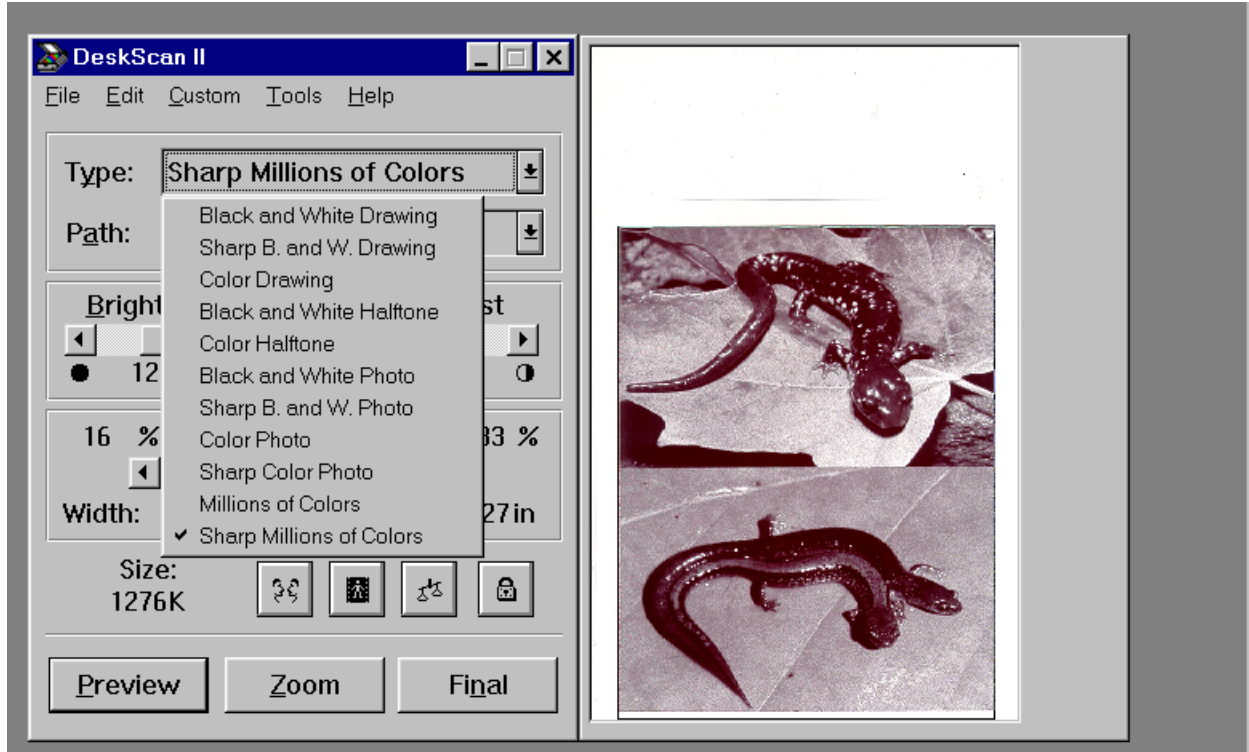
Turn on the flat bed scanner (switch is on the right hand side towards the rear. Begin Windows and select the **Adobe Photoshop** icon by clicking twice with the mouse. This will start the Photoshop program



Lift the scanner cover and place the item to be scanned squarely on the glass surface. Close the cover. To start the scan, select **File**, then **Import**, then **TWAIN_32** as shown by the gray boxes in the illustration.



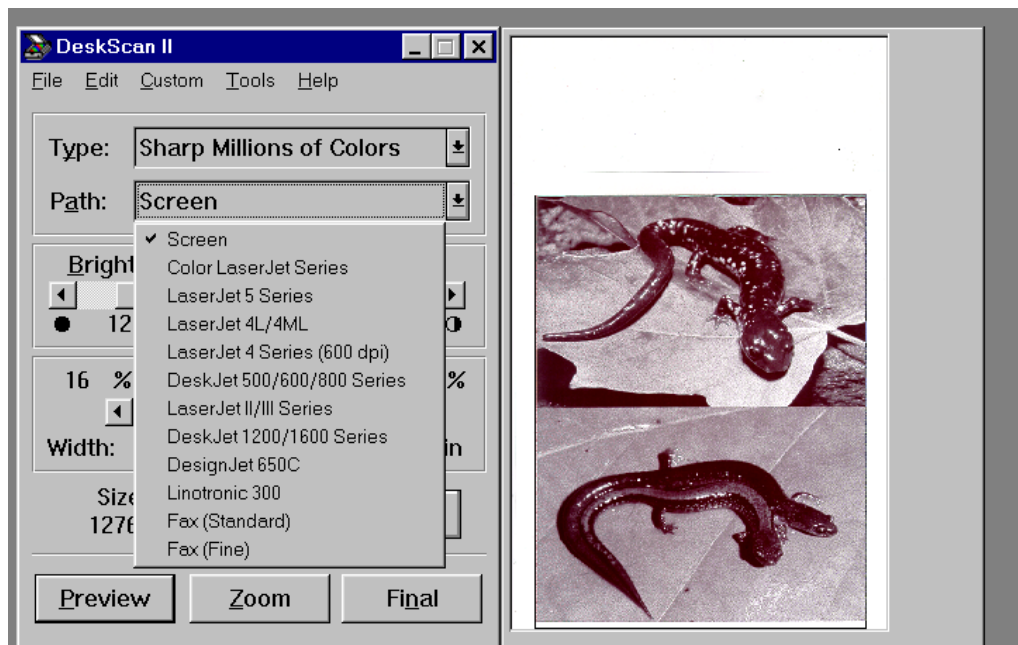
After the preview you must select the proper settings for the desired output. First select the type of scan you intend to prepare. We recommend using Black and White Photo for photographs and drawings which are to be printed on the black and white LaserJet, and **Millions of Colors** for all color work. Click the arrow at the end of the line marked **Type** and make your selection.



Next you must select the Path. Path is a set of commands which are designed to give the best results for each printer and software program combination. At present the following are your path options:

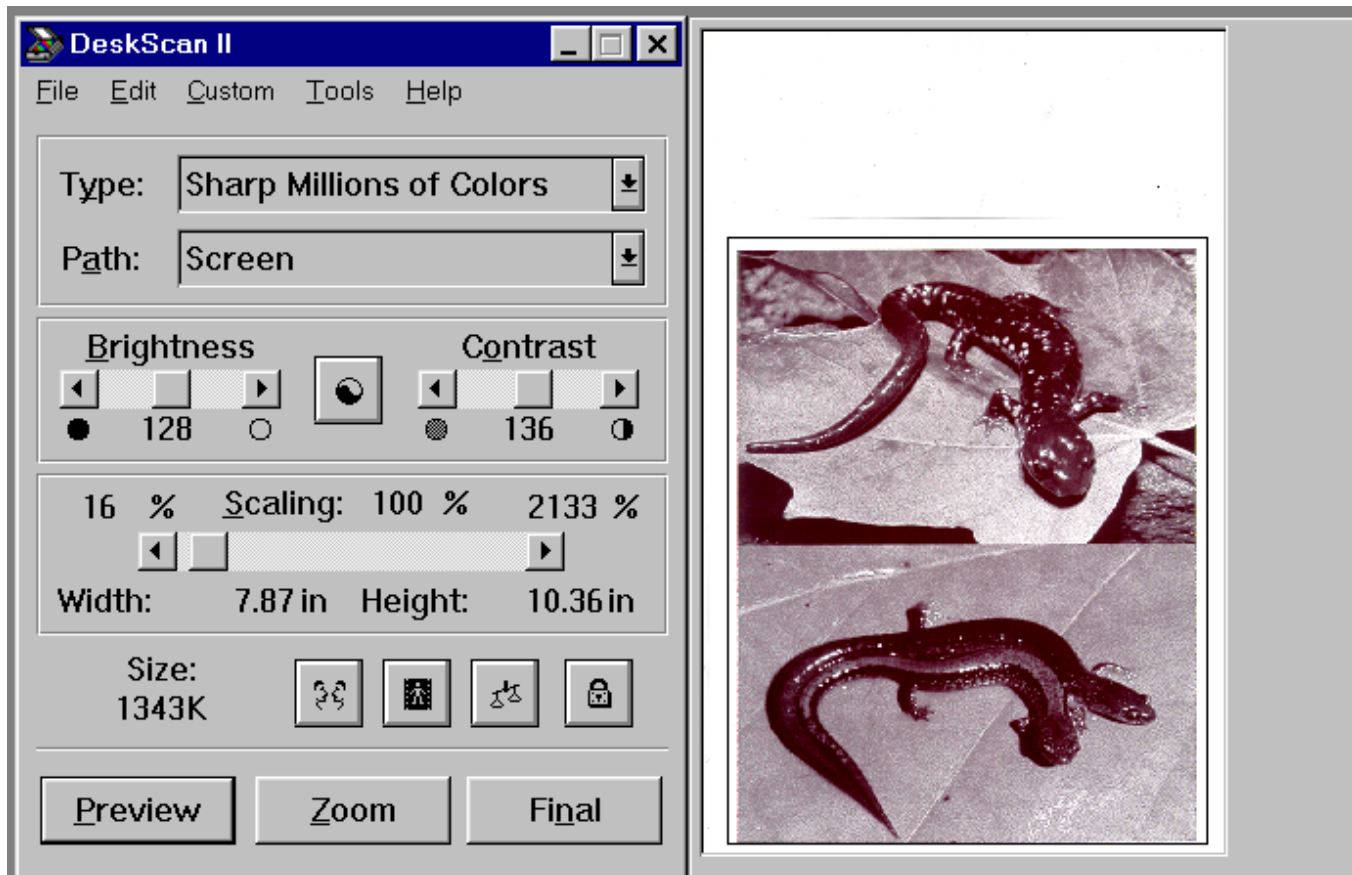
- psd/hp/600dpi** use for b&w LaserJets at 600 dots per inch
- psd/hp/300dpi** use for b&w LaserJets at 300 dots per inch
- psd/teW600dpi** use for color prints at 600 dots per inch
- psd/teW300dpi** use for color prints at 300 dots per inch

Under most conditions select the 300dpi option, as 600dpi gives a small increase in print quality, but a dramatic increase in file size and much slower operation for processing and printing. Click the arrow at the end of the line marked **Path** and make your selection.



The 3.5" floppy disk has a maximum file size of under 1.4 Mb which is fairly small relative to the file sizes which can be generated by Photoshop. **Size** (just above the preview button) indicates the file size and will change as you change Path, Crop and Scale.

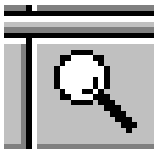
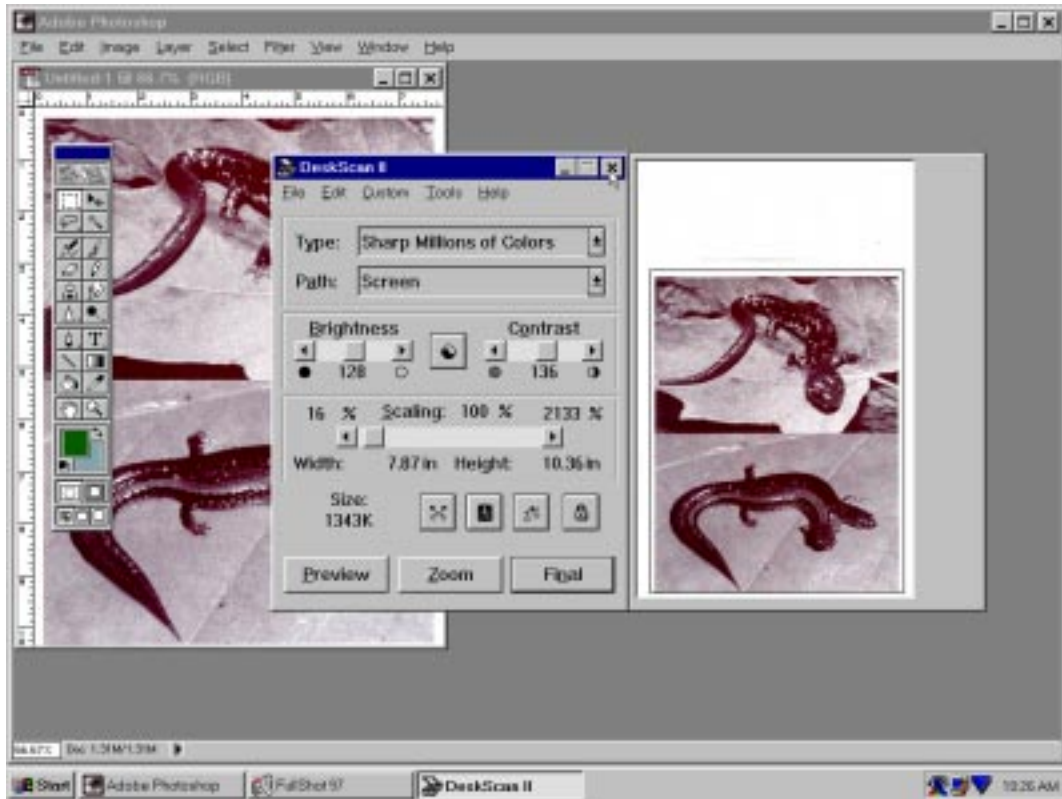
The preview screen allows cropping of the scanned image. Bring the mouse into the box with the **preview** image (right hand side of the screen). Click in one corner of the area to be retained, hold the **button and drag** to the opposite corner. A box will surround the selected areas. Adjustments can be made by clicking and dragging the sides as needed. Notice the change to the file size as the image is cropped. **The brightness and contrast** of the image can be adjusted at this time. The button in the center (yinyang symbol) will adjust automatically, while the **sliders** allow manual control. For some images it might be a good idea to Zoom in on a particular area (move the crop box to the small area you wish to examine, press **Zoom**, adjust brightness and contrast, press **Preview**, and re-crop the image. The new exposure settings will be held.



Scaling allows you to scan the image at the size you need for the final printed page. It is best that any enlargement or reduction which is required be done at this time. File size can be managed, and scanning quality is optimized through proper size selection in the scanning stage. Click the arrows at the ends of the **Scaling Slider** or move the slider. Note how the file size changes.

After all of these adjustments have been made, click **Final** to complete the scan. The scanner will activate, and you will be shifted into Photoshop.

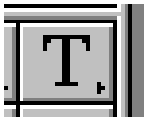
Photoshop has many tools which will allow you to improve or enhance an image prior to saving or printing. This guide will explain the most basic functions needed for printing. Please use the manual and program help menus to explore the other features as well. You must be able to use all of the capabilities of Photoshop. Mastery of this program will require considerable practice, and we suggest you use the program's guide and tutorial to get started.



The **Toolbar** is located on the left side of the startup page. Along the top you will find some of the controls for the particular tool selected. After scanning, your image shows up in the center and is named "untitled". Selected tools and functions are described below:



The **Magnifier** allows you to zoom in on the image. It is often easier to work when zoomed in, as details will be clearer and tool manipulation easier. By shrinking the image, more than one picture can be viewed at a time. Note the toolbar information at the top of the screen: Select + and a mouse click zooms in, select - and you can zoom out. Sliders will appear at the sides of the image to enable you to move around on a zoomed picture.



The **Crop** tool allows you to trim the edges of the image. Click and drag, and when the area is selected, click Crop in the top tool bar.

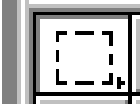


The **Text** tool allows you to add text to the image. Size, font and color can be selected through the toolbar.

Painting, Line Drawing, Air Brush, and Erasing Tools are accessed through these items



The **Eyedropper** allows you to select and duplicate any color or shade on the image. There is also a **Cloning** tool which allows duplication of any section of an image. These tools are useful in removing unwanted elements from a picture, and when used correctly, modifications are invisible.

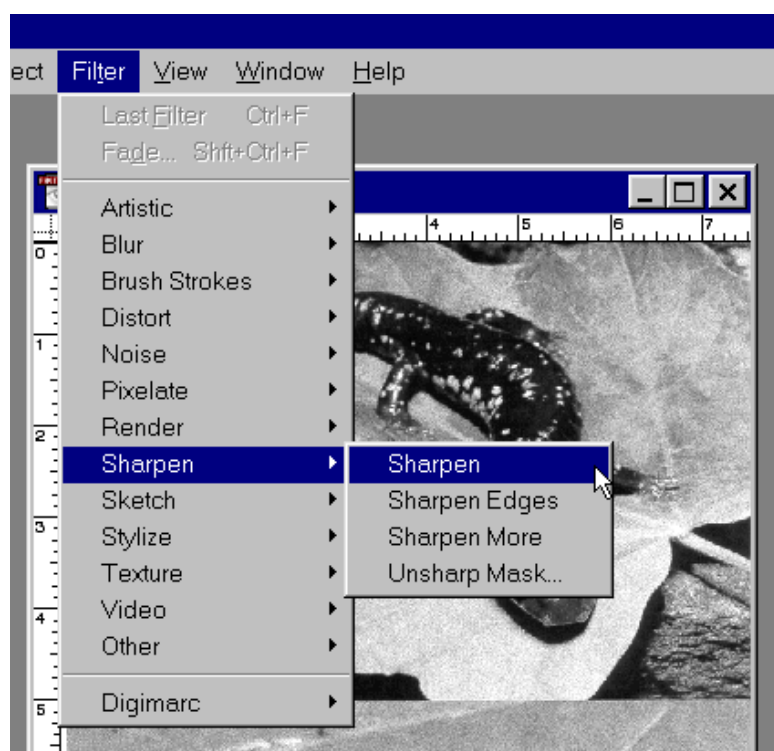


Selection tools allow you to select, copy mask, duplicate, move or color any part of an image.

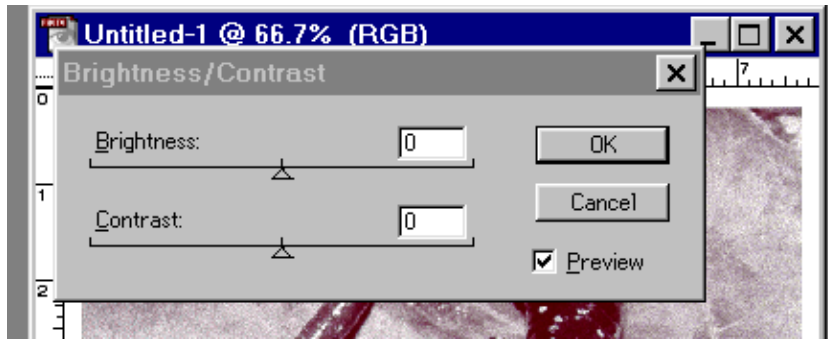
In addition to changes made to individual parts of the image with the drawing tools, other tools allow adjustments to the entire image (or selected area). Correction for color, brightness, contrast, focus or straightness is almost always necessary. These tools are accessed through pull-down menus on the top bar of the screen. Click **Image**, then **Adjust** to get to the global correction menus.



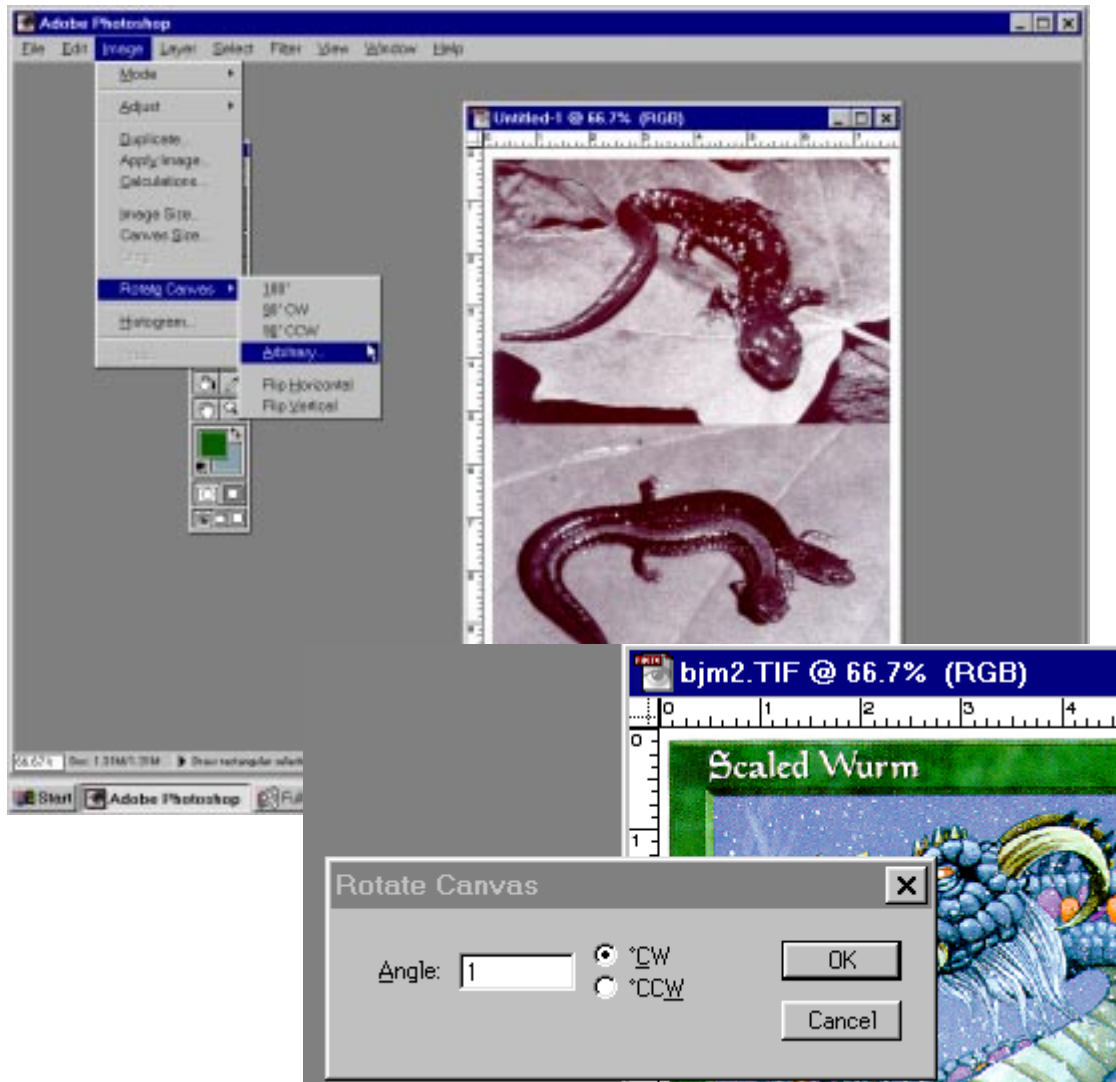
To sharpen an image choose **Filter**. The sharpness is adjusted by selecting **Sharpen**. Click **Preview** to see the effect. We suggest no more than one or two **Filter Sharpen**, as things can get very strange if more sharpness is given.



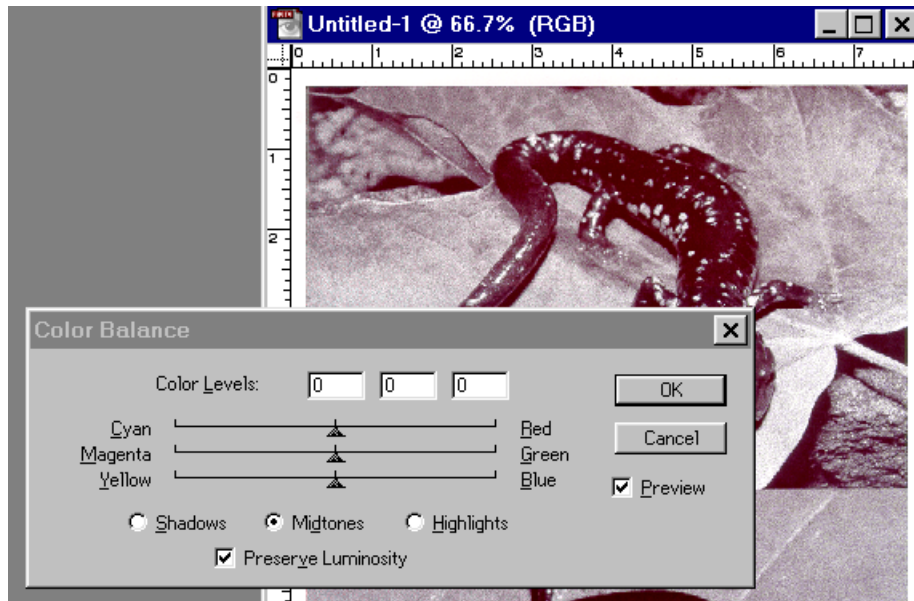
Brightness and Contrast often need adjusting. Select **Image, Adjust, Brightness and Contrast**. As above, use the **sliders** to make adjustments.



Straighten the image if necessary by selecting **Arbitrary** from the **Image, Rotate Canvas** menu. Enter in degrees the amount off rotation required to square up the image in a clockwise or counter clockwise direction. **Cropping** is often needed after this tool is used.

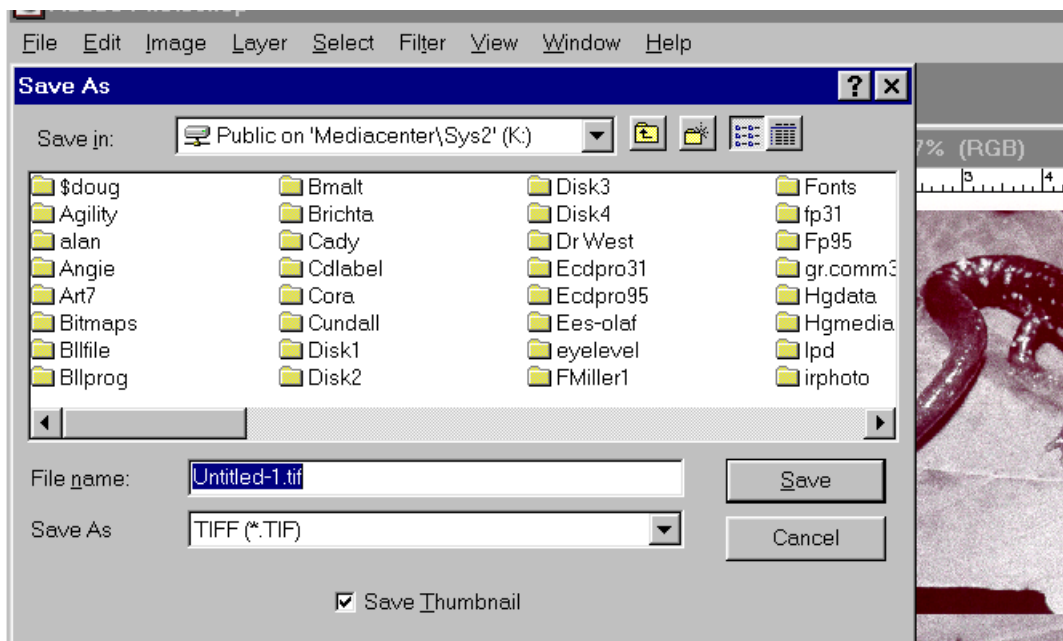


Color Balance will allow you to correct scans which are tinted in some peculiar fashion. Select **image,adjust** and **color balance**. Click one of the arrows to move the dot in the opposite direction of the color you **want to remove**. For example, if your scan is too blue, click the arrow which points opposite blue towards the yellow side of the scale. As above, you can use preview to monitor the changes. Select OK when the preview is correct.



Saving

Once the image is tuned, you are ready to save your scan. Remember that file size may limit transportability. We have a special place for the storage of bitmaps. We will keep them there for a little while in case the image is needed again. Select **File** and **Save As** from the menu bar. Select the correct drive and directory by clicking in the **Save in** section. You **MUST** use **Public on `Mediacenter\Sys2` (K:)**, then the sub-directory **`Bitmaps`**. Be very sure that this drive and this directory are selected before you proceed. Select a **file type** by clicking the arrow next to the file name bar (TIF is most common). Type a file name in the box provided near the top of the save screen. We suggest you use simple names like the clients initials and a number to make it easier for us to erase the files later. Click Save. If the client wants to put the file on a floppy, "A" is the 3.5" drive. Be sure to **Perform a Virus Check** before using in our machines.

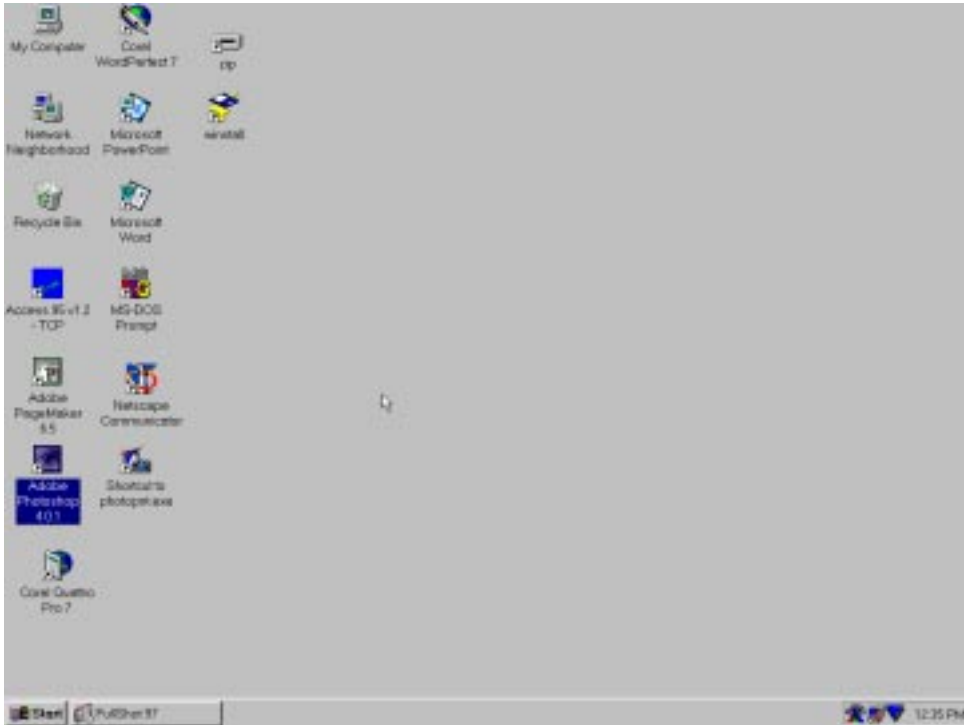


Scanning 35mm Slides

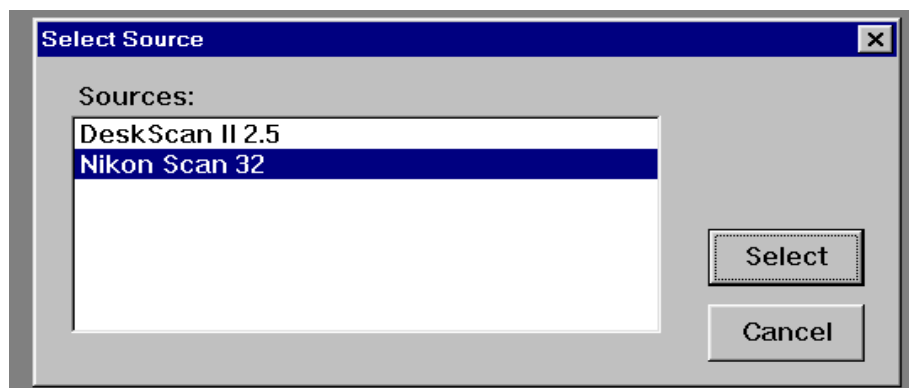
Slides and Negatives can also be scanned through **PhotoShop** .

PhotoShop version 4.0 is very complex and powerful. This is an introductory guide only. You will need to practice with the tutorials and manuals to master the program.

Turn on the slide scanner. The switch is on the right side towards the rear. Wait until the green light stops blinking before loading the slide or negative carrier. In Windows select **Adobe Photoshop**, and then the **Photoshop** icon.



To select between the Flat Bed Scanner and the Nikon Slide Scanner you must select **File, Import, Select Source** then Select **Nikon Scan 32** and enter **OK**.



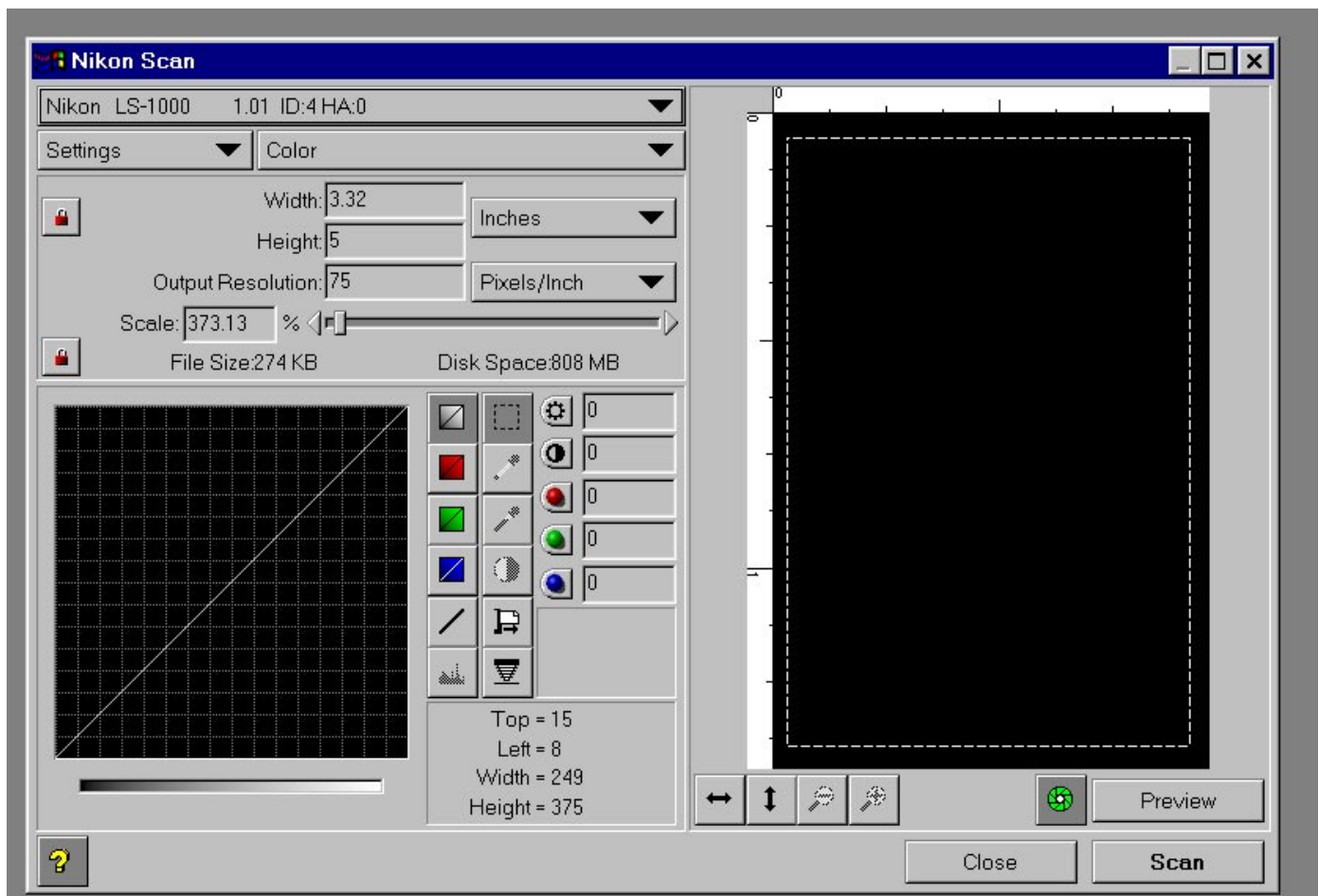
Place the slide face up (the way you would normally view it), emulsion side down and long edge parallel to the sides of scanner (right edge first). Push the slide in gently until it stops. The edge of the mount will be visible.

You are now ready to scan slides. Select **File**, then **Import** (remember you have already selected the correct scanner) If you are scanning a Negative, load the Strip in the holder and insert to the gray line.

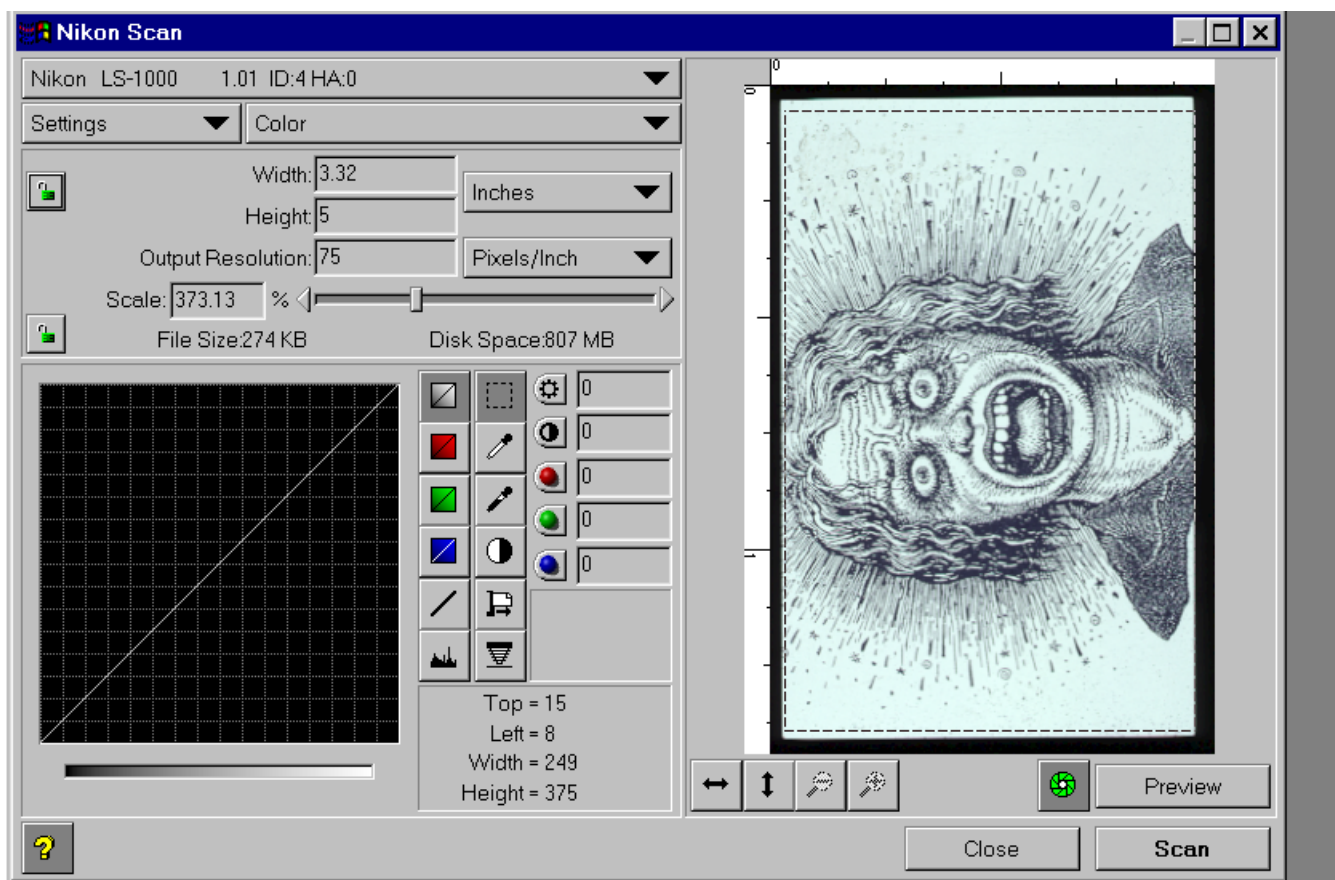
The Nikon source window will now be on the screen.

Several steps are now required to create a File. First select the proper **scan type** by choosing the **Color** selection bar. Select **B&W Line Art**, **Gray Scale** (Photo) or **Color?** Is it a **Positive** (slide) or **Negative**?

Make the selection and click **Preview**. The slide or negative will be drawn into the scanner and a preview image is created.



Next, you have to determine **Image Size**, **Output Resolution**, and **File Size**. Start by clicking on the **Redlock Boxes** to unlock them. They will turn **Green** to indicate unlock. With the mouse, move the sides and corners of the **crop box** as needed to mark the area you wish to scan. Next, **Lock** the box which is next to the width and height settings. Now set what you anticipate to be the **final image size** by typing the value (in inches) at either the width or height prompt. The other number will adjust automatically since the ratio is locked. It is a very good idea to select the proper size now, as changes in size either at the printer or in a paint program have significant impact on image quality and printing time.



The final step involves **image resolution** and File Size. File size must be managed to insure transportability and printing speed, while image resolution affects output quality. Remember that a floppy can only hold 1.4mb, and that large files take longer to modify and print. It is very easy to go from a 2 minute print job to a 12 minute print job with only a slight improvement in quality. Be sure the height and width are locked, and **adjust the output resolution**. Note the change in **file size** as you do this. When you have a reasonable setup lock the file size box.

Click **Scan**. The completed scan will appear in the paint program. For PhotoShop you will have to close the Nikon scan software to see the image.