

## Color reduction options

When using PhotoGIF™ to save a file from RGB mode the first dialog that is presented, not including Photoshop's put file dialog where you supply the name of the file and designate the location to place the file, is the color reduction options dialog.

When saving to GIF from RGB mode the image must first be color reduced to 256 colors or less, because the GIF format supports a maximum of 256 unique colors in an image. The color reduction options dialog allows you to choose first whether color reduction will be performed by generating a custom palette or by using an existing fixed palette. This is controlled by the group of two radio button in the top, left of the dialog labeled 'Generate custom palette' and 'Use fixed palette', respectively.

If using an existing fixed palette, the color reduction options dialog allows you to choose any palette from the 'Palette' pop-up menu and displays the palette in the dialog. The Mac system palette, a gray scale palette, and the infamous Netscape palette are built in options for fixed palettes. You may also use the 'Load' button

across from the 'Palette' pop-up menu to load any palette from a GIF file or Photoshop CLUT file or to unload any palette from the 'Palette' menu by depressing the 'option' key. When you press the 'option' key, the 'Load' button's title will change to 'Unload' and hitting the 'Unload' button will remove the current palette from the 'Palette' menu.

When using both custom and fixed palettes for color reduction, you must specify the depth or number of colors desired. Any number of colors between 2 and 256 is valid and there are preset radio buttons for even bit depths of 256 (8 bit), 128 (7 bit), 64 (6 bit) and 32 (5 bit) colors in the 'Resolution' group box. Any other valid number of colors between 2 and 256 may be used by selecting the 'Other' radio button in the 'Resolution' group box and entering the desired number of colors in the corresponding edit text field.

The last set of controls in the color reduction options dialog controls dithering. The dithering in PhotoGIF™ is unlike other dithering methods you may be familiar with that are either 'on' or 'off'. To improve both image quality and compression PhotoGIF™ uses a new variable magnitude, selective dithering method. Dithering can be turned on or off with the 'Dither' checkbox. This method of dithering allows control over the magnitude of dithering used for the particular image with the 'Magnitude' slider, and where dithering is applied is controlled internally and limited to only where necessary instead of the entire image. The range of the 'Magnitude' slider is -5 to 5, with 5 being the maximum amount of dithering possible. Lower settings will result in smaller files, but higher ones will generally result in better looking files. Settings between 0 and 3 usually work best as a happy medium between image quality and file size.