### **Preferences**

Preferences permit the user to customize certain features in the program. The initial preferences dialog contains three icon button to go to one of the three preferences sections. It also contains an OK button to keep any preferences changes and a Cancel button to discard preferences changes.

Three distinct preferences sections exist: program, window, and file creator. The program section provides a set of options that apply to all fractal windows. Window preferences apply only to a single window. Every fractal may have a different set of window options. Finally, the file creator preferences provide a method to select the default application to launch for text and PICT files that are created by CFG.

# Program Preferences Dialog

The Program Preferences Dialog is displayed in response to hitting the Application Icon. The items in this dialog box apply to all windows. This dialog controls the general user interface, including such features as numeric precision display, window updating, and progress scales. Each preferences item is described in detail below.

## Generate Immediately

Generate Immediately is an option which will start the image generation process as soon as a file is opened or a fractal is created (with the New command). The user does not have a chance to change any parameters associated with the window before fractal creation begins. If this option is not selected, no fractal creation will happen when Open or New is selected. Instead, an empty window will be displayed and it is up to the user to initiate fractal creation (with Redraw, Continue, Zoom, etc.).

#### **Draw Individual Lines**

Selecting this item will permit the application to update a fractal image as each line is completed, instead of presenting the entire fractal at once. This method is more lengthy, but it permits the user to see that the fractal is being created. If one desired to zoom in on a certain region, the user may stop the fractal creation once that region has been completed, long before the complete image would be created.

If this item is not checked, the image will only be displayed when the creation process is completed or has been canceled. Please note that this preference item does not apply to Random Walks, as these fractals are not created one line at a time.

### Display Progress Scale

When checked, this option displays a progress scale while the fractal is being

generated. As the fractal approaches completion, the scale is updated. If the box is not checked, no scale is displayed.

This scale is only displayed while generating a fractal in the foreground. If a fractal is being created in the background, the scale will not be displayed, no matter how the preferences item is set.

## Display Random Walk

This option applies only to Random Walk fractals and only when Foreground generation mode is active. If this option is selected, the actual movement of the particles is displayed as they create the Random Walk fractal. This method of fractal creation requires a great deal more time than without displaying the moving particles as the screen must be updated for each move. If the option is not selected or the fractal generation is in background mode, then no moving particles are shown.

#### Limit Window Size

This option prevents a window from being re-sized to larger than the fractal image. This is useful since it prevents a window from using excess screen area while displaying the entire fractal.

#### Precision

This is the number of significant digits that are used to display fractal data. The value can be from 3 to 18 digits. The default is 9 digits.

## Window Preferences Dialog

The Window Preferences Dialog is displayed in response to hitting the Window Icon. The items in this dialog box apply only to the top-most windows. If the top-most window is either the Help window or New Parameters window, then the preferences will be applied to newly created fractals. The controls in this dialog dictate the saving options and fractal depth. Each preferences item is described in detail below.

### Destination

This is the window to which the preferences changes are applied. If the New Parameters window is specified, then changes apply the newly created fractals.

### Save Fractal Image

This item is only available to registered users. Checking this box will cause the complete or partial fractal image to be saved along with its settings. When the fractal is

reopened, the image generation can pick up where it had left off. This option can create vary large files as it stores the actual fractal image in the file. If this option is not selected (as is the case for unregistered copies of this program), the fractal image will not be saved with the parameters.

### Save Palette

Setting this option saves the current palette (whether it is a standard palette or custom palette) in the settings file. This permits a custom palette to be applied to the fractal the next time it is opened without having to load the palette separately. Simply checking this box will not save the palette in the parameter file, however. The user must still select either Save or Save As from the File menu to update the file.

If this option is left unselected, the palette will not be saved to the parameter file. In this case, if the fractal had a custom palette associated with it, that palette will be lost when the file is opened from disk (unless it was saved with the Save Palette command). A default palette will be assigned to the fractal.

# Save Selection Only

Checking this item permits saving only a selected region of the fractal. In response to the Save PICT menu option, if this item is checked and a selection is active in the fractal, only the selected region will be saved.

### Use Faster Direct Color

Selecting this item causes CFG to use interpolation for direct color fractals using the Rainbow Palette instead of the standard system calls. This is especially useful for Power Macintosh computers since the standard method is very slow due (those portions of the Macintosh Toolbox are emulated). The fractal will be produced about three times faster, with only small color deviations from the standard coloring method.

### Depth

The image's depth can be selected by the depth pop-up menu. The user may choose to create a fractal with as many colors as the most colorful monitor connected to the system or he may choose a specific color depth.

One may choose to modify the depth of a currently open fractal. This can be dangerous since memory must be re-allocated. Make sure that the fractal is saved before altering its depth.

## Apply All

This button will distribute the preferences to all open fractal windows. Thus any

changes made to a particular window can easily be applied to all windows.

## Creator Preferences Dialog

The Creator Preferences Dialog is displayed in response to hitting the Creator Icon. This dialog controls the application that will be assigned to opening any text and graphics files created by CFG. Each preferences item is described in detail below.

## Image Creator

This set of controls permits the user to select an application as the owner of graphics files created by this program. One can either enter the 4 character signature into the editable text field or use the Select button to choose an application. An application chosen by the Select button will have its name dsiplayed below the button and edit text field. If the signature is manually entered, no application name will appear.

# Text File Creator

This functions exactly as Image Creator above except that the creator applies to text files created by CFG.