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## Getting Color Information

If you want information about the colors of a picture or pixel map, you indicate how many colors you want to know about, what sort of color sampling you want done, and whether you want colors returned in a palette or color table.

Currently the **Picture Utilities Package** has two color-sampling methods: one that gives you the most frequently used colors and one that gives you the widest range of colors. Each has advantages in different situations. For example, suppose a forest image has 400 colors, of which 300 are greens, 80 are browns, and the rest are a scattering of gold sunlight effects. If you ask for the 250 most popular colors, you might, in early summer, get all greens. If you ask for a range of 250 colors, you will receive an assortment stretching from the greens and golds at one locus of RGB space to the browns at the other, including colors in between that might not actually appear in the image. If you need to use less than the image's full color set, you now have some information that may help you make the selection.

You can specify that the **Picture Utilities Package** chooses which color-sampling method to use (with the constant `systemMethod`), or you can specify one of the two color-sampling methods. By letting the **Picture Utilities Package** decide, you assure that when new methods are made available they will be chosen when appropriate.

<code>systemMethod</code>	method chosen by picture utilities
<code>popularMethod</code>	most frequently used colors
<code>medianMethod</code>	range of colors

You can also supply a color-sampling algorithm of your own, as described in **Creating Custom Color-Sampling Methods**. In that case, you pass the resource ID of your color-sampling method.

**Warning:** When you ask for color information about a picture, the **Picture Utilities Package** only takes into account the version 2 picture opcodes RGBFgCol, RGBBkCol, BkPixPat, PnPixPat, FillPixPat, and HiliteColor (as well as pixel map or bitmap data). Each occurrence of these opcodes is treated as 1 pixel, regardless of the number and sizes of the objects drawn with that color. If you need an accurate set of colors from a complex picture, create an image of the picture in an offscreen pixel map, and then call **GetPixMapInfo** to obtain color information about that pixel map.

You can request that colors be returned in a color table, a palette, or both, and that black and white not be returned in palettes or color tables. You can also ask for information about comments and fonts encountered in the picture.

<code>returnColorTable</code>	returns colors in a color table
<code>returnPalette</code>	returns colors in a palette
<code>recordComments</code>	creates a handle to comments
<code>recordFontInfo</code>	creates a handle to fonts
<code>suppressBlackAndWhite</code>	suppresses black and white from color tables and palettes

When you use the `returnColorTable`, `returnPalette`, `recordComments`, and

recordFontInfo values, you create handles to the additional information they provide. It is your responsibility to dispose of these handles. The **Picture Utilities Package** always returns NIL for the palette if you run system 7.0 with the original QuickDraw.