Tony Reveaux

COOL MAC Clip Art Plus!

FREE DISK PACKED WITH SPECTACULAR CLIP ART!
Cool Mac™
Clip Art Plus!
Cool Mac™ Clip Art Plus!

Tony Reveaux
For my parents, Marion and Edward Reveaux
Producer Laura “Let’s Make a Deal” Wirthlin
Director Marj “Bar-” Hopper
Set Designer Katherine “Pixel Power” Hanley
Original Score David “Tenor Man” Ciskowski
Continuity Michele “Rodeo Queen” Laseau and Scott “Can’t But Wish I Could” Cook
Key Grip Michael J. “Just Say” Nolan
Gaffer David “Thunder Thumbs” Bartley
Best Boy Mat “Yes, as in Door, Floor, and Wrestling” Wahlstrom
Costume Designer Jay Corpus “Delecti”
Hair & Makeup Greg “Semolina” Pilcher
Production Stunts Tim “T-Dog” Cox
Mark “Raging Yang” Enochs
Tim “Keep Those Wagons” Groeling
Phil “Sober Yin” Kitchel
Tom “I’m in the Mood for” Loveman
Carrie “Grapes of” Roth
Kelli “Widdle House in a” Widdifield

Filmed entirely on location in Carmel, Indiana, USA

Composed in ITC Garamond, Helvetica, and MCPdigital by Hayden.
Tony Reveaux

Tony is one of those people who, after being active in the arts and academia, found himself moving into the expanding sphere of Macintosh-based computer-aided multimedia. The surging fusion of art and technology has been his beat as a writer, journalist, and consultant.

Armed with a background in photography and film, he has spent twenty years teaching media studies at a number of fine institutions, including the University of California at Santa Cruz, the San Francisco Art Institute, and Sonoma State University. He has also designed and produced multi-image projections for museum, theater, dance, and opera venues. Starting with motion picture journalism and criticism for periodicals such as American Cinematographer, Film Quarterly, and Artweek, Tony moved on to write software reviews for The Whole Earth Software Review. From then on his life has been a constant stream of writing activity, including A+, Macintosh Today, Computer Currents, and Media Letter. At present he is the editor of Computer Publicity News, a contributing editor for Artweek, and a columnist for MicroTimes and Film/Tape World. Tony also writes for NewMedia, Visions, and Computer Gaming World and is an Expanded Media Consultant with High Tech Communications in San Francisco.
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Acknowledgments

Since a book about clip art is about images which spring from the entirety of civilization as we know it, I must do the impossible—thank that entire world for inspiration.

That includes my parents and, being a theatrical family, all the directors, scenic designers, composers, writers, critics, actors, and dancers who have come through our doors and on past the final footlights.

As an art student, all my teachers of art history, architecture, sculpture, music, theater, and film. And, as a teacher, my colleagues and students.

The editors and publishers of all the art and computer periodicals that I have written for and write for now.

Hi-Tech Communications of San Francisco, for a workplace of humanistic professionalism.

The tireless clipsmiths who harvest the vast shoals of the printed page to preserve and give new electronic life to ideas in pictures.

Hayden, for the inventive leadership of Mike Britton and, most especially, Marjorie Hopper for her pragmatic whimsy and infinite best.
Introduction

It was 1984. I was just about to buy a Kaypro, the “liberal writer's computer,” when a campus colleague slipped me a hint from an educational conference—Apple was going to release a desktop computer that could combine text and graphics.

What a concept!

I got my first 128K Macintosh a couple of months later. It was a good book that I couldn't put down. It was also a guppy that grew. My primal Mac evolved to memory, slots, large screen, color, input devices, and multimedia in a spiral of dizzying Darwinism.

Seven years later, and the Macintosh is a desktop publishing and multimedia macrocosm that is already beginning to poke its mouse-whiskers into virtual reality. Its the graphical user interface (GUI) that makes the Macintosh a Mac, and learning to use the Mac more graphically will help make you a better communicator.

About this Cool Mac Book

Cool Mac Clip Art Plus! is organized to introduce you to computer graphics and desktop publishing through the fun and fancy of clip art. You'll learn:

- what it is, where it came from, and what the different kinds of clip art are, including motion clips.
- the lore of graphics file formats and the alchemy of file compression.
- how and where to buy commercial clip art—even how to acquire it from user groups and on-line services.
- all about the liberties you can take to integrate clips into your design strategies.
- more than you thought possible about DeskPaint.
• how to produce rubber stamps, business cards, letterheads, flyers, posters, and banners using DeskPaint, clip art, and your own crafty noggin.

• how clip art can help you in your multimedia ventures.

• about advanced activities like using scanners and graphic databases.

• that there are copyright issues to know and care about.

Why You Should Have This Book
This book is meant to serve as a “My First Sony” of computer graphics. By using clip art as a kickstart to graphic design, you can begin to realize your potential as a creative communicator without fear of drawing. I have consciously tried to design the book to be accessible to anyone, from a junior high school student with a taste for the finer things in life to the time-stressed business professional who wants to master one more skill, without having to work too hard.

With the DeskPaint application and a collection of clips, Cool Mac Clip Art Plus! is a very economical package that could be used as a module in a computer lab curriculum. While I haven’t taught at that level, I have seen fifth and sixth grade students create their own HyperCard stacks. They’ve learned to communicate graphically—and so can you.

How This Book Was Created
One reason this book is cool is because, along with all Hayden titles, it was created entirely on a computer. All preliminary design work was done on a Macintosh IIcx with both a color and a gray scale portrait monitor from Mirror, a Hitachi CDR1750SMAC CD-ROM player, and a Microtek 600ZS flatbed scanner, using DeskPaint, DeskDraw, Aldus PageMaker, Adobe Photoshop, Adobe Illustrator, Light Source’s Ofoto, FGM Inc.’s PICTure This, and ImSpace Systems’ PICTpocket. All writing and editing was done with Microsoft Word 5.0. Pages were laid out using PageMaker. The index was created via PageMaker. The cover was designed using Adobe PhotoShop and QuarkXPress. Pretty neat, huh?
Conventions Used

Text you are instructed to type and keyboard maneuvers appear in blue type.

Text that appears on-screen, such as messages, menu commands, and names of icons, appear in bold blue type.

Keystroke combinations are indicated as in the following example:

Press Command-P to print.

This means you press and hold the Command key (the key at the bottom of your keyboard with a picture of an apple and a cloverleaf on it), and then press the P key. Release both keys simultaneously.

The following icons appear throughout this book:

Cool ideas

Clues and hints

Important notes

About Your Cool Disk

This Cool Disk has everything you need to get cracking creatively as soon as you boot it up. You’ll find a lively collection of samples from some of the leading clip art publishers. DavysDingbats is a community of dingbats, or pictorial accents, in the form of a font set. It’s a very handy way to enrich your language as you process your words. PopChar is a handy pop-up utility that reveals a complete font set in one window. Wild dingbats find there is no place to hide when PopChar is on patrol!
A special edition of Zedcor's DeskPaint provides a full-featured black-and-white graphics program that installs as a desk accessory. It is compact enough to make a perfect graphics companion for your PowerBook when you take it to that desert island. With DeskPaint, you can browse through the clip art collection, modify clips, combine text and graphics, and even create artwork from scratch. Its excellent on-line Help file is always there to guide you through your activities.

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Disclaimer

Executive summary: We take full credit for anything you like about this product. We designed it just for you. Any aspect of this product that dissatisfies you is purely an accident or simply not our fault.

We at Hayden have tried our best to make this the most fun and useful Macintosh book available to the masses. However, we are (unfortunately) only human, and it is conceivable that you may encounter unusual circumstances that we did not discover in our extensive two-hour testing session. For any problems you may have, we apologize in advance. We'll do our best to make amends wherever possible (and inexpensive).

Be careful. Practice safe computing. Make backups. Try these programs out on a friend's Mac first. . . .

Void where prohibited by law. No stopping, standing, or parking. No shirts, no shoes, no service. Place trays in the upright and locked position. This side up. Do not submerge. Curb your dog. Do not fold, spindle, or mutilate. Tape. Do not staple. Fully microwaveable. Under penalty of law, this tag may not be removed except by the consumer. Do no pass GO, do not collect $200. Have you enclosed your check?
No CODs. Keep out of reach of children. Not to be used as a flotation device. Keep off the grass. If gets in eyes, flush with warm water. No trespassing. This is not a toy. Non-negotiable. Please enclose stub with payment. Open 9 a.m. ’til closing. Do not induce vomiting. Consult your doctor or pharmacist.

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What our readers think of Hayden is crucial to our sense of well-being. If you have any comments, no matter how great or how small, we’d appreciate your taking the time to send us a note, fax us a fax, rhyme us a rhyme, etc.

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If this book has changed your life, please write and describe the euphoria you’ve experienced. If you have a cool book idea, contact us at the above address. We always welcome proposals, for marriage and otherwise.
So, You Say You Can’t Draw?

The first impression you had of your Macintosh was probably its graphical user interface. Now you and your Mac together can make an almost unlimited number of graphic impressions to expressively visualize, communicate, and inform others of your ideas and your feelings. Whether you have a Mac Plus or a Quadra, you can design notes, flyers, newsletters, and presentations that can help others share their activities with even wider audiences.
Part I: So, You Say You Can't Draw?

The ability to draw well and illustrate professionally is as widely and fairly distributed as are the talents of recordable singers and signable athletes. When you want to build a hut in the jungle, you choose the right rocks, limbs, and leaves to do the job. With the electronic art studio that exists inside your Macintosh, you can choose the right clips, borders, and letters to creatively put together a finished communications project. Clip art can jump-start your creativity and inspire you to go on to bigger and more ambitious activities.

In the pages and kilobytes to follow, you will see how electronic graphic design is as new as tomorrow’s front page and yet carries forward the same primal need for communication as our ancestors had when they rubbed two sticks together for a signal fire. Digital clip art libraries extend our collective family of socially shared images, from the preservation and continuation of classic printing to the latest snips and quips. We’ll see what all the different kinds of clip art look like and what shapes they come in, from black-and-white and gray to color and motion. You’ll be able to identify the various file formats and learn what to do with them. The samples on the Cool Disk are just a sampling of the oceans of art that are available in the marketplace and over the wires. The ownership of images is often unclear, but we’ll offer some guidance from those who know.
Images, Images, Images

Ancient Impressions

People have been making marks with pictorial images for as long as history has left surfaces for us to read. The Sumerians and Phoenicians stamped figures into clay tablets and the Ancient Egyptians pressed the hieroglyphics of their Gods on papyrus scrolls. The Chinese and Japanese inked woodcut blocks and rubbed characters onto rice paper. These images served as proofs of official emblems, signatures, and rulings in societies where virtually every part of life had a decorative nature. Traditional printers' ornaments and devices in metal type have been in use since the fifteenth century. By the seventeenth and eighteenth
centuries in Europe and Great Britain, woodcuts of illustrative elements could be rearranged and reused in different combinations to print broadsheets and chapbooks. It was during those years that movable images began being used even more freely in personal, creative, and whimsical ways (see figure 1.1).

Rubber stamps have been used for work and for play since the Civil War. Many rubber stamps are struck from graphic clip art designs used in publishing, while others come from original designs and typesetting (see figure 1.2). Accented with different colored inks, and applied singly or in combinations and patterns, rubber stamps enliven notes and letters. Decalcomanias—or “decals” and “transfers”—embellished many arms, legs, books and lunch boxes in the forties and fifties. The rolls of decorative peel-off stickers sold in shops today carry on the happy tradition. All these ready-made remedies for dullness make it possible for children, teenagers, and adults to add a personal spark to the surfaces of their lives for pennies without requiring professional skills. Once you have dipped your Mac into the clip art pool, you will see more choices of more kinds of images than even the most devoted stamper or sticker ever dreamed possible.

Clipping Art the Old Fashioned Way

Since the turn of the century, graphic clip art for publishing, advertising, and technical documentation has been sold in sheets, portfolios, books, and by subscription services. Dover Publications has produced many books with reproductions of classical clip art. Artists continue to use them today.

You can send for a free catalog from Dover Publications, 31 East Second Street, Mineola, NY 11501.
Graphic artists employ clips as part of their designs. They cut out the clips and paste them down in layouts. If an artist wants to reuse them, or if they are not at the proper scale, he shoots them with a copy camera on high contrast black-and-white film. During this process, he can enlarge, reduce, texturize, and even change the clip's orientation. The artist makes prints of the newly revised images, and puts these clips into his design.

When you "cut" and "paste" with mouse and keyboard, you are making, in digital form, the kinds of decisions and actions that artists make with scissors, matte knives, tape, glue, and hot wax.

**Clipping Art Electronically**

To produce most commercial clip art, printed images are digitally scanned and cleaned up within a graphics program. Sometimes a video camera on a copy stand is used to capture the image, when the camera is part of a desktop system that can transform the video signal into a digitized file that can be accepted by a computer.
Part I: So, You Say You Can't Draw?

Artists use high-end drawing programs like Adobe Illustrator and Aldus FreeHand and image manipulation programs like Adobe Photoshop and Fractal ColorStudio to create most clip art. Complex, detailed images require a bitmapped scan of an original graphic that can be brought into the background layer of the program as a template. Then you make a line tracing over the image with the program’s drawing tools. Whether an image is bitmapped or PostScript, once it becomes digital, you can use and manipulate it with the right kinds of software in many ways and for different purposes. Parts II and III will show you many of the ways you can develop these images and a few of the countless uses you can put them to.

Closing Thoughts

Electronic clip art is both old and new. It is a creative application that continues ornamental, decorative, and expressive practices that go back to ancient times. Today, the Macintosh can make it available to anyone who has things to say and wants to communicate them in an interesting and rewarding way.
The Family Tree of Clips

The sky is the limit for the subject matter and design of clip art. Clips come in several different physical varieties and file formats. This chapter introduces you to the basic family of clip types in terms of their looks and functions.

Black-and-white Clip Art

Though more color clip art is available now than ever before, the majority of collections still come in black-and-white and gray scale. Most designers prefer to add their own color to a piece of line art, since the color of the clip rarely matches the color palette of their design. Black-and-white clip art ranges from textured bitmapped MacPaint to razor-sharp PostScript-based EPS files. Figure 2.1 shows samples of both types.
Gray Scale Clip Art

Gray scale is not just the increasing or decreasing of densities of dots to express shading, as is often seen in bitmapped clip art. True gray scale, available in PostScript and TIFF files, is the smooth, photorealistic gradation of up to 100 shades of gray. (See figure 2.2.) Gray scale provides images with an airbrushed, three-dimensional presence that can be an alternative to the flatness of line art. A photograph, in PostScript or in a scanned TIFF file, is another kind of gray scale image.
Color Clip Art

Color clips are usually colored and filled versions of line art, primarily used in the creation of presentations and multimedia projects rather than publishing. Many sets of color clip art available commercially are in the PICT2 format. As you can see in figure 2.3, PICT2 really isn’t meant to print very well. PICT2 is configured for images designed to be viewed in transparency. These images can contribute strong accents to compositions that appear on a monitor or are projected on a screen or output to slides. Other color clips are created from color scans. These scanned images can be displayed or printed in either 8-bit low resolution—that may appear soft and rough-edged—or sharper 24-bit images.

![Figure 2.3](Image)

PICT2 color

Keep in mind we aren’t able to show you colorful color clip art in this book. But trust us. The clips we say are color are indeed color.

EPS color clip art will publish just as well as EPS gray scale (see figure 2.4), and—with the appropriate software and color output system—will print directly in color. Because they are EPS files, you can fully edit them and their color attributes within a PostScript graphics program.

Because of the extra information it carries, a color file will be much larger than a black-and-white file, even when they both portray the same image.

The way your monitor displays gray scale and color clip art depends upon what kind of video card is in your computer. If yours has a monochrome, gray scale card, then the gray scale clip will appear approximately the way it will look on the printed page. If your monitor has a low-resolution card, as in a Macintosh Plus, the same image appears in outline and dithered gray tones.
Dithering creates a rough approximation of a smooth tonal range by substituting dots and/or patterns. For example, if you display a 24-bit color clip art document on a Mac that has an 8-bit or 16-bit color card, the pure colors will be made up of dots of several colors that approximate a pure color, often with a spotted or speckled character. The result of your design, whether it is a printed flyer, a slide show, or animation, will depend upon the resolutions of your output and display devices. The clip retains all the original details of its gray scale or color attributes that it came with, even if it looks different on your screen than it does printed in the catalog. Most EPS files are designed with one major goal—to look good in print. The attributes that will ensure a sharp image after it has gone through a printer are not always the same ones that will look good on a monitor. Conversely, those color PICT2 format files work just the opposite way. Their goal is to look good in illuminated display.

3D Clip Art

When we refer to 3D clip art, we mean more than a well-rendered drawing of a solid subject. The images can take any form, including geometric shapes, alphabets (as in the head above), maps, architectural modules, and even an object like a sofa (see figure 2.5).
Some clip art may seem more three-dimensional than others, but all 3D clip art was created in an editable 3D drawing program. 3D, modeling, and computer-aided drawing (CAD) programs are most commonly used in general design work where the investment in such a program can be worthwhile. 3D programs give you a tremendous amount of design power. For instance, those letters in the “3D Clip Art” head were all the same size and lined up straight before I decided to test their orientations for different design solutions. With a 3D object, you can choose to render it in a wireframe, solid, shaded, or shadowed format, redirect the light sources, rotate it around in any direction, alter the scale and shape of individual parts, or change the nature of the whole object itself.

You can’t make changes in the files outside their parent applications. However, if they are Macintosh files, they usually can be exported to other programs. Macromedia’s Swivel 3D, for instance, is used widely by artists to create three-dimensional elements for graphic designs used in paint, page layout, and animation projects.

**ALPHABETS**

Alphabet clips, like the ones used in the head above, are individual letters, each existing in its own file. These letters are larger and more complex than those found in most fonts, and usually are used when only a few letters are needed for a design, such as a very dramatic banner or attention-getting headline.
Part I: So, You Say You Can’t Draw?

A great variety of fonts is available for the Macintosh, including display fonts. (Display fonts are large-scale decorative faces.) However, cutting and pasting alphabet clips can be less work than installing and removing an entire font. Besides, most alphabet clips would create extremely large files if they were translated into full display fonts.

Drop Caps

drop cap is a capital letter, usually more decorative than an upper-case alphabet clip, that can stand on its own as a design element. As demonstrated here, a drop cap can be the lead character in an individual paragraph or in a full-page layout. Like alphabet clips, drop caps can be used as initials and for chapter and index headings. Conversely, alphabet clips can serve time as drop caps.

When a drop cap replaces a character, it displaces text and line space, and so should be used carefully in a page design.

Dingbats

No one remembers where the word “dingbat” came from, not even the printers who use it to describe the character-based ornaments they use for bullets, accents, and paragraph breaks. (And you thought Archie Bunker made it up!)

Today’s dingbats are font characters designed to carry a pictorial or emblematic message and assigned a keyboard position just like any other character. For the personal computer user, dingbats are installed as fonts. Large-scale dingbats are also found occasionally in clip art collections, and are then as much printer’s ornaments as dingbats.
You can see Zapf dingbats under their keyboard letter equivalents in the heading above. They were created by Hermann Zapf, a famous German type and book designer. He shaped them so they would share the same typographical signature as the characters in his other Zapf fonts, yet still maintain a simple purity that enables them to join other kinds of fonts on the same page. More illustrative dingbat fonts, like DavysDingbats (see disk) or Apple's Zeal, provide an enriched palette of graphical options for your communications.

When you enter a dingbat as text into a program like DeskPaint, it can become a graphic element and be manipulated and reused like any other element. In addition, when the dingbat font is a PostScript font like Zapf, or a TrueType font like Zeal, the dingbat can be enlarged to page, or even poster size.

PostScript and TrueType font dingbats often provide the symbols to make instant full-page signage for things like directional arrows, no smoking, and restrooms.

PopChar

Most fonts have dingbats hiding somewhere in their character set, like a bird, a rabbit, or an apple. PopChar, the freeware utility on your new Cool Disk, can reveal where the goodies are and what keyboard command you use to enter them into your document. PopChar displays an entire font set for your perusal, such as the DavysDingbats font on your disk and in figure 2.6.

First, select a font used in your document and click on the tiny P box at the left end of your menu bar. Without releasing the mouse button, slide the cursor over the characters. As each one is selected, the keyboard command appears in quotes at the right-hand end of the PopChar menu bar. In figure 2.6, the American shield was selected. According to the PopChar menu bar, if you're using DavysDingbats and type $68 = 104$, you'll insert an American shield into your document. Those numbers in the brackets, $[68 = 104]$, are just information for you programmers out there. Other good utilities for this purpose are Apple's KeyCaps and Dubl-Click's FontCharter, both in the form of desk accessories.
Part I: So, You Say You Can't Draw?

Borders, Boxes, and Frames

Clip art can supply the frame as well as the picture.
Borders come in various degrees of completeness, as you’ll learn in chapter 8. Usually you’re provided with the structural elements (bars, corners, details) you need to build a border. You can make it just the right size by performing the stretching and addition operations offered by DeskPaint and other such programs.

Boxes are predefined graphic elements with a hole of space to accept text or graphics. Headers, scrolls, plates, labels, banners, windows, friezes, and cartouches are other forms of boxes. If they are EPS or PICT files, they can be sized. Bitmapped boxes and frames may have some give to them, but don’t expect much.

Frames are completed borders, but are like boxes in that they are predetermined as to their size. Most are meant to be full-page, quarter-page or some other layout module useful in the publishing practices of their time.

If you look carefully, you will find that certain frames will have a section of bar that can be stretched.
Backgrounds and Patterns

Graphics and paint programs, like DeskPaint, have palettes or libraries of patterns and fills that can provide instant areas of patterns for your designs (see chapter 6). Clip art patterns and backgrounds can be more complex, thematic, and pictorial than program patterns. Some, like the figure at the start of this chapter, are scenic panoramas. You can use them in their entirety for posters and animation backgrounds or you can selectively lift out sections and elements of them for any number of other uses.

With the increasing number of CD-ROMs being published that include rich libraries of backgrounds and patterns in different levels of gray scale and color resolutions, you should have no problem finding what you want for a special application.

Patterns are either tilable or they are free-form. Tilable means that, like ceramic tiles, the element is a building block that can be combined and repeated. Free-form patterns can be cut in any shape or area, but their edges won't always match up with another piece of the same pattern. Tilable patterns are, like graphic program patterns, infinitely repeatable and extensible. The rectangle of wooden shingles in figure 2.7 can be joined together with more copies of it, and the opposite edges will merge and match. Repeat that operation to cover as large an area as you need.

Figure 2.7
Pattern
Closing Thoughts

Electronic clip art is more than just a single picture that can be cut, pasted, and reused. It is a versatile approach to the application of visual elements of any kind that can be accessed by the computer.

The family tree of clip art has many, many branches. It includes black-and-white bitmapped images that can be used by any Macintosh; gray scale and PostScript images that can provide professional-looking output for publishing; and even color clip art for your presentations and multimedia projects.

Three-dimensional control of clip art images is possible within 3D, modeling, and CAD programs, and the images can be exported to page layout and animation programs.

The dingbats in fonts are really a form of miniature clip art, providing even more options for your graphic communications.

You can enrich and dignify the printed page with borders and frames, and spell out your message with alphabet and drop cap letters.

Clip art can even be full-page patterns and backgrounds to anchor and surround your words and your art.

Clip art is as much an attitude of visual enterprise as it is a graphic element.
In the family tree of clip art, each clip was created in one graphics file format or another and this format affects how you work with it. For example, not all Macintosh graphics file formats are compatible with every application you may use. Your ability to change the size or orientation of the image will not be equal in every format. The maximum amount of resolution varies. The way you can or cannot edit the image may differ radically from one format to the next. The same image may occupy several times more kilobytes of memory in a document in one format than when it resides in another. If you try to modify a clip's format using an application or translation utility, you'll discover that some formats are more flexible than others.
Part I: So, You Say You Can’t Draw?

MacPaint has the lowest resolution and highest flexibility, while color PostScript has the highest resolution and least flexibility.

An image’s appearance on the screen or printed page can often tell you about its format. For instance, bitmapped images have a rougher texture and their curved lines tend to exhibit “jaggies,” a stair-step type of pattern, instead of a smooth curve.

Here’s what icons for different graphics file formats will look like on your desktop:

- MacPaint
- PICT
- Adobe Photoshop PICT
- Ofoto PICT
- Microtek scanned TIFF
- Adobe Illustrator EPS
- Aldus Freehand
- EPS Exchange
- Swivel 3D
- Aldus Compressed File
- Stuffit Compressed File
- Generic icon

MacPaint

MacPaint is the most “primal,” or native, graphics file format for the Macintosh. Named after MacPaint, Apple’s first graphics application for the Mac, it is a bitmapped format based upon the grid of pixels (picture elements) which supports the screen image for whatever you see there—lines, letters, numbers, patterns, and pictures. The grid is 720 pixels high by 576 pixels across, which gives the displayed image a resolution of 72 dpi (dots per inch). Like a checkerboard of electric light switches, each one of these pixels will either be turned “on” for black, or “off” for white. In the computer’s binary code, “on” is a 1 and “off” is a 0. Thus, MacPaint has a bit-depth of 1. A letter or picture is built by the distribution of black and white pixels in the grid.
DeskPaint is a bitmapped graphics program. The tools you use to create images, such as the brush, line, and circle, empower you—through your mouse and cursor—to turn those "switches" on and off to achieve different design results. With a color Macintosh, using the color version of DeskPaint or another color paint program, each pixel can also display a color. Like a stack of different colored glass lenses, each pixel can be switched to have one or more of those color attributes "on" or "off." This determines the color each pixel will appear to be. Depending upon the tonal range of the paint program and the power of the graphics board in your Mac, the program will have a bit-depth of 8, 16, or 24.

**Advantages**

MacPaint has widespread support on the Macintosh. It is a compact file format, simple to implement, and exportable to virtually any other program. Its bitmapped structure renders soft and delicate textures with expression and fine-point fidelity. MacPaint-based programs, which respond to many of the same kinds of operations you would use in traditional graphics, are very easy to learn and work with.

**Disadvantages**

MacPaint is limited to 1-bit black-and-white; gray scale is possible only through dithering. Designed for Apple's first dot-matrix printer, MacPaint images are not improved much when output to high-resolution printers like the LaserWriter since they are limited to 72 dpi. (The maximum output size is an 8½-by-11-inch page.) The bitmapped document cannot command the PostScript typefaces from the printer and defaults to bitmapped characters. Some editing operations can be very difficult when they involve changes to portions of the design that are embedded in the image. Sizing and rotation without distortion are very limited (see figure 3.1). When the giraffe's legs are reduced by 25% through DeskPaint's **Scale Options**, they may be one-fourth the normal size, but the lines have collapsed and degraded. At each successive scale of magnification, the giraffe's spots become more geometric and less naturalistic.
Think of MacPaint as being like a printed image on a balloon. When you let air out of it, the dots of the image clump and clot together. When you inflate the balloon, the image begins to lose coherence as the dots are spread farther apart.

The seven colors under the Label menu of the Macintosh desktop were chosen to match the colors available on the multicolored ribbon that worked with Apple's first dot-matrix printer for the Macintosh.

**TIFF**

TIFF (Tagged Image File Format) is the format typically used for scanned images saved in black-and-white, grayscale, or color. TIFF files are bitmapped, but, unlike MacPaint, they are not chained to one low resolution. TIFF files can be up to an 8-bit pixel depth, support up to 256 shades of gray, and allow variable image dimensions. TIFF files can carry information of up to 2500 dpi for high resolution printers, and produce very good, camera-ready results when output from a 300-dpi LaserWriter. They are used widely for the storage and exchange of images between different graphic media.
As an example of how TIFF specifications are always being changed and added to, TIFF 6.0—the latest version—includes JPEG (Joint Photographic Experts Group) compression for managing file sizes of color TIFF images and the enhanced abilities to handle digital video images and to process color images used in color publishing and pre-press systems. And JPEG standards themselves are still evolving.

**Advantages**

TIFF files can be used with a wide variety of applications and computer systems to handle black-and-white, gray scale, and color images at a very flexible range of resolutions. They can successfully store and reproduce continuous tones which are editable with photo-retouching types of programs, such as Adobe Photoshop, when used on a Macintosh with an 8-bit graphics card. DeskPaint will accept many, but not all, TIFF images.

**Disadvantages**

TIFF files may include a signature code that is particular to a brand of scanner or output device and may not decompress and transfer easily. TIFF files can be very large, even exceeding the capacity of an 800K floppy disk.

Think of TIFF as being like a graphics grid where the number of pixels can be increased or decreased and changed to different sizes to support different resolutions.

**PICT and PICT2**

PICT files are vector-based, object-oriented graphics applications. That means that instead of being a field of varying pixel-dots, like bitmaps, the elements of the PICT image are geometrical objects which are created and stored as x/y coordinates on the Macintosh grid. PICT is really a graphics description language written in the Mac's QuickDraw code.
Programs like DeskDraw, MacDraw, and SuperPaint are object-oriented drawing programs. They enable you to create a document, save it as PICT, and then go back and edit this PICT file. Elements are created with tools similar to those in a paint program, but without the same gestural freedom of texture. When elements are selected, they display square "handles" that are the control points for manipulation. Elements can be grouped together and then ungrouped, but each element is dynamic and can still be selected and edited in isolation without affecting the rest of the document.

One of the greatest advantages to a draw document is the ability to manipulate objects in layers. You can create one line or object right on top of another, without affecting the one on the bottom. The Move to Front and Move to Back commands, common in all draw programs, allow you to retrieve an object even if it is hidden from sight. Draw objects are like shapes cut out of cardboard. You can move them around, stack them in layers, and change your mind without changing the object. In comparison, paint objects are like shapes drawn in ink on soft paper. You can draw one paint shape on top of another, but that act will permanently alter the bottom shape.

In the left-hand image in figure 3.2, a PICT object of an illustration of a Mac Plus was imported into DeskDraw. I used the graphic tools to trace a line drawing over the picture of the Mac. In the center image, the draw document is shown with all its individual objects selected and the handles highlighted. The completed image as printed is shown at the right. Text in Draw remains independent and can be moved and re-edited. You can go back to a draw image and change line widths, add or delete objects, move and modify elements, and add and subtract fill patterns, as many times as you want.

The Autotrace tool in DeskPaint enables you to capture some paint elements as objects, which can then be imported into DeskDraw or another object-oriented program. Most PICT format clip art files are not complete draw documents with all their objects intact. They are captured as one single PICT object like the Mac in figure 3.2.
PICT2 supports 8-bit color images drawing upon a 48-bit color table from Color QuickDraw.

If you have Apple's TeachText utility on your desktop, it will allow you to open and display (but not edit) a PICT graphic, independent of any graphics program.

**Advantages**

PICT files are compact, easily transportable, and can support color as well as high-resolution black-and-white. Object-oriented documents allow you to edit elements independently.

**Disadvantages**

Unlike TIFF, PICT does not support continuous tone shadings. PICT2's color depth support is limited by Color QuickDraw.

Think of a PICT file as being like a clockwork mechanism with gears and wheels that each draw lines, arcs, and patterns. Whether it is reduced or enlarged, the gears and wheels continue to describe the same graphics drawn to the new size. To edit the image, you can go to each individual part and change it, separate from the others.

**PostScript and EPS**

PostScript is a page description programming language originally devised for printers and other output devices. It is the most complete graphics description
format, possessing both the bitmapped format's fluid freedom of curvilinear lines and PICT's object-oriented control.

PostScript's basic element is the path-based Bézier curve, which can be drawn and then reshaped as an object, in smooth, easily adjustable curves as displayed by basketball player A in figure 3.3. As in PICT files, the elements display square "handles" as control points when selected, as in player B in figure 3.3. In its Encapsulated PostScript (EPS or EPSF) form, demonstrated by player C, a PostScript file can be displayed in programs that have QuickDraw but not PostScript by employing a PICT preview of the image. Even when a program does not have all the data instructions, the file will be represented by a simple gray box icon and the printout will be of the same high quality. To edit PostScript clip art, you need to bring it into a PostScript drawing program such as Adobe Illustrator, Aldus Freehand, or Cricket Draw.

A PostScript graphic can be pasted easily into a page layout program like Aldus PageMaker or QuarkXPress, and even into a word processing program like Microsoft Word. While you cannot edit the PostScript document within these programs, you are free to crop, stretch, and resize it.
Bitmapped graphics programs like DeskPaint cannot recognize, preview, or edit PostScript files.

**Advantages**

PostScript has become the standard for desktop publishing. It has the capabilities for effects, such as text rotation and gradient fills, and supports color pre-press separations. Its dynamic elements can be edited separately with great precision. Like TIFF, PostScript can embrace a wide range of resolutions.

**Disadvantages**

It cannot reproduce the soft and delicate textures of MacPaint. EPS gray scale images are much larger than their TIFF gray scale counterparts. Because the printer is also the processor for PostScript, more time is needed to print an image. PostScript applications are more expensive and complex than the others and they require a lot of effort to master.

Think of a PostScript file as being like an automated robotic shape factory in the printer. PostScript can accurately describe the complex curves and areas you created in the PostScript drawing program. When the file is enlarged or reduced, the printer factory will recreate them at the proper proportion. You can go into the drawing program and reprogram the attributes of each curve generator separately, and the printer will produce the new figure.

**Closing Thoughts**

Underneath every clip art image is a file format. Graphics file formats determine whether an image can be used and edited within the graphics and page layout programs you are using. Each format has different characteristics in terms of file size, ease of importing and exporting, resolution in printing, resizing, and editing.
MacPaint is a low-resolution, easy-to-use black-and-white format which can be exported to almost any other application, but is limited in its resizing and rotation capabilities and does not support PostScript text.

TIFF, often used in scanning, is a bitmapped format that is resolution independent and can reproduce continuous tones.

PICT files are compact and easily transportable. As object-oriented, vector-based documents, they can be edited by addressing each element independently.

PostScript is a page description language processed by the printer and is capable of the highest precision in editing and output. PostScript applications are more expensive and learning intensive than bitmapped and PICT-based programs, most of which cannot preview or edit PostScript files.

There is a dividing line of practice between PostScript and bitmapped computer graphics. To use PostScript fully, you need a Macintosh that is powerful enough to run the more costly and complex editing and page layout programs. Most bitmapped programs can be run on any Mac and are easy-to-use and relatively inexpensive. With Cool Mac Clip Art Plus! and DeskPaint, you can understand what PostScript is and what it can do while you enjoy being creative and learning to be productive in the lively bitmapped world.
CHAPTER 4

Motion Clips

PICS Animation

PICS animation files are sequences of PICT files linked by a runtime program. Collections of PICS motion clips, both monochrome and color, are available for use in animation programs such as MacroMind Director, PROmotion, Magic, Action!, and Cinemation. For graphic applications, individual frames can be captured, cut, and pasted from a sequence. A series of frames, such as those chosen from a Media in Motion clip as shown in figure 4.1, can provide a visual expression of motion and change. You may want to include a complete sequence fragment
for smooth, incremental change, or choose key frames—points in the sequence that highlight the positions of primary difference. Macromedia's ClipMedia Volumes on CD-ROM offer more motion sequences and animation graphics that can be used for graphic design. Generally, you must have access to an animation program to open up the sequences.

**Figure 4.1**

PICS animation key frames

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**QuickTime**

QuickTime documents are another source of clip art. A QuickTime movie is a motion clip that can be pasted into spreadsheets, word processing, and presentation programs that have QuickTime compatibility. Individual movie frames can be cut and pasted. The frames are relatively small and of low resolution, but you may find applications where they can be part of a design solution.

QuickTime means more than movies (MooV files). Different QuickTime compression file formats support different image resources. The Video compression format supports QuickTime MooV files. The QuickTime Animation format provides for fairly good resolution of graphic animation, and individual frames, if not resized, can provide a source of clips. If the animation was compressed from a video source, stills may exhibit excessive visual noise. The Photo and Graphics formats provide very good resolution black-and-white, gray scale, and color images that can be successfully enlarged.
Photo CD

Kodak’s Photo CD medium, an optical disk the same size as an audio CD or a CD-ROM, will grow to be an increasingly popular source for images. While designed to support high-resolution color photography, its efficiency for archival storage will make it serve graphics as well. Photo CDs can be played on a Kodak Photo CD player or any other Photo CD-compatible machine, such as a Commodore CDTV player or an XA-compatible CD-ROM drive. Apple’s CD SC Plus CD-ROM drive, and the Performa 600 CD and Macintosh IIdv CD computers with their built-in CD-ROM drives, can also play Photo CDs. Other CD-ROM manufacturers are adding Photo CD compatibility to their new models.

Kodak has gone beyond just storing color photos on the disk. Each Photo CD image document is supported in five selectable resolutions: thumbnail, snapshot, TV display quality, HDTV (for high resolution image handling), and full detail (which is adequate for color pre-press). In the Macintosh System 6.05 environment and higher, Photo CD will support RGB, gray scale, bi-tonal, PhotoYCC scheme, and all color QuickDraw pixel depths, including 24-bit. Export formats for the Macintosh are in PICT, EPS, and TIFF. QuickTime 1.5 supports Photo CD with automatic file format translation and can preview thumbnail images. You can use QuickTime 1.5 to view a slideshow movie of all the images on a Photo CD.

Closing Thoughts

You can catch clips from motion files such as PICS and QuickTime and read them from Photo CD. You can include them as full motion clips, such as pasting a QuickTime MooV into a word processing document, or select individual frames for graphics applications. A sequence of still frames can provide a graphic depiction of motion and change. You may need an animation program to open some motion clips for single frame capture.
Buying It by the Bushel

There is such an abundance of clip art that can be used with your Mac that the biggest problem can be storing all you decide to get. Not only are there great grab bags of miscellaneous images, you can find specialty packages that focus on applications such as architecture, electronics, medicine, maps, religious services, botany, zoology, sports, military, science fiction, and business.

The second biggest problem may be finding an exact clip that would answer a precise design problem you are facing. Even with the thousands of clips out there, there just may not be one (yet) that shows a mechanic fixing an Edsel or a cat dressed as a cook. Still, there is a great deal of inventive flexibility that is the artist’s stock in trade, and, as you’ll learn later in this book, there are ways to repurpose clips to meet your needs.
Part I: So, You Say You Can’t Draw?

The third problem you may find is in mixing and matching clips from different vendors. It would seem logical, for instance, that to compose a street scene for an ad you are laying out, you could paste in a walking man from one package next to a skateboarder from another, and a fire hydrant and a dog from two others. But when you put them together, even when they are roughly in the same scale, the graphic styles of the original illustrators may be just different enough to call attention to their lack of consistency. Even something as straight up as a giraffe can be drawn in different ways by different vendors. For example, figures 5.1, 5.2, 5.3, and 5.4 all show giraffes differently. Additional giraffes appear throughout the book if you want to make further comparisons.

Figure 5.1
Giraffe by SunShine
Figure 5.2
Giraffe by T/Maker

Figure 5.3
Giraffe by Multi-Ad
Clip Art Software Packages

The bible of Mac electronic clip art is the second edition of *Canned Art: Clip Art for the Macintosh*, by Erfert Fenton and Christine Morrissett (Peachpit Press, Berkeley). It is a 640-page compendium of printouts of commercially available digital clip art from more than 37 vendors. Images are arranged by vendor and software edition, with background notes, and ordering and pricing information. In the first edition, the authors were able to include printouts of most of the images of each company. Since then, there has been so much expansion of clip art products, the second edition just has samples from each vendor. Clip art packages are often reviewed in computer magazines, especially those concentrating on desktop publishing, graphics, and multimedia.

The first place to look for clip art packages would be your favorite computer store. The prices may or may not be more than those offered by mail order sources, but you will have a chance to sample the graphic style of the art from the packaging. Some stores will have open packages so that you can examine the manual, which may have the entire image inventory printed in thumbnails. If you know what you want, the advertisements in magazines like *MacUser*, *MacWorld*, and *MacWEEK* have many opportunities for ordering blizzards of clips. User groups are another source for economical software, especially shareware.
Clip Art on CD-ROM

The dilemmas of choice and storage for clip art are solved in a big way with CD-ROM. If you want to have the greatest collections of clip art and need to use them often enough, it can be worth your while to buy an external CD-ROM drive like one from Hitachi (see figure 5.5), NEC, Sony, Philips, Apple and others or the optional Sony-built AppleCD 300i internal player drive that can rest in the bay of the Performa 600 CD and the Mac IIvx and IIvi lines. An external CD-ROM drive can cost from about $350 to $800. The better the speed efficiency, the more a drive costs. A “slow” drive can be quite adequate for offloading clip art. If you access files from high-resolution photo libraries, a faster drive could be helpful. For clip art, backgrounds, photo libraries, fonts, and high-end multimedia applications, the cost of the CD-ROM package can be less expensive than the same material delivered on floppies. With CD-ROM, there is so much storage area on one disk—up to 650 megabytes of memory—that files don’t need to be compressed and few vendors manage to fill up a whole disk.

When you buy a package of clip art on floppies, there is usually a printed catalog of the images and each disk is labeled with a certain category. But CD-ROMs contain so much material, it could take a phone-book-size catalog to cover all the images. Dubl-Click Software’s “The Wet Set” contains the entire, vast collection of their WetPaint bitmapped clip art. SunShine’s “Visual Delights” has—on one disk—5,800 images, many of them wonderfully complex and detailed designs from the Victorian era and the early decades of this century. How do you deal with all this bounty? Most of the clip-art CD-ROMs come with their files in a pre-cataloged format, and the package includes a runtime version of a file management application. SunShine and Pro Art have Multi-Ad SEARCH, and Dubl-Click
Part I: So, You Say You Can’t Draw?

has—on the same disk—duplicate sets in Paint, Mariah, and Picture Base formats. They all use the Macintosh hierarchical file format in distributing the data on the disk, under categories such as Landscapes, Fantasy, Animals, and People. Many CD-ROM editions are compatible for IBM-PCs as well. There is so much room on the disk that they can carry duplicate sets for each format.

**Online Services**

Another source of clips is over the wires. If you have a modem for your Macintosh, you can subscribe to one of the many online services and tap into the hundreds of bulletin boards (BBSs). It is not only words and news that can be sent back and forth through the ether. Graphic files, HyperCard stacks, and even QuickTime movies can be exchanged as well. Clip art has been a favorite share item as long as graphics could be translated into electronic files. When you have a file of any kind sent to you, you are downloading it. When you send a file to someone else, you are uploading it.

The major difference between clips through the modem and commercial clip art packages is that online clips are usually available one at a time instead of as collections. Sometimes there will be groups of six or ten small images in a file, but you will see most of them described as one image. The attractions here are not so much for generic subjects, but to make available timely and special-interest topics that you may not want more than one or two of anyway. You may discover current political hot-buttons, popular cartoon characters, Star Trek, Japanimation, and personality images to be sampled. Artwork authored by other users is another kind of clip that serves as a public art gallery of the air. However, there is no way to preview them before you request a file. America Online always provides a brief verbal description along with the downloading time, but you have to be willing to take a chance and buy a pig (or a frog or an aardvark) in a poke.

Some clips online are shareware but most are freeware. The greatest disadvantage to acquiring graphics this way is the cumulative cost of the time rate. While you are downloading, the meter is running, as online services charge by the minute. Even with file compression—as services such as AppleLink employ—some graphics and
multimedia files are very large and dense, and it can take from several to many minutes to download them. Even if the clip is freeware, the delivery service is not. You just need to evaluate for yourself the relative online cost versus equivalent software from other sources. Another possible downside to downloading, and to similar 'wares gotten from user groups, is that the legal status of these clips is very murky at best, and professionals rarely use them outside of personal activities (see chapter 18, "Reproductive Rights").

Closing Thoughts

There is an abundance of clip art that can be acquired for your Mac, from generic to specialty applications. You may not find the exact image that you want for a specific design problem, and the varieties of graphic styles from different vendors may not match up with one another, but you can find creative ways to repurpose clips to meet your needs. You can buy clip art from computer stores, mail order houses, and user groups. If you have a CD-ROM drive, you can take advantage of the vast quantities of clips that are mounted on each disk, with significant savings over buying the same material on floppies. Online services are another source for limited quantities of images, but of often unusual subject matter.
PART II

Grabbing, Moving, and Changing

Clip art is clip art because it looks so good just the way it is. But that is just the start of the creative design process. Electronic art will become silly putty in your hands as you learn how to use DeskPaint and other graphic applications to extend your talents into more and more kinds of graphic expression. Where do you get the talent? When we figure out how to bottle talent and copy it onto a floppy disk, you will be one of the first to know. What we are doing with Cool Mac Clip Art Plus! is the next best thing: offering an electronic studio where anything goes. Here you can experiment with dozens of different approaches to any idea that tickles your fancy.

The key is to be free—free to try, free to fall, free to find what works for you. Make copies of different stages of your design as you go along; you can always go home again. Unlike paper, canvas, or clay, you are not wasting materials. You are just juggling electrons and your imagination. In no time at all, you'll be a real pixel puncher. Your mouse will be a magic wand that can build a castle or make a lion vanish like popping a bubble.
Don’t forget that popular dance step—the Kopy Kat Mak screen capture move. It’s just a *Shift-Command-3*, and whatever is on your screen will be in a PICT Picture file that lands on your desktop. Open it in DeskPaint and there it will be. You can cut and paste the part you want for your design.
DeskPaint

DeskPaint is a compact and versatile graphic design and editing program for the bitmapped digital environment. It has all the tools you need to wrangle clip art and create original artwork. The Cool Disk's special black-and-white desk accessory version of DeskPaint has limits to the amount of memory you can assign to a document, but that limit is usually more meaningful for files in the color version of DeskPaint. Color demands much more memory overhead than black-and-white. Here and there you will encounter some terms and selections that are grayed out or are unavailable, like the Eyedropper tool. These are features that are functional in the color application of DeskPaint. Use the ad in the back of the book to get a copy of that program at a special price.
The Cool Disk's lean and mean version of DeskPaint will be right at home on the range with an Apple Powerbook computer.

**DeskPaint's Help**

DeskPaint's online Help is an excellent resource that will always be there to answer your questions as you explore the graphic world of the Macintosh. To access DeskPaint's Help, click the Help icon, which is the question mark (?) in the lower-left corner of the window, as you can see in figure 6.1. You can also press the Help key, if your keyboard has one, or press Command-.?. When Help is activated, the mouse cursor will turn into a question mark. Move this question mark cursor over the tool or menu selection for which you need information. In many cases the Help window will display a preview illustration of what that tool or effect can do. To see a list of keyboard shortcuts, press Return. To exit Help, click in the Help window, press the Help key, or press Command-.?.

DeskPaint can be easily understood and used with the Help functions and by your trial- and-error experimentation. Chapter 8 illustrates some of the transformation capabilities such as enlarging, reducing, stretching, squashing, flipping, mirroring, multiplying, texturizing, colorizing, using fill patterns, and casting a shadow. This chapter will expand upon some of the other aspects of DeskPaint.

**Image Grabbing**

An image grabber is a utility or function within an application that allows you to preview a graphic, size it, and import it into an application, a different storage file, or folder. Some grabbers include an extensive toolbox for editing and manipulating the image before it is exported. Those functions can be very useful when you're exporting the image into a word processing file, a database, or some other non-graphics program. Macromedia's Art Grabber and Dubl-Click's Art Roundup are good image grabbers. Both function as desk accessories and, like DeskPaint, they are bitmap-based and can neither preview nor import PostScript and many TIFF files. You can reduce DeskPaint's window and use it in the corner of your desktop.
as a preview window for graphics while you are working on another kind of document, and it can be just as handy (and much more powerful) as those two trusty DAs. To compare different graphics, and even grab elements by cutting and pasting between them, you can open and then size down each DeskPaint file and arrange them as tiles. (See figure 6.1.)

**Figure 6.1**

DeskPaint windows

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**Browsing**

To view a graphic file in DeskPaint, select **Open** from the **File** menu, find the file you want to view, and click the **Open** button. That file will open in the DeskPaint window. If the file is large, a thermometer bar with a countdown of the seconds to open may be activated.

One of DeskPaint’s handiest features is its **Browse** function, as seen in figure 6.2. With it, you can see a slide show of a collection of clip art or of your own graphic files. From the **File** menu, choose **Browse**. The slide show sequence begins with whatever file is selected. To start the browsing at a particular point in a folder, use the **Browse** open menu to select the first file. (It works best when you choose the file just before the first one you really want to see.) Do the same whenever you
want to start from a different file or a different folder. As when you open a file, the chosen graphic will open up very large, often spreading beyond the DeskPaint window.

One thing you can do in **Browse** that you can't do in **Open** is preset the scale of the succeeding incoming graphics. Often you just want to skim through a folder, looking at thumbnails, to find the image you need before you examine it in detail. Use the **Reduce** command (**Command-R**) to reduce the image to a size that is comfortable for you. Each successive incoming graphic will open at that scale. To modify the speed at which the graphics open, press any number between 0 and 9. 0 will set the fastest rate and 9 the slowest. To stop the action, click on the **Pause** icon. Go forward or backward in the folder by clicking the **Browse Forward** and **Browse Backward** icons, or use the arrow keys. When you want to return to the editing functions, click the **Exit Browse** icon. The **Graphic Tools** menu will replace the **Browse** menu. The last image occupying the **Browse** window will now be in the editing window, awaiting your creative decisions.
Graphic Tools and Selection Menus

The Graphic Tools menu (see figure 6.3) and the Selection menu (see figure 6.4) are fairly self-explanatory. The functions of the selection tools are not as easy to grasp at first, but the Help files will give you a clear explanation and example for each one. What may not be immediately clear is how you switch between the two menus. When you open DeskPaint, the default menu is the Graphic Tools menu. The way you get to the Selection menu is to select an object—even just one pixel—with either the Marquee or the Lasso. When you make the selection, the Selection menu automatically replaces the Graphic Tools menu. The minute you deselect the object, the Graphic Tools menu will return.

Figure 6.3
The Graphic Tools menu with selection keys in black

Figure 6.4
The Selection menu
Part II: Grabbing, Moving, and Changing

Marquee Hints

- From the **Options** menu, you can choose **Marquee** and select the **Shrink to Fit** option. When you select an object, the marquee will shrink to its minimum possible size, hugging the object.

- Double-click on the **Marquee** tool to select and activate the entire window, or press **Command-A**. If the **Shrink to Fit** option has been chosen, the marquee will find the object, or the external perimeter of a group of objects, wherever they are in the window, even if you can't see them.

- Press **Delete** or **Command-X** and this will provide a quick way to clear the entire **Edit** window.

- Instead of using the **Eraser** tool, the **Marquee** and the **Delete** command can be one of the best and fastest ways to clean up parts of images and the **Edit** window.

- The marquee's non-invasive lines provide a quick and painless way to see if elements are lined up either horizontally or vertically.

Lasso Hints

- When you surround an object with the **Lasso**, a selection rectangle will appear. Do not be deceived. That rectangle is just an indication of its selection. The real selection description is following the perimeter of the object, so that when you paste it over another object, the object will be pasted with its true shape.

- To automatically select an object with the **Lasso**, press the **Command** key, place the cursor just underneath the bottom edge of the object, and double-click.

- From the **Options** menu, you can choose **Lasso** and select the **Auto** option. Now, all you need to do is click once just underneath the bottom edge of the object and the entire object will be selected automatically.
If you select the **Line** option, you can describe an angled area the way you use the **Straight-line Poly** tool. Click once to fix the start point, click at each corner or vertex, and double-click at the connecting finish point. Sometimes the lasso will jump on the finish for you when it feels it is close enough. Even though you will see a selection rectangle, the true selection will be in the shape as you have described it with the **Lasso**.

When you use the **Auto** option lasso on a piece of clip art that has a lot of texture around the edges, don't be surprised if it leaves a lot of "dust" behind. Remember, the lasso is hugging around the primary mass of connected pixels. Use the **Freehand lasso** option to preserve the entire image.

When you have scanned an image that needs a lot of cleanup, the **Auto option lasso** can be a real time saver for the first step of the cleanup operation.

### Text

Like most other graphics programs, DeskPaint has a text function. The maximum font size you can assign in DeskPaint is 127 points. If you really need a character or a dingbat blown up bigger than 127 points, you can achieve that effect in most word processing programs. Perform a screen capture there (press `Shift-Command-3`), and cut and paste the new characters into your DeskPaint document.

The **Text** function in DeskPaint works just like a word processor. You can perform the same basic edits inside the text box. If you are using a large font, you may find that you just see the lower part of it. Move the cursor on the upper line of the text rectangle until it turns into an arrowed cross cursor. Click and drag the upper line up until it clears the top of the text characters. For that reason, draw the text rectangle lower down in the design window so that it will clear the other elements. Once you deselect the text function, whatever you entered is no longer an active text window. As far as DeskPaint is concerned, they are just another bunch of pixels.
Part II: Grabbing, Moving, and Changing

Don’t forget to catch those Zs! Command-Z is the great and merciful Undo command that forgiveth thy last action on the screen.

**TrueType**

DeskPaint will support Apple’s TrueType if your Macintosh is running under Apple’s System 7 operating system. TrueType is what is known as a Type 1 PostScript font. Because TrueType is built into System 7, it is able to support its clarity of outline and to be rendered fast enough to be displayed on the screen without a time lag. It has the advantage of being on the screen as well as on the printed page in a smooth form with little or no jagginess. Because there is a direct correspondence between what you see on the screen and what comes out of the printer, your design will have fewer discrepancies in your proofs.

Unlike bitmapped fonts, which must store and display a specific pattern for each font size, TrueType has no font size restrictions. TrueType allows for arbitrary (integral) point sizes of fonts, and generates a version for any size in real time. It will, as in DeskPaint, be limited by the program or application’s maximum font generation capability. Unfortunately there are not extensive libraries of TrueType fonts like there are of bitmapped and PostScript fonts. This book is based upon making the most of bitmapped fonts because of their availability and rich graphic varieties.
Compressing, Importing, and Exporting

Clip art, graphics, and multimedia files deliver a great deal of information so their file sizes tend to be large. Their kind of information is very different from text, and different kinds of graphics and multimedia files are often unlike each other. Just as you expect to cut and paste text between documents, you also want to be able to use graphic elements from other sources for your designs. Importing and exporting governs the exchanges between different graphics file formats, and also when and why they can't be exchanged.
Part II: Grabbing, Moving, and Changing

What Is Compression?

File compression is a programmer’s solution for greater storage efficiency. A compression algorithm is a mathematical formula that analyzes the redundant data in a document, identifies the bits that are repeated, and logs how many times they are duplicated. This formula is unique to every document and may be modified in terms of the compression ratio. For file compressors that allow that adjustment, the compression ratio can determine how much smaller the compressed document will be, how long it will tie up your computer compressing or decompressing, and what the quality or resolution of the image may be. The size and kind of the original file will determine how much smaller you can compress it, but it’s usually about 50% and can be as high as 70%. The document can then be decompressed—restored to its original, larger state.

Think of file compression and decompression as being like a block of Swiss cheese. If all the air bubbles were removed, it would shrink in size. When the bubbles were replaced, the cheese would swell back to its original bulk.

Where Is Compression?

You encounter file compression right away with Cool Mac Clip Art Plus! when you load the Cool Disk into your Macintosh because we compressed all the clip art files. Compression lets us pack more cool stuff on a single high-density floppy disk. As you follow the instructions at the back of the book, you will see the Cool Disk clip art icons that you will decompress on your hard disk by activating the file compressor, which is actually a small application program. As you acquire more clip art, you will find that many of the commercial packages deliver their files on floppies in a compressed form. Some will be, like the Cool Disk, an entire collection that will be decompressed onto your hard disk. Others may present you with a list of files in the collection that you can decompress individually. Collections on CD-ROM tend to be uncompressed because of all the room available in that medium. File compression programs such as Stuffit, Compact Pro, Disk Doubler, and SuperDisk are available from retail and shareware sources. You
may find using one of them very helpful in compressing your own files and collections to extend the capacity of your storage media.

**What About Importing and Exporting?**

As discussed in chapter 3, the file format that clips come in is important. An image may look good on the page of a catalog, but if it is not compatible with your application, it can't get through the door. DeskPaint, like MacPaint and most other bitmapped programs, can accept Paint, PICT, and many but not all TIFFs. The admission policy is made clear when you perform a “Save As.” The dialog box gives you the choices of MacPaint, PICT, PICT resource, TIFF, and TIFF compressed. PICT resources are graphic data forms for programmers. Though you can save in TIFF, that doesn't mean DeskPaint can accept, or even see, every variety of TIFF. TIFF files can take as much as three times the disk space of PICT or TIFF compressed. Compressed TIFF files are significantly smaller but take longer to load. You can accept PICT files from a program such as DeskDraw, but you won't be able to edit its elements separately; it will be edited as a bitmapped image. Again, PostScript images are a breed apart. You cannot see or edit them in a bitmapped program like DeskPaint. However, there are file-conversion utilities like PICTure This 2.0 from FGM Inc., 131 Eelden St., Suite 308, Herndon, VA 22070, (703) 478-7428. It can translate almost any kind of a file into PICT so as to be readable by DeskPaint. But even then, a PICT version of PostScript results in a small, crippled bitmap image that has none of the sharpness of the original, and cannot be enlarged to any practical degree.

**Closing Thoughts**

File compression is an easy and efficient way to reduce the storage demands of large graphic and multimedia files. Many collections of clip art are delivered in a compressed form. You can use file compression for storing your own collections
Part II: Grabbing, Moving, and Changing

of files more economically. Importing and exporting graphic documents is not as simple as cutting and pasting text between documents. As in international relations, some graphics file formats don't speak to each other, while others can party all night.
Transformations

Clip art images are like cookie cutters. They present you with a predetermined form that you can use to cut the same image into the material of your graphic window, over and over again, and it’s perfect each time. But when you make cookies, do you ever take the cookie—before putting it in the oven—and do things with that soft dough? Just as you can stretch and bend the arms or dimple a smile on that gingerbread person, so too can you twist, change, and alter your clip art.

Enlarging and Reducing

Those two felines in figure 8.1 started out as about the same size, both rendered in realistic textures. They have been resized, proving that a cat can snooze in front of a king—especially since she now appears much bigger than him. Or is the lion really yards away from the contented cat?
Resizing, or rescaling, images provides you with many design alternatives. To resize images in DeskPaint, you can either click and drag or use the scale by percentage.

**Changing shape and scale manually:**

1. Surround the object with the **Marquee** or the **Lasso**.

2. Move the cursor into the selected area of the image. The cursor will change from a cross to an arrowed cross.

3. Hold down the **Command** key. Click and drag, in or out, and the image will shrink or stretch depending upon how and where you move the cursor.

4. Press **Command-Z** to restore the image to its original size and shape.

The more detail and texture the image has, the more distortion will occur as you resize and reshape it. This can also be an opportunity to create special objects and unusual textures that you can use in other designs.

**Reducing scale proportionately:**

1. Surround the object with the **Marquee** or **Lasso**.

2. Move the cursor into the lower right-hand area of the image. The cursor will change from a cross to an arrowed cross.
3. Hold down the Command key.

4. Select a point inside the image area that will be the new lower right-hand corner of the smaller image at the reduced size you want.

5. Click once.

   The image will snap to the reduced size. It is hard to enlarge the scale manually with precision. To enlarge an image proportionately, use the scaling by percent method as described next.

6. Press Command-Z to restore the image to its original size and shape.

**Scaling by percent:**

1. Surround the object with the Marquee or Lasso.

2. Select the **Scale by Percent** icon (%) from the **Selection** menu, or press Command-%.

3. The **Scale Options** dialog box shown in figure 8.1 appears.

4. Choose a percentage under 100 to reduce it or over 100 to enlarge it. Type in any percentage number in the **Custom %** box. If you choose a very large number, like 900%, DeskPaint will enlarge the image, but it may no longer fit into the window.

5. Press Command-Z to restore the image to its original size.

As in figure 8.1, the image will be perfectly reduced or enlarged proportionally. You will have to judge whether or not the digital distortion that occurs is detrimental to your design. Because they are bitmapped, the images exhibit the digital coarsening that occurs when they are resized. In figure 8.2, the wave was isolated with the Lasso tool, given the mosaic effect, and enlarged to give it a digital texture. Solid line and area images suffer less distortion than textured images. PostScript images can be resized without distortion, which is one of their major advantages.
Figure 8.2
An area within an image can be textured and enlarged.

Figure 8.3
Creative distortion

Stretching and Squashing
Using some of the effects tools in DeskPaint, you can alter the perspective and angle of view of an element in very flexible ways. The hapless frog in figure 8.3 has been duplicated and stretched, squashed, turned, angled, and given a variety of different aspects. From the Selection menu, these tools—Free Rotate, Distort, Skew, 1 pt perspective, 2 pt perspective, and Stretch—were used on the frogs. Try it yourself and you will find even more ways you can transform an object or parts of an object. You can select an area within an image with the Marquee or Lasso and apply an effect. Used on flat-surfaced objects, you can simulate rotations and perspectives that can help to make them fit better into the environment of a background or a layout.
Chapter 8  ■  Transformations

Creating a shadow:

1. Duplicate the image.
2. Flip the copy vertical, as in figure 8.4A.
3. Fill and paint the duplicate with black, as in figure 8.4B.
4. Select the black shadow image with the Marquee or the Lasso.
5. Select the 2 pt perspective selection tool.
6. Click and drag either the left lower or right lower corner handle, as shown in figure 8.4B, horizontally away from the center.
7. As you drag, the perspective angle will always keep the shadow proportional. If you drag towards the center, the perspective will reverse, as if the point of view were from the house. If you drag upwards, the perspective angle will become oblique.
8. Match the top of the shadow with the bottom of the house as closely as possible, and then fill in the gaps with black, as in figure 8.4C.

Figure 8.4  
Casting a shadow

In figure 8.4, the shadow is cast as if the sun were shining directly behind the house. When the light source is coming from other heights, angles and directions, use other selection tools to arrive at the most naturalistic-looking shadow for the scene. The same basic technique can be used for creating reflections, as in the “Wetlands Trust” letters in chapter 11’s figure 11.1.
Part II: Grabbing, Moving, and Changing

Flipping, Mirroring, and Multiplying

Making designs, patterns and borders with repetitive elements that are combined with mirrored images of themselves create a unified rhythm in variety. It is a practice as old as the Stone Age. Today it’s as easy as the click of a tool when you select an element in DeskPaint. The man and gear element shown in figure 8.5 was made to be flipped and joined as shown, or used as corner details.

Figure 8.5
Making an image flip for itself

![Original image](image1)

![Flipped and joined](image2)
As demonstrated by the guitars shown in figure 8.6, you can make a four-way mirroring pattern, which could be repeated to make a larger pattern or border.

**Figure 8.6**
Making a border and patterns

Making a four-way mirroring pattern:

1. Select an element, like the guitar, that will repeat well, as in figure 8.6.
2. Duplicate this new element once.
3. Flip the duplicate horizontally.
4. Pair together the two elements so they join or link at some meaningful point.
5. Select the pair as one element.
6. Duplicate the new element.
7. Flip the new combined element vertically.
8. Pair together the two elements.

Using the **Duplicate** command, one element will be slightly offset from the original. If you click and drag the duplicate to just the way you want the relationship between them to be, each successive time you invoke the duplicate command the next copy will be multiplied like a row of dominos. This is the way that you make borders like the one in figure 8.6, which was made from elements provided on the Cool Disk. You can use the mirror top, bottom, right, and left commands in the **Special** section under the **Effects** menu for selections you make within a larger image.
Fill Patterns

With the **Paint bucket** tool, you can fill in areas with patterns from the pop-up menu. Other tools, such as pencil, brush, and spray can will also adopt the fill pattern that you select. But wait—there's more. Select **Patterns** from the **Options** menu, and you will see that there are six pattern menus to choose from: **System**, **Grays**, and four sets (see figure 8.7). Whichever one you select will be installed when you return to the program. The U.S. map, from the Cool Disk, was filled from the **Grays** set. Open **Set 4**, and you will see an array of blanks. These are mini-easels for you to select and create your own custom patterns that will be saved when you close the set window. Try the **Random** button. A graphic randomizing algorithm will toss the dice for you differently each time, producing some very interesting textures that you can further modify. They, too, will be saved. You can modify any of the patterns in the other windows. Click on any one of them, and the **Edit Pattern** window will open, loaded with that pattern. Once you change it, it's yours and will be saved over the original pattern.
Don’t leak! If you fill an area, and there is even one pixel of space missing in one of the lines, the pattern will just keep on going and flood the other areas next to it. Maybe the whole desktop! If that happens, reach for your “Z.” (Remember that Command-Z undoes your last action.)

**Texturizing**

You can digitally alter the texture of an image in a variety of ways. Some of the effects available on this version of DeskPaint are grayed out because they are meant to work with the color version of the program. The oil painting effect doesn’t work here either for the same reason. Make lots of copies of images, or parts of them, and experiment with the effects. It’s hard to predict what they will look like, and the different pixel densities of different images will result in quite different results with the same effect. Most effects can be invoked in repeated applications, which will also widen the range of what you can do with them. In figure 8.8, the ring-tailed possum is basking under the influence of four different effects. Some effects, like the border, can be adjusted in parameters with a dialog box that will pop up. Others are just applied all at once or in degrees.

**Colorizing**

If you have the color version of DeskPaint, or any other color paint or draw program, your collection of black-and-white clip art will have many images that can contribute to your color design work. This clip of an Australian Rosella in figure 8.9 is an ideal example of a black-and-white clip that is—just like a page in a coloring book—composed of multiple drawn areas that can be filled with colors. To check on the suitability of an image for color fill, examine it by enlarging the image several times. This bird is a perfect candidate for the color palette. All the lines are tightly drawn, with hardly a single pixel leak to be found. The foliage and the landscape, which were more lightly sketched, would need considerable repair to hold a fill. If you are skilled with a program like PixelPaint Professional or Fractal Painter, the solution for the foliage would be to use pastel brushstrokes to lay in a semi-impressionist wash over the foliage to back the brightly feathered bird.
Part II: Grabbing, Moving, and Changing

Figure 8.8
Four different effects

Figure 8.9
A colorful candidate
Chapter 8  ■  Transformations

When you are preparing artwork for simple spot color, such as posters and announcements, most professional programs like QuarkXPress allow you to select all elements for color value and for prepress color separation. For simpler means when you just want to use the fill function to fill in lines and basic elements, there are other solutions for clips like figure 8.10's Earth. In A, the dark areas whole clip could be filled with the spot color. In B, the pixels that connected the continents with the circle were erased, allowing each element to be filled separately. In C and D, the circle had the Trace Edges effect performed on it, allowing the spot color to fill with the advantage of a black outline. Of course, using bitmapped elements will not give the precision and finished results of PostScript, but if the style of the design permits, this could be a practical design solution.

Figure 8.10
Simple spot color
Closing Thoughts

Clip art may be predrawn, but its work has only begun when it comes “out of the can.” The image can be resized—either manually or proportionally—with the Scale by Percent function. You can stretch and squash and distort the image in all kinds of strange and creative ways, and introduce shadows for more naturalistic realism. You can turn, twist, flip, and mirror the image, and even combine it with other repeatable elements for extensible designs and patterns. A variety of special textures and effects can be applied to images and areas. Black-and-white clip art can go on to support design in color, for fill-in colorizing and spot color. Clips are like building blocks. They can fulfill many different roles in design solutions.
PART III

Creative Clipping

Your creative clipping need never leave your desktop to be enjoyable, fulfilling, and worthwhile. When pointed in the right direction, your Mac can be a worthy workhorse for doing jobs in print, in media, and multimedia. After all, it was the Macintosh that defined desktop publishing. The following chapters introduce just a few ways you can use clip art to enrich the way you work with the world.
Making a Rubber Stamp

Since so many rubber stamps were made from paper-based clip art, it's only fair that you can make your own from the electronic versions. Rubber stamps are still very useful—you can't run everything through a laser printer. You can stamp your organization's identity on library and program materials, add a new message to business materials after they have been printed, and mark complimentary copies of the local newspaper and ferry schedules for the guests in your bed and breakfast inn.

Your design for a rubber stamp will be in the form of camera-ready art that you will submit to a rubber stamp shop. The process of translating a graphic into a negative mold, which produces the positive rubber stamp which then is inked to press a copy of the graphic on paper, tends to smooth and sharpen bitmapped art and text. While you may want to go to PostScript text for some business letterheads,
most rubber stamps can't tell the difference. However, if your text has a severe case of the jaggies, the rubber will tell. You may prefer to have the stamp shop set the type, which you can specify, to be inset in your design. Figure 9.1 shows how you can use antique boxes to frame your rubber stamp legends.

Figure 9.1
Rubber stamp designs

Galeria de la Raza

Please include your business card

compliments of Stony Creek Inn
Creating Cards

You may have already gone wild making personalized greeting cards with clip art. The ability to design your own personal or business cards can be very useful, especially when you move, change phone numbers, or add careers.

Business Cards

The finished cut size of a standard U.S. business card is 2" x 3 1/2", as shown in figure 10.1. Using DeskPaint's Ruler, (choose Show Ruler from the Format menu or press Command-H), you can lay out the size of one card. If you are bringing the design to a printer to have the cards produced, center the design on the laser printer page. Laser copies are camera-ready for the printer.
Part III: Creative Clipping

If you are going to print them yourself, then you will also be cutting them. Allow from two to four pixels separation for the cutting waste between cards. Instead of one card, you will want to multiply them enough to print a whole sheet at once. Use the duplicate function to create a row of images and then duplicate the rows. Experiment with different papers. You want one that is compatible with your printer, paper cutter, and your personal image.

Figure 10.1
A business card

Postcards

You can also use clip art to create your own postcards. A standard U.S. postcard is 3½" x 5½" and must be at least .007 of an inch thick. Oversize postcards demand first class postage rates, but offer a more generous design area. You can have anything you want on the reverse side, but the address side must reserve the right-hand half of the card for the postage and the address information. Continuous-feed card stock, in either one- or two-card widths are available from office supply stores. They can be 3" x 5", 4" x 6", or other specialty configurations, such as foldovers.
Designing a Letterhead

There are two main types of letterheads for computer users. The first is designed on the computer and then submitted to a print shop for printing. Once printed, this stationery can be used on an as-needed basis. Make sure to adjust your letter's text so it won't overprint any of the letterhead's text, then just feed the paper into your printer, and voilà! You've got a professional-quality letter. This type of letterhead offers the best long-term results when designed within a high-quality PostScript environment, since its audience will include the business and professional worlds.

The second type of letterhead is called electronic letterhead. This type is printed individually by the user, sent on a floppy disk, or transmitted via electronic mail. Bitmaped art and text may be just as appropriate, since the receiving display or...
output device will probably not be PostScript-driven. It can also be totally demand-driven. You output what you want when you want. Forget about your local print shop’s minimum requirement of 500 or 1,000 sheets.

If you want to have a vertical border, frame, or fall that runs down the side of the page, a PostScript page layout program like PageMaker will be the most practical to use. This kind of layout can work for your personal electronic letterheads, but it will not be very portable for e-mail. Word processing programs are line dedicated. That means the data entry is recognized one line at a time. When you introduce a different data form like a text block, clip graphic, or QuickTime MooV, the program assigns it the number of lines it needs for its vertical dimension, regardless of how wide or how narrow it is. The leftover dimensions are displayed as white space. You may experiment with the column functions of your program (if it has them) to see if it will accept a vertical graphic, but don’t be surprised if the program rebels against that action. Some word processing programs have the ability to include a text block or a graphic within the text page area so that the body text flows around it.

If you are doing a one-page letter, you can create or import a full-page ornate frame into DeskPaint, which you can then integrate with your letterhead. With the Text tool, create a text window within the frame. There, you can use the text function as a basic word processor. Remember though, once you deselect the text function, whatever you have written is now one big graphic element.

You can create several letterheads for yourself. Some may be personalized for sending to friends. Others may serve your home-based business. Still others may represent an organization in which you are active. See figure 11.1 for some samples. Figure 11.1’s “Vortex” and “Northern California Wetlands Trust” letterheads serve double duty as examples of logos created with clip art.

For the free integration of clips and text within lines, such as a rebus or a kicky letter to a special friend, you will probably have an easier time creating the project within DeskPaint rather than fighting with your word processing program.
Figure 11.1
Letterhead designs
Lofting a Flyer

Supplementing the town crier, the flyer is one of the oldest forms of printed communication. Based upon whatever the standard sheet size was at that time and place, flyers were handed out to people and posted in pubs and village squares. Using DeskPaint, it is possible to design and produce letter-size flyers quickly and economically. The original can be brought to a quick-print shop for duplication in black, color, or spot color ink, or you can run off more limited numbers of flyers on a photocopier.

Making the Sample

Borders from the Cool Disk were used as corner framing devices in figure 12.1. The corner framing devices let the sides “breathe” out with white space. The eye
clip was grabbed from Dubl-Click's "The Wet Set" CD-ROM. There are more fonts used on the same page than might always be advisable, but when typefaces are floated as graphic elements with structural design roles, then you may feel more free to be eclectic. In this case, Machine was used for "Photography Gallery," and the softer Nadianne for "#103" and the event information. Cape Canaveral for "HandHeld Gruppe" refers strength to an independent group logo, and New Century Schoolbook defers to the host institutional style.

Figure 12.1
Eye-catching flyer

latest flashes from the HandHeld Gruppe
April 1 to May 18, 1993

Photography Gallery #103

Student Union Building, University of Connecticut at Storrs
To get the best output results, I would have normally laid this out in Aldus PageMaker, so that the fonts could have been driven by PostScript. But you should not be intimidated into not trying design if you don’t have the skills and access to higher level PostScript software and hardware systems.

**Designing Your Own**

You can produce punchy, communicative flyers directly from a program like DeskPaint. Even if you look closely enough to see the jaggies on some of the letters, it’s the message that will be seen, read, and remembered that really matters. To make sure that the message is noticed, consider your audience and the environment where your flyer will be flown. Posters follow these same rules, though the scale is larger.

First, begin the design process by considering how the flyer will look from twenty feet away. You may be working with it close up, but members of your selected audience may never get that close if they don’t notice it. Find a graphic “hook” that will catch their eyes. In figure 12.1, the film strips draw people who have interest in film or photography. The eye clip acts as a secondary hook to pique their curiosity. A clip of a musical instrument, like the guitar in figure 12.2, draws people interested in music. Whether the flyer is advertising a sporting event, dance, concert, lost cat, or garage sale, choose an appropriate graphic clip that can be read from a distance. If the flyer is part of a series sponsored by a group, like a film society or a credit union, the group’s logo will help to identify it.

The “what” comes next. Now that you’ve got people within reading distance, you owe it to them to clearly state your message—no more guessing. In figure 12.1, “Photography/Gallery” lets the audience know immediately that this isn’t a flyer for a movie or an equipment sale. The “who,” as the rock group featured in figure 12.2, might be the most pivotal element for many viewers. Graphic style can also
provide a strong sense of the “what.” The punkoid attitude of the “Vujâ Dév” poster could not be mistaken for a Baroque chamber music festival. Is it live or is it obsolete? The “when” can be just as important and should not be buried in the page. The “where” can often be descriptive as well as directive, when a location is well-known for hosting certain kinds of activities.

Figure 12.2
Hair-raising poster

Last performance before their Scandinavian tour!

Friday, July 14th

VUJÅ DéV

AS SEEN ON MTV!

ArnsKlub: 101 Harker St., Minneapolis

A flyer often serves as a notice of change. For the school or company bulletin board, a graphic clip that is different from than the one used the month before—even if it is as corny as a turkey or a snowperson—lets the busy student or worker
know that it signals new news. Also, if you know a nature group always uses the same green paper stock for their notices, you should choose a different color for your flyer. Don’t ignore the ecosystem of the public information environment where you intend to launch your flyer.

When you go to the service bureau or the office to print out your flyer, try different colors and textures of paper stock to see what might best enhance your design.
Hanging a Poster

When you design a flyer, you are working within the direct scale of the printed page. We know that you think bigger than that, and there are ways you can print your big ideas at larger sizes. Some print shops and service bureaus can take your Macintosh file and blow it up for one copy or make a master and print posters in quantity. With DeskPaint's poster mode, you can make a poster as big as 5 by 7 feet—more than big enough for a full-size portrait of you.

Making the Sample

The posters you see in movie theater windows and on subway and railway platforms are called one-sheets, and tend to measure 28 by 42 inches, 30 by 46...
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inches, or larger. Outside this book, the poster in figure 13.1 is slightly oversized. The occasion was the need to respond quickly to a one-time event with little lead time. The audience would be one that would know about the group and be attracted to the graphic style of the design. The guitar from Dubl-Click was given a sharper crest and duplicated several times. The TV was expanded with DeskPaint’s 2 pt perspective tool, flipped, and duplicated. The arrows from T/Maker’s arrow files were flipped and duplicated. The Delphian font was used for the group’s name, Swing for the date, and Helvetica Black for the other event information.

Designing Your Own

The way you use a standard printer to create a big poster is by a mosaic system of expanding the virtual image so that each sheet of paper carries one chunk of the
overall design. When they are all printed out, you paste or tape the individual sheets together like a patchwork quilt. Because it is labor-intensive, this method is not meant to be the way to produce posters in quantity.

Printing a big poster on a standard printer:

1. Decide how large you want the finished poster to be.
2. Conceive of the design so that it will be noticed from up to 100 feet away, and with details that can be read at 10 feet away.
3. Design your poster in DeskPaint. (Sorry, but you have to create the design. I can't be more specific.)
4. From the File menu, select Page Layout or press Command-Y. The poster design will appear in the Page Layout window, as in figure 13.2. The page size grid will be normal and the dpi setting at the default size of 72.

5. Leave the Uniform button checked, and type in a smaller value than 72 in the box next to it.

6. You will see the grid change to smaller rectangles subdividing the window. At the bottom of the Document Size window, the Pages required setting will have changed from 2 to a larger number. That tells you how many pages the image will occupy when printed. The Paper size setting shows the standard page size. Multiply those dimensions by the number of squares you see in the grid that the image occupies and you will know how large the finished poster would be.
7. When you have arrived at a dpi setting that will give you the size poster you want, click **OK**.

8. Print the document. The printer will print the pages from the top down, and in columns left to right.

9. When the print run is completed, mark a corner of each page with a small consecutive number to keep track of the parts for assembly.

Assembling the poster will be like putting together a puzzle. In the sample, we had twenty pages to piece together. The method of assembly depends on the printer and on your own preferences. A dot matrix printer will have the perforated edges. Some people like to bend them back and staple the edges together in back of the poster. Most laser printers do not print in a "bleed"—that is, from edge to edge. They usually leave a blank border. To make the poster design look seamless, you can either trim the images all around and tape the pages on the back after putting the paper edge to edge, or—what I prefer—trimming one bottom and one side of each page, which provides overlaps that can be glued or taped.

If you love puzzles, ignore step 9. Hold the stack of printouts, take a deep breath, and throw them up in the air as high as you can. You will have the biggest puzzle on the block!

**Closing Thoughts**

Your design in DeskPaint can go much further and larger than a one-page flyer. You can bring your design to a service bureau for single or multiple copy blowups. With DeskPaint, you can print the poster in a mosaic of individual pages that can then be pieced together and assembled to create a large, full-scale poster. This method is meant for one-time, special-needs production. It is labor-intensive, but very, very economical.
Spreading a Banner

Banners are a form of public communication older than flyers. Essentially just strips of characters and pictures, they have been hung across town gates and raised in marches and rallies. The Japanese have used vertical banners carried by samurai horsemen and fluttering from poles in festivals. You can create horizontal and vertical banners and panoramas with DeskPaint. If you often want to produce these kinds of graphics, look into a Macintosh program called BannerMania from Brøderbund Software. It is especially designed for this kind of work and enables you to make giant letters easily and quickly. The results from DeskPaint may be rougher around the edges than BannerMania or a PostScript program, but they can be a quick and inexpensive response to a celebratory situation.
Making the Sample

Clip art borders and spot art can make the difference between making just another big, long sign and creating a banner worth waving. The Bon Voyage banner in figure 14.1 was designed to be hung over a vacation-bound co-worker's cubicle. Since it was a spur-of-the-moment inspiration, we needed it to be simple. This used just five or six pages from a laser printer. The border and spot clips were chosen from the Cool Disk for their nautical themes. The Swing font was used for its easy curves, which don't betray the jaggies as much as Roman typefaces like the ITC Garamond font that this sentence is printed in. The text was styled in Outline and then filled with a pattern to soften and brighten the design.

The banner was meant to be hung from its ends. The sides were folded and stapled together in the back for speed of assembly, strength, and reliability. The end borders were stapled to create tubes for the string to go through to suspend the banner.

Designing Your Own

Making a wide or tall multi-page document like a banner demands that you follow most of the same steps as you do when you make a poster (see chapter 13, "Hanging a Poster"). First, consider your ideal finished banner dimensions and use the Page Layout window to select a dpi setting. You can then configure the proportions of your design window in DeskPaint. Enter different Width and
**Height** dimensions in the **Page Layout** window and click **OK**. When you return to the design window you will find that it is the proportion you have chosen, whether that's a long horizontal strip, a tall skinny column, or something in between.

A prime consideration is whether or not you can keep the size of the banner within a one-page height. Generally speaking, a suspended banner constructed of computer paper begins to get rather heavy and flimsy if you make it three or more pages in height. However, if the banner is going to be pinned or tacked up to a surface, such as on a wall in the gym to proclaim to all, "BEAT THE BELMONT BEAVERS!", then it is being installed like a poster, and you can make it as large as DeskPaint is able to push it.

As shown in figure 14.2, the way the page grid is designed in the **Page Layout** window is with the modules of a page laid on its side, which is optimized for pin-feed printers. If you are using a laser printer, the images will be printed in the orientation as displayed in the window. If you want the laser printer to print so that the height of the banner takes advantage of the 11" height of a single letter-size page, simply click on the right-hand orientation icon at the bottom of the window.

Since the maximum font size in DeskPaint is 127 points, the biggest a character can be is 2½" high. Most border clips were designed to fit on the standard letter-sized page, so they are not big enough for a banner either. Your strategy will be to set your design size to an area that you can enlarge with the **Scale by Percent** function.
For the sample in figure 14.1, the 8" width dimension of the standard page is being used as the banner’s height, with a 1/4" margin at the top and bottom. So, the design could be 2" high to be enlarged 400%, 4" high to be enlarged 200%, or some other dimension and percentage. Once you have determined the height, go back to the Page Layout window and type a dimension into the Width window. Make it somewhat longer than you think it will be. When you have completed the dimensions, if the design leaves extra pages at the right hand side, just count the number of pages the design takes and enter that quantity into the Copies window of the Print window. In addition to banners, you can use this technique for panoramas and any other kind of document that is too wide or too long to fit on one page.

**Designing a Vertical Banner**

You may want to create a thermometer graph for a charity fund raising campaign, a diagram of the atmosphere’s layers, or two banners for the names of the bride and the groom to flank the doorway of a wedding party. To design this sort of vertical banner, go to the Page Layout window and configure your design window in DeskPaint to be a column instead of a row. If you are printing to a pin-feed printer and want to take advantage of the continuous roll, click on the right-hand icon in the Orientation window.
Printing to a Pin-feed Printer

A pin-feed, dot-matrix printer like the Apple ImageWriter (or different models from Apple, Hewlett-Packard, and other manufacturers) may not produce the sharp lines of a laser printer, but it provides the easiest solution for banner production. Because the paper comes as a perforated roll, you don't have to glue or staple the individual pages as you do those from a sheet-feed laser printer. You can choose to tear off the perf strips or leave them on.

1. In the Page Layout window, configure the banner design in the horizontal as in figure 14.1.

2. From the File menu, select Print Preview or press Command-I.

3. The document will be displayed in the Print Preview window for your confirmation. Click anywhere in the window to close.

4. From the File menu, select Page Setup or press Command-J.

5. In the Page Setup window, click on the No Gaps Between Pages button (see figure 14.3).

6. Print.

Since the pages are part of a continuous roll, there is no assembly to speak of with the output from a pin-feed printer. If you have designed a banner with a height of two or more rows of pages, the rows can be assembled by folding the perf strips and gluing or stapling them in the back, or the perf strips can be torn off and the rows taped together on the back.
Clipping into Multimedia

Graphics play important roles in the many facets of multimedia. Clip graphics are used in a variety of ways. They can enrich presentations, videos, and interactive multimedia just as they have enriched print for years.

Each form of multimedia holds both opportunities and limitations for clips. While PICT2 and PostScript color clips provide the best resolution, bitmapped clips can be used as-is in some animation and interactive systems where the computer monitor is the primary form of display. In some presentations, where slides and video projection greatly magnify the resolution, bitmapped images may look ragged and spotty.

Many presentation programs like Aldus Persuasion and Microsoft PowerPoint include their own text generation capabilities for titling. These programs may also
Part III: Creative Clipping

include libraries of graphic elements. While you can still add clips to some of their screens, you should check your program's compatibility to importing file formats and investigate potential scale and size problems.

**Titles for Video and Multimedia**

Titles are combinations of text and graphics and they can be the most important images that an audience sees in a presentation, film, video, or computer-aided multimedia piece. Titles introduce the concept of the piece, establish mood, and identify style and character.

In designing titles and presentations, the first thing you need to do is determine the nature of your video, animation, QuickTime, HyperCard, or other media program production environment to see what kinds of text and graphic elements can be brought into it. For instance, you can import WKS, WKS1, WRI, SYLK, ASCII, and Excel documents into PowerPoint, while Persuasion can only accept WKS and ASCII files for non-Mac data.

If the medium will be seen in magnification through display on a larger monitor or in projection, you don’t want to be caught with the jaggies. Under Apple’s System 7, TrueType fonts will automatically smooth themselves out at any point size. If you are using PostScript fonts under ATM (Adobe Type Manager), they too will take care of themselves.

There are title functions in many multimedia programs, and even applications like Macromedia's TitleMaker. TitleMaker has an editable library of over 150 animation templates that include bars, thematic clip art, and text areas. These titles can be overlayed over live and recorded video. Clip art can contribute unique character to titles that speak for special applications (see figure 15.1).
Clips in Animation

Animation is motion, but many of the elements in an animated sequence may be static. While it is possible to “Flintstone it”—to tweak a certain amount of difference in a piece of action—such as a change of expression, a mouth opening and closing, or an arm moving up and down, clip art can contribute more in applications like these: backgrounds, architectural and landscaping modules, furnishings, and decorative accents. Character animation is the most difficult of all, and it is best when created from scratch.

The major consideration is whether or not your animation program can accept the clips. Bitmapped clip art is quite compatible with animation programs such as MacroMind Director, Magic, PROmotion, and Cinemation. Director, one of the most widely used animation programs, is capable of supporting full-color designs and can operate in 1-bit monochrome, gray scale, and color modes. Animations can bog down with higher resolution images, so designers try to keep the individual elements “lightweight” in terms of memory overhead.

Most animation and presentation programs include their own graphics creation and editing functions. Macromedia produces various sound, graphic, and motion clips that can be used in several of their products. Persuasion includes over 100 black-and-white editable clips and PowerPoint has over 500 in color. In DeskPaint
you can prepare many animation elements that are bound for PROmotion or Director's 1-bit monochrome mode. Then there are motion clips, like figure 15.2's 8-bit sequence from Macromedia's ClipMedia CD-ROM. (The same CD-ROM also includes the same clip in 1-bit monochrome mode.) For additional information, refer back to chapter 4, "Motion Clips."

Figure 15.2
A ClipMedia motion clip

Clips in HyperCard

Some clip art collections come in HyperCard stacks (see figure 15.3), and other collections use HyperCard as a "front end" for searching and finding individual files. HyperCard can accept both bitmapped and object-oriented graphics, but it is limited by the screen size of a card (see figure 15.4). With HyperCard 2.1 you can have different sizes and proportions of cards, but they will tend to remain relatively small. If you overload HyperCard with large file sizes on individual cards, it can tend to slow down the stack. Once pasted onto a card, the graphic can be
further rescaled by using **Select Rectangle**, one of the options in HyperCard. However, as always, bitmapped elements will only take just so much rescaling before becoming distorted. Object-oriented graphics should be scaled to size before importing and pasting into HyperCard.

HyperCard 2.1 can accept color clips and even QuickTime MooVs. If you are comfortable with scripting, learn how to use the `ColorizeHC XCMD` to bring in a color picture to a card. Monochrome and color clip art can also be brought into other hypertext programs such as Silicon Beach Software's SuperCard and Spinnaker Software's PLUS. When you buy the Claris HyperCard program, one of the bonuses you get with the package is collections of clip art, created in perfect sizes and scales for building stacks. These collections are bitmapped graphics, and you can export them to DeskPaint or any other bitmapped program, or as PICTs to object-oriented programs. This HyperCard collection is especially rich in accents, bullets, and dingbats.
Figure 15.4
Clip art in a HyperCard stack

Business Cartoons

Taxes
ClickArt® Business Cartoons

eagle, revenue, shelter, deduction, year-end, return, evasion,
penalty, planning, IRS, audit
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Clipping Ahead

After becoming comfortable with clip art and gaining the savvy to manipulate it at will, you may now be at the point where you want to go further. Though your collection of clip art has grown by leaps and bounds, you feel frustrated when you can’t find what you want when you need it.

Unless you have the ability to draw anything and everything from scratch, learning to use a scanner will greatly extend your reach of the images, backgrounds, and textures that you can add to your work. They are available for black-and-white, gray scale, and color material. Flatbed and hand scanners offer a range of options in price, convenience, and desktop space. Scanning software can enhance the detail of textures and photographic images. Optical character recognition
Part IV: Clipping Ahead

(OCR) software packages, which enable you to translate printed text for your word processor, increases the value of a scanner.

As your collection of clip art grows larger, a means of organizing it becomes critical. Graphic database programs provide visual-, text-, and keyword-based systems for storing, sorting, and finding the clips you need.

By now you are a graphics professional, so you should be aware of how to act like a professional. The issues of software ownership, licensing, copyright, and fair use should be honored and observed to keep the graphic playing field level for all.
Using a Scanner

As you become more advanced in electronic artistry, you may want to start capturing your own clips. Some commercial clip art is created from original artwork, but most of it originates with scanning an existing image. Not long ago, digital scanners were big, $10,000 devices that were not very user-friendly. Today, a 600-dpi gray scale/color flatbed scanner can be had for under $900 and a black-and-white hand scanner for under $350. With more efficient scanning systems and new software, scanners are not hard to use. Macintosh scanning devices all use the SCSI interface, and include the cable to connect to your computer, or to be daisy-chained with other peripherals like printers and CD-ROM players.
Flatbed Scanners

A flatbed scanner operates on the same principal as a photocopier. You lift up the lid, as seen in figure 16.1, and place the graphic material face down on the glass platen. You tell the scanner what to do through commands in the scanning software interface. Underneath the platen, the motorized scan head with its light source moves across the page and its light bounces back through mirrors and a lens that focuses on electronic sensors that interpret the ratios of light and dark of the original into a digital signal. Some color scanners make three passes with the scan head, with each pass going through a red, green, or blue filter, while some new scanners can do it all in one pass. The digital signal is accepted by the scanning software as the graphics file format you select.

Sheet-fed scanners can be good for office work, but not for the graphic artist. Unlike the flatbed scanner, which can accept paper of different sizes and thicknesses, and even magazines and books, the sheet-fed scanner can accept only
one standard letter or legal size sheet at a time, which is drawn through a slot by motorized feed rollers.

Scanners come with software to connect it with your desktop. A scanner driver, like a printer driver, is installed into your system so that it can respond to your commands. The scanner control program, often installed as a desk accessory, provides you with the ability to preview the scan and crop the scan down to the precise image area for greater efficiency. You can scan for line, halftone, or gray scale (if it is a gray scale scanner) and you can choose the resolution level as a tradeoff between quality and image file size. Most scanner software includes basic graphic editing so that you can tailor the final image to your design goals. As you learned in chapter 3, you can save the image as TIFF, PICT, or EPS.

You can scan photographic images, too. Light Source's Ofoto scanning software has made desktop photo scanning much more professional looking. It is able to interpolate images scanned from photographs and deliver black-and-white hardcopy prints that have the smooth tonal ranges that we associate with photography. Light Source's algorithms are able to take care of most of the guesswork and trial-and-error from prescan to scan, resulting in an unprecedented simplicity in point-and-shoot execution. The photo that comes out of your laser printer still looks like a photo instead of a high-contrast depiction of one. The photos in this book, as well as the rubber stamps and other non-electronic images, were scanned with a Microtek flatbed scanner such as the one seen in figure 16.1.

Good sources for making your own background images on a scanner are samples and swatchbooks from the furnishings and decorator industries.

**Hand Scanners**

A hand (or hand-held) scanner is like a miniaturized version of the flatbed scanner in reverse (see figure 16.2). You place the graphic original face-up on your desk and drag the hand scanner over the column of text or the graphic that you want to grab. Instead of a lamp in a scan head, there is a small light-emitting diode (LED)
that reflects light off the original and then focuses into a charge-coupled device (CCD) which translates the differences in light values into streams of electrical voltages. As you roll the scanner across the paper, a hard rubber guide roller turns a slotted disk and a light sends a signal to an analog-to-digital (A-D) converter which in turn sends the line of data to the scanning software to build a graphic file format document that you can read as an image on your desktop. (Now, close the book and draw a diagram that shows how scanners work.)

For the occasional user, the inexpensive hand scanner takes up little desk space and can quickly grab signatures, logos, spot art, and graphic details. You can scan even vertical surfaces like wallpaper. Some hand scanners don't need an independent power supply and can work with laptops. A recent software technology called "stitching" has made giant steps in the effectiveness of hand scanners. You can scan an area larger than the average 4 ½-inch aperture of the scanning lamp by making parallel and contiguous passes on the page or illustration. The software
'remembers' the common mapping coordinates and provides the key points to match and realign them for the imaging program.

For some jobs, like getting a digitized version of a board-mounted map or a large rare book that can't fit on a flatbed, this kind of package can offer the best solution. But if you do volume scanning, a flatbed is still worth the added investment. Once you start scanning your own clip art, you will see how easy it is, but also that it can be hard work sometimes. Some images scan cleanly and with little "noise"—extraneous pixels and areas that get picked up—and other images may take many minutes to clean up.

**Optical Character Recognition**

An added benefit of owning a scanner is their ability to perform optical character recognition (OCR). All flatbed scanners, and many hand scanners, can support OCR software packages that enable you to scan printed text and translate it into digital form that can be read by your word processing software.

The scanner reads the proportions of dark versus white areas and converts the characters to bitmapped patterns which it matches to templates of English or other language sets of letters and numbers. When the OCR program can't recognize a character, it denotes it with a character such as a "#" or other symbol. Some advanced OCR packages include a spelling checker which it uses to further decipher the digital file. For desktop publishing and office productivity, OCR can really help rest those tired typing fingers. Many scanners are bundled with an OCR package. If you are looking for one to match your scanner, make sure that it's really compatible with your scanner and that it recognizes the word processing program you use.

**Closing Thoughts**

Flatbed and hand scanners are much more affordable now and the scanning software, including photographic applications, is simpler to use. A flatbed scanner
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is better for larger areas and more constant use, while the hand-held scanner is a compact and inexpensive answer for occasional scanning and for reaching areas that would be difficult for a flatbed. Scanners can also aid your productivity when they’re combined with an OCR program that can automatically translate printed text to word processing files.
You can never be too rich or too happy or have too much clip art. Unless, of course, you own more images than you can keep in your head and can’t find what you want when you want it. Fortunately, you can choose a method of organizing your clip art that suits both your personal style and your workspace.

**Disk Tales**

If you are working with a Macintosh that has a 10M or 20M hard drive, or no hard drive, you may not have the room to store a respectable clip art collection and still take care of business. While it is a good idea to maintain a resident folder with
Part IV: Clipping Ahead

those few clips that you use often, the bulk of your files can be selectively off-loaded to floppies.

**Floppy Copies**

Some commercial clip art comes to you grouped in categories, and some are eclectic mixtures of subjects. Copy the files onto disks grouped in ways that are meaningful to you.

Remember: Never work with an original disk. Always back up and use the copy.

**Hard Disk Acres**

If you have enough hard disk space available to store all your clips, you are lucky indeed. If your hard disk management software allows for partitioning into sectors, you can stretch your luck by separating your work area in one partition and your clips and other resources in other partitions.

You can use the Mac's hierarchical file system to redistribute clips into folders and folders within folders to really put your house in order.

**Removable Storage Media**

An alternative to getting bigger and bigger hard disks is to turn to removable media subsystems. They allow greater flexibility in storage strategies and can transport large amounts of information in compact modules from one computer to another.

**44M SyQuest Cartridges**

The SyQuest, or Winchester, hard drives are subsystems in which disk cartridges, like giant floppies, are inserted into the drive boxes that have the motors and electronics to run them. This can give you 44M paperback-sized chunks of storage that cost about $70 each, or $1.65 per megabyte.
88M SyQuest Cartridges

88M drives and cartridges are the same physical dimensions as the 44M subsystems but pack in twice the storage capacity. If you are concerned only with your in-house activities, the 88s are more space-efficient and economical.

If you are an active professional who needs to exchange large documents between co-workers, contractors, clients, and service bureaus, stick with the 44M format for now. The 88M subsystems can read 44M cartridges, but can’t write to them. 44M subsystems can’t read or write to an 88M cartridge, and most of the graphics and multimedia community have 44s.

Opticals

Some removable media use a read-write optical technology instead of magnetic. 42.8M Bernoulli cartridges are about $90 per cartridge and 46.7M Ricohs are $125. Removable media drive boxes range from about $400 to $2,500. Removables rise to the heights of opticals like Panasonic’s 1G (gigabyte, or one billion bytes) cartridges, which would be almost enough to hold all the clip art you would ever want to own. Almost.

Aliases in Wonderland

If you are using System 7, the alias function can be a valuable ally. An alias is a file that provides a reference to another file. The alias of a file acts like the original file, but allows the file to appear in multiple places, though the original, full file is stored elsewhere. Aliases take up very little memory, and you can make aliases of files, of folders, hard disks, and even aliases of aliases. You can create lists of clip art files as aliases in any order that serves your needs, including multiple lists.

One of the most endearing traits of aliases is their “homing pigeon” talent. Clicking on the alias will find and open the original file as long as you haven’t changed its location. If the original file resides on the same disk or a connected peripheral, the
alias will open it directly. If the original file is stored somewhere outside of the system, a dialog box will identify by name the floppy, cartridge, or network server where it resides, and ask you to come up with it.

Graphic Management Programs

While some people feel more comfortable depending upon paper-based catalogs or printouts to keep track of their clip art, others have expanded their operations beyond the limits of lists. There are a few programs designed to serve as databases for graphic and multimedia resources. These allow a more comprehensive and sophisticated method of finding topics and subjects and adding to and revising clip art collections. If several people share the collection, such as over a network, a graphic database can be essential.

Aldus Fetch

The search engine of this database is exceptionally strong and versatile, allowing you to seek files of subjects, topics, and file formats with multiple associations as well as by single keywords. Fetch can support up to 32,000 images in multiple file formats, such as AIFF, EPS, PICT, PICS, TIFF, Persuasion, QuickTime, Kodak Photo CD, SND, and SoundEdit. You can preview files—even sounds and movies—without their original applications. It can support a single user's activity or multiuser, multivolume databases. Fetch will display selections from its catalogs in a Text List or a Thumbnails view. (See figure 17.1.)

Mariah

Mariah is a full-featured graphic database that is simpler and less powerful than Fetch, but it can also support up to 32,000 images in multiple file formats. (See figure 17.2.)
Chapter 17  ■  Stashing Your Clips

Figure 17.1
Fetch displays thumbnails

Figure 17.2
Mariah’s thumbnail index
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Mariah is suited for multimedia applications, since it can support some sound and animation files, and incorporates the option of playing SND sound files and PICS animation files from within the view windows. It does not, however, support QuickTime. Like Fetch and DeskPaint, Mariah has a Slide Show browser function that will automatically display one image after another from its collections.

**MultiClip**

Your Macintosh came loaded with sample clip art in its Scrapbook. You can add and delete items to the Scrapbook, but you have to scroll from one image to the next and you can't enlarge the window. The Clipboard can store only one item at a time as you cut and paste. MultiClip is an organizer that combines the qualities of the Scrapbook and the Clipboard to support multiple clipboards, clipboard backup, and organizing and editing collections of multiple clipboards (see figure 17.3).

MultiClip is installed as a startup document (INIT file) that also appears as a desk accessory. This makes it convenient to cut and paste images while working in other programs. MultiClip's Graphics Editor allows you to perform limited editing on graphics stored in a clipframe.

*Figure 17.3*

MultiClip's multiple clipboards
Closing Thoughts

As you develop your goals and interests in graphic design and your skills grow and expand to realize them, you will amass a larger collection of clip art libraries. Like your other computer tools, clips are an investment. To get the most out of them, you will need to work out a personally satisfactory system to store and retrieve them. These storage mediums and graphic databases are compatible with your Macintosh and represent some of the options that you may consider.
Reproductive Rights

With a universe of clip art to use and choose from, are there any limitations to what you can do with it? Like the paper-based ancestors of electronic clip art, these images are meant to be used by artists in the creation of designs for private and commercial publication. If you were only permitted to play with them on your desktop, it would certainly be fun, but not very profitable. With the digital nature of electronic clip art, and the instantaneous ease of reproducing them in quantity, the reproductive issues multiply in complexity.

You should read the licensing information that comes with each software package to determine your rights of use, although the way they are written, many of those paragraphs would take a lawyer to translate them. Basically, you can use clips to
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incorporate into the designs of book and magazine illustrations, posters, postcards, t-shirts, fabric and covering designs, and products. You just can't repackage them and resell them as clip art.

Most clip art has been created by artists for hire or has been found from other sources that are in the public domain. Public domain refers to any kind of material: graphics, music, the written word, inventions etc.—according to Webster's Third New International Dictionary, is within "the realm of property rights belonging to the community at large, subject to appropriation by anyone; status unprotected by copyright or patent." Prior to 1970, a copyright lasted for 28 years, and upon renewal, another 28 plus 19 years. Now it is generally for the lifetime of the copyright licensee, with rights of heirs subject to more complex regulations. Prior to 1917, virtually everything is in the public domain. If you are going to scan and resell images as clip art or as an integral part of a logo or product, it is up to you to protect your interests. Obtain written permission or confirm that it is in the public domain. To determine public domain, you must go to or contact the Copyright Office of the Library of Congress in Washington, D.C. There, you can pore through the mountains of paper records or have them do it for you at $20 per hour.

The clip art that comes to you on floppy or CD-ROM, from wherever its image origin may have been, is now software. The Software Publishers Association (SPA), based in Washington, is the principle trade organization of the PC software industry. Here's what the SPA says about this software:

The federal copyright law is simple—it states that a person has the right to: (i) copy the software onto a single computer and (ii) make "another copy for archival purposes only." The license agreement that accompanies all copyrighted software gives the user additional rights not afforded under the copyright law. For instance, some licenses permit the user to make copies for laptop or home PCs, while other licenses may not. It is important for users to read and understand software license agreements to ensure that the program is used legally.
Furthermore, some licenses are written for a specific user, for a specific computer, for a network (commonly known as a concurrent license), for a file server, or for a site. It is equally important to check with the MIS manager or internal auditor to understand what kind of licensing arrangement the software has. As an alternative to the use of copyrighted software, many authors offer public domain or shareware software. Public domain software can be distributed freely, without authorization from the publisher. Shareware is distributed in the same way as public domain software. However, if one chooses to use this software, he/she is obligated to send the program’s author a donation. In return, The author makes him/her a registered user of the shareware, and the user is then entitled to upgrades and documentation.

Finally, it is important to recognize that fonts and images are also protected under the copyright law. These products, while not actual software applications, are also intellectual property. They are created by software companies in the same way as any application, such as a word processor or spreadsheet, and are entitled to equal legal protection.

To request additional information, or SPA anti-piracy materials, including SPAudit, copyright law brochures and videos, or to report a case of software piracy, please contact the SPA at (800) 388-7478.

**Closing Thoughts**

The digital nature of electronic clip art lends itself to easy duplication and distribution, and you should be aware of the permissible usage of it for applications. Public domain material, such as used in software, means that there are no copyright restrictions. It is your responsibility to confirm the legal status of graphic materials that you may wish to repurpose. The SPA has defined the permissible uses of commercial software.
User Groups and Commercial Online Services

User Groups

User groups are not only good sources for more clip art, but also for help, training and resources for graphics, desktop publishing, and multimedia skills.
Part IV: Clipping Ahead

The Boston Computer Society Macintosh Group (BCS•Mac)
BCS•Mac Software Exchange Library, CD ROMs
For a catalog, call or write:

BCS•Mac
48 Grove Street
Somerville, Massachusetts 02144
617.625.7080

Or call with your modem:

BCS•Mac BBS
617.625.6747, 625.0381

BMUG, Inc. (Berkeley Macintosh User's Group)
BMUG Public Domain Disk Library, CD ROMs
For a catalog, call or write:

BMUG
1442A Walnut Street, No. 62
Berkeley, California 94709
415.549.BMUG

Or call with your modem:

BMUG BBS
BBS 510.849.BMUG

Commercial Online Services

Commercial online services are good sources for shareware and freeware clip art and also provide forums and special interest groups (SIGs) on graphics, desktop publishing and multimedia.
America Online
18619 Westwood Center Drive
Vienna, Virginia 22182
Sign-on information: 800.227.6365

AppleLink
Apple Online Services
Apple Computer, Inc.
20525 Mariani Avenue
Cupertino, California 95014
Sign-on information: 408.996.1010

CompuServe
5000 Arlington Centre Boulevard
P.O. Box 20212
Columbus, Ohio 43220
Sign-on information: 800.848.8990 or 614.457.8600

GENie General Electric Information Services Company
401 N. Washington Street
Rockville, Maryland 20850
Sign-on information: 800.638.9636

Ziffnet/Mac (ZMac) MacUser and MacWeek magazines online
25 1st Street
Cambridge, Massachusetts 02142
Sign-on information: 800.666.0330
Cool Solutions to Uncool Problems

Problem
I just got a new package of clip art, but when I try to import it into DeskPaint, the Open dialog box just shows blanks instead of the names of the files that I know are in there.

Solution
Check the documentation that came with the package to see what kinds of graphics file formats the clips are in. They may be in PostScript or a form of TIFF that DeskPaint can't read.
Part IV: Clipping Ahead

Problem
When I import a clip to paste into a document I am working on, the whole DeskPaint window shrinks.

Solution
DeskPaint is making the window conform to the original scale of the graphic. To reconcile the new element to your document, use the Scale to Size function in the new elements window, copy, and then paste into your working document.

Problem
When using DavysDingbats, some of the characters are displayed with part of the right side cut off.

Solution
Because these pictorial fonts manage to cram so much detail into one font slot, some of that area can get masked by the field of the next space. They will print out in complete form without any problem. This masking may, however, invalidate them for use in screen display presentations.

Problem
When I try to find the No Gaps Between Pages selection for printing out a banner on an ImageWriter, I just get an Options button in the Page Setup window.

Solution
Check the Chooser to see if the ImageWriter driver icon is selected. If there is no ImageWriter icon visible there, then you need to install one in your System folder and restart.
Problem
After working in DeskPaint for a while, I noticed that the title of the document had added to it a string of •••••• symbols. What does that mean?

Solution
Each time that you make a major change or edit to your document, DeskPaint denotes that event with a *. Ignore them, erase them, or just regard them as recognition for all your good work.

Problem
When I enlarge an object or character that has a nice, even pattern fill, the pattern goes to weird plaid and gingham types of textures.

Solution
That is an unavoidable by-product of the digital bitmapped graphics environment. You can either experiment with different percentages of enlargement to see if there's a blowup pattern you can live with, or perform the pattern fill after you have enlarged the object instead of before.

Problem
I have a hard time using the mouse to make those final teensy-weensy adjustments to my designs. I keep running over the edges and having to undo it time after time. I feel so clumsy!

Solution
If you have arrow keys on your keyboard, click and drag your object or element very close to its destination. Select it. Now move it, pixel by pixel, by pressing the appropriate directional arrow key. If you don't have arrow keys, well—have you tried meditation or t'ai chi?
Wanna Buy Some Software?

Clip Art Vendors

3G Graphics
114 Second Avenue South, Suite 104
Edmonds, Washington 98020
800.456.0234, 206.774.3518

Acuris Inc.
125 University Avenue, Suite 125
Palo Alto, California 94301-1630
415.329.1920
fax: 415.323.3449

Adobe Systems, Inc.
1585 Charleston Road
Mountain View, California 94039
800.344.8335, 415.961.4400

Advantage Computing
1803 Mission Street, Suite 416
Santa Cruz, California 95060
800.356.4666
### Appendix A

<table>
<thead>
<tr>
<th>Company</th>
<th>Address</th>
<th>Phone</th>
<th>Fax</th>
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<tbody>
<tr>
<td>Alpha Telecommunications</td>
<td>1245 16th Street, Suite 100, Santa Monica, CA</td>
<td>800.736.1567</td>
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<tr>
<td>Applied Microsystems</td>
<td>200 West 34th, Suite 571, Anchorage, AK</td>
<td>800.327.2588</td>
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<tr>
<td>Artbeats</td>
<td>P.O. Box 1287, Myrtle Creek, OR</td>
<td>503.863.4429</td>
<td>705.863.4547</td>
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<tr>
<td>Budgetbytes</td>
<td>1647 SW 41st Street, Topeka, KS</td>
<td>913.266.2288</td>
<td></td>
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<tr>
<td>CAR Inc.</td>
<td>7009 Kingsbury, St. Louis, MO</td>
<td>800.288.7585</td>
<td>314.863.7212</td>
</tr>
<tr>
<td>Casady &amp; Greene, Inc.</td>
<td>22734 Portola Drive, Salinas, CA</td>
<td>800.359.4920, 408.484.9228</td>
<td>408.484.9218</td>
</tr>
<tr>
<td>Collector Software</td>
<td>436 West 4th Street, Suite 222, Pomona, CA</td>
<td>800.584.8198, 714.620.9014</td>
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<tr>
<td>Computer A.D.vantage</td>
<td>P.O. Box 2329, Camarillo, CA</td>
<td>805.485.2688</td>
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<td>Creative Media Services</td>
<td>P.O. Box 5955, Berkeley, CA</td>
<td>800.358.2278</td>
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<tr>
<td>Davka Corporation</td>
<td>7074 North Western Ave, Chicago, IL</td>
<td>800.621.8227, 312.465.4070</td>
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<tr>
<td>Discimagery</td>
<td>18 East 16th St, New York, NY</td>
<td>212.675.8500</td>
<td></td>
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<tr>
<td>D'pix</td>
<td>P.O. Box 572, Columbus, OH</td>
<td>818.888.2068</td>
<td></td>
</tr>
<tr>
<td>Dream Maker Software</td>
<td>925 West Kenyon Ave, Suite 16, Englewood, CO</td>
<td>303.762.1001</td>
<td>303.762.0762</td>
</tr>
<tr>
<td>Dubl-Click Software, Inc.</td>
<td>22521 Styles St, Woodland Hills, CA</td>
<td>818.888.2068</td>
<td></td>
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</tbody>
</table>
Wanna Buy Some Software?

Dynamic Graphics
6000 North Forest Park Drive
Peoria, Illinois 61614
800.255.8800
fax: 309.688.3075

Educorp Computer Services
7434 Trade Street
San Diego, California 92121-2410
800.843.9497, 619.536.9999
fax: 619.536.2345

Electric Beach Computer Products
5538 Pearl Road
Cleveland, Ohio 44129
216.845.6260

Empire Berol USA
Rapidesign Division
345 Parkside Drive
San Fernando, California 91340
800.323.2454

Farcus Cartoons
P.O. Box 3006, Station C
Ottawa, Ontario
K1Y 4J3 Canada
613.235.5944
fax: 613.230.3873

Form and Function
1595 17th Avenue
San Francisco, California 94122
415.664.4010

Good Ideas Clip Art
Margaret Summers, Inc.
3431 St. Blase Lane
St. Ann, Missouri 63074
800.736.5514

H&A Graphics
3401 Woolsey Drive
Chevy Chase, Maryland 20815
800.989.2788

Hired Hand Design
3608 Faust Avenue
Long Beach, California 90808
213.429.5653

Image Club Graphics
1902 11th Street SE, Suite 5
Calgary, Alberta
T2G 3G2 Canada
800.661.9410
fax: 403.261.7013

Imagine That! Publications
12200 Marion Lane, Suite 5120
Minnetonka, Minnesota 55343
612.593.9085

Innovation Advertising & Design
41 Mansfield Avenue
Essex Junction, Vermont 05452
800.255.0562
fax: 802.878.1768

LetterSpace
338 East 53rd Street, #2C
New York, New York 10022
212.935.8130
Appendix A

MacMedic Publications, Inc.
5177 Richmond, Suite 1040
Houston, Texas 77056
800.477.0717
fax: 713.621.2408

Macromedia
600 Townsend
San Francisco, California 94103
415.252.2000

Magnum Software
21115 Devonshire Street, Suite 337
Chatsworth, California 91311
818.700.0510

Masterclip Graphics, Inc.
5201 Ravenswood Road, Suite 111
Fort Lauderdale, Florida 33312-6004
305.983.7440

Media in Motion
P.O. Box 170130
San Francisco, California 94117
415.621.0707

Medina Software
385 Commerce Way, Suite 101
Longwood, Florida 32750
407.260.1676

[metal] Studio Inc.
13164 Memorial Drive, #222
Houston, Texas 77079
713.932.6088
fax: 713.932.6087

Metro ImageBase., Inc.
18623 Ventura Boulevard
Tarzana, California 91356
800.525.1552, 818.881.1997
fax: 818.881.4557

MicroMaps Software
P.O. Box 757
Lambertville, New Jersey 08530
800.334.4291, 609.397.1611

Multi-Ad Services
1720 West Detweiller Drive
Peoria, Illinois 61615
800.447.1950, 309.692.1530

Nova Cube
14 Jarrell Farms Drive
Newark, Delaware 19711
302.655.4486

Olduvai Corporation
9200 South Dadeland Boulevard,
Suite 725
Miami, Florida 33186
800.822.0772, 305.665.4665
fax: 305.670.1992

One Mile Up
7011 Evergreen Court
Annandale, Virginia 22003
800.258.5280, 703.642.1177
fax: 703.642.9088

Pacific Rim Connections, Inc.
1838 El Camino Real, Suite 109
Burlingame, California 94010
415.697.0911
fax: 415.697.9439
Wanna Buy Some Software?

Pleasant Graphic Ware, Inc.
P.O. Box 506
Pleasant Hill, Oregon 97455
503.345.5796

Showker Graphic Arts & Design
15 Southgate
Harrisonburg, Virginia 22801
703.433.1527

So-Cal Graphics
8316 Clairemont Mesa Boulevard
San Diego, California 92111
800.368.3823, 619.292.4919
fax: 619.292.1905

Software-of-the-Month Club
2180 Las Palmas Drive
Carlsbad, California 92009
619.931.8111, extension 510
fax: 619.438.6859

State of the Art Graphics
2103 Harrison NW
Suite 2, #137
Olympia, Washington 98502
800.745.1117, 206.357.4461
fax: 206.943.9780

SunShine
P.O. Box 4351
Austin, Texas 78765
512.453.2334

TechPool Studios
1463 Warrensville Center Road
Cleveland, Ohio 44121
800.777.8930, 216.382.1234
fax: 216.382.1915

T/Maker Company
1390 Villa Street
Mountain View, California 94041
415.962.0195
fax: 415.962.0201

Totem Graphics, Inc.
6200 Capitol Boulevard S.E., #F
Tumwater, Washington 98501
206.352.1851
fax: 206.352.2554

TS Graphics
108 Shrewsbury Avenue
Red Bank, New Jersey 07701
908.530.5959
fax: 908.219.0822

The Underground Grammarian
P.O. Box 203
Glassboro, New Jersey 08028
609.589.6477

Visatex
1745 Dell Avenue
Campbell, California 95008
800.722.3729, 408.866.6562
fax: 408.866.6598

Wayzata Technology Inc.
P.O. Box 807
Grand Rapids, Minnesota 55744
800.735.7321, 218.326.0597
fax: 218.326.0598

Wheeler Arts
Department B, 66 Lake Park
Champaign, Illinois 61821-7101
217.359.6816
fax: 217.359.8716
Appendix A

Other Software Vendors

Adobe Systems Incorporated
1585 Charleston Road
Mountain View, California 94039-7900
415.961.4400

Aldus Corporation
411 First Avenue South
Seattle, Washington 98104-2871
206.622.5500

Claris
5210 Patrick Henry Drive
Santa Clara, California 95052-8168
408.987.7202

Light Source
17 East Sir Francis Drake Boulevard
Suite 100
Larkspur, California 94939
415.461.8000

Olduvai Corporation
9200 South Dadeland Boulevard,
Suite 725
Miami, Florida 33186
800.822.0772, 305.665.4665
fax: 305.670.1992

Symmetry
8603 East Royal Palm Road, #110
Scottsdale, Arizona 85258
800.624.2485, 602.844.2190
APPENDIX

Where Did This Book's Art Come From?

Front cover art
Part I's opening art
Chapter 1's opening art
Chapter 2's opening art
  Figure 2.1
  Figure 2.2

LetterSpace, Multi-Ad Services, and T/Maker Company
SunShine
Dubl-Click Software, Inc.
SunShine
 Dubl-Click Software, Inc. and T/Maker Company
T/Maker Company
### Appendix B

| Figure 2.3 | T/Maker Company |
| Figure 2.4 | T/Maker Company |
| "3D Clip Art" heading | Macromedia |
| Figure 2.5 | Macromedia |
| "ALPHABETS" heading | Metro ImageBase, Inc. |
| "A" decorative cap | SunShine |
| "DINGBATS" heading | Apple Computer's Zapf Dingbats font |
| "Borders, Boxes, and Frames" heading | SunShine |
| Figure 2.7 | Form & Function |

**Chapter 3's opening art**

| Figure 3.1 | Dubl-Click Software, Inc. |
| Figure 3.2 | The Underground Grammarian |
| Figure 3.3 | Image Club Graphics |

**Chapter 4's opening art**

| Figure 4.1 | Media in Motion |

**Chapter 5's opening art**

| Figure 5.1 | SunShine |
| Figure 5.2 | SunShine |
| Figure 5.3 | T/Maker Company |
| Figure 5.4 | Multi-Ad Services |
| Chapter 5's filler art | LetterSpace |

**Part II's opening art**

| Dubl-Click Software, Inc. |

**Chapter 6's opening art**

| Image Club Graphics |
| SunShine |

**Chapter 7's opening art**

| Metro ImageBase, Inc. |

**Chapter 8's opening art**

| Image Club Graphics |
| Dubl-Click Software, Inc. |
| Dubl-Click Software, Inc. |
| Dubl-Click Software, Inc. and T/Maker Company |
### Where Did This Book’s Art Come From?

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<td>Figure 15.2</td>
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<td>T/Maker Company</td>
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<td>T/Maker Company</td>
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<td>Chapter 19's opening art</td>
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<td>Dubl-Click Software, Inc. and SunShine</td>
</tr>
<tr>
<td>Appendix C's opening art</td>
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What’s on the Cool Disk?

We knew it wouldn’t be fair to get you all excited about clip art and then not give you the stuff to do it with. For your enjoyment, the Cool Disk provides you with 47 files (which translates to over 600 images), samples from the kindly coffers of Dubl-Click Software, Inc., SunShine, and T/Maker Company. And it would be cruel to dangle all these nifty clips in front of you without providing the means to use them on your Mac. We’ve power-packed the disk with DeskPaint, a graphics program that has enough tools and features to keep you creating for years. For good measure, we included PopChar and DavysDingbats. Once you open the book and boot up the disk you’ll never have to leave the house.
DeskPaint 3.08

Installed as a desk accessory, it is a full-featured bitmapped paint program that is compatible with most scanners and application programs. DeskPaint includes a pattern library, a browsing function, autotrace, and effects.

Basic Requirements

In order to use DeskPaint, your system must satisfy the software, hardware, and memory requirements outlined here.

Software Requirements

Your Macintosh must be running System version 6.05 or later. System 7.0 is supported.

For those of you running System 6.0X and a color monitor, 32-Bit Quickdraw must be in your System folder.

Hardware Requirements

You must have a Macintosh Plus or later with a hard disk. DeskPaint and DeskDraw work equally well on both black-and-white and color Macintoshes.

Minimum Memory Requirements

Your Macintosh must have at least 1M or memory, 2M if you are running System 7.0 or a color monitor.

Upgrading from an Older Version

If you are upgrading DeskPaint from an older version, please remove any old copies of the programs before continuing with the installation. Failure to do so will interfere with launching some files.
Installation

The installation of DeskPaint involves two steps:

1. Moving files to your hard disk drive.
2. Installing DeskPaint under the Apple menu.

Installing DeskPaint under the Apple Menu Using System 7.0

To install the DeskPaint application under the Apple menu in System 7.0, complete the following steps:

1. Double-click on the DeskPaint suitcase.
2. Drag the DeskPaint application to the Apple Menu Items folder in the System folder.

Installing DeskPaint under the Apple Menu Using System 6.0X

To install the DeskPaint desk accessories under the Apple menu in System 6.0X, complete the following steps.

MasterJuggler™ and SuitCase™ II users: DeskPaint works with both MasterJuggler and Suitcase II. Disregard the following steps and complete the procedures in the Master Juggler or SuitCase II owner’s manuals to install the Paint DA suitcase.

1. Double-click on the Paint DA suitcase in your hard disk window. In a few moments the Font/DA Mover window will appear.
   
   If the Font/DA Mover window does not appear, Font/DA Mover is not in your system. Find Font/DA Mover on the master system disks supplied with your Macintosh or get a copy from your Apple dealer.

2. Click the Open button in the lower-right corner of the window.

3. Locate and open the System file in the System folder by selecting it and clicking the Open button. In a few moments the desk accessories already installed in the system file will appear in the field on the right.

4. Select the DeskPaint desk accessory.
Appendix C

The Macintosh allows only 15 desk accessories at a time. If there are too many existing desk accessories to install DeskPaint, you can delete any unwanted desk accessories by selecting it and clicking the **Remove** button.

5. Click **Copy**. After a few minutes DeskPaint will also appear in the right hand window.

6. Click **Quit**.

Installation is now complete.

**Technical Support**

If you have any questions, please call Zedcor at (602) 881-2310. Technical support is available Monday through Friday, 9 A.M. to 5 P.M. Mountain Standard Time.

Zedcor Technical Support
4500 E. Speedway, Suite 22
Tucson, AZ  85712-5305
602.881.2310
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What's on the Cool Disk?

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DeskPaint Help File

To install the DeskPaint Help file, drag it into the System folder. Once installed, it provides easy-to-use online help for all of DeskPaint's tools and features with a click of the mouse. To activate Help, click on ? at the lower left corner of the window, press Command-H, or the Help key if your keyboard has one. The cursor changes to a ?. Use that to click on whatever DeskPaint feature you want to learn about. To deactivate Help, click on the ? again, or click within the Help window.
Appendix C

PopChar

PopChar is a handy pop-up font set display that will reveal every character that resides in a font and how to get it. PopChar is also a Control Panel document, or cdev. To install PopChar, drag it into the System folder. If you’re using System 7, you will be asked if you want to “put PopChar into the Control Panels folder.” You do, so click OK. You’ll need to restart your Mac before you can use PopChar.

To copy a character directly from PopChar to your document, select the character in PopChar, press Command-C and then the mouse button. That character will now appear in your document where the insertion bar was last located.

To make the PopChar window stay on the screen without holding the cursor on the pop-up button, move the cursor to the upper right hand corner of the window where it will say more... and release the mouse button. The window will remain on the screen until you click Cancel or OK. Whatever character you click on or whatever keys you press, the character equivalents of those commands will appear in the ribbon window at the bottom of the PopChar window. Clicking on the Clear button will erase whatever was in the ribbon window. If you click OK, whatever characters remained in that window and in whatever font you set, will be copied to your active document. This gives you the choice of composing a character string within PopChar that will be transferred to your document.

DavysDingbats

DavysDingbats is an exceptionally rich pictorial dingbat set that you can use within DeskPaint as a graphic or within a word processor or any other productivity program that includes a text function.

DavysDingbats is installed as you would any other font.

If you’re using System 6, you’ll need to use the Font/DA Mover (included with your System disks) to install the DavysDingbats files in the System file. To do so:

1. Double-click on the Font/DA Mover in order to launch it. Make sure the radio button at the top of the dialog box is set to Font (as opposed to DA).
What's on the Cool Disk?

2. Open your System file, using the left side of the Font/DA Mover dialog box. (If the Font/DA Mover is on your startup disk, it may have already done so.) If the left side has a button labeled Open, click on it. If the button is labeled Close, click on it. It becomes an Open button; click on that, too.

3. Using the Open File dialog box, find the System file and open it.

4. Now, you need to use the right side of the Font/DA Mover dialog box to open the DavysDingbats files. Click on the Open button, and use the Open File dialog box to select a DavysDingbats file.

5. Click on the DavysDingbats entry at the right side of the dialog box. The Add button should display arrows indicating that it will copy right to left—to the System file you opened on the left. Click on the Add button. The DavysDingbats file will be added to the list of System fonts on the left side of the Font/DA Mover dialog box.

6. Repeat steps 4 and 5 for each of the DavysDingbats files.

7. When you've installed all the DavysDingbats files in your System file, click on the Quit button. You're ready to go!

If you're using System 7.0 or 7.01, you need to place the DavysDingbats files in the System. Quit all applications before you start—only Finder should be listed in the Application menu. Double-click on the System file (it looks like a suitcase); it will open to a normal Macintosh Finder window. Drag all the DavysDingbats files to the System window. When the files have been copied, you're done.

If you're using System 7.1, simply drag the DavysDingbats files into your System folder. You will be asked if you want to “Put these fonts into the Fonts folder?” This is where they belong, so click OK.

As you will see from the outlined numbers in your font size menu, the sizes that these dingbat characters will keep their integrity best are in 18, 24, 36, and 48 points. You can make them much larger, up to 127 points, in DeskPaint. Some characters, like a flower or a calligraphic stroke, will enlarge well, while others, such as a human or animal figure, will become distorted.

Because it is a pictorial font, and some characters are rather large and detailed for a normal font slot, not every key position has a character. That's why you will see
Appendix C

a few blanks in the following table and why there are several exceptions—characters that are built by two additive keystrokes.

Dingbats like these in DavysDingbats can be used within word processing documents as accents and flourishes and for emphasizing headings and breaks for paragraphs and pages. Dingbats can make great bullets for outlines and flyers and graphic elements for spicing up charts and graphs.

**Table C.1 DavysDingbats and How to Print Them**

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**Exceptions**

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- Option-I and then Shift-U
- Option- and then Shift-U
- Option-I and then Shift-E
- Option-U and then Shift-E
- Option- and then Shift-E

### EPS Clips

3.5 Inch Disk from T/Maker Company
What's on the Cool Disk?

5.25 Inch Disk from T/Maker Company

Airmail from T/Maker Company

Burger from T/Maker Company
Appendix C

Capitol from T/Maker Company

Football from T/Maker Company

Medical Symbol from T/Maker Company
What's on the Cool Disk?

Panda from T/Maker Company

Party Border from T/Maker Company

Plant from T/Maker Company
Appendix C

Porsche from T/Maker Company

Watermelon from T/Maker Company

MacPaint Clips

Beethoven from T/Maker Company
What's on the Cool Disk?

Arrows from Dubl-Click Software, Inc.
Borders #2 from Dubl-Click Software, Inc.
What's on the Cool Disk?

Borders #3 from Dubl-Click Software, Inc.
Bus from T/Maker Company

Computer Cartoon from T/Maker Company
What's on the Cool Disk?

Desk Stuff #1 from Dubl-Click Software, Inc.
Flags from Dubl-Click Software, Inc.
What's on the Cool Disk?

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Food Icons from Dubl-Click Software, Inc.
Fun Pix from Dubl-Click Software, Inc.
IBM Computer from T/Maker Company

Letters Cartoon from T/Maker Company
What's on the Cool Disk?

Macintosh Computer from T/Maker Company

Bright Ideas: Make a Memo from Dubl-Click Software, Inc.
Marquee de Said #1 from Dubl-Click Software, Inc.
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Summer...

Autumn...

Winter...

Spring...

Seasons from Dubl-Click Software, Inc.
Shall we play a game? from Dubl-Click Software, Inc.
Appendix C

Skyline from T/Maker Company

U.S./World Map from Dubl-Click Software, Inc.
What's on the Cool Disk?

Travels from Dubl-Click Software, Inc.
UnUnited States from Dubl-Click Software, Inc.
What's on the Cool Disk?

You Grow on Me from Dubl-Click Software, Inc.
Appendix C

PICT Clips

Deposit

Int'l Time

LONDON
TOKYO
PARIS
NEW YORK
What's on the Cool Disk?

Phone

UK Flag
Appendix C

TIFF Clips

Abstract Horizontal Frieze A from SunShine

Avocet from SunShine
What's on the Cool Disk?

Boy Riding Butterfly 1 from SunShine

Small Circular Swirls from SunShine
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Symphony of Fonts is a collection of 88 PostScript Type 1 or TrueType fonts for use with Windows 3.1 or on the Mac. The collection includes a bonus of 8 decorative drop caps or display faces in EPS file format and 4 original symphonic musical sound bites composed by the author, David Rakowski, of Columbia University.

Symphony of Fonts is available from the Boston Publishing Group at (508) 653-2700 or FAX: (508) 653-2785 and in Europe from INTECSAS of Dusseldorf at (211) 615-968 or FAX: (211) 631-332. Pricing is $99.95 for TrueType format and $149.95 for PostScript Type 1 format.
What's on the Cool Disk?

Appendix C provides the nitty-gritty about what you'll find on the Cool Disk, but briefly...

**DeskPaint**  Zedcor's nifty desk accessory makes you the master of your clip art castle. Why, you may even find yourself using it to create your own little masterpieces.

**PopChar**  Gunther Blaschek's charming pop-up utility lets you spy, with your little eye, all the members of any given font. You've got to see it to believe it.

**DavysDingbats**  Now you can brighten up your work with David Rakowski's definitive dingbats. Ballerinas. Fish. The man from Mr. Munch's "The Scream." What more could you ask for? Well, you'll probably find that here, too.

**Clip Art**  You get hundreds of clip art images in a variety of formats from Dubl-Click Software, Inc., SunShine, and T/Maker Company. Look for copies of all of them in Appendix C.
Using the Cool Disk

Before you use the Cool Disk, you need to copy the material from it to your hard disk. To save space, the files on the disk are compressed. You need to decompress the files before you work with them.

You will need at least 1.8M of free space to install the software that comes on this disk. To prepare the disk for use, lock it (by sliding the black plastic shutter on the disk to the open position) to protect the contents of the disk from any careless Mac maneuvers you may perform in the near future.

If you insert the Cool Disk (a high-density disk) into a 800K (double-density) floppy drive, you may see the message

This disk is unreadable: Do you want to initialize it?

If this occurs, click Eject. Do not initialize the disk! Find a drive that can read 1.4M (high-density) floppy disks. Double-density drives cannot read high-density disks.

To install the Cool Disk's cool clip art on your hard drive, follow these steps:

1. Insert the locked disk into your floppy drive.
2. Double-click on the icon of the floppy disk.
3. Double-click on the icon of one of the compressed file folders.
4. When the dialog box appears asking where you want the uncompressed files, choose to install them on your hard disk or in a folder on your hard disk.
5. Click the Save button when you are satisfied with where the folder will be placed. The files will decompress automatically.
6. Drag the icon of the floppy disk to the trash to eject the disk.
7. Repeat for each compressed collection of clip art.

Now you are ready to install DeskPaint, PopChar, and DavysDingbats by following the instructions for each in appendix C.

That's all there is to it. Enjoy!
A black & white version of DeskPaint is included free with Cool Mac Clip Art Plus! Upgrade to the color version of DeskPaint for only $39.95 and get DeskDraw FREE!

DeskPaint is the award-winning paint program that can create and edit color, gray scale, or black & white images – including MacPaint®, PICT, and TIFF documents. DeskPaint is great for creating your own graphics, editing existing clip art, or touching up images scanned in with your favorite scanner.

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