OH NO, MY FILE!!!!!!   Joseph F. Buchanan, UUCC, 8/19/86

"So, your file will not load."
"What did you say?"
"You do not have a backup?"
"Tsk Tsk Tsk!!"
"How do you get yourself into such a fix!"
(of course you need the file recovered immediately...)

What is a poor user to do? What is a poor "MacGuru" to do, with a queue at his door (or is it a heap or stack? it depends upon the time of day).

THE ARSENAL: (this assumes you know how to use all of these items)
• an extra disk or two (single- and double- sided)
• MacTools™ 5.4 (or so)
• FEdit plus 1.04
• Copy II Mac™ 5.4 (or so)
• ReadMacWrite (Scott Gillespie, Reed College)
• Microsoft Word™
• QUED 1.3
• Filetricks (Joseph F. Buchanan, University of Utah)
• a small paperclip, partially unbent (for unwilling disks in a 400K drive)
• a large paperclip, or a small piece of reinforcing steel (for more advanced drives)
• a large handkerchief (for sobbing users)
• (optional, but recommended) A Mac Plus, a hard disk, common sense, compassion, etc.

PROCEED (**Please note that the following is not for the faint of heart.**)
1. Calm the user (hysterics are common).
2. Rephrase the user's assessment of the situation (translate to English if necessary).
3. Determine the type of file to be recovered. Classify as follows:
>   M - MacWrite document (version 3.0 or higher)
>   A - a Text type document (stored in ASCII)
>   O - any other
>   Be aware that most files can be treated as type A. For example, Microsoft word keeps its text in ASCII. Most
>   spreadsheets and data bases keep the actual data in ASCII. The special formatting and organizational information
>   is not in ASCII and would probably be lost anyway. Also, at present, you can probably write-off anything in
>   PICT form unless the next few steps work.

4. Try the disk in a different machine. Sometimes there might be a calibration problem in the floppy drive causing mis-reads. If this works you become an instant hero (or heroine), but be sure to suspect a problem with the original drive and have it tested.
5. Try rebuilding the DeskTop file. Two methods are possible:
>   • Insert the disk (after reboot) and hold down the "option" and "control" keys through the entire process.
>   • Use a utility like MacTools to delete the DeskTop file. Then the Finder will rebuild the DeskTop file.

6. Make a copy of the disk before trying anything else. Use the copy in all subsequent attempts at recovery. Usually you will need Copy II Mac™ to copy the disk, using bit copy. Sometimes this in itself will produce a recovered disk, but that is not likely. Because you are working with a copy, you can always get back to the original if something goes awry. Also, the user can try someone else if they don't like your work (also not likely).
7. IS THE DISK ITSELF UNREADABLE? If so, repeat step 1. above and then skip the next sections down to section D below.
8. Has the file been deleted, or is it not accessible by any means? If so, go to section D.
9. TYPE M:
>   - try reading it with Microsoft Word. It might work.
>   - try reading it with ReadMacWrite. It might work, but you will lose Font, Style, formatting and pictures.
>   - read it with FileTricks, Compressed format recovery. It will read the file, but you will lose Font, Style, formatting and pictures.

Also, you will see much garbage. Also, paragraphs will be out of their proper order.
10. TYPE A:
>   - try reading it with QUED. It might find it. You might have to zap gremlins.
>   - read it with FileTricks, ASCII format recovery. It will read the file, but you will probably see a lot of garbage.
11. TYPE O:
>   - good luck! Try FileTricks reading it as ASCII. It might look like pure garbage occasionally sprinkled with good stuff. The user

will need to decide if they would rather clean up the garbage they see, or start from scratch. Sometimes the cleanup work is more time consuming.
12. If nothing good comes from the above steps, you could try the methods listed below in section D, but don't hope for much.

SECTION D (Disk recovery)

D1. Determine the disk formatting:

    400K MFS - standard single-sided floppy

    400K HFS - unusual for a single-sided, but possible

    800K MFS - double-sided "flat"

    800K HFS - standard double-sided heirarchical

    Note: do <u>not</u> believe the writing on the disk. Many single-sided disks are being used as 800K. This might even be the cause of the problem.

D2. Use MacTools™ to look at the disk:

- if it will load the disk and shows your file(s) then try copying it (them) to another disk.
- if it will load the disk and your file(s) do not show, then try to UnDelete files.
- if it will not load the disk, then select Repair and then hope for the best. If you get some files, go to step D7.

D3. If D2 failed, you will probably need to restore your disk (see step 6 above). Then continue to step D4 or D6.

D4. 400K HFS or 800K HFS -

- prepare a blank 400K MFS or 800K MFS disk, respectively.
- proceed to step D5.

D5. Run Copy II Mac™ and do a sector copy (<u>without</u> formatting) of sectors 0 thru 2 from the blank MFS disk to the troublesome HFS disk. This will trick the system into thinking it is working with a MFS volume. It will also change the name of the disk. Proceed to step D6.

D6. 400K MFS or 800K MFS - Run FEdit Plus. Do an "OpenVolume". Insert the disk. Select "Recover Deleted Files" from the "Special" menu.

D7. If it worked, then files will be found, but their names will not be familiar. You will also need to look at the individual files with FEDit Plus and restore the Creator and Type fields of each file. For example, a MacWrite file should be of Type WORD, Creator MACA. You can usually recognize a MacWrite file by its small Resource fork containing the days of the week and month names and the data fork beginning with Hex 0006.

D8. If the above steps failed, try reading the disk with FileTricks. To recover an entire disk, you must run FileTricks from a hard-disk or from a disk in the external drive and the disk must have plenty of room to receive a lot of junk. FileTricks will read the disk starting with sector 15 (past the directory stuff) extracting either ASCII or Compressed (MacWrite 4.5 text). Choose "Compressed" only if you expect MacWrite format, otherwise choose "ASCII". Most of what you see will be garbage. An entire 800K disk recovery using "Compressed' can take over five hours and give over a megabyte of junk. You can skip ahead in jumps of 1 to 9 blocks (512 bytes) and can terminate using "control-period". FileTricks will show a count of consecutive spaces, because zeroes in Compressed form convert to spaces and may really be vast amounts of initialized disk. Again, you must ask yourself if this is really worth it, because the junk might be too vast to work with. This last step is definitely a last-resort process, but can be helpful. Also, FileTricks will ignore any IO problems, so you might get left in a "hung" condition requiring a reboot of the machine.

D9. If you reach this point, you migh try the following with your disk:

    • Re-initialize the disk. You couldn't get anything from it anyway, so at least try to make it useful. If it won't initialize, try to "degauss" it (large magnetic field), then try to initialize it again. If that still doesn't work, you can:

- Cry.
- Give it to an NRA friend for target practice.
- Use it as a drink coaster.
- Mount it on a plaque and put it on your wall as "One that got away".
- Use it under a leg of a wobbly table to stablize it.
- Paste a picture of your family on it and set it in the front of your disk organizer.
- Slice off a corner and try to sell it as valuable software that has been "reduced".
- Put a clock mechanism in the center of it, frame it and sell it as a unique clock.
- Use it as a window scraper for your car in the winter.
- etc....