Chapter 10
Backing Up and Restoring

Once you start using T.O.M. you should backup your information regularly. Although today's technology is very reliable hardware failures do occur. If your hardware does fail and you do not have a backup of your T.O.M. information you will be forced to reenter all of the information that you had previously typed into the computer. Fortunately, backing up your T.O.M. information is a quick and easy process.

This chapter describes the following features:

- Why it's important to back up and restore your T.O.M. Data

- Backing up your data to a diskette, a set of diskettes or to another hard disk

- Browsing for backup and restore locations

- Restoring your data from a diskette, a set of diskettes or from another hard disk

About Backing Up and Restoring Your T.O.M. Data

In order to establish a safe and reliable backup and restore procedure for your organization, let's first learn a little about these routines and why they are so important.

What is the Difference Between *Backup* and *Restore*?

The phrase "backing up your data" means to make a copy of your data and store that copy on something other than your computer's hard disk. Usually you backup your data onto another hard disk, diskettes or a tape. This copy of your data acts as an insurance policy in case your computer is destroyed or your computer's hard disk fails. You can then use the backup copy of your information and copy it back (or *restore* it) to a replacement computer or hard disk.

Another reason you backup your information is that sometimes something might cause your data to become erroneous or corrupted. It might be a routine that you accidentally ran like Mass Assign, it might be a computer virus, or it might be a partial failure of your hard disk. In any of these situations – once you have discovered that your data is corrupted you can restore from your backup copy and begin processing again knowing that your information is accurate.

The phrase" restoring your data" means to recopy a previous backup copy of your information from another hard disk, a diskette or a tape to your computer's hard disk. You only need to restore from your backup data when your original information on your computer's hard disk was either lost or corrupted. You may never have to restore your data, but when you do need to restore your information it is a critical need.

How Often Should I Backup My Data?

You should backup your T.O.M. information everyday that you use the T.O.M. system. The T.O.M. Backup process is very quick and is well worth the effort. It's best to create multiple sets of backup diskettes or multiple folders on your backup hard disk so that you are not always overwriting the same backup files.

Should I Create Multiple Sets of Backups or Use Just a Single Backup?

You should definitely create multiple sets of diskettes or multiple folders on your backup hard disk. It is *not* a wise policy to rely on one diskette or one set of diskettes or one file on your hard disk as your last line of defense from losing your data.

If You Backup Your T.O.M. Data to Diskettes

If you backup your data to diskettes, remember that diskettes fail much more often than hard disks. Alternate between several diskettes or sets of diskettes. For example, you may have a separate diskette or set of diskettes that you use as backup diskettes for each day of the week. Label each backup: Monday, Tuesday, Wednesday, Thursday and Friday. If your most recent backup fails you still have other backups to restore from.

NOTE: T.O.M. uses a powerful file compression tool that will compact your data before copying it to your backup diskette. This compression tool is so powerful that most school districts will be able to copy at least one full year of history information on to a single backup diskette!

If You Backup Your T.O.M. Data to Another Hard Disk

If you backup your data to another hard disk, you should still have a policy have many different backup copies on that hard disk. Just as you would have separate sets of backup diskettes for each day of the week you might create "daily subdirectories" in a backup directory. The backup structure might look like this:

Backup Location	Drive and/or Directory Name*
Backup Hard Disk	n:\
Backup Directory	n:\backup
Monday Backup Directory	n:\backup\1-mon\
Tuesday Backup Directory	n:\backup\2-tue\
Wednesday Backup Directory	n:\backup\3-wed\
Thursday Backup Directory	n:\backup\4-thu\
Friday Backup Directory	n:\backup\5-fri\
Before Mass Assign Directory	n:\backup\mass-assign\
After End of School Year Directory	n:\backup\year-end\2000\
*Be sure to add the last "\" character to the drive and/or directory path.	

This can make it easy to keep your backup files logically organized by backing up your data to the directory for that day of the week. Interim backups can be done in special subdirectories before undertaking special tasks such as a Mass Assign or year-end wrap-up.

NOTE: Since Windows displays filenames alphabetically, we've named our daily folders beginning with the numbers 1, 2, 3, 4 and 5 so that they display consecutively in the list. If they were named beginning with just the words mon, tu, wed, thu and fri, they would display in the wrong order (fri, mon, thu, tue and wed). Not a necessity, but it will help keep the backups organized and may keep you from mistakenly selected the wrong one.

Can I Backup My T.O.M. Data to the Same Hard Disk Running My T.O.M. Software?

You can but we *do not* recommend it. If that hard disk fails, you'll have no running software *and* no backup to restore! You will have no choice but to reenter your data. We certainly don't want you to be facing that daunting task!

Backing Up Your T.O.M. Data

T.O.M. has a very quick and easy backup process. The following is a detailed discussion of the steps you must take to properly backup your T.O.M. information. Once you have started the backup routine you can choose between instructions to backup your data to a diskette or set of diskettes or to another hard disk, as described later in this section.

Starting the Backup Routine

Backing up your T.O.M. information requires that the T.O.M. database be free of use. Make sure that no other users are using the T.O.M. software before you start the backup routine. They must all exit COMPLETELY from the T.O.M. software.

2. Select the Backup menu option from the top menu (Figure 10-1) or click the Backup T.O.M. button.

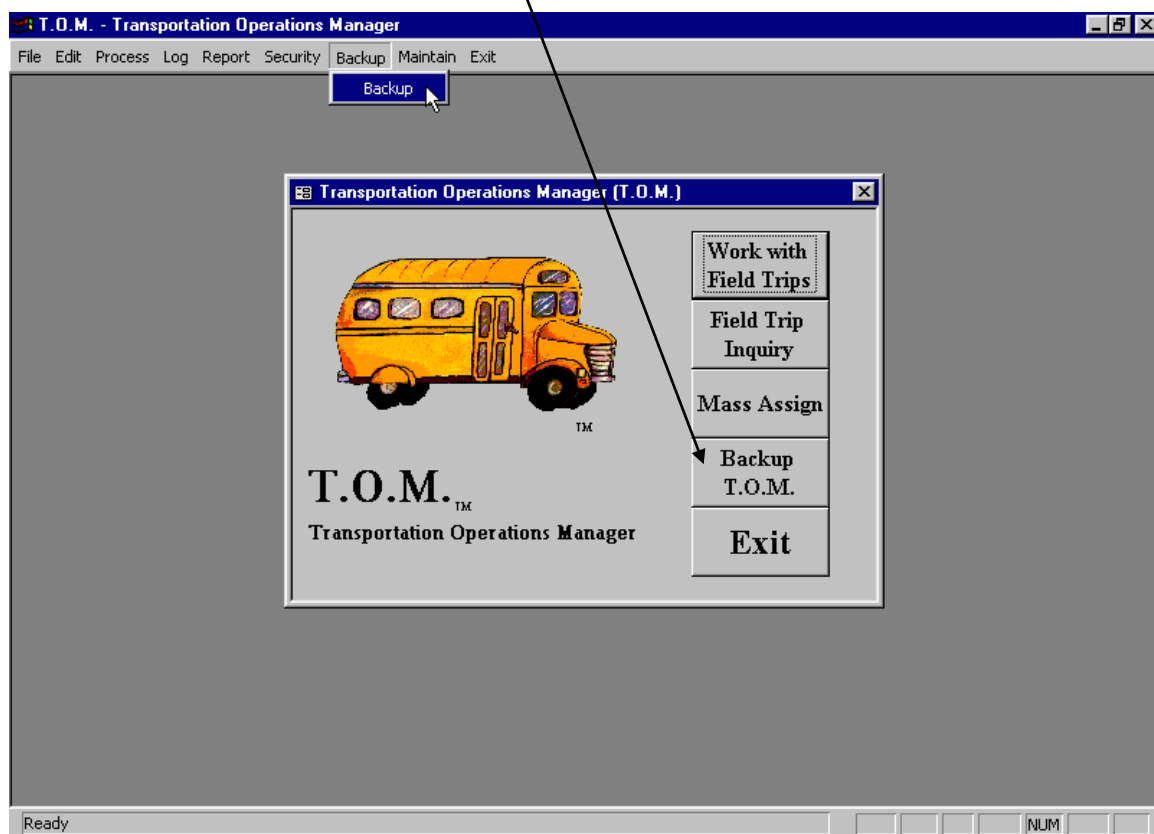Select Backup from the Backup menu at the top of the screen, or click the Backup T.O.M. button.

Figure 10-1. Running The T.O.M. Backup Procedure

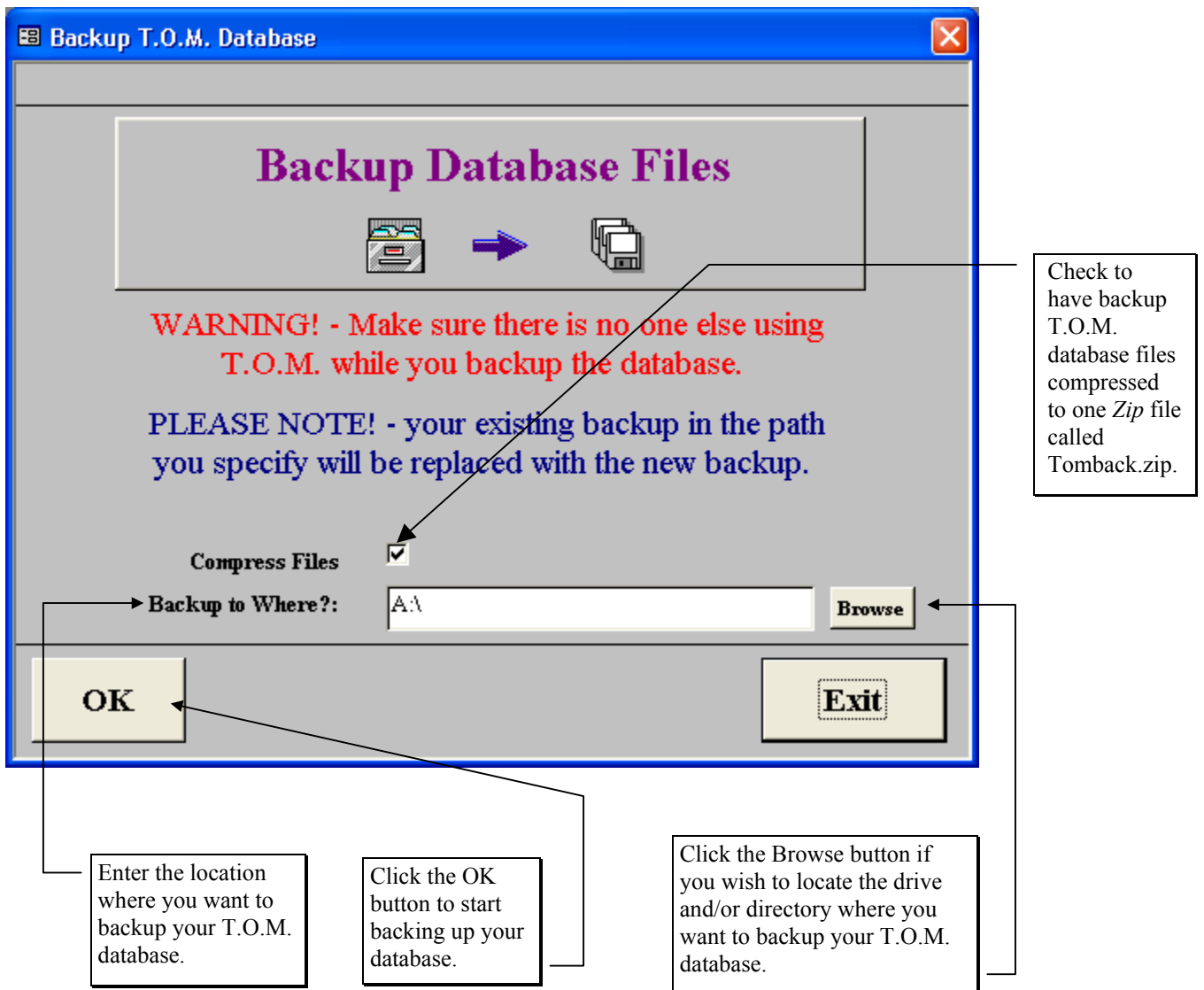The Backup Database Files screen is displayed (Figure 10-2).

Figure 10-2. Backup Database Files Screen

3. Do one of the following:

   - Backup your T.O.M. data to a diskette or set of diskettes. See *Backing Up Your T.O.M. Data to a Diskette* below for details.

   - Backup your T.O.M. data to another hard disk. See *Backing Up Your T.O.M. Data to Another Hard Disk* later in this chapter for details.

Backing Up Your T.O.M. Data to a Diskette

Start the backup routine if you haven't already done so. (See *Starting the Backup Routine*, previously in this section for details.) NOTE: if backing up to diskettes it is HIGHLY recommended that the Compress Files checkbox is CHECKED. Then follow these instructions:

1. Insert your backup diskette into the diskette drive.

2. T.O.M. defaults to drive A in the Backup Database screen (Figure 10-2). If your diskette is not in drive A then enter the drive letter where your diskette is located in the Backup to Where? field. For example, if your diskette is in drive B, enter B:\ (be sure to enter the "\" character).

    NOTE: Click the Browse button if you need to locate the drive on the diskette where you'll be backing up your data. See *Browsing for the Backup Location on the Backup Database Files Screen* later in this section for details.

3. Click the OK button. T.O.M. will display a message reminding you to place the first disk into your diskette drive (Figure 10-3).
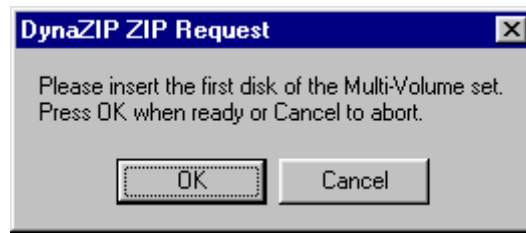

Figure 10-3. Insert Backup Diskette Reminder

4. Click the OK button and T.O.M. will begin making a backup copy of the T.O.M. database. A status screen showing your progress will display. If your data is too large to fit one a single diskette T.O.M. will prompt you to insert additional diskettes into your diskette drive as the backup proceeds. When T.O.M. has completed its backup of your data it will display a message informing you that your data was successfully copied to the backup diskette(s) (Figure 10-4).
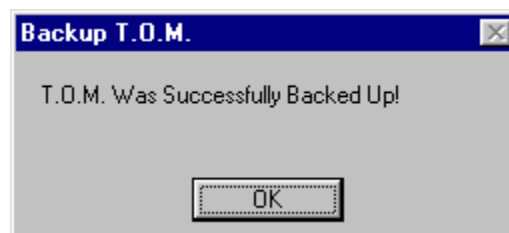

Figure 10-4. Successful Backup Message

5. Click the OK button to return to the Backup Database Files screen (Figure 10-2).

6. Remove the diskette from your diskette drive. Be sure to label the diskette(s) properly and store the diskette(s) in a safe place.

Backing Up Your T.O.M. Data to Another Hard Disk

Start the backup routine if you haven't already done so. (See *Starting the Backup Routine*, previously in this section for details.) Then follow these instructions:

1. T.O.M. defaults to drive A in the Backup Database Files screen (Figure 10-2). Enter the full path of the backup hard disk in the Backup to Where? field, such as n:\backup\1-Mon\. Be sure to enter the last "\" character at the end of the pathname. Otherwise, the backup file will be incorrectly placed in the directory \backup instead of n:\backup\1-Mon\.

    NOTE: Click the Browse button if you need to locate the drive and/or directory where you'll be backing up your data. See *Browsing for the Backup Location on the Backup Database Files Screen* later in this section for details.

2. Select whether or not you want to you want to have the T.O.M. Database Files compressed into one *zipped* file called 'Tomback.zip' or just saved individually uncompressed at the backup location.

3. Click the OK button and T.O.M. will begin making a backup copy of the T.O.M. database. A status screen showing your progress will display. When T.O.M. has completed its backup of your data it will display the message in (Figure 10-5).
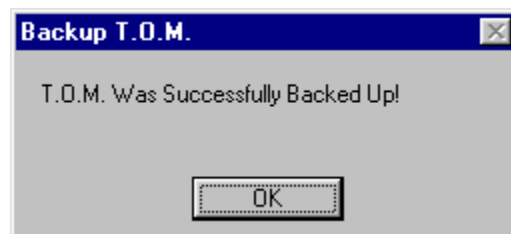

Figure 10-5. Successful Backup Message

4. Click the OK button to return to the Backup Database Files screen (Figure 10-2).

Browsing for the Backup Location on the Backup Database Files Screen

If you're not sure of the path you should enter for your backup location in the Backup Database Files screen you can browse to it by clicking the Browse button to the right of the Backup to Where? field (Figure 10-2). The standard Windows File Search screen is displayed (Figure 10-6). Locate the drive and the path where you want to backup your T.O.M. database. (Remember, it will first default to drive A.)
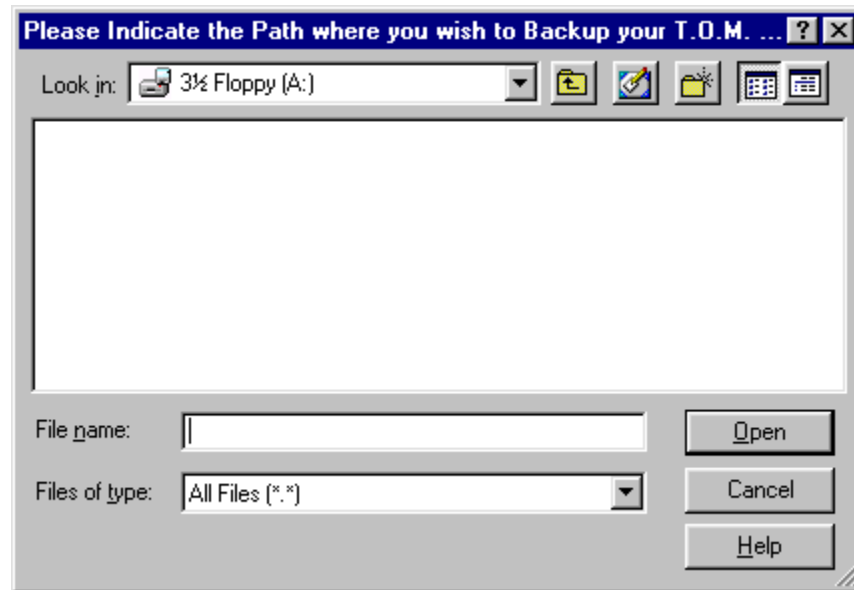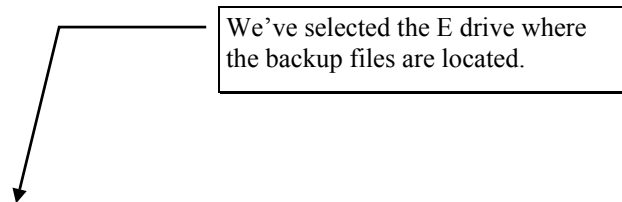
Figure 10-6. The Windows File Search Screen – Before the Backup Path Is Selected

NOTE: There is one small quirk to how this screen works. You *must* select a file (it can be any file) in the path before this screen lets you return the pathname to the Backup Database Files screen. Unfortunately, if you have a backup path that does not contain any files you cannot use this screen to point to it. You will have to type the pathname in the Backup to Where? field in the Backup Database Files screen.

The Browse feature is useful if you are backing up your data to multiple folders on another hard disk, you can locate the appropriate drive and/or directory using the Windows File Search screen. The following example describes how you might navigate to a "Tuesday folder" to do your Tuesday backup.

1. From the Backup Database Files screen (Figure 10-2), click the Browse button. The Windows Search screen is displayed (Figure 10-6). It defaults to the A drive.

2. Click the Look in drop-down arrow to select the drive where the backups are located, such as drive E (Figure 10-7). Folders for that drive are displayed in the list.
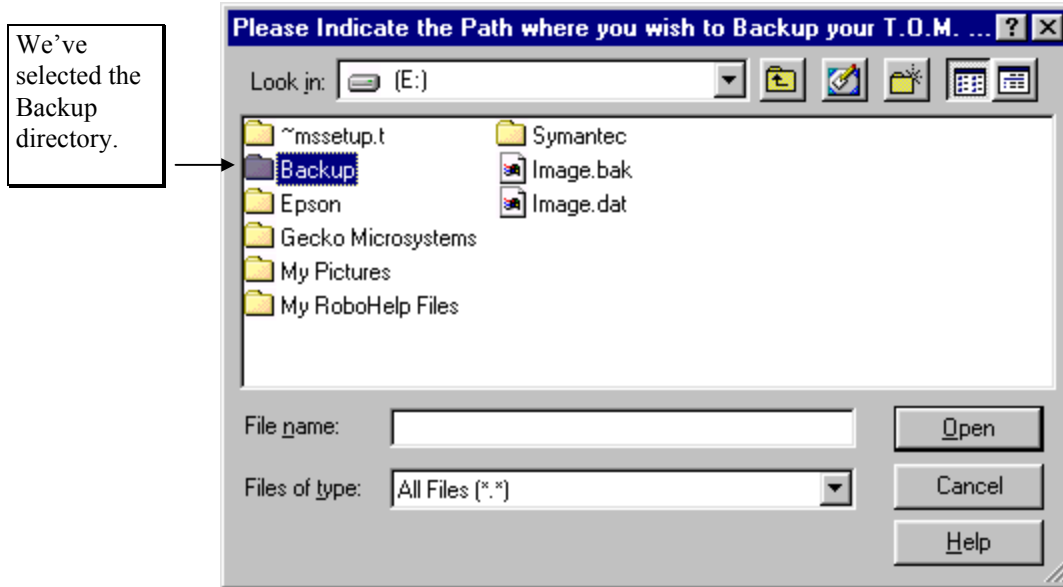
We've selected the E drive where the backup files are located.

We've selected the Backup directory.

Please Indicate the Path where you wish to Backup your T.O.M. ...

Look in: (E:)

~mssetup.t
Backup
Epson
Gecko Microsystems
My Pictures
My RoboHelp Files
Symantec
Image.bak
Image.dat

File name:

Files of type: All Files (*.*)

Open
Cancel
Help

Figure 10-7. The Windows File Search Screen – Drive E and the Backup Directory Selected

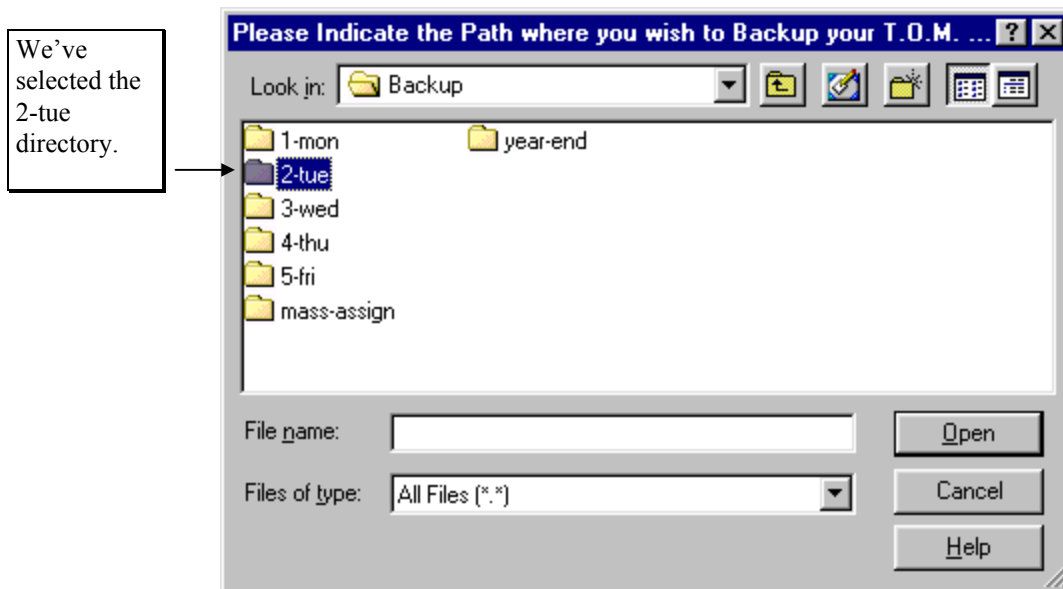3. Double-click on the Backup folder to display the daily backup folders (Figure 10-8).

We've selected the 2-tue directory.

Please Indicate the Path where you wish to Backup your T.O.M. ...

Look in: Backup

1-mon
2-tue
3-wed
4-thu
5-fri
mass-assign
year-end

File name:

Files of type: All Files (*.*)

Open
Cancel
Help

Figure 10-8. The Windows File Search Screen – Tuesday Backup Directory Selected

NOTE: Since Windows displays filenames alphabetically (Figure 10-8), we've named our daily folders beginning with the numbers 1, 2, 3, 4 and 5 so that they display in the right order (mon, tue, wed, thu, fri) in the list. If they were named beginning with just the words mon, tu, wed, thu and fri, they would display in the wrong order (fri, mon, thu, tue and wed). Not a necessity, but it will help keep the backups organized and may keep you from mistakenly selected the wrong one.

4. Double-click on the 2-tue folder (Figure 10-8).

5. Click on tomback.zip (Figure 10-9). This is the backup file T.O.M. creates when doing a backup. T.O.M. will automatically replace the old backup file with the new one, so be sure this is the one you

want. In other words, be sure that you're in the right folder! (You could select any name in the directory. T.O.M. only returns the pathname to the Backup Database Files screen.)
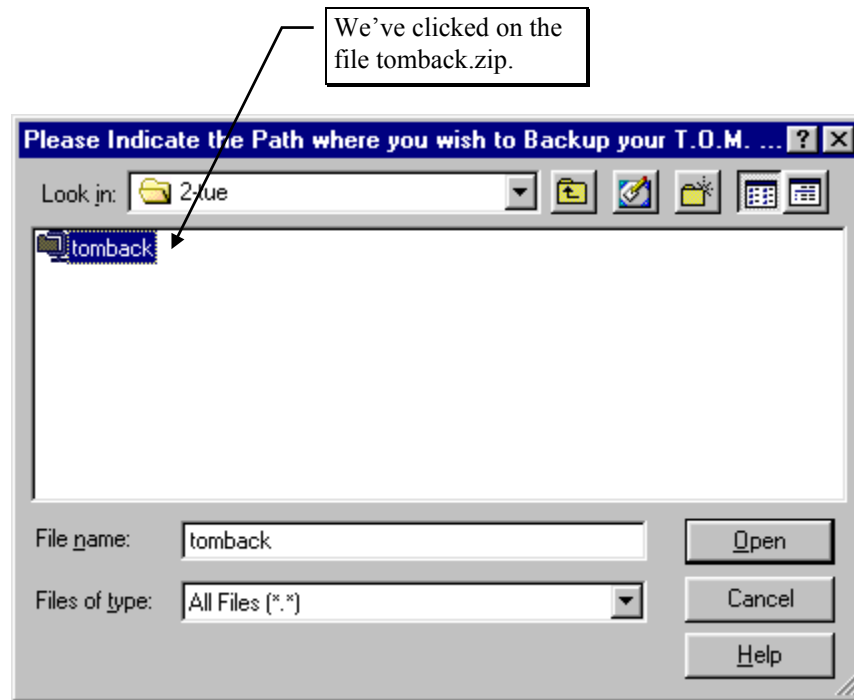
We've clicked on the file tomback.zip.

Figure 10-9. The Windows File Search Screen – With the tomback.zip File Selected

6. Click the Open button. The Backup Database Files screen is displayed with the path e:\backup\2-tue\ in the Backup to Where? field (Figure 10-10). Notice that T.O.M. does *not* enter the filename—just the pathname with the last "\" character. This is why you could select *any* filename in your directory, as previously mentioned.

The backup pathname you selected in the Windows File Search screen is displayed here.
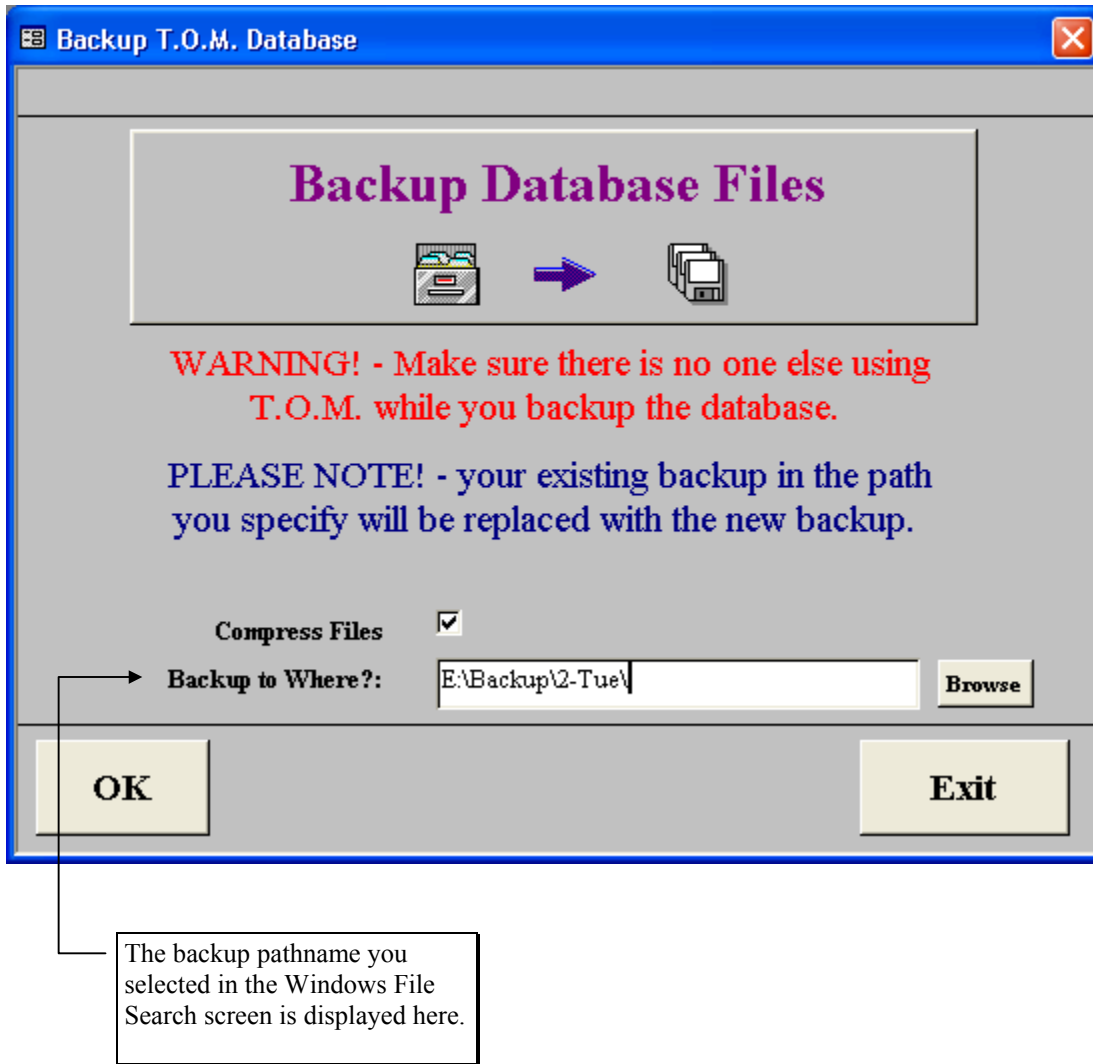
Figure 10-10. The Backup Database Files Screen – Backup To Pathname Filled In

Now you can complete the backup procedure as described in *Backing Up Your T.O.M. Data to Another Hard Disk* described previously in this section.

Restoring Your T.O.M. Data

T.O.M. has a very quick and easy data restore process. The following is a detailed discussion of the steps you must take to properly restore your backup T.O.M. information. Once you have started the restore routine you can choose between instructions to restore your data from a diskette or set of diskettes or from another hard disk, as described later in this section.

Starting the Restore Routine

Backing up your T.O.M. information requires that the T.O.M. database be free of use. Make sure that no other users are using the T.O.M. software before you start the backup routine. They must all exit COMPLETELY from the T.O.M. software.
Restoring a backup copy of your T.O.M. information requires that the T.O.M. database be free of use. Make sure that no other users are using the T.O.M. software before start the restore routine. They must all exit COMPLETELY from the T.O.M. software. You also must exit T.O.M. because the restore routine is a separate program you run from your desktop.

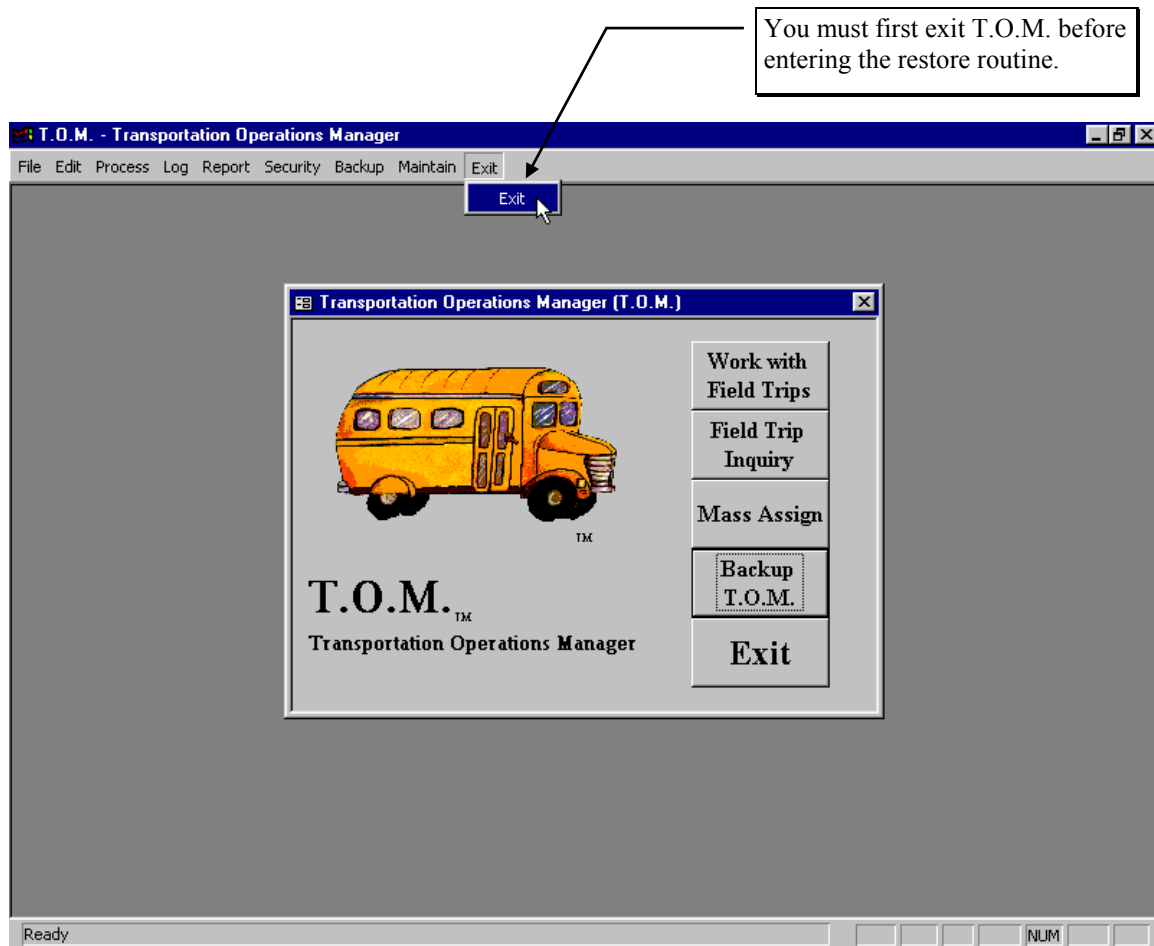1. Click the Exit option from the top menu in the Main T.O.M. screen (Figure 10-11).

> You must first exit T.O.M. before entering the restore routine.

Figure 10-11.- Exiting T.O.M. Software

2. Click the Start button. Highlight Programs, the T.O.M. folder and then click the Restore T.O.M. Database option (Figure 10-12).
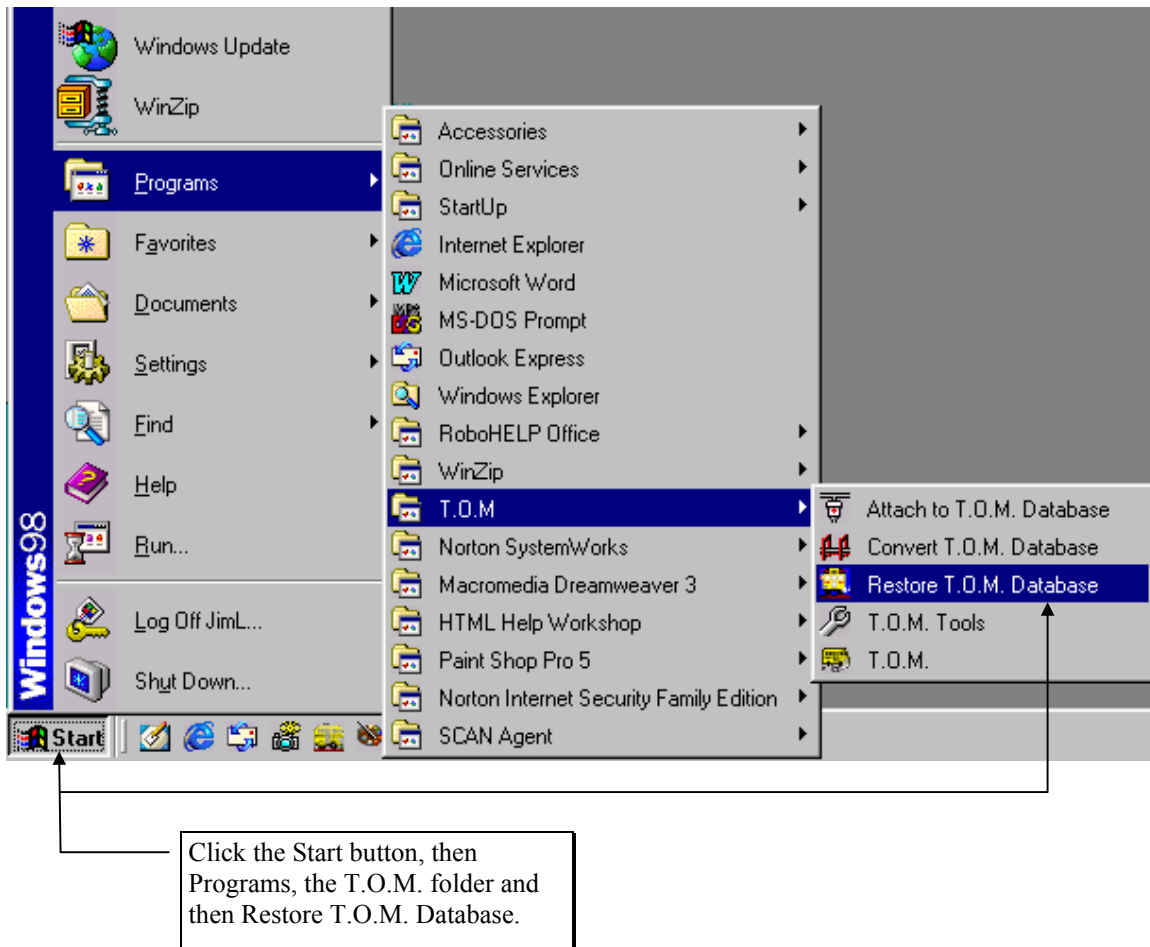

Figure 10-12. Running the Restore T.O.M. Database From Windows 95/98

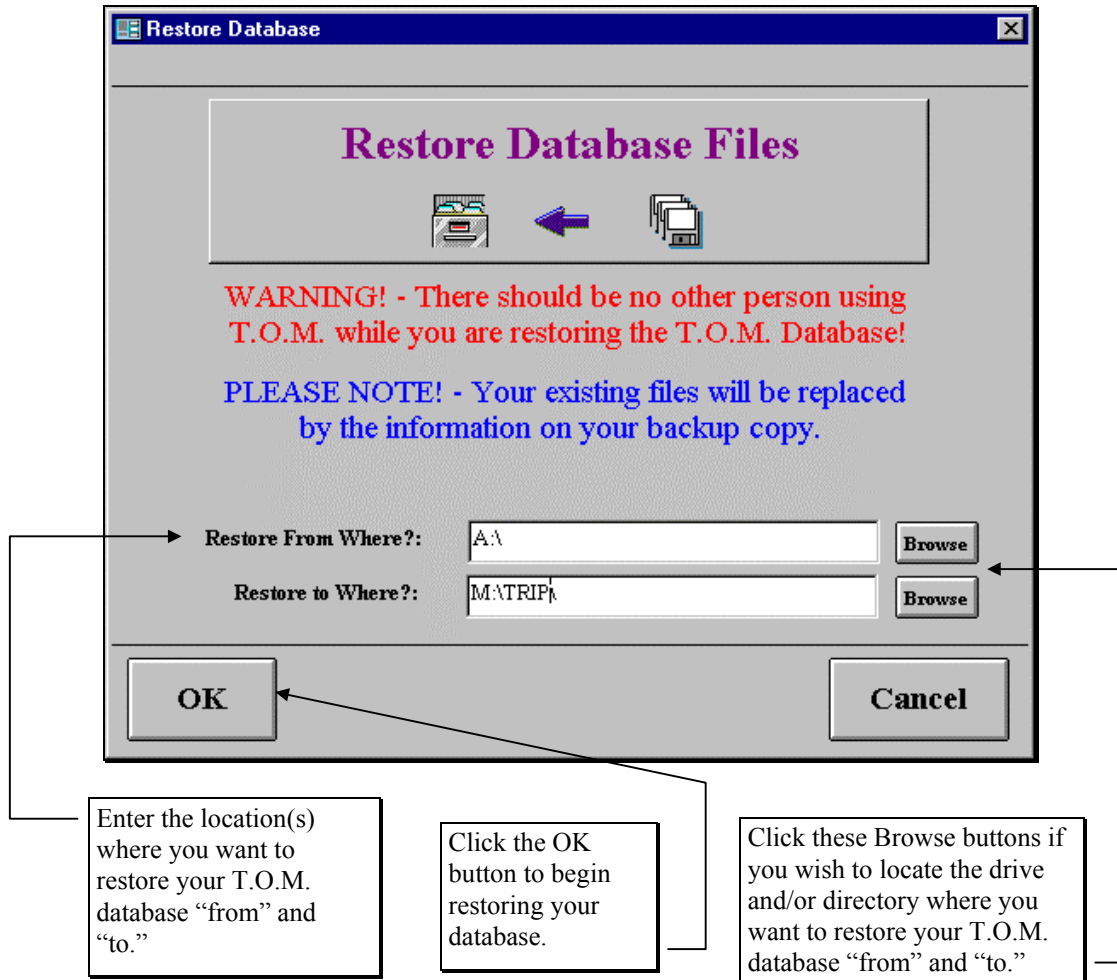The Restore Database Files screen is displayed (Figure 10-13).

Figure 10-13. Restore Database Files Screen

Where you originally backed up your T.O.M. database determines how you will run your restore procedure. T.O.M. assumes that you are going to restore a backup diskette to the path that you currently have your T.O.M. software running from.

3. Do one of the following:

- Restore your T.O.M. data from a diskette or set of diskettes. See *Restoring Your T.O.M. Data from a Diskette* below for details.

- Restore your T.O.M. data from another hard disk. See *Restoring Up Your T.O.M. Data from Another Hard Disk* later in this chapter for details.

Restoring Your T.O.M. Data from a Diskette or Set of Diskettes

Start the restore routine if you haven't already done so. (See *Starting the Restore Routine*, previously in this section for details.) Then follow these instructions:

1. Insert your *most recent* T.O.M. backup diskette or the first diskette of your *most recent* set of backups into your diskette drive. **NOTE:** If you have multiple backups, be sure it is the *most recent* one.

2. If the default paths in the Restore From Where? and the Restore To Where? fields are correct then click the OK button (Figure 10-13).

   If your diskette is not in the drive indicated in the Restore From Where? field enter the appropriate drive letter. For example, if your diskette is in drive B, enter B:\ (be sure to enter the last "\" character).

   If the path in the Restore To Where? field is wrong enter the appropriate full pathname. For example, your pathname may be d:\programs\trip\. Be sure to enter a backslash character at the end of the pathname. Otherwise, the backup file will be incorrectly restored to d:\programs.

   NOTE: Click the Browse button if you need to find the drive and/or directory for either the Restore From Where? or Restore To Where? fields. See *Browsing for the Restore Locations on the Restore Database Files Screen* later in this section for details.

3. If the database still exists in the Restore To Where? location, the message in Figure 10-14 is displayed. Click the Yes to All button to replace all the related database files.
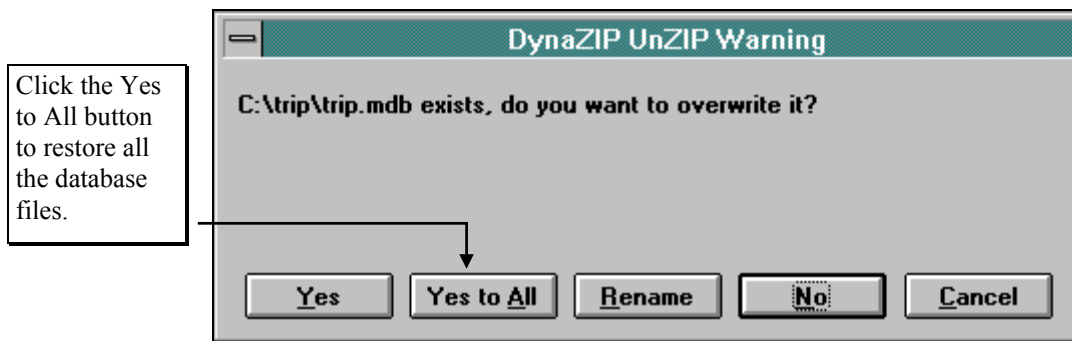
Click the Yes to All button to restore all the database files.

Figure 10-14. Overwrite Confirmation Message

T.O.M. will restore your backup database to the drive and directory you specified in the Restore Database Files screen. A status screen showing your progress will display. When T.O.M. has completed restoring your backup database it will display the message in Figure 10-15.

Figure 10-15. Successful Restore Message

4. Click the OK button to return to the Restore Database Files screen (Figure 10-13).

5. Click the Cancel button to exit the restore routine.

You have now successfully restored your backup database to your hard disk and can start T.O.M. and begin processing. **NOTE:** Your T.O.M. data will be as you left it when you made you're the backup copy you just restored. Any information entered or changed after you made the backup will be lost and you will need to reenter or make the changes to the information again.

Restoring Your T.O.M. Data from a Backup Hard Disk

Start the restore routine if you haven't already done so. (See *Starting the Restore Routine*, previously in this section for details.) Then follow these instructions:

1. If the default paths in the Restore From Where? and Restore To Where? fields are correct then click the OK button (Figure 10-13).

    If the paths in the Restore From Where? and/or Restore To Where? field are wrong enter the appropriate full pathname. For example, your pathname may be d:\programs\trip\. Be sure to enter a "\" character at the end of the pathname Otherwise, the backup file will be incorrectly restored to d:\programs.

    NOTE: Click the Browse button if you need to navigate to a drive and/or directory for either the Restore From Where? or Restore To Where? fields. See *Browsing for the Restore Locations on the Backup Database Files Screen* later in this section for details.

2. If the database still exists in the Restore To Where? location, the message in Figure 10-16 is displayed. Click the Yes to All button to replace all the related database files.
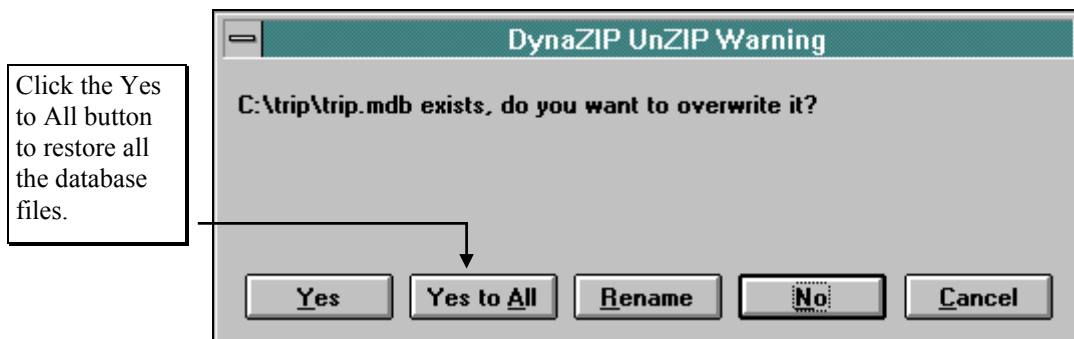
Click the Yes to All button to restore all the database files.

Figure 10-16. Overwrite Confirmation Message

T.O.M. will restore your backup database on to the drive and directory you specified in the Restore Database Files screen. A status screen showing your progress will display. When T.O.M. has completed restoring your backup database it will display the message in Figure 10-17.
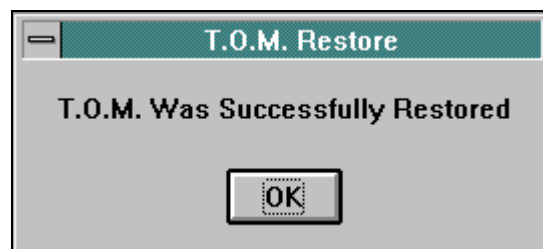

Figure 10-17. Message Box of Successful Restore

6. Click the OK button to return to the Restore Database Files screen (Figure 10-13).

7. Click the Cancel button to exit the restore routine.

You have now successfully restored your backup database to your hard disk and can start T.O.M. and begin processing. **NOTE:** Your T.O.M. data will be as you left it when you made you're the backup copy you just restored. Any information entered or changed after you made the backup will be lost and you will need to reenter or make the changes to the information again.

Browsing for the Restore Locations on the Restore Database Files Screen

If you're not sure of the path you should enter for your restore to and/or restore from locations in the Backup Database Files screen you can browse to it by clicking the Browse button to the right of the the appropriate field (Figure 10-13). The standard Windows File Search screen is displayed (Figure 10-18). Locate the drive and the path where you want to backup your T.O.M. database.
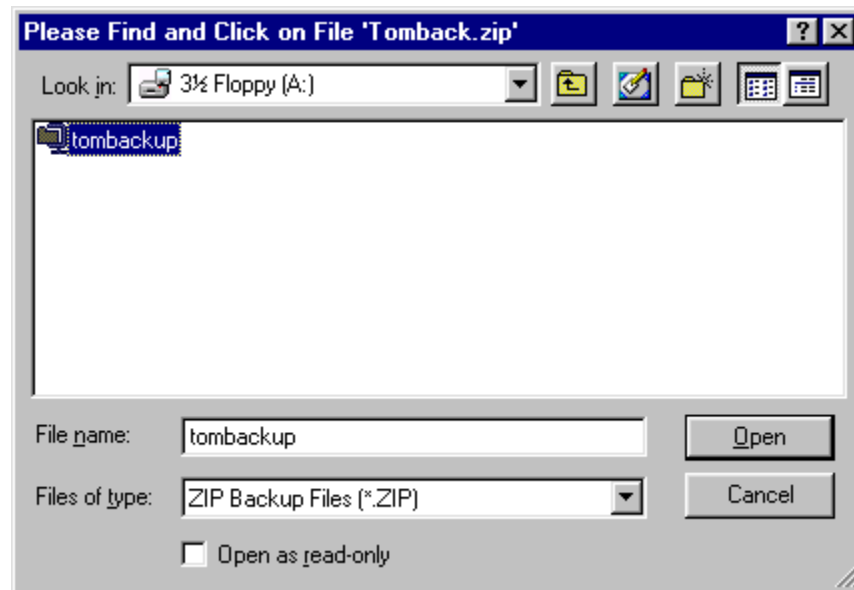

Figure 10-18. The Windows File Search Screen

NOTE: There is one small quirk to how this screen works. You *must* select a file (it can be any file) in the path before this screen lets you return the pathname to the Backup Database Files screen. Unfortunately, if you have a backup path that does not contain any files you cannot use this screen to point to it. You will have to type the pathname in the Backup to Where? field in the Backup Database Files screen.

This example describes how to browse to the e:\backup\2-tue folder to use for your Restore From Where? field. The same principle can be applied to the Restore To Where? location. You would browse to the drive and/or directory where the T.O.M. database is located that you wish to replace with the backup.

1. From the Restore Database Files screen (Figure 10-13), click the Browse button to the right of the Restore From Where? field. The Windows Search screen is displayed (Figure 10-18).

2. Click the Look in drop-down arrow to select the drive where the backup file is located, such as drive E (Figure 10-19).
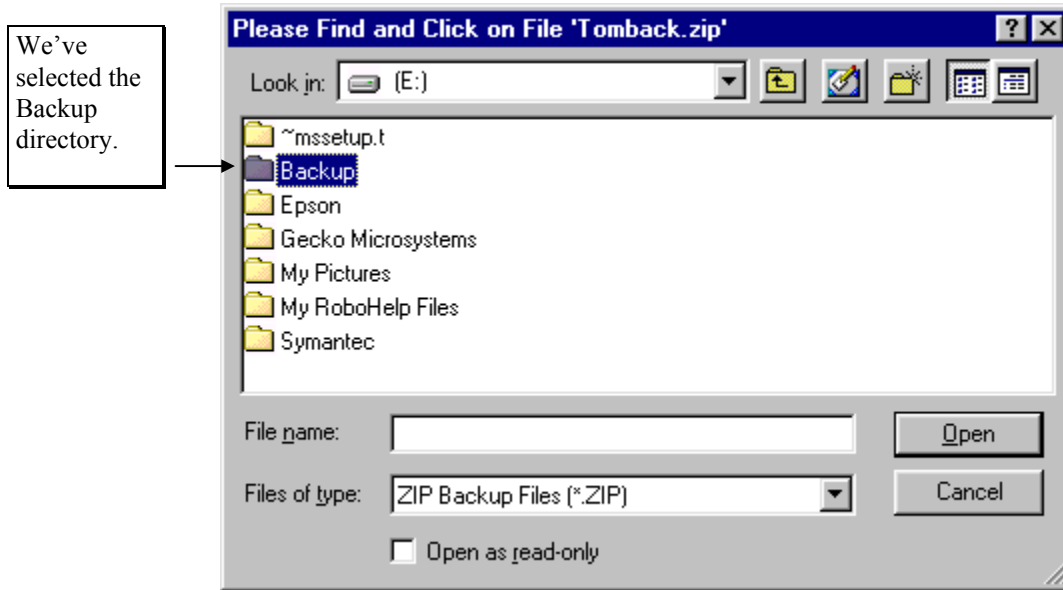
We've selected the Backup directory.

Please Find and Click on File 'Tomback.zip'

Look in: (E:)

- ~mssetup.t
- Backup
- Epson
- Gecko Microsystems
- My Pictures
- My RoboHelp Files
- Symantec

File name:

Files of type: ZIP Backup Files (*.ZIP)

☐ Open as read-only

Open   Cancel

Figure 10-19. The Windows File Search Screen With Backup Directory On Drive E Selected

3. Double-click on the Backup folder (Figure 10-19) to display the daily backup folders (Figure 10-20).
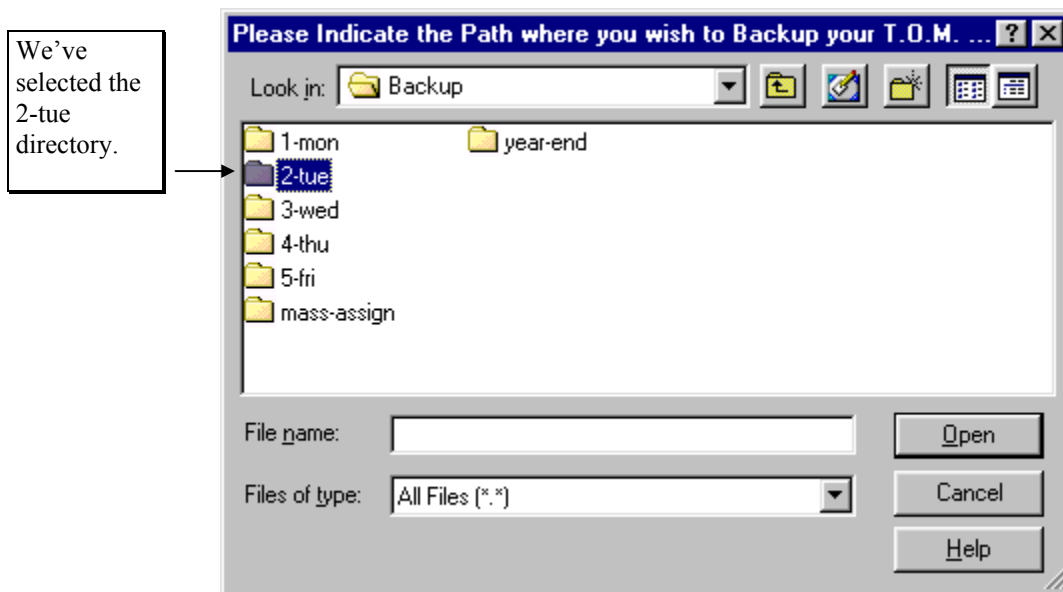
We've selected the 2-tue directory.

Please Indicate the Path where you wish to Backup your T.O.M. ...

Look in: Backup

- 1-mon
- 2-tue
- 3-wed
- 4-thu
- 5-fri
- mass-assign
- year-end

File name:

Files of type: All Files (*.*)

Open   Cancel   Help

Figure 10-20. The Windows File Search Screen – Tuesday Backup Directory Selected

NOTE: Since Windows displays filenames alphabetically (Figure 10-20), we've named our daily folders beginning with the numbers 1, 2, 3, 4 and 5 so that they display in the right order (mon, tue, wed, thu, fri) in the list. If they were named beginning with just the words mon, tu, wed, thu and fri, they would display in the wrong order (fri, mon, thu, tue and wed). Not a necessity, but it will help keep the backups organized and may keep you from mistakenly selected the wrong one.

4. Double-click on the 2-tue folder (Figure 10-20) to display the e:\backup\2-tue folder (Figure 10-21).

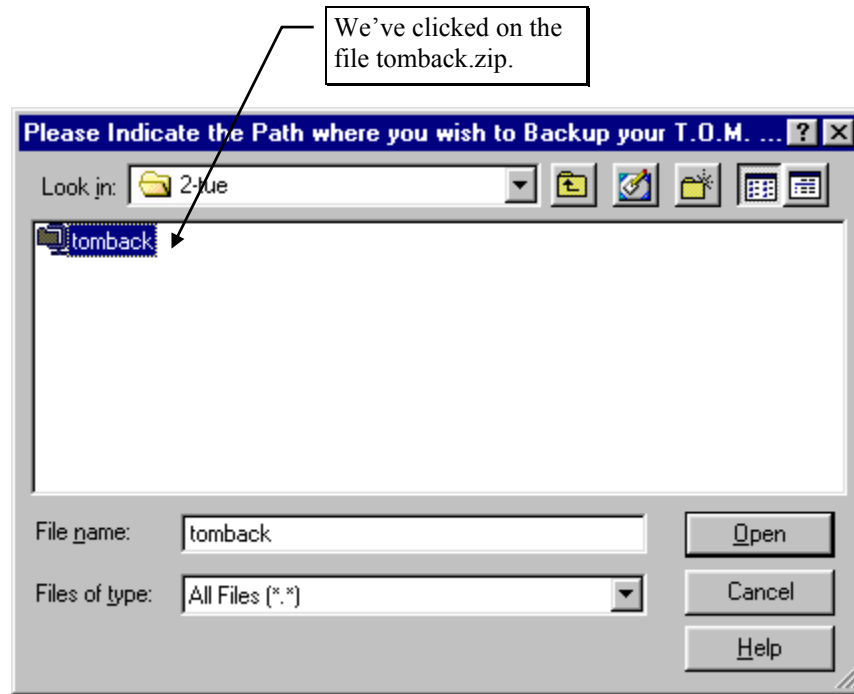5. Click on tomback.zip (Figure 10-21).

We've clicked on the
file tomback.zip.

Figure 10-21. The Windows File Search Screen – With the tomback.zip File Selected

6. Click the Open button. The Backup Database Files screen is displayed with the path e:\backup\2-tue\ in the Backup to Where? field (Figure 10-10). Notice that T.O.M. does *not* enter the filename—just the pathname with the last "\" character. This is why you could select *any* filename in your directory, as previously mentioned.

The pathname you selected in the Windows File Search screen is displayed here.
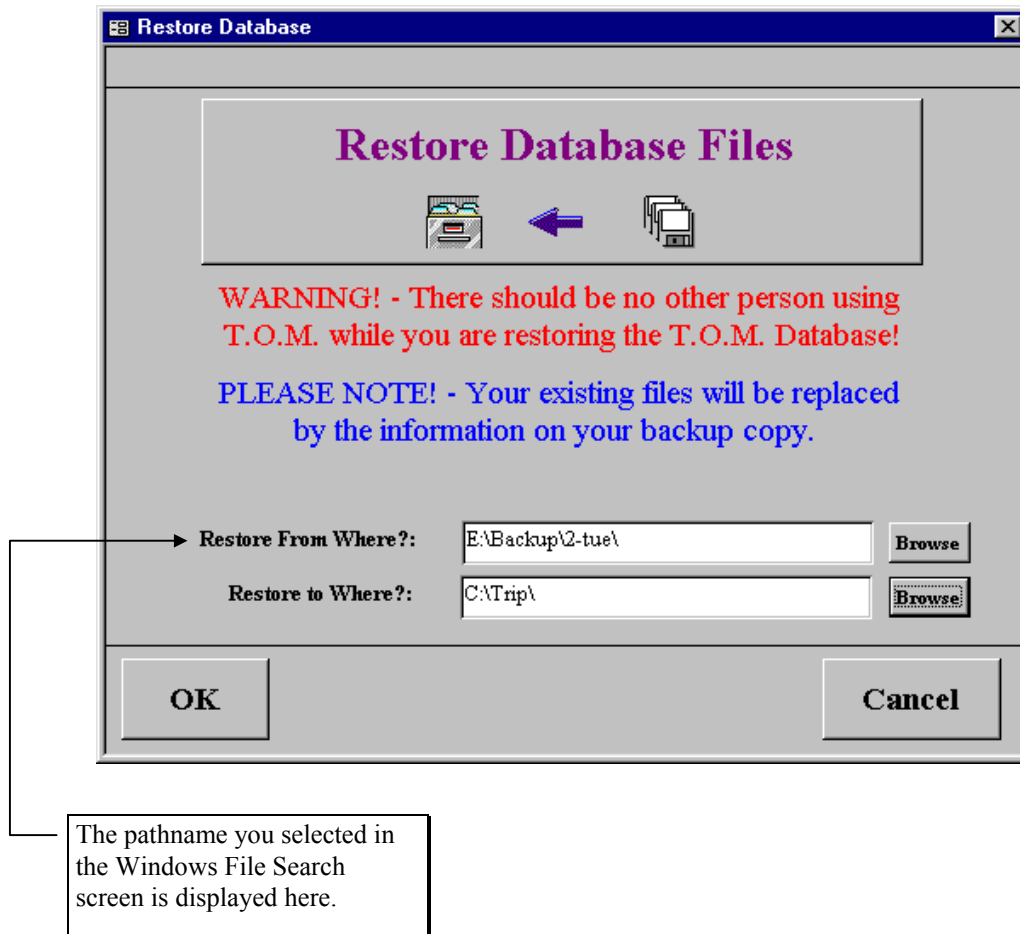
Figure 10-22. The Backup Database Files Screen – Restore From Pathname Filled In

When you have located both the restore from and restore to locations, you can complete the restore routine as described in *Backing Up Your T.O.M. Data to Another Hard Disk* previously in this section.