



Trims '97 was developed and is distributed by Trims Software International (TSI) based in Phoenix, Arizona. Trims is a grounds management program which uses separate modules for inventorying budgets and expenses, chemicals and fertilizers, personnel and labor, equipment maintenance, events, fuel, and trees. TSI has recently upgraded their software to Trims 2000. TSI provides services both nationally and internationally where there are over 30 communities using their street tree inventory software.

**Services**

- Software development and support

**System requirements**

Trims '97:

- 486/66 or Pentium® processor
- 16 MB or RAM
- Windows® 3.1, 95, 98, or NT®
- 50 MB of hard disk space
- VGA monitor
- CD-ROM

Trims was primarily used on a Gateway™ G6-200 Pentium® Pro PC using Windows NT®. Trims was also used with Windows® 95 and 98 on a Gateway™ P5-166 Pentium® PC and a G6-300 Pentium® II PC, respectively. The Trims directory uses 27,955 KB of hard disk space after deleting sample data from the system. After entering data for 454 tree sites the directory size increased to 28,349 KB. Therefore 1,000 trees sites would require approximately 868 KB (0.85 MB).



▲ Figure 3.10.1: Trims '97 grounds management software window.

**Software cost**

Trims '97 with the tree inventory module is purchased from Trims Software International for \$1,295.00. A demonstration presentation program is available for download on the Internet and a demonstration program is available from TSI on CD-ROM.

**Technical support**

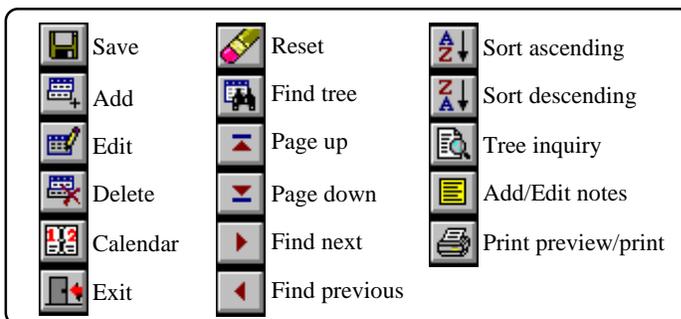
Trims is provided with a 374 page bound manual with a tree inventory section that is 33 pages long. Online documentation is also available. TSI offers one year of free technical

support after purchase. An optional \$200.00 annual fee includes unlimited technical support and software upgrades.

**Contact**

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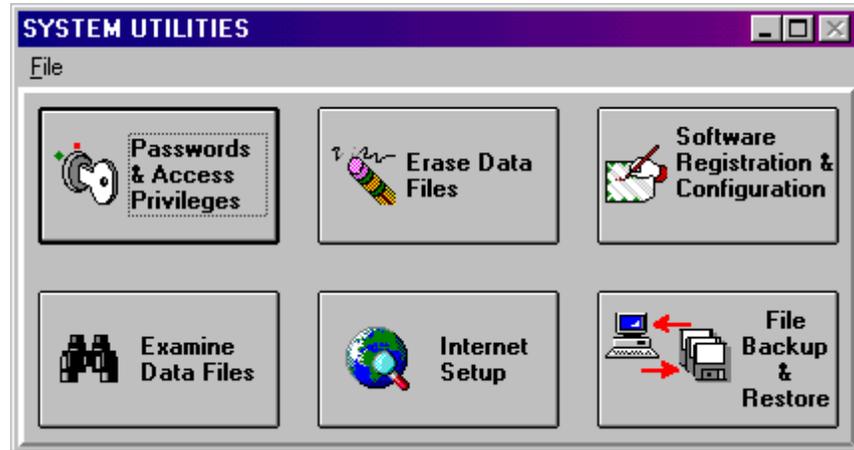
◀ Figure 3.10.2: Trims command buttons and functions.

The **bold** text in the following description refers to window names indicated in the title bar of each window. *Italicized* text refers to either field names or program modules.

The modules in Trims are accessed from the **Trims '97 grounds management software** window (Figure 3.10.1). Command buttons and functions are indicated in Figure 3.10.2.

### Defining users

Only administrators can access the **system utilities** window (Figure 3.10.3). Access privileges for users are not activated until the administrator defines user names and passwords in the **passwords and access privileges** windows (Figure 3.10.4). Access privileges including



▲ Figure 3.10.3: The system utilities window is the gateway for defining user passwords, erasing data files, registering the program, examining data files, internet setup, and backing up files.

read/write (W), read only (R), or no access (N) can be assigned for each module. Any user can be designated as an administrator.

### Erasing data files

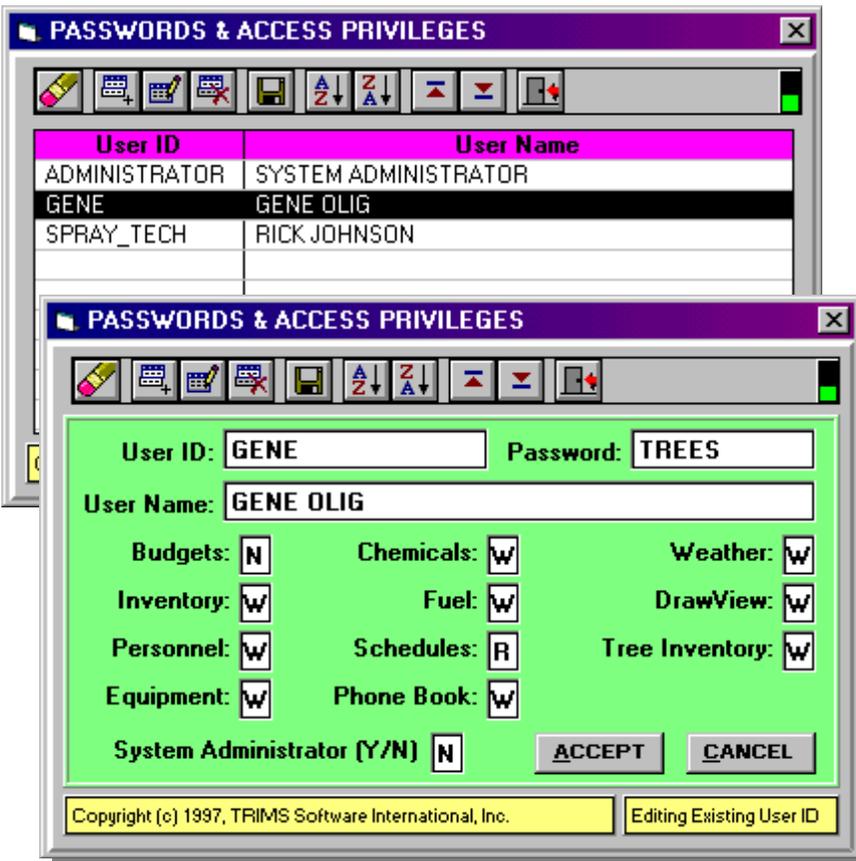
Sample data files included with Trims are deleted from the **erase data files** window (not shown). Up to 18 database files can be chosen for deletion. Some of these include tree inventory, work order, personnel record, and equipment maintenance files.

### Software registration and configuration

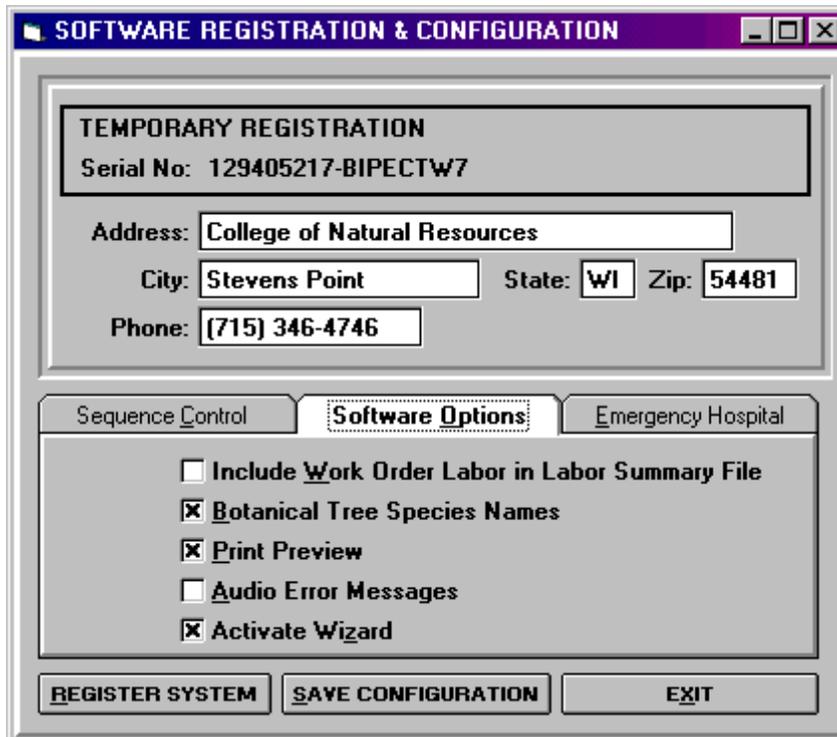
Address and phone number for the system are specified in the **software registration and configuration** window (Figure 3.10.5). The address and phone number for the local hospital can also be specified. Software options such as enabling print preview, displaying botanical species names, and enabling audio error messages can be configured. Registration information is entered in this window.

### Examining data files

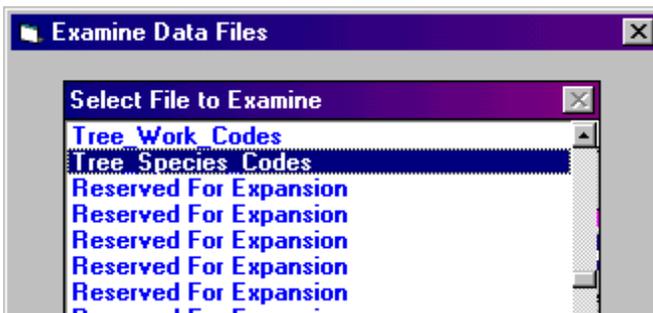
The **examine data files** window lists the database files used in Trims (Figure 3.10.6). Any file can be selected from this window to view its contents. The example in the



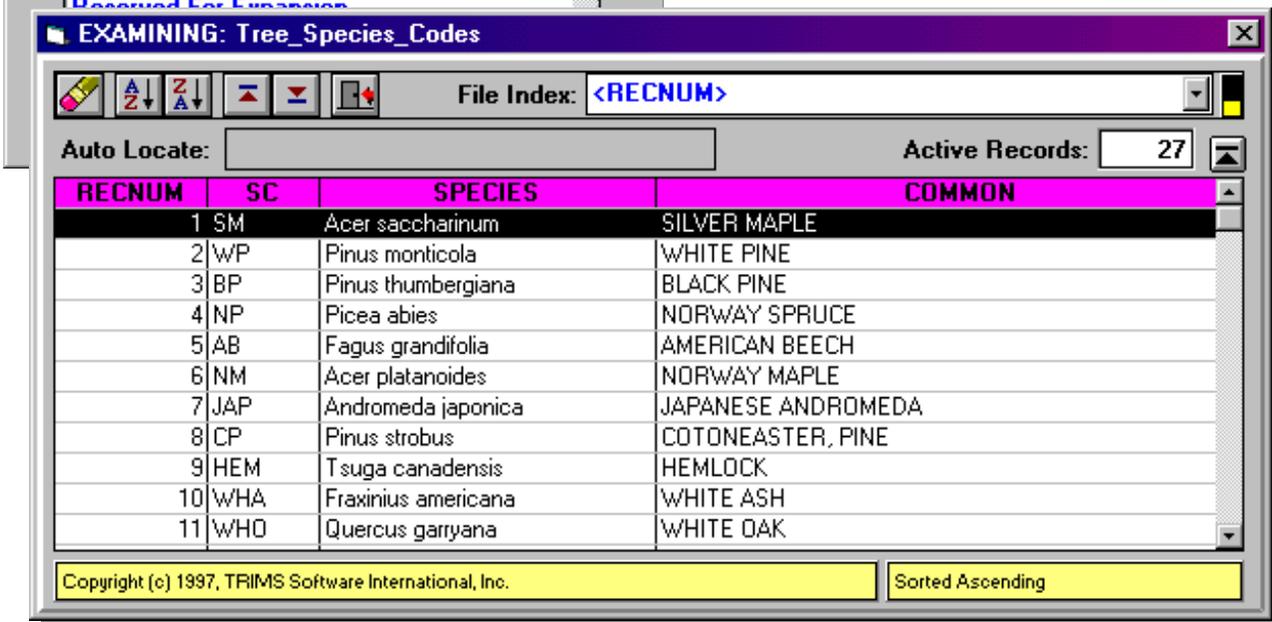
▲ Figure 3.10.4: User access privileges can be defined for each module.



▲ Figure 3.10.5: Software registration, address and telephone information, and software options are configured in the software registration and configuration window.



◀ Figure 3.10.6: A utility is provided for viewing any of the database files in Trims.



**examining** window indicates tree species codes (Figure 3.10.6). Data can not be edited from this window.

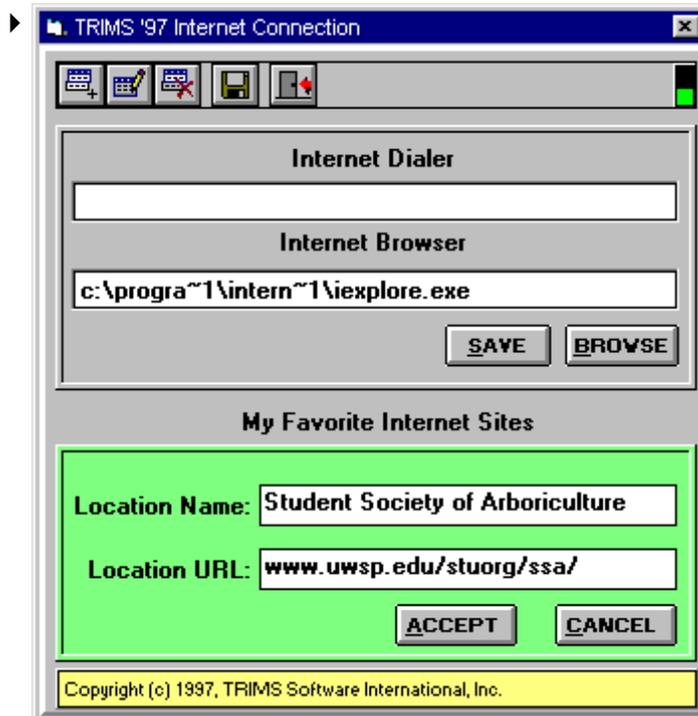
### Internet setup

The **Trims '97 grounds management** window can be configured to indicate either a *Microsoft Internet Explorer* or *Netscape Navigator* button which is used to open either of these browsers (Figure 3.10.1). The **Internet connection** window identifies the browser and is used to define links indicated on the browser start page (Figure 3.10.7). An Internet dialer such as Dial-up Networking (DUN) can be specified in the **Internet connection** window in order to connect automatically to the Internet.

### File backup and restore

The **backup-restore utility** window is used to backup and compress data files using either *PKZIP* or *Microsoft Backup* programs. Files backed-up using *PKZIP* are saved on either the A or B drive. The *PKZIP* utility was able to compress 2,151 KB of sample data files to 336 KB.

Figure 3.10.7: An Internet dialer, browser, and favorite Internet sites are defined in the Internet connection window.



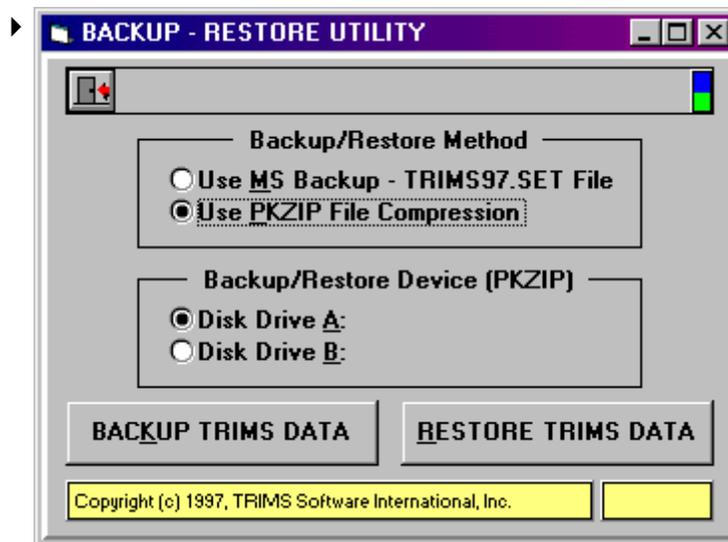
### Defining species

Species are added, edited, and deleted in the **species codes browse table** window (Figure 3.10.9). Up to a three character *species code* and up to a 30 character *botanical* and *common name* are entered. The tree site database file is updated if *botanical* and *common names* used within it are edited in this window.

### Defining height classes

Height classes are defined in the **height codes browse table** window (Figure 3.10.10). The *height code* can be one character and the *height range* description up to six characters. Height codes must be defined prior to data entry.

Figure 3.10.8: Files can be backed-up and restored using MS Backup or PKZIP programs.



### Defining diameter classes

DBH classes are defined in the **DBH codes browse table** window (Figure 3.10.11). The *DBH code* can be up to two characters and the *DBH range* description can be up to six characters. DBH codes must be defined prior to data entry.

### Defining work activities

Work activities are defined in the **work activity codes browse table** window (Figure 3.10.12). The *work code* can be one numeric character and the *work activity* description up to 24 characters.

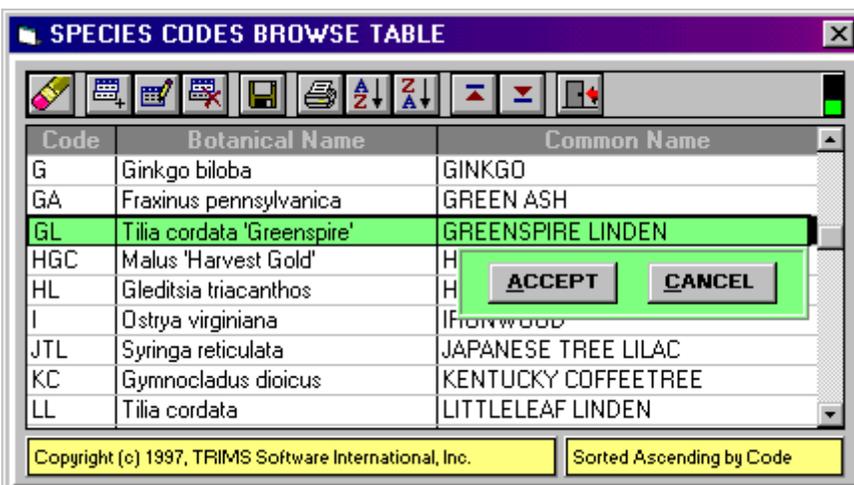


Figure 3.10.9: Species are defined by entering a code, botanical name, and common name.

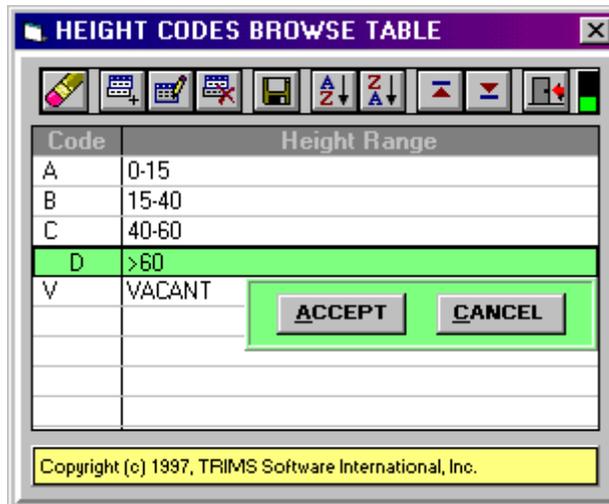


Figure 3.10.10: Height classes are defined prior to data entry by entering a code and a height range.

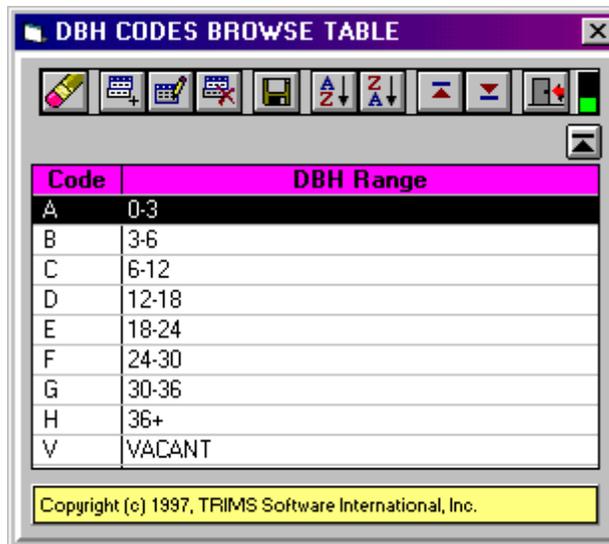


Figure 3.10.11: Diameter classes are defined prior to data entry by entering a code and DBH range.

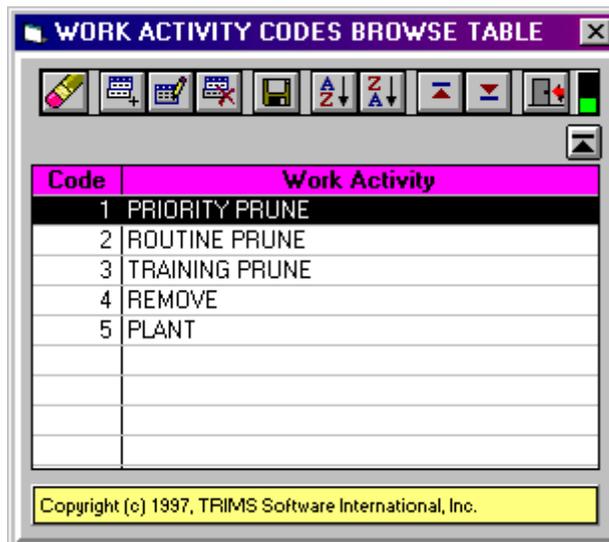
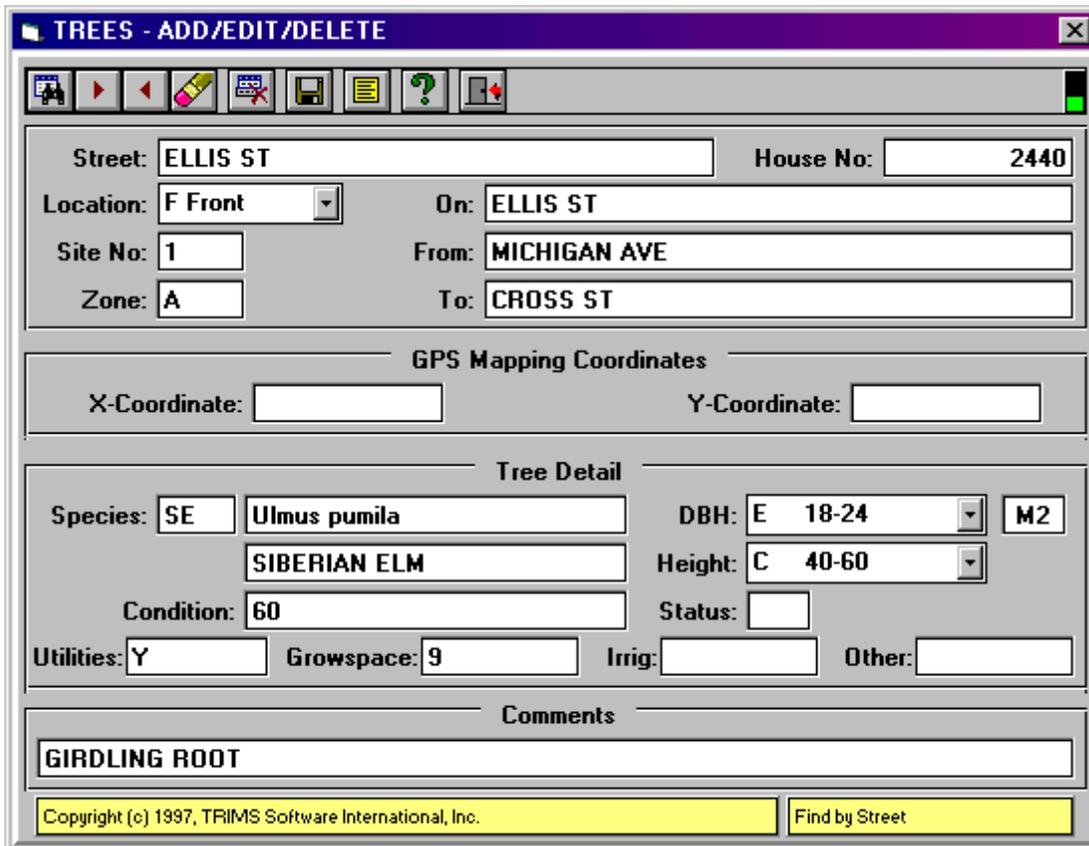


Figure 3.10.12: Work activities are defined by entering a numeric code and a work activity description.



◀ Figure 3.10.13: Tree site data are entered in the trees-add/edit/delete window. Data must be saved for each site.

### Adding tree sites

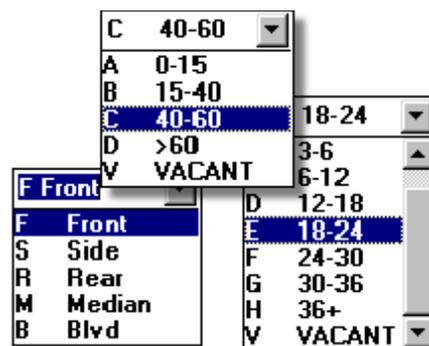
The **trees - add/edit/delete** window is used for entering tree site data (Figure 3.10.13). Required fields include *street name*, *house number*, and *species code*. Drop-down lists and their values are indicated in Figure 3.10.14.

Location descriptors include *street name*; *house number*; *location*; *site number*; *zone*; *on*, *from*, and *to* streets; and *GPS mapping coordinates*. *Street name* can be up to 26 characters. A street list is not available, however the street name from the previously entered site is indicated when adding multiple tree sites. Tree site *location* drop-down list values include *front*, *side*, *rear*, *median*, and *boulevard*. These values were not editable by the authors. *Site number* indicates the sequence number of the tree site at the address. A zero is assigned when a value is not entered. *On* street is where the tree site is physically located, *from*

street is the cross street at the lower end of the block, and *to* street is the cross street at the upper end of the block. Street lists are not available, however *on*, *from*, and *to* street names are indicated from the previously entered site when adding multiple tree sites. Up to a 12 digit value can be entered for the *X-* and *Y-coordinate* fields for *GPS mapping coordinates*.

Tree descriptors include *species*, *DBH*, number of leaders, *height*, *status*, and *condition*. A three character *species code* is entered by either typing the code directly or by selecting a species from the **species codes browse table** window (Figure 3.10.9). *Common* and *botanical* names are displayed in the **trees - add/edit/delete** window after a species is selected. Trees species can be added, deleted, modified, or printed from the **species codes browse table** window during data entry. *DBH* is entered by typing its one letter code or by selecting a

diameter class from a drop-down list. Up to a two character code can be used to indicate the number of leaders. *Height* is entered by typing in its one letter code or by selecting a height class from a drop-down list. Tree *status* indicates either a stump (S) or a tree for replacement (R). *Condition* can be up to a 24 character description about the general health of the tree.



▲ Figure 3.10.14: Drop-down lists are available for location, height, and DBH fields.

Other fields include *utilities*, *growspace*, *irrigation*, *other*, and *comments*. A *utilities* description up to five characters can be entered. *Growspace*, *irrigation*, and *other* fields can each be up to six characters.

Trims allows for entering notes in addition to *comments* for each tree site. Notes are edited, deleted, and printed from the **notes** window (Figure 3.10.15). Notes can also be entered for sites through the **tree inventory browse table** window (Figure 3.10.16).

Data must be saved for each tree site in the **trees - add/edit/delete** window. Only the *house number*, *location*, *site number*, and *comments* fields are cleared of information for data entry of the next tree site.

### Adding work activities

Scheduled and requested work activities either within a specified address range or block combination are entered in the **work activities schedule/request** window (Figure 3.10.17). Filtering criteria including

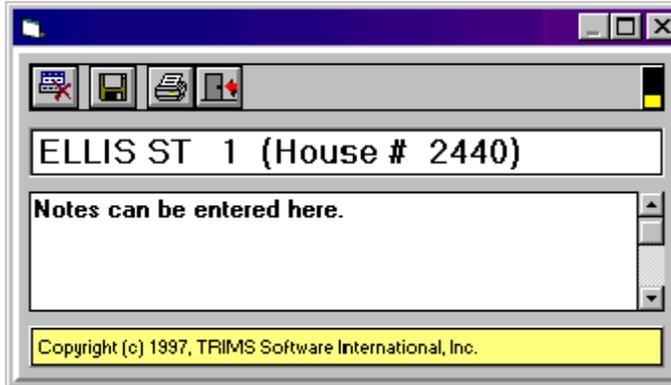


Figure 3.10.15: Notes can be entered and printed for tree and planting sites.

*species*, *DBH* range, *height* range, and *zone* can be specified. Pick lists are available for *work*, *species*, *DBH*, and *height code* fields, and a calendar is available for the *event date* field.

When entering completed work activities the *date completed*, *activity number*, and *labor hours* are entered (Figure 3.10.18). The remaining fields indicated in the **enter completed work activities** window are entered automatically. Trims assigns an *activity number* after work is scheduled, which is obtained from the tree work schedule report described below.

### Reports

A summary report of requested, scheduled, or completed work activities is created from the **tree work schedule** window (Figure 3.10.19). The report can be filtered by selecting work activities from a drop-down list and by selecting a *zone*. Work activities can then be previewed and printed. Results are indicated in a tabular listing that includes *street* names, *house numbers*, *lot locations*, *site numbers*, *species* names, *DBH* and *height* classes, work requested descriptions, dates scheduled, and *activity numbers*. *Activity numbers* are used to enter completed work activities.

TREE INVENTORY BROWSE TABLE						
Street	House #	Zone	L	Site	S	Species
ELLIS ST	2432	A	F	1		VACANT
ELLIS ST	2440	A	F	1		SIBERIAN ELM
ELLIS ST	2440	A	F	2		SIBERIAN ELM
ELLIS ST	2440	A	S	3		VACANT
ELLIS ST	2440	A	S	4		RED MAPLE
ELLIS ST	2441	A	F	1		SIBERIAN ELM
ELLIS ST	2441	A	F	2		SIBERIAN ELM
ELLIS ST	2449	A	F	1		VACANT
ELLIS ST	2457	A	F	1		VACANT
ELLIS ST	2501	A	F	1		VACANT
ELLIS ST	2509	A	F	1		VACANT
FREMONT ST	1600	A	F	1		VACANT
FREMONT ST	1609	A	F	1		VACANT

Copyright (c) 1997, TRIMS Software International, Inc. Sorted Ascending by Street

Figure 3.10.16: The tree inventory browse table contains a matrix of data for all tree and planting sites.

**WORK ACTIVITIES SCHEDULE/REQUEST**

Event Date: 8/17/98       Schedule Activity  
 Request Activity

Work Code: 3      TRAINING PRUNE

Comments:

Include Only Trees Within An Address Range  
 Street:      Address:      to     

Select Specific Block      On: ELLIS ST  
 From: MICHIGAN AVE      To: WELSBY AVE

Select Specific Species       Select Zone  
 Code: MSA      MARSHALLS SEEDLESS ASH      Zone: A

Select DBH Range       Select Height Range  
 DBH Code:      thru           Height Code:      thru     

Copyright (c) 1997, TRIMS Software International, Inc.

Figure 3.10.17: Scheduled and requested work activities can be entered.

**CALENDAR**

August 1998

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

**ENTER COMPLETED WORK ACTIVITIES**

Date Completed: 8/17/98      Activity Number: 1      Labor Hours: 0.50

Comments: TRAINING PRUNE

2324      CENTER ST      Loc: S      Site: 3      Zone: A

SILVER MAPLE

Status	Date	Code	Work Description
S	8/3/98	3	TRAINING PRUNE

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Figure 3.10.18: The date completed, activity number, and labor hours are entered for completed work activities. The remaining information is entered by Trims.

**TREE WORK SCHEDULE**

Reporting Period

Summarize Work for Dates: 8/3/98 thru 8/18/98

Report Work Activities Requested  
 Report Work Activities Scheduled  
 Report Work Activities Completed

Select Specific Work Activity  
 003 TRAINING PRUNE

Include Only Trees in a Specific Zone  
 Zone: A

Copyright (c) 1997, TRIMS Software International, Inc.

Figure 3.10.19: A summary report of requested, scheduled, and completed work activities can be created.

The **tree work summary** window allows for viewing, printing, or saving to file a summary of requested, scheduled, or completed work activities (Figure 3.10.20). The beginning and ending work dates are specified, and a *zone* can be entered. Trims indicates in a tabular layout the *work codes*, *work descriptions*, and number of sites.

*Species*, *height*, *DBH*, and *work codes* can be viewed, printed, and saved to file through the **code lists** window (Figure 3.10.21). A tabular layout report is created that indicates codes and descriptions for these fields.

The **tree statistics** window creates a report that includes *DBH*, *height*, and *species* statistics indicated in separate tables (Figure 3.10.22). An area can be specified for the report. Output includes *DBH* and *height* ranges, *species*, number of trees, percents of total, and overall totals. Figure 3.10.23 indicates statistics for *DBH* classes.

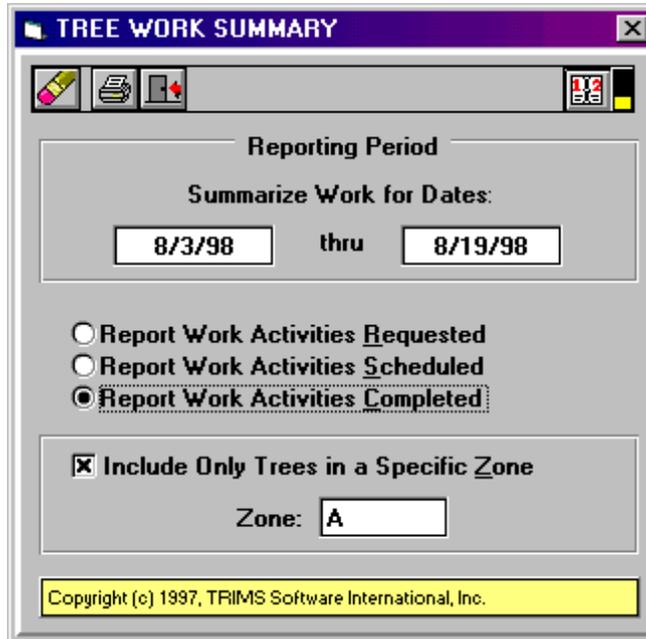


Figure 3.10.20: A summary report of work codes, descriptions, and number of sites is created from the tree work summary window.

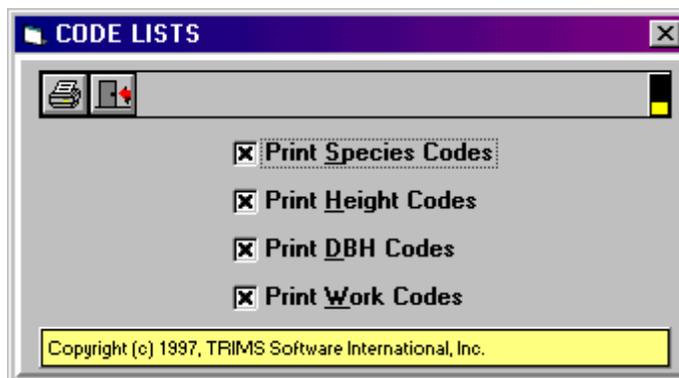


Figure 3.10.21: Species, height, DBH, and work codes can be viewed, printed, or saved to file.

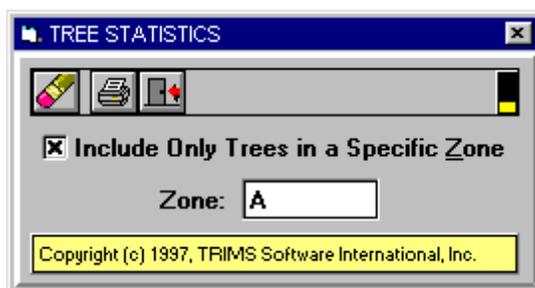


Figure 3.10.22: A statistics report can be created for species, diameter classes, and height classes.

Zoom Factor: 60% TRIMS - Print Preview Page: 1 of 3

File Zoom

TREE DIAMETER STATISTICS  
01/11/99

Zone: A

DBH RANGE	NUMBER OF TREES	% OF TOTAL
0-3	78	17.29
3-6	46	10.20
6-12	90	19.96
12-18	45	9.98
18-24	23	5.10
24-30	5	1.11
30-36	3	0.67
VACANT	155	34.37
STUMPS	6	1.33
<b>TOTALS</b>	<b>451</b>	<b>100.00</b>

Figure 3.10.23: Statistics report output for tree diameter classes.

The **tree inventory file listing** window creates a report of either all tree sites in the inventory, sites that need tree replacements, or sites with stumps (Figure 3.10.24). A *zone*, *species*, *DBH* range, and *height* range can be specified. The report indicates the *street* names, *house numbers*, *lot locations*, *site numbers*, *species* names, *DBH* and *height* ranges, *status* codes, *utility* descriptions, *growspace* sizes, and *irrigation* requirements.

A report can be created for **trees on a block** which includes the same output fields described for the **tree inventory file listing** report (Figure 3.10.25). The block combination is specified, and a zone or species can be entered.

The **trees at an address** window creates a report of tree sites by specifying an address range (Figure 3.10.26). The output format is similar to the **tree inventory file listing** and **trees on a block** reports (Figure 3.10.27).

### Additional modules

Only the tree inventory module has been described in this section, however several other modules may be of interest to urban foresters. The following briefly describes the *DrawView*, *Telephone Directory*, and *Equipment Maintenance* modules.

The *DrawView* module allows for viewing and printing image files. Trims '97 supports PCX, BMP, GIF, and DXF file formats. Images can be zoomed, panned, and printed. The DXF file format is used by AutoCad, which is a commonly used computer aided design and drafting program.

The *Telephone Directory* module is used to store agency contacts, including names, phone numbers, fax numbers, addresses, and general comments. The directory can be printed and exported to a text file.

Figure 3.10.24: A tree inventory file listing can be created for either all tree status codes, trees to be replaced, or stumps.

Figure 3.10.25: A report can be created for tree sites by identifying a block combination.

Figure 3.10.26: A report of tree sites at a single address or range of addresses on a street can be specified.

01/11/99 15:26

TEMPORARY REGISTRATION  
TREES AT AN ADDRESS

ZONE SELECTED: ALL

STREET	HOUSE NO	LOC	SITE	SPECIES	DBH	HEIGHT
CLARK ST						
*** ON CLARK ST FROM RESERVE ST TO FREMONT ST						
	2101	F	1	EMERALD QUEEN MAPLE	3-6	15-40
	2101	F	2	AMERICAN ELM	12-18	40-60
	2101	F	3	EMERALD QUEEN MAPLE	6-12	15-40
*** ON RESERVE ST FROM CLARK ST TO ELLIS ST						
	2101	S	4	CENTURION FLOWERING CRAB	6-12	0-15
	2101	S	5	HARVEST GOLD CRAB	0-3	0-15
	2101	S	6	HARVEST GOLD CRAB	0-3	0-15
TOTAL TREES LISTED = 6						

▲ Figure 3.10.27: Tree inventory file listing, trees on a block, and trees at an address reports create similar output that can be viewed, printed, and saved to file. The example shown indicates tree information at one address.

Trims also allows for exporting mailing labels in either a line or comma delimited text file format.

The *Equipment Maintenance* module allows for keeping an inventory of equipment, including maintenance schedules, purchase dates, manufacturer information, and purchase and replacement dates. Hours/miles of use, fuel costs, labor hours, and parts costs can be recorded. Trims also allows for specifying and viewing picture files of equipment.