

A Computer Program for Planning Forestry Activities



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ForPlanner:

A Computer Program for Planning Forestry Activities

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PREFACE

This program is the result of many hours of dedicated effort by a plethora of talented people. ForPlanner was originally conceived by Lynn Prine (president) and Brad Campbell (forester) of Southern Resource Service, Inc. As the idea for the program slowly came into focus, many "brainstorming sessions" were held with Lynn, Brad, and Southern Resource Service secretary Kathy Kimbrell to flesh out the design of ForPlanner. Thanks, Lynn, Brad, and Kathy.

After ForPlanner was running, "beta" testing began, with Brad and Kathy taking the lead. The typical "bugs" that "bite" all computer programmers were found and fixed in ForPlanner. (Although I'm sure there are still some for the rest of us to find!) I very much appreciate Brad and Kathy for their important work.

Once bulletin writing was needed, Corey Miller, student worker with the Mississippi State University (MSU) Agricultural Economics Department (Ag Econ), took over! With very little instruction or help from myself, Corey put together this splendid bulletin. You are much appreciated, Corey.

Finally, when the time came to review ForPlanner, we were again blessed with a group of folks who took the time to read this bulletin and test ForPlanner: Stan Spurlock, professor, MSU Ag Econ; John O. Moore, Moore-Alsworth Consultants, Waynesboro, Mississippi; and Bob Daniels, associate specialist, Extension Forestry Department, MSU Extension Service. Thank you very much Stan, John, and Bob for reviewing ForPlanner. Special thanks go to Steve Bullard, a professor in the MSU Forestry Department, who had many important comments about ForPlanner, most of which were incorporated into the final design.

Near the end of the review, ForPlanner was presented to the Mississippi Consulting Foresters Association. This group provided very important feedback, most of which has been implemented in ForPlanner. Thanks, consultants! Although I am most grateful to all those mentioned above for their super work, as the programmer of ForPlanner, I must take responsibility for any problems found in the final product. I *guarantee* to continue supporting ForPlanner as changes are needed.

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ForPlanner:

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INTRODUCTION

ForPlanner, a forest planner designed with the forestry consultant in mind, is a useful tool for anyone planning forestry activities. ForPlanner is designed for the user to enter activities and leases that will need attention at future dates, then provide reports (whose output can be sent to the screen, printer, and WordPerfect[®] data files) that focus on "maturing" activities and leases. Follow-up bookkeeping can also be done after a forestry job is completed. Estimates of timber volumes and values are also available at future dates via the use of compound growth percentages. ForPlanner allows easy communication with computer software outside its domain by creating DBF (database management) files that are compatible with spreadsheets such as Lotus[®], Quattro[®] Pro, and Excel[®], as well as WordPerfect® merge files that can be used for creating personalized letters and mailing labels.

ForPlanner is written in a C-based computer language called *Clipper*. It is designed around a series of user-friendly menus. Several databases (DBF files) are used as repositories for ForPlanner data. ForPlanner was designed for MS-DOS[®], but it will run on computer systems using Windows[®] 95 or Windows[®] 3.1. A complete Windows[®] 95 version of ForPlanner is under development; users will be able to migrate alreadyexisting ForPlanner databases into it. ForPlanner computer resource demands are minimal. ForPlanner should be a useful tool for those who are just beginning to plan forestry activities, as well as those who have been planning and completing forestry activities for 40 years. ForPlanner databases are named by their principal usage. These databases are LandOwnr, Contact, Tract, Stand, StandSpp, Activity, Lease, and JobHist:

LandOwnr contains the name, address, and phone, fax, Social Security, and tax identification numbers for each landowner.

Contact contains the same information as LandOwnr, except that it is for the contacts that a particular landowner may have.

Tract contains tract names, compartment and stand numbers, and various classifications of acreage in a particular tract. All databases that are subservient to Tract contain landowner name, tract name, and compartment and stand numbers. These data fields are used to link the databases together. The organization of ForPlanner database structures is shown in *Figure 1*.

Stand is a transition database that contains the linkage variables "landowner" and "tract name," as well as compartment and stand numbers, and stand acreage and timber type.

StandSpp is a subsidiary database to Stand. In addition to linkage variables used to access it from a particular stand, StandSpp contains timber species names, growth percentages, prices, and units to which prices pertain. One Stand database entry usually has several StandSpp entries associated with it, one for each timber species or species group in the stand.

Activity is a subservient database to Tract and Stand. It contains all future forest activities planned for a particular timber stand. Data fields contained in

1

Activity include the activity name, acreage, initiation date, duration of the activity, and estimated income per acre from the activity.

Lease holds information for each lessee for each tract of land entered by the ForPlanner user. Data fields include the lessee name and address, phone and fax numbers, the number of acres leased, the purpose of the lease, the last lease date, the duration of the lease, and the yearly cost per acre of the lease.

JobHist is designed to provide a historical record

of activities (forestry jobs or projects) that have been completed. In addition to linkage variables, each JobHist entry includes the activity name, acreage in the completed activity, the completion date, the number of hours of labor needed to complete the activity, the name of the person completing the service, the mileage traveled, a comment field for supplies used and other information on the activity, costs of subsistence for the worker, the total expenses, and the total amount billed for the activity.

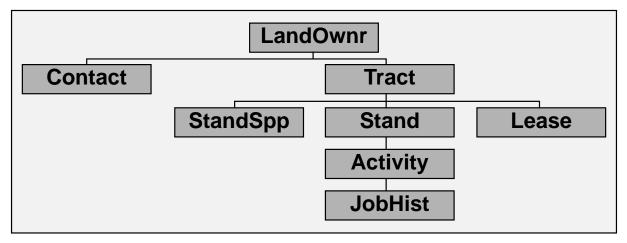


Figure 1. ForPlanner Database Organization Chart.

INSTALLING AND SETTING UP FORPLANNER

ForPlanner is distributed as a subdirectory on a $3^{1/2}$ -inch diskette. To install it using Windows[®] 95, place the diskette in the drive and do the following:

(1) On the task bar, click *Start*, select *Programs*, and click on *Windows Explorer*.

(2) Next, click on the $3^{1/2}$ *Floppy* icon (usually A:) on the left side of Windows Explorer.

(3) On the A: drive, find the folder *ForPlan* (on the left or right side) and drag it to your C: drive (hard drive) icon. The program files will then be copied to your hard drive *and* placed in a new folder called *ForPlan*.

To install ForPlanner using DOS or DOS mode, get to a C:> prompt and key in the following:

>md ForPlan

>cd ForPlan

>copy a:\ForPlan*.*

A directory called *ForPlan* will be created and all ForPlanner files copied into it.

ForPlanner is easy to run in any mode. One can go to a DOS prompt, type cd\ForPlan, then type ForPlan to execute the program. Or, an alternative in Windows[®] 95 is to create a shortcut on the desktop. This can be done by finding the ForPlan.exe file in Windows Explorer and dragging it to the desktop. (See Windows 95 Help for more information on creating and using shortcuts.)

STARTING AND USING FORPLANNER

When ForPlanner is started, the user is greeted with the title screen, which contains credits for its developers and supporters, as well as copyright information. Pressing any key takes the user to the **ForPlanner Main Menu**, which has six options (*Figure 2*). Each option in the menu is a major ForPlanner topic. Many ForPlanner main menu options, when selected, propagate additional menus. Each ForPlanner menu should be straightforward and relatively easy to use, even for individuals with little computing experience.

Notice a descriptive line in a block near the *bottom* of the ForPlanner main menu (*Figure 2*). It is a *message* that describes the main menu option above that is *currently selected*. In *Figure 2, menu option 1* is selected; the message explains which information can be updated by entering menu option 1. There are separate descriptive messages for each ForPlanner menu option.

There are three ways to select menu options in ForPlanner:

(1) Use arrow keys to move the light bar to *highlight* the desired option, then press ENTER;

(2) Key in the *number* (1-9) of the menu option and control will be transferred to that menu option (Note that this second option only works for menus with nine options or less); or

(3) For those who prefer using a mouse, point and use the left mouse button to double click on any menu option to select it.

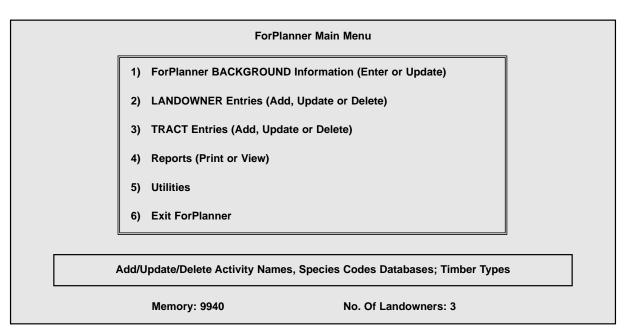


Figure 2. ForPlanner Main Menu.

The first ForPlanner Main Menu option, ForPlanner BACKGROUND Information, allows the user to change database background information. Selecting this option takes the user to the background information submenu, Update ForPlanner Background Database (Figure 3). Background information is data that must be predefined to be used with the rest of the program. There are three major pieces of information needed for ForPlanner Use: Activity Names, Species Codes Entries, and Timber Types. A few entries have been predefined in each group, but ForPlanner users should define all these categories to suit themselves.

Activity Names

Background submenu *option 1*, **Activity Names**, is used for adding, changing, or removing activity names. Activities are specific forestry jobs. Upon selecting this submenu option, the user will see a screen with a list of about 15 predefined activities, from boundary lines to timber sales. These are the activities the user can initially choose from in other parts of ForPlanner. However, ForPlanner users are encouraged to update the predefined list to conform to *their* agenda of forestry activities. The list of forestry activities should contain one entry for each activity conducted by the ForPlanner user (such as a management plan, herbicide release, etc.), and it can grow as large as needed to support each unique activity conducted. If the user

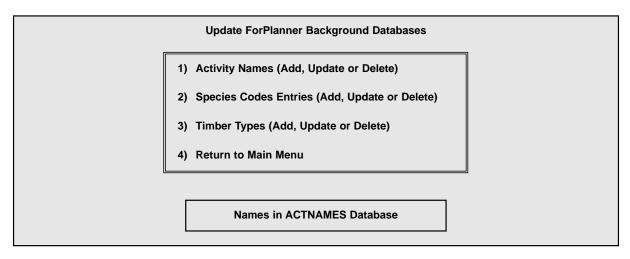
selects "new activity," a prompt is issued for new activity entry; if an existing activity is selected, the activity can be changed as needed.

Species Codes Entries

Background submenu option 2, Species Codes Entries, is used to modify species codes/names. Species names are used to define timber species and species groups within a particular timber stand. ForPlanner users should select background menu option 2 to change the species names used as a background for future species name/code entry in defining the composition of a particular timber stand in ForPlanner. ForPlanner predefines several species names, with accompanying prices, units [cords, thousand-board-feet (MBF), or tons], and an appropriate compound growth percentage. Species name entries can be added or removed as necessary. ForPlanner users will likely find it convenient to include a comprehensive list of species information for the geographic area in which they work. A particular timber stand will sometimes contain only a fraction of the timber species named in this list. However, ForPlanner will support as many timber species name entries as needed.

Timber Types

Background submenu *option 3*, **Timber Types**, is used to add, change, or delete general timber types/land use categories. After selecting submenu option 3, a screen listing several timber types/land use categories





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is presented. These timber types may be edited by highlighting and updating (similar to updating options 1 and 2 above). The user may define as many timber types as needed. Timber types will, of course, vary from one

Landowner Entries

Landowner Entries, the *second option* on the **ForPlanner Main Menu** (*Figure 2*) is for adding, changing, or removing landowner information. The user is prompted to enter a last name to find the appropriate landowner entry. Once a name is entered, a screen will appear with the selected name and other names that follow it in alphabetical order (if found). The user may then select any desired name by highlighting it and pressing *Enter*. After a particular name has been selected, the user will have the opportunity to delete the entry. If the user chooses *not* to delete the entry (the usual case), an editing screen containing personal information for the landowner (similar to *Figure 4*) will appear. This information then can be changed, or pressing *PgDn* will skip through the screen.

geographic area to another. Users are encouraged to define and modify the list of predefined types as needed to outline all timber types and land uses needed in a particular geographic area and operational situation.

After completing landowner information, the user is prompted to enter or edit a list of personal contacts that can be associated with each landowner. If the user chooses to update contacts, he or she is shown the current list of contacts for that landowner. (The list of contacts for a new landowner obviously begins with "none.") Selecting a particular contact will cause an information entry/update screen similar to Figure 4 to appear. The same set of information is gathered for both a landowner and a landowner's contacts. The information can be edited, or pressing PgDn will skip through this screen. Once the user has completed editing a contact, control can be returned to the list of contacts for more editing. Otherwise, the user will be returned to the ForPlanner Main Menu.

| Landowner Name (Last First MI) | : | KILLCREAS WALLACE EDWARD | |
|--------------------------------|---|---------------------------|--|
| Company or Business Name | | MS State Univ | |
| | | P. O. Box 344 | |
| | | STARKVILLE MS 39759 | |
| Contact Name (Last First MI) | : | ALEXANDER GRAVIS ALVIN | |
| Contact Relation to Landowner | : | Friend | |
| Company or Business Name | : | Alexander Building Supply | |
| Street Address | : | P. O. Box 2323 | |
| City State Zip | : | ANNISTON AL 35432 | |
| Residence Telephone # | : | 205/232-3223 | |
| Office Telephone # | : | 205/232-3323 | |
| Fax Telephone # | : | 205/323-3333 | |
| E-Mail Address | | alex@okra.anniston.edu | |
| Social Security Number | | 343-24-3243 | |

Figure 4. Edit Landowner Contacts Screen (from the Landowner Entries submenu, the second option on the ForPlanner Main Menu).

Tract Entries

Tract Entries, the *third option* in the ForPlanner Main Menu (Figure 2) is used for adding, removing, or modifying tract entries. Tract entries are perhaps the most essential part of ForPlanner, since the Tract database has "oversight" of more than five additional ForPlanner databases (Figure 1). The user enters the name of a desired landowner and selects it in the same way as in landowner entries. Once a name is selected, a small box with the owner's name and other information will appear at the top of a screen, followed by a prompt to update stands, leases, tracts, or activities. Selecting this prompt will cause a box to appear with a list of tracts from which to select, or to add a new tract for that landowner. If an existing tract is selected, the user will be prompted to delete it. If the tract is not deleted, a box with information about the tract will appear that the user can edit (Figure 5). The box has the name of the tract and compartment number at the top, followed by the total number of tract acres. Subsequent data entry boxes prompt for acreage by four land types: forest, pasture, crop, and miscellaneous. ForPlanner will ensure that the *sum* of acreage for the four land types entered is the same as the total number of acres entered. After the user has entered the number of acres of each type, he or she will be prompted to edit information for another tract. If the user answers "yes" to this prompt, control returns to the list of tracts from which the user may edit the same data for another tract. If the user answers "no" to this prompt (the usual case), a menu similar to the menu at the bottom of the tract box of the selected tract will appear (*Figure 5*). This menu allows the user to add, update, or delete stands, leases, or activities for the selected tract. The *fourth option* in this menu allows the user to edit another tract. Menu *option* 5 returns control to the main menu.

Stands

Selecting Stands, menu option 1 of Figure 5, opens a stand creation/selection menu below the tract name. The user selects New to create a new stand and will be prompted to enter the number of the stand. (The default number is the next stand number in order, beginning with 1.) To edit an existing stand, the user selects its number. Once a stand has been created/selected, a data entry screen will appear for entry or update of stand information (Figure 6 — part of the stand acres line is overlaid by a Species window). The first option is the number of acres in the stand, followed by the stand timber type, the stand age, and the entry date. After general stand data entry is complete, a prompt will ask the user to add, update, or delete stand species data. If the user decides not to update stand species data, control returns to the previous menu (stands, leases, activities, etc.). If the user elects to update stand species data, a window with species name and other information for the stand will appear (Figure 6, inner box). Individual species entries in the window include species name/code, timber volumes for the species, units for pricing the species, an estimated compound growth percentage for the species, and a default price for the species. The user may select an existing species entry

| Company or Business Name | : | Ms State Univ | # Stands | : | 10 |
|---------------------------|------|------------------------------------|--------------|----|-------|
| Street Address | : | P. O. Box 344 | # Leases | : | 6 |
| City State Zip | : | STARKVILLE MS 39759 | # Activities | : | 6 |
| Enter TRACT I | nput | s/Updates, or Press PgDn to Contin | nue ——— | | |
| Tract: BRAD CAMPBELL | | Compartment: 1 | | | |
| Acres: Total 500.0 Forest | 200 | 0.0 Pasture 100.0 Crop | 100.0 Mis | sc | 100.0 |

Figure 5. Tract Entry/Update and Stand, Lease, and Activity Processing Menu (from the Tract Entries submenu, the third option on the ForPlanner Main Menu).

| Company or Business Na | Comp 1 Stand 1-Esc to | QUIT-Up,Dn AR | ROWS, E | NTER to S | ELECT |
|------------------------|-------------------------|---------------|---------|-----------|--------|
| Street Address | - | • · | | | |
| City State Zip | Timber Species : Name | Volume/Acre | Units | Growth% | Price |
| Enter TRAC | Enter NEW Species Infor | mation | | | |
| Tract: BRAD CAMPBELL | Cherrybark Oak | 1.00 | MBF | 6.10 | 155.00 |
| Acres: Total 500.0 F | Lob-ShI Pulpwood | 25.00 | Cords | 6.20 | 19.00 |
| Enter STAN | Loblolly Pine | 4.00 | MBF | 5.67 | 255.00 |
| Enter STAN | Shortleaf Pine | 1.23 | MBF | 6.35 | 239.00 |
| Stand Acres: 200.0 T | Sweetgum | 2.00 | MBF | 5.52 | 165.00 |

Figure 6. Landowner, Tract, and Stand Data Overlaid with a Stand Species Pop-Up Menu (from the Tract Entries submenu, the third option on the ForPlanner Main Menu).

and press *Enter* to edit it, or select **Enter new species information**, and create a new species entry. If **new species information** was selected, a "pop-up" menu will appear so that the user can select a species name from the previously created background list (see Background for master species list entry). **Old** species names may be changed by hitting the space bar on the first character of the species name to activate the species entry pop-up menu. The next data entry block prompts for the timber volume at data entry time. The next three entries — **Units**, **Growth%**, and **Price** are predefined from the background species names/codes entries, but they may be changed at data entry time. The **Units** entry also has a pop-up menu (use the space bar as above to activate this menu when editing). When editing has been completed, pressing *ESC* will return control to the previous menu.

Leases

If **Leases**, the *second menu option* at the bottom of *Figure 5*, is selected, a selection screen listing all leases for the selected tract will appear. Option 1 on this screen is for a new lease entry, or current lease options may be selected for editing. Leases are listed by compartment number and are sorted by lessee, last name first. When an "old" lease is selected for editing, the user is given an option to delete it. If the user chooses not to delete it (the usual case), a screen similar to *Figure 7* will appear.

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| Landowner Name (Last Fi Company or Business Nat | | | | | | |
|--|---------------|------------|------------------|----------|---------|--------|
| Street Address | | | Volume/Acre | | Growth% | Price |
| City State Zip | Sweetgum | | 2.00 | MBF | | 165.00 |
| Enter TRAC | Cherrybark O | ak | 1.00 | MBF | | 155.00 |
| Tract: BRAD CAMPBELL | Lob-Shl Pulpy | | 25.00 | Cords | | |
| Acres: Total 500.0 F | Lobiolly Pine | | 4.00 | MBF | | |
| Entor | | | Press PgDn to | | | 255.00 |
| | • | • | • | Continue | | |
| Lessee Name (Last First | • | PRINE L | | | | |
| Company or Business Na | | | Resource Serv | vice | | |
| Street Address | : | P. O. Box | 344 | | | |
| City State Zip | : | Starkville | e, MS 39759 | | | |
| Residence Telephone # | : | 601/323-3 | 3444 | | | |
| Office Telephone # | : | 603/323-9 | 9103 | | | |
| Fax Telephone # | : | 601/323-4 | 1566 | | | |
| E-Mail Address | : | | | | | |
| Social Security Number | : | 234-55-44 | 455 | | | |
| Tax Identification Number | · . | 65-23325 | 56 | | | |
| | D.O : | Purpose | of Lease : | Hunting | | |
| Date of Lease : 11/0 | | • | of Years in Leas | • | : 5 | |
| Lease Cost (Dollars per A | | 6.79 | | | | |

Figure 7. Leases Selection Screen (sample screen derived from saving data in the Leases submenu, the second selection from the Tract Entry/Update and Stand, Lease, and Activity Procession Menu [Figure 5]).

The *Figure 7* data entry screen is used for entering new leases and updating existing leases. It contains personal information similar to that entered under background information (name, address, etc.), as well as lease-specific information. This screen contains the number of leased acres, the purpose of the lease, the date of the lease, the number of years in the lease, and the lease cost (in dollars per acre). Once a lease is completed, control returns to the previous menu.

Activities

The *third Figure 5* menu option is used for **Activities**. A stand selection window will first appear, followed by a selection screen for activity names, ordered by compartment, stand number, and starting date. Activity names listed were previously chosen from a master list of activity names maintained through the background information menu. **New Activity** is the first entry in the list and is selected when the user wishes to add an activity to the list. Once an activity has been selected, an option to delete the activity is offered. If the user chooses to retain the activity (the usual case),

a screen with general activity information will appear (center block, *Figure 8*).

The first option (center block, Figure 8) in this screen is Activity Name, which is selected from a popup menu. Activity names in this list are predefined by the user in the background main menu option, and may be as brief or as lengthy as needed. After Activity Name are five other options: Activity Acres, for the number of acres the activity involves; Initiation Date of Activity, the date on which the activity began or will begin; **Comment**, for the user to record any comments about the activity; # Years Until Activity is Done, the expected duration of the activity in years (or an optional ending date); and Est \$\$\$ / Acre from Activity, the revenue expected from the activity. After all activity information has been entered, a prompt will ask the user if job cost and income data for the activity are to be entered. If the response is "yes," a small window will appear and present a list of previous job history entries for the activity. An option that will add a job entry also appears.

Job history data (bottom block, *Figure 8*), which are always associated with a particular activity start date, can consist of many entries, detailing the "life" of the activity. After an activity is marked as "complete," the user has two options: (1) leave it — and the associated job history — in Activity and JobHist databases; or (2) or delete it. Job history data include a job ID number, job date, number of hours worked, the name of the employee who worked, mileage, a list of any supplies or comments, the cost of the job, the job completion date, any income from the job for the current day, and whether the activity has been completed.

| | Comp 1 Stand 1-Esc to | QUIT-Up,Dn Al | ROWS, I | ENTER to | SELECT |
|--|--------------------------|--------------------|----------------------|----------|----------|
| Street Address | Timber Species : Name | Volume/Acre | Units | Growth% | Price |
| City State Zip | Sweetgum | 2.00 | MBF | 5.52 | 165.00 |
| Enter TRAC Tract: BRAD CAMPBELL | Cherrybark Oak | 1.00 | | •• | 155.00 |
| Acres: Total 500.0 F | Lob-Shl Pulpwood | 25.00 | | | |
| | Loblolly Pine | 4.00 | MBF | •.•. | 255.00 |
| | LEASE Inputs/Updates, or | • | |) | |
| Activity Name | | nical Applicatio | | | |
| Activity Acres : | 22.0 : Initia | tion Date of Act | ivitv | : 10 | /28/1997 |
| _ | | | | | |
| Comment : | | | | | |
| Comment : # Years Until Activity is D | Done : 6 Est | \$\$\$ / Acre from | | : 7. | 78 |
| # Years Until Activity is E | | | Activity | | |
| # Years Until Activity is E | | | | | |
| # Years Until Activity is E | | 05/1997 I | Activity | orked : | 35.0 |
| # Years Until Activity is E Jobld : 97145 | Job Date : 11/ | 05/1997 I | Activity Hours Wo | orked : | 35.0 |

Figure 8. Tract Activity Update Screen with Job Cost Entry Screen (sample screen derived from saving data in the Activities submenu, the third selection from the Tract Entry/Update and Stand, Lease, and Activity Procession Menu [Figure 5]).

Reports

The fourth option in the ForPlanner Main Menu is Reports. Selecting it activates the ForPlanner Reports Menu, which has 10 menu options (Figure 9). The first option in the reports menu is a "toggle" option. Pressing Enter at this selection toggles the computer between two activities: (1) displaying information on the screen; or (2) sending information to the printer. The output of most reports can be placed on the screen, a feature that should be helpful in that it gives the user a preview of how a report will look. This feature should be especially useful for beginning users of ForPlanner who are not yet familiar with its reports. Placing reports on the screen can also be of use if ForPlanner is run on a laptop computer in the field, where a printer may not be accessible. In any event, one of the two options must be selected, and the selected option remains in effect for all ForPlanner Reports Menu options until the user changes it.

Background ForPlanner Species and Activity Listing

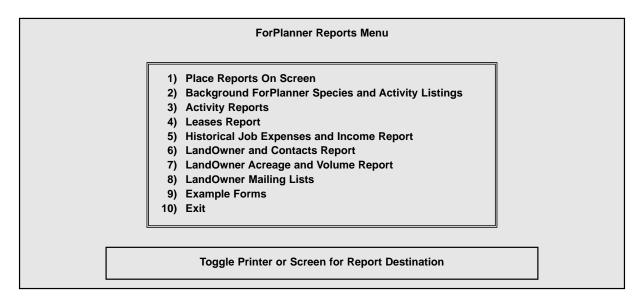
The *second option* in the **ForPlanner Reports** menu, **Background ForPlanner Species and Activity Listing**, prints background information for species data, activity names, and timber types. A list of all background activity names appears first, followed by a list of ForPlanner's species names, including their default prices, associated units, and growth percentages. The last option reported is the list of timber types in ForPlanner. These background data lists should be useful for reference purposes.

Activity Reports

The *third option* in the **ForPlanner Reports Menu** is **Activity Reports**. When it is chosen control moves to a submenu similar to *Figure 10*. Usually, these are all projected reports, meaning that ForPlanner is programmed to create them for future periods. It is sometimes useful, however, to leave *completed* activities in ForPlanner, enabling its user to peer into the past, as well as to peer into the future!

Note that the *first option* in the *Figure 10* menu is a toggle switch that moves between specific and general functions; this switch changes the types of reports in options 2 through 4. A general report is for *all* activities in the Activity database, while a specific report is done for a *particular* activity selected by the user. For each of these reports, the user must define the time frame past, present, or future. The default beginning date is always the current date.

By Landowner and Activity Name, for Selected Maturity Period. In the first report, (*option 2, Figure 10*) if the *general* type of report is selected, names and other information for *all* activities maturing or com-





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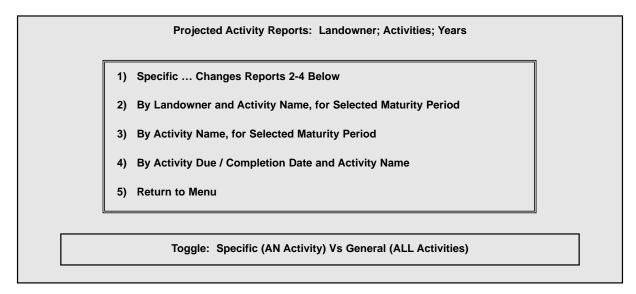


Figure 10. Projected Activity Reports: Landowner; Activities; Years Menu (from the ForPlanner Reports Menu).

pleted during the selected date range are listed for a specified landowner. Thus, after entering the range, the user will be prompted to enter the name of the desired landowner (in the same fashion as previously described) to generate the report. The date of the report and the maturity date range of the activities are listed at the top of this report. Activity names are then listed for the landowner according to their name and the date they are to mature (or have matured), as summarized in *Figure 11*. The first line of a particular entry lists the name of the landowner and the name of the tract. The second line lists the compartment and stand numbers

and the name of the maturing activity. The third line lists the total number of acres, the start and completion dates, and the estimated income from the activity. The last line (which appears *only* if some miles of boundary line were done or a percentage quote was issued for the activity) gives the number of miles of boundary line and/or the percentage of gross income initially quoted for the activity. Each unique activity is listed for the landowner and date range selected.

If the *specific* report type is selected (Figure 10), the user enters the name of the landowner as previously described and then selects a particular type of activ-

| Activity Due R | ange: | 11/17/1997 - 02/15/2008 Report Date: 11/17/1997 |
|-----------------------------------|-------|---|
| LandOwner Compartment Acres | :: | KILLCREAS WALLACE EDWARDTract:GEORGE ROBINSON1Stand :1Activity :Inspection Report500.0Dates :Start 09/03/1997 Due 09/03/2002Est Income :3380.00 |
| LandOwner Compartment Acres | :: | KILLCREAS WALLACE EDWARD Tract: BRAD CAMPBELL 1 Stand : 1 Activity : Inspection Report 159.0 Dates : Start 11/06/1997 Due 11/06/1998 Est Income : 3180.00 |
| Miles | : | 3.0 |

Figure 11. Partial Projected General Landowner-Activity Report for a Selected Period (sample screen generated from By Landowner and Activity Name, for Selected Maturity Period, the first selection from the Projected Activity Reports menu).

ity from a pop-up menu. This report, therefore, will list all tracts/compartments/stands involved in a particular activity, such as a herbicide release. The report format is similar to Figure 11.

By Activity Name, for Selected Maturity Period. The *third option* in the *Figure 10* submenu – under general mode – prints an activity listing of the same type as the second option, except that this list reports of *all* activities for all landowners and tracts. Maturing activities are listed in order according to landowner, tract, compartment, stand, and activity start date. Under specific mode, the user must select a particular type of activity for which the report will be printed. This specific report is for all landowners.

By Activity Due / Completion Date and Activity Names. The *fourth option* in the activity reports submenu (*Figure 10*) prints a list of activities much like the previous two options, but it orders the report by *due date* (complete or incomplete), instead of using a date range. *All* entries for any activity reported are listed. In general mode, this report lists *all* occurrences of *all* activities as they come due. In specific mode, all occurrences of a particular activity are listed by completion date or expected completion date.

Leases Report

The Leases Report is the *fourth option* listed in the ForPlanner Reports Menu (*Figure 9*). Selecting this

option will produce a report that lists all leases maturing during the date range selected.

Historical Job Expenses and Income Report

The *fifth option* in the *Figure 9* **ForPlanner Reports Menu** is the **Historical Job Expenses and Income Report**. This option is used to print a list of specific jobs related to a particular activity. The first prompt will ask the user if a detailed or a summary report should be printed. A summary report only lists each activity and its job ID number, date, cost, and income. A detailed report, on the other hand, lists a job along with its activity, compartment and stand number, landowner name, tract names, job ID numbers, job dates, hours worked, mileage, names of employees, cost, income, and a list of supplies or any other comments (all data entered for each job history transaction). A detailed report provides an ordered history of all work done to complete a particular activity.

Year-to Date Activity Reports. Once the report type and year have been selected in the **Historical Job Expenses and Income Report**, control moves to a **Year-to Date Activity Reports** menu. From this menu, the user may select different "focus areas" for job expense reports (*Figure 12*). Option 1, **By Activity**, prints an alphabetized list of jobs by activity names. For example, "boundary lines" entries may be listed first, followed by all "control burns" entries, etc., until all job history entries for every activity have been list-

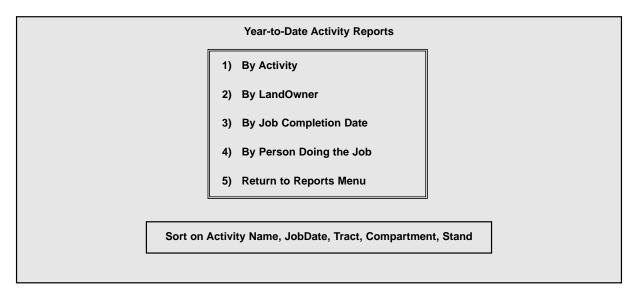


Figure 12. Year-to-Date Activity Reports menu (from the Historical Job Expenses and Income Report option of the ForPlanner Reports Menu).

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| Landowner : KILLCREAS WALLACE EDW | ARD Tract: JOHNSON CREEK |
|---------------------------------------|------------------------------|
| Activity : Herbicide Release | Compartment : 2 Stand: 5 |
| Job Id : 97024 JobDate : 19 | 971028 Hours Worked : 12.0 |
| Brad Campbell Mileage : 250 | Cost: 133.00 Income: 188.00 |
| Supplies and Comments : | |
| | |
| Landowner : KILLCREAS WALLACE EDW | ARD Tract: BRAD CAMPBELL |
| Activity : Chemical Application | Compartment : 1 Stand: 1 |
| Job Id : 97145 JobDate : 19 | 971105 Hours Worked : 35.0 |
| Brad Campbell Mileage : 157 | Cost: 450.00 Income: 789.00 |
| Supplies and Comments : Sprayer and C | |
| | |
| Landowner : KILLCREAS WALLACE EDW | ARD Tract: BRAD CAMPBELL |
| Activity : Chemical Application | Compartment : 1 Stand: 1 |
| Job Id : 97166 JobDate : 19 | 971106 Hours Worked : 15.0 |
| Brad Campbell Mileage : 125 | Cost: 500.00 Income: 3000.00 |
| Supplies and Comments : | |
| | |
| Landowner : KILLCREAS WALLACE EDW | ARD Tract: BRAD CAMPBELL |
| Activity : Inspection Report | Compartment : 1 Stand: 1 |
| Job Id : 97212 JobDate : 19 | • |
| Brad Campbell Mileage : 135 | Cost: 200.00 Income: 677.00 |
| Supplies and Comments : | |
| Supplies and Somments . | |
| Totals : Cost 12 | 283.00 Income 4654.00 |
| | |
| Landowner : CRAWFORD BRADLEY | Tract: CRAWFORD 40 |
| Activity : Herbicide Release | Compartment : 1 Stand: 1 |
| Job Id : 97023 JobDate : 19 | 971016 Hours Worked : 123.0 |
| Brad Jefferson Mileage : 123 | |
| Supplies and Comments : | |
| | |
| Totals : Cost 44 | 14.00 Income 666.00 |
| | |
| | |

Figure 13. Sample Historical Job Expenses and Income Report (by employees).

ed. Option 2, **By LandOwner**, lists all pending jobs for each landowner. This report first lists all jobs done for the first listed landowner, regardless of activity. This first entry is followed by entries for all other landowners who had activities done for them. Option 3, **By Job Completion Date**, from the Figure 12 menu reports jobs by the value given in the job due date field. Thus, jobs are listed in chronological order beginning with the earliest job date. Jobs that have the same date are then sorted by tract, compartment, and stand names. Option 4, **By Person Doing the Job**, from the Figure 12 menu prints a job expense report by employee names. In this report, all jobs completed by a particular employee will be listed in alphabetical order. In the sample **Historical Job Expenses and Income Report** (*Figure 13*), activities are listed by the person doing the job.

LandOwner and Contracts Report

The sixth option in the **ForPlanner Reports Menu** (*Figure 9*), **LandOwner and Contracts Report**, lists all landowners and their contacts. Landowners are listed in alphabetical order with their personal information as defined in the background menu (name, address, phones, Social Security number, Tax ID number, etc.). Then each contact, if any, is listed under each landowner, in alphabetic order by their relationship to the landowner. Like landowners, contacts entries contain personal information as defined in the background menu (bottom window, *Figure 4*).

LandOwner Acreage and Volume Report

The seventh option, LandOwner Acreage and Volume Report, in the ForPlanner Reports Menu (Figure 9) is a comprehensive report listed by landowner (Figure 14). Each landowner is listed with all corresponding land information. Each stand from each compartment of each tract is listed with its corresponding information. When a stand is listed, the tract acreage is also detailed: the total number of acres in the tract and the number of acres in pasture, crops, etc. The acreage information for each stand includes the stand acreage, the timber type, stand age, and the date. Below this information is a table of timber species in the stand. Similar to previous species information, each table entry lists the species name, its current volume per acre, growth percentage, years grown, the units, the unit price, the total volume, and the current value of that species in the stand. Total timber volumes and values by all pricing units (MBF, Cords, CNSCords, Tons, and Dollars) complete the Figure 14 table. All of this information is listed for all stands in each tract for every landowner. The report can be printed for all landowners or for an individual landowner selected by the user.

LandOwner Mailing Lists

The *eighth option* in the **ForPlanner Reports Menu** (*Figure 9*), **LandOwner Mailing Lists**, allows the user to develop landowner mailing lists. Selecting this option moves control to the **Create Mailing Lists** submenu (*Figure 15*). Here, the user can make selections to develop specific mailing lists created as WordPerfect[®] (compatible) data files.

Once control moves to the **Create Mailing Lists** menu, the user has several choices as to the composition of mailing lists. Whatever type of mailing list the user creates, a filename must be specified for it. Recall that a filename (DOS) has a maximum of eight characters and a three-letter extension. Thus, if only one name is typed, it is a file with a blank extension. An appropriate file entry (such as WordPerfect[®] file *.*dat*) should be created. Once this file is created, it will be placed in the ForPlan directory.

The *first option* in the *Figure 15* submenu, **All Landowners**, will create a list of landowner names. Only each landowner — no contacts — will be listed in alphabetical order along with the appropriate address. The *second option* in the submenu, **ALL Landowner Contacts**, creates a list of contact names only. This list is ordered by landowner name, then contact names and addresses. The *third option*, **Landowners with Activities Coming Due in Selected Period**, allows the user to specifically identify landowners who fit into this category. In this list, a landowner's name and address are listed along with a specific activity and its due date. Thus, each time an activity comes due within the selected period, the landowner's name and address will appear in this list. This means that a landowner's name

| Landowner : Tract : | | | | Off 601/326-3232 Compartment : | | Res 601/3 | 26-2322 |
|------------------------|-------------|----------|-----------|-----------------------------------|----------|-----------|------------|
| Tot Acres | | Forested | 250.0 | Pasture 20.0 | Crops 20 | .0 Mis | sc 10.0 |
| Stand 1 Acro | es : 25.0 | Type : | Upland Pi | ne/Hardwood | Age: 21 | Date : | 02/19/1998 |
| Species Name | Current Vol | Gro | Yrs | Units | Price | Current | Current |
| | Per Acre | Pct | Gro | | /Unit | Volume | Value |
| Ash | 5.00 | 4.30 | 0 | Cords | 6.50 | 125.00 | 813 |
| Chip-n-saw | 10.00 | 4.60 | 0 | CNSCords | 85.00 | 250.00 | 21250 |
| Cottonwood | 11.00 | 3.20 | 0 | Cords | 6.75 | 275.00 | 1856 |
| Pine | 7.50 | 5.00 | 0 | MBF | 245.00 | 187.50 | 45938 |
| Cherrybark Oak | 17.00 | 4.60 | 0 | Tons | 25.00 | 425.00 | 10625 |
| | MBF | (| Cords | CNS Cords | Tor | IS | Dollars |
| Total Volumes | 187.50 | 4 | 400.00 | 250.00 | 425. | 00 | 80482 |
| /Acre Volumes | 7.50 | | 16.00 | 10.00 | 17.0 | 00 | 3219.28 |

Figure 14. Sample Landowner Acreage and Volume Report (from the seventh option on the ForPlanner Reports Menu).

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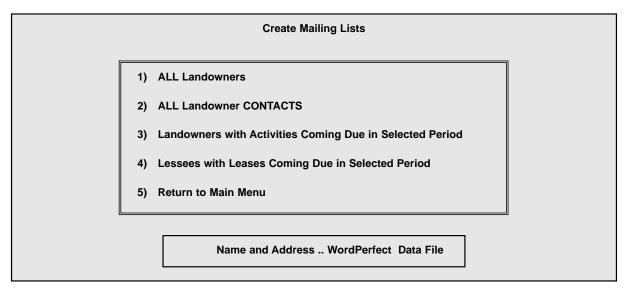


Figure 15. Create Mailing Lists menu (from LandOwner Mailing Lists, the eighth option of the ForPlanner Reports Menu).

may appear often in this list. The *fourth option* in this submenu, **Lessees with Leases Coming Due in Selected Period**, prints a similar list pertaining to lessees. Lessees who have a lease coming due in the period selected are listed in this file. These are the lessees who were defined earlier.

Example Forms

The *ninth option* in the ForPlanner Reports Menu (*Figure 9*), Example Forms, contains sample forms that can be printed to use with ForPlanner. These forms are designed for users who, when away from the computer, need to make records of input information used by ForPlanner. The lines of these forms correspond exactly with the data entry fields of ForPlanner, including the number of characters and data types. The user need only select this menu option to print these forms. Copies of these forms are also included in the Appendix to this bulletin.

Utilities

The fifth option in the ForPlanner Main Menu (Figure 2) is Run ForPlanner Utility Programs. In the utilities submenu, the first option is Re-Index and **Re-Pack ALL ForPlanner Databases** (Figure 16). Packing a database involves physically removing records marked for deletion from it. In this database management program, when a database record is "deleted," it is actually only "flagged" for deletion. The record is treated for all practical purposes as deleted, but is not physically removed from the database until the database is packed. When records are re-indexed, they are sorted again according to the current index. This option should be selected in one three situations: (1) if there are problems in "finding" data known to be in a database; (2) when reports do not appear to be properly ordered; or (3) after doing database manipulations outside ForPlanner.

The *second option* in the **Utility Programs** submenu is **Select Desired Printer**. This is a simple option that involves switching between two common printer types. The user may select dot-matrix or laser jet printer emulations. The current printer will be displayed before any changes are made and the user will have a chance to "back out" of this option if necessary.

The *third option* in the **Utility Programs** submenu is **Back up ForPlanner Databases and Memory File**. It is recommended that the user back up files from time to time to safeguard data. This action can be done by selecting this menu option and entering the drive letter of the disk to which the files are being written. This can be a floppy disk or the hard drive; however, a floppy disk is recommended in case of a hard disk failure.

Utility Programs *menu option 4*, Delete Activities and Job History Records, is used to delete records. Associated job history files may also be deleted. Date ranges are used to decide which activities are to be deleted, as well as whether or not the activity has been completed. The deletion of job history data is optional.

Utility Programs *menu option 5* is Install NEW ForPlanner into OLD Databases. This installation routine allows current ForPlanner users to install a newer version of ForPlanner into their existing databases. This feature allows format changes to be made to ForPlanner databases with no data losses.

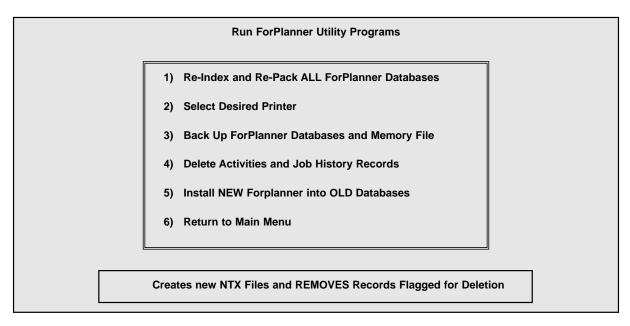


Figure 16. Run ForPlanner Utility Programs menu (fifth option on the ForPlanner Main Menu).

References

Microsoft Windows 95. Copyright[®] 1981-1996, Microsoft Corporation.

CA-Clipper for DOS Reference Guide, Volumes 1 and 2, Version 5.3. Computer Associates International, Inc. Copyright[®] 1992. Corel WordPerfect Suite - Version 8. Copyright[®] 1997 Corel Corporation Limited.

APPENDIX: EXAMPLE FORMS FOR FORPLANNER

(1) Landowner and Contact Entry Form

Landowner Name, Company Name, Street Address and City State Zip Fields are EACH 25 characters in length. All telephone numbers are 13 characters long. E-mail address is 40 characters, Social Security number is 11 characters, and tax number (needed ONLY if different than social security number) is 11 characters.

| Landowner Name (Last First Mi) Company or Business Name Street Address City State Zip | |
|--|----------------------------------|
| Residence Telephone Number Office Telephone Number Fax Number | :/ |
| E-Mail Address Social Security Number Tax Identification Number | : : [*] [*] |

(2) Leases Entry Form

| Landowner (25 Char) | : | | |
|--------------------------------|-------|--------------------------|---|
| Tract Name (25 Char) | · | | |
| Compartment Number(99 Numeric) | : | | |
| Lessee Name (Last First Mi) | : | | |
| Company or Business Name | : | | |
| Street Address | : | | |
| City State Zip | : | | |
| Residence Telephone # | : / - | | |
| Office Telephone # | : / - | | |
| Fax Telephone # | :/ | | |
| E-Mail Address | : | | |
| Social Security Number | : | | |
| Tax Identification Number | : | | |
| Leased Acres | : | Purpose of Lease | : |
| Date of Lease | : / / | Number of Years in Lease | : |
| Due Date of Lease (optional) | : | | |
| Lease Cost (Dollars per acré) | · | | |

(3) Tract Data Entry

| Landowner (25 Char) Tract Name (25 Char) Compartment Number(99 Numeric) Stand Number (99 Numeric) Tract Acres (99999.9 Numeric) Tract Forested Acres Tract Pasture Acres | |
|--|------------|
| Tract Crops Acres | ··_ ··_ |
| Tract Miscellaneous Acres | : |

(4) Stand Data Entry

| Landowner (25 Char) | : |
|---------------------------------|-----|
| Tract Name (25 Char) | : |
| Compartment Number (99 Numeric) | : |
| Stand Number (99 Numeric) | : |
| Stand Acres (99999.9 Numeric) | : |
| Stand Type (20 Char) | : |
| Stand Age (999 numeric) | : |
| Stand Entry Date (MM/DD/YYYY) | :// |
| | |

(5) Activity Data Entry

| Landowner (25 Char) : Tract Name (25 Char) : Compartment Number (99 Numeric) : Stand Number (99 Numeric) : Stand Acres (99999.9 Numeric) : Activity Name (40 Char) : Activity Comment (60 Characters) : Activity Acres (99999.9 Numeric) : Activity Acres (99999.9 Numeric) : Activity Date (MM/DD/YYYY) : Activity Miles (Optional) : Activity Years (9999 Numeric) : Activity Lump Sum Quote (Num 10) : Pct. of Activity Gross Quoted : Activity Completion Date (Est) : | |
|--|--|
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| c) | b) : | |
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(6) Job History Data Entry

| Landowner (25 Char) Tract Name (25 Char) Compartment Number (99 Numeric) Stand Number (99 Numeric) Activity Name (40 Char) Job ID Number (999999 Numeric) Job Date (MM/DD/YYYY) Man hours (9999999 Numeric) Person Who Worked (25 Char) Mileage (999999 Numeric) | | |
|---|--------|--|
| Supplies, Comments (60 Char) | : : | |
| Costs of Job Entry (Numeric 10) Total Billed (Numeric 10) | : : | |





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