



SAVING THE LAST GREAT PLACES ON EARTH

Conservation Planning Tool: User Guide

Version: 1.0

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TABLE OF CONTENTS

TABLE OF CONTENTS	I
TABLE OF FIGURES	III
INTRODUCTION	1
OVERVIEW	1
HISTORY	1
CONTACT INFORMATION	1
GLOSSARY OF TERMS	1
GETTING STARTED	3
INSTALLATION	3
STARTING CPT	3
THE MAIN MENU	3
Enter or Browse Data	4
Document Methodology	4
Preview or Print Reports	4
EXITING CPT	4
WORKING WITH DATA	5
NAVIGATION	5
Convert Area Units	6
Convert Length Units	7
Return to Menu:	7
WORKING WITH PLANNING UNITS	8
Selecting a Planning Unit	8
Selecting a Plan Iteration	8
Completing the Planning Unit Form	9
WORKING WITH GEOGRAPHIC UNITS	11
Working with Stratification Units	11
Working with Political / Administrative Units	12
WORKING WITH TARGETS	12
Working with Target Characteristics	13
Working with Target Rationale	16
Working with Goal Selections	17
Working with Ranking Criteria	18
Working with Occurrences	19
Working with Goal Attainment	20
WORKING WITH CONSERVATION AREAS	21
Working with Conservation Area Characteristics	22

Working with Interests	24
Working with Target Occurrences	25
Working with Portfolio Selection	25
Working with Action Site Selection	26
WORKING WITH THREATS AND STRATEGIES	27
WORKING WITH PARTICIPANTS	29
BACKING-UP YOUR DATA	29
DOCUMENT METHODOLOGY	30
WORKING WITH DOCUMENT METHODOLOGY	30
PRINT OR PREVIEW REPORTS	32
WORKING WITH REPORTS	32
PREVIEWING AND PRINTING REPORTS	33
To Preview All or Part of a Report:	34
To Print all Pages	34
EXITING THE REPORTS FORM	34
BEHIND THE SCREENS	35
TABLES	35
QUERIES	36
FORMS	36
REPORTS	36
Creating and Listing New Reports	36
PAGES, MACROS, AND MODULES	37
IMPORTING DATA	37
Preparing the Data	37
Importing the Data	38
Adding data to the CPT files	38
EXPORTING DATA	42
Performing a Simple Export	42
Exporting Data for ArcView	43
USING THE USER TABLES	44

TABLE OF FIGURES

CPT MAIN MENU	3
DATA FORMS	5
CONVERT AREA UNITS FORM	6
CONVERT LENGTH UNITS FORM	7
PLANNING UNITS FORM	8
GEOGRAPHIC UNITS FORM	11
TARGET CHARACTERISTICS FORM	13
NEW RECORD ICON	13
TARGET RATIONALE FORM	16
GOAL SELECTION FORM	17
RANKING CRITERIA FORM	18
OCCURRENCES FORM	19
GOAL ATTAINMENT FORM	21
TOP OF THE CONSERVATION AREA FORM	22
CONSERVATION AREA CHARACTERISTICS FORM	22
INTEREST FORM	24
TARGET OCCURRENCES FORM	25
PORTFOLIO SELECTION FORM	25
ACTION SITE SELECTION FORM	26
TREATS AND STRATEGIES FORM	27
PARTICIPANTS FORM	29
DOCUMENT METHODOLOGY FORMS	30
REPORTS FORM	32
EXAMPLE - APPEND QUERY	40
EXAMPLE - UPDATE QUERY	41
EXAMPLE - TARGET OCCURRENCES TABLE	42
EXAMPLE - QUERY WITH THREE INCLUDED TABLES	42
EXAMPLE - SIMPLE EXPORT OF DATA	43
EXAMPLE - RENAMING FIELDS FOR ARCVIEW EXPORT	44
EXAMPLE - XUSRPARTICIPANTS TABLE	45
EXAMPLE - QUERY TO APPEND PARTID TO XUSRPARTICIPANTS	46
EXAMPLE - QUERY LINKING PARTICIPANTS AND XUSRPARTICIPANTS	46
EXAMPLE - MODIFIED PARTICIPANTS FORM	48

SECTION 1: INTRODUCTION

1.1 OVERVIEW

The Conservation Planning Tool (CPT) is a Microsoft Access based application designed to help you manage the data you collect as you put together an ecoregional plan. It organizes the core ecoregional planning data in a way that meets TNC's guidelines and standards, and allows you to add tables and forms to manage additional data as you wish.

1.2 HISTORY

The Conservation Planning Tool was developed as a collaborative effort by TNC scientists and planners who wanted to have a common data management tool in order to share data and methodology. That desire was brought to the attention of the Technology and Information Systems department in the Winter of 2002. Since that time the program has undergone further development, pilot testing in Alaska, Arkansas and the Upper Mississippi project, and is now being released to all TNC staff.

1.3 CONTACT INFORMATION

We, the CPT project team, hope you find CPT to be a helpful, time-saving tool. Should you have any ideas for future improvements please contact Marjorie Bennett at mbennett@tnc.org

Should you have any questions regarding the installation or use of CPT please contact the Enterprise Help Desk at 703-841-4884 or help-desk@tnc.org.

1.4 GLOSSARY OF TERMS

Conservation targets: Specific components of biodiversity identified by TNC and used to design ecoregional portfolios and develop and prioritize conservation strategies. Currently, TNC's conservation targets consist of ecological systems, natural communities, and species.

Target occurrence: A particular instance on the ground of a conservation target. It corresponds to what the Natural Heritage Programs call an element occurrence. In GIS terms, an occurrence is mapped as a polygon within the ecoregion.

Goals: For each conservation target, the amount and distribution which, if captured in the portfolio of conservation areas, would preserve the biodiversity of the ecoregion.

Functional conservation areas: The geographic area needed to maintain the conservation targets and supporting ecological processes within

acceptable ranges of variability over the long term. In earlier editions of ecoregional plans, these may be called sites.

Portfolio: The suite of conservation areas within an ecoregion selected to represent and conserve the conservation targets and their genetic and ecological variation.

Viability: The ability of a conservation target to persist for many generations over long time periods.

Action Site: One of the highest priority conservation areas in the portfolio for TNC action.

SECTION 2: GETTING STARTED

2.1 INSTALLATION

Extract the files from CPTv1_5.zip. Place them in the directory of your choice on your hard drive or on a network drive.

2.2 STARTING CPT

To start CPT:

1. Open Microsoft Access 2000.
2. Select Open an existing file.
3. Select “More files...” and click OK.
4. Navigate to CPTv1_5.mdb, select it.
5. Select Open.

If Access 2000 is the only version of Access on your computer, you can also open CPT by double-clicking on the file CPTv1_5.mdb. If both Access 97 and Access 2000 are installed on your computer, you must open all Access databases by first opening the correct version of Access and then selecting the database you want to open.

After beginning CPT the main menu appears (Figure 1).

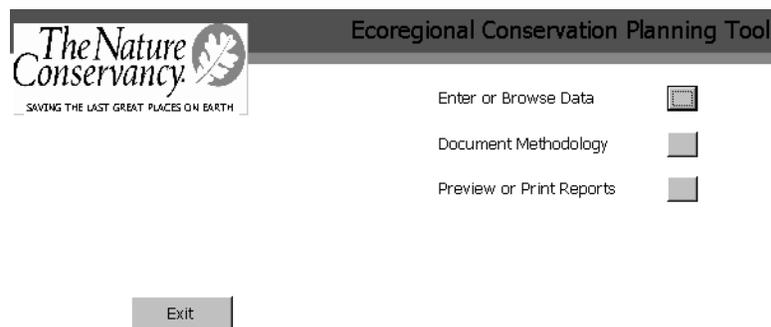


Figure 1: CPT Main Menu

2.3 THE MAIN MENU

If you are the data manager for an ecoregional plan, you will spend much of your time in the Access database window, working directly with the CPT tables, queries and reports. However, if you are a general user of CPT, you will be most interested in the functions available from the main menu that you see when you first open the application.

On the main screen you have three choices. You may chose to either:

1. Enter or Browse Data
2. Document Methodology
3. Preview or Print Reports

ENTER OR BROWSE DATA

Selecting the box next to **Enter or Browse Data** allows you to view your data for a single ecoregion, by individual target, target occurrence, or conservation area.

DOCUMENT METHODOLOGY

Selecting the box next to **Document Methodology** allows you to enter details about the methodology you used to develop the ecoregional plan.

PREVIEW OR PRINT REPORTS

Selecting the box next to **Preview or Print Reports** allows you view a list of reports that come with CPT. As you write additional reports, you can add them to this listing.

2.4 EXITING CPT

You may close CPT in one of three ways.

- Close CPT by clicking the button labeled Exit on the main menu, or
- Selecting the **X** in the upper right corner of the screen, or
- Selecting Exit from the file menu.

SECTION 3: WORKING WITH DATA

To Enter or Browse your data within CPT, select the box next to the words Enter or Browse Data on the Main Menu. The Conservation Planning Tools window opens (Figure 2). You can access your data via a series of tabular forms within this window.

The screenshot shows the 'Ecoregional Planning' interface. At the top, there's a header with the organization's logo and name, and a field for 'ID'. Below this are several tabs: 'Planning Unit', 'Geographic Units', 'Targets', 'Conservation Areas', 'Threats and Strategies', and 'Participants'. The 'Planning Unit' tab is active. On the left side, there are three vertical buttons: 'Convert Area Units', 'Convert Length Units', and 'Return to Menu'. The main form area contains several sections:

- 'Select a Planning Unit' and 'Select a plan iteration' dropdown menus.
- Fields for 'Plan kickoff date', 'Plan completion date', 'Plan lead operational unit', and a note: 'pick an operational unit or organization from the list, or add a new one'.
- 'Planning Unit Type' dropdown, 'Area' (hectares) and 'Population' input fields.
- 'Total Stream Length in kilometers' and 'Stream length mapping scale' input fields.
- 'Planning Unit Description' text area.
- 'Land Use/Land Cover' section with checkboxes for 'Developed', 'Agricultural', 'Natural', 'Water', and 'Perennial Snow and Ice', each followed by a percentage input field.
- 'Ownership' section with a table header: 'Ownership', 'Sub-Type 1', 'Sub-Type 2', 'Protection Status', 'Hectares', and '%'. Below the header is a single row of data.
- 'Record: 1 of 1' at the bottom.

Figure 2: Data Forms

3.1 NAVIGATION

The name of the ecoregion you are working with is displayed at the top of the form. The CPT ID of the ecoregion is displayed to the right. However, this information will not appear until after you have selected an ecoregion from the Planning Units form.

For every ecoregion you define, there are six forms for you to work with. You access these forms using the tabs just below the Ecoregion Name. The purpose of each form is described in Table 1.

Table 1: Data Forms

Form Name	Description
Planning Unit	Allows you to enter basic data about the plan and about the ecoregion as a whole.

Table 1: Data Forms

Form Name	Description
Geographic Units	Allows you to enter various geographic divisions of and intersections with the ecoregion.
Targets	Allows you to enter information about the targets considered for this ecoregion.
Conservation Areas	Allows you to enter information regarding the conservation areas within the ecoregion.
Threats and Strategies	Allows you to enter information concerning threats to the ecoregion and strategies to alleviate them.
Participants	Allows you to enter the contact information for the individuals who participate in the plan's development.

As you work with your data, you can also perform three other functions at any time. They are convert area units, convert length units, and return to the main menu.

CONVERT AREA UNITS

The CPT program accepts all area data in hectares. If your area data is in a different unit, you will need to convert it to hectares using the convert area units function. This function converts square miles, acres, or square kilometers to hectares.

To convert your data:

1. Select the Convert Area Units icon. The frm:ConvArea : Form appears (Figure 3).

The screenshot shows a dialog box titled 'Convert Area Units'. At the top, it says 'Enter number and units:' followed by a text input field and a dropdown menu. Below this, there is a 'Convert' button, a text input field, and the label 'Hectares'. At the bottom right, there is a 'Close' button.

Figure 3: Convert Area Units Form

2. Enter the number of units you want to convert in the first box.
3. Select the unit type from the dropdown menu.
4. Select the Convert button. The total, converted to hectares, appears in the bottom field.
5. To close the box, click the Close button.



Note: You must close the conversion box before you can return to the main form.

CONVERT LENGTH UNITS

CPT accepts distance data in kilometers. If your distance data is in a different unit, you will need to convert it to kilometers using the convert length units function. This function converts miles to kilometers.

To convert your data:

1. Select the Convert Length Units icon. The frm:ConvLength : Form appears (Figure 4).

A screenshot of a software form titled 'Convert Length Units'. It features two input fields: the top one is labeled 'Enter distance' and 'Miles', and the bottom one is labeled 'Kilometers'. A 'Close' button is located at the bottom right of the form.

Figure 4: Convert Length Units Form

2. Enter the number of miles you are converting in the top box.
3. Press the 'Enter' key, on your keyboard. The converted amount, in kilometers, will appear in the bottom box.
4. To close the box, click the Close button.



Note: You must close the conversion box before you can return to the main form.

RETURN TO MENU:

At any time you can choose to return to the main menu. Select the Return to Menu button and the Main Menu appears.

3.2 WORKING WITH PLANNING UNITS

The first tab, Planning Unit, displays basic data about the plan and about the ecoregion as a whole (Figure 5).

The screenshot shows a web application interface for managing planning units. At the top, there are several tabs: "Planning Unit", "Geographic Units", "Targets", "Conservation Areas", "Threats and Strategies", and "Participants". The "Planning Unit" tab is active. Below the tabs, there are two dropdown menus: "Select a Planning Unit" and "Select a plan iteration". Below these are two rows of input fields: "Plan kickoff date" and "Plan completion date" (text boxes), and "Plan lead operational unit" (dropdown menu) with a note: "pick an operational unit or organization from the list, or add a new one". Further down, there are more input fields: "Planning Unit Type" (dropdown), "Area" (text box) with "hectares" next to it, "Population" (text box), "Total Stream Length in kilometers" (text box), and "Stream length mapping scale" (dropdown). A large text area labeled "Planning Unit Description" is on the left, and a "Land Use/Land Cover" section on the right contains five rows: "Developed", "Agricultural", "Natural", "Water", and "Perennial Snow and Ice", each with a percentage input field. Below this is an "Ownership" section with a table. The table has columns: "Ownership", "Sub-Type 1", "Sub-Type 2", "Protection Status", "Hectares", and "%". The table is currently empty. At the bottom, there is a record navigation bar showing "Record: 1 of 1".

Figure 5: Planning Units Form

SELECTING A PLANNING UNIT

You must first select a planning unit. The dropdown menu labeled “Select a Planning Unit” lists all the ecoregional planning units officially designated by TNC.

To select a planning unit:

1. Select an ecoregion from the list, or
2. Type the letters of name of the ecoregion until it appears in full.

SELECTING A PLAN ITERATION

After you select an ecoregion to work with you must indicate the plan iteration. If you have not entered any data yet, the dropdown will be blank.

To indicate a plan iteration:

1. If you are creating a record for a new iteration of the plan, enter the iteration number in the Select a Plan Iteration box (for exam-

ple, enter “1” if this is the first iteration of the plan.)

2. If you have already created a record for the plan iteration, select the iteration number from the dropdown box.

When you move the cursor out of the plan iteration box, CPT looks in the database for a record relating to that plan iteration for that ecoregion. If a record is found, the data will be displayed. If a record is not found, one will be created and the ecoregion name, ID, and iteration will be entered in the new record. In either case, the ecoregion name will be displayed at the top of the form, and will continue to be displayed as long as you are working with that ecoregion.



Note: The planning unit name and iteration number are the only two fields that must be completed on this form. After you have entered this information, you may either complete the rest of fields on the Planning Unit form or you may work with any of the other planning tool forms.

COMPLETING THE PLANNING UNIT FORM

The next three fields ask for information about the ecoregional plan. The rest of the Planning Unit tab displays basic information about the ecoregion. None of these fields are required, but all are useful if you can obtain the information.

Plan kickoff date, Plan completion date: Enter the dates in the format, mm/dd/yyyy. If the plan has not been completed, you can enter the projected completion date or leave the completion date blank.



Note: The date must be entered in the mm/dd/yyyy format. If you don't know the exact day of the month on which the plan was kicked off or completed, use the first of the month.

Plan lead operational unit: Enter the name of the organization that is taking the lead for the ecoregional plan. Usually this will be an operational unit of TNC (e.g., TNC Oregon Field Office), but it may be a partner organization. Once you have entered an operational unit or organization, it is added to the dropdown box for you to choose from the next time you need to identify an organization.

Planning Unit type: Select a type from the dropdown menu. In most cases, the type will be “Ecoregion.”

Area: Enter the area of the ecoregion in hectares. Use the Convert Area Units function if needed.

Population: Enter the permanent population of the ecoregion.

Total stream length in kilometers: Obtain this information from the GIS mapping of the ecoregion. Use the Convert Length Units function, if needed.

Stream length mapping scale: The scale at which the streams were mapped in GIS. The total stream length will be greater at smaller scales, because smaller streams will be mapped.

Planning unit description: Use this field for a text description of the ecoregion. You are not limited by the size of the box; everything you enter will be saved, and can be viewed and printed.



Note: If you already have a text description of the ecoregion elsewhere, you can cut and paste it into this field.

Land use / land cover: Enter the approximate division of the ecoregion by generalized land use /land cover categories. The sum of the percentages must be equal to or less than 100.

Ownership: You decide how finely to divide the ownership categories. The “Ownership” dropdown box contains the most basic categories. The “Sub-type 1” and “Sub-type 2” dropdown boxes give you the opportunity to specify for exact categories for some of the choices. For instance, if you choose “U.S. Federal Lands” in the “Ownership” dropdown, you can choose “Bureau of Land Management” from the “Sub-type 1” dropdown list, and then “National Monument” from the “Sub-type 2” dropdown list. On the other hand, if you choose “International Waters” in the ownership dropdown box, the only choice for “Sub-type 1” and “Sub-type 2” is “Not applicable”. You must select an ownership category before selecting a sub-category, however you are not required to enter sub-categories. Nor are you required to describe the ownership of all of the ecoregion.

Choose a protection status, if applicable. Enter the size of the ownership portion in hectares. If you have entered the total area of the ecoregion in the middle of the form, the application will calculate the percentage of the ecoregion in a particular ownership portion.

3.3 WORKING WITH GEOGRAPHIC UNITS

The second form (Figure 6), accessible from the tab labeled Geographic Units, allows you to enter various geographic divisions of and intersections within the ecoregion.



Note: You can't move to the second tab unless you have started a record for an ecoregion by selecting an ecoregion and entering a plan iteration number.

The screenshot shows a web application interface with several tabs: Planning Unit, Geographic Units (selected), Targets, Conservation Areas, Threats and Strategies, and Participants. The main content area is divided into two sections:

Stratification Units *Enter any ecological subdivisions you have used in the plan*

Identifier - Name or Number	Type	% of Planning Unit
▶		

Political/Administrative Units *Enter the political or administrative units that intersect the planning unit*

Type	Subtype	Name	% Ecoregion in Pol/Admin Unit
▶			0.0

Figure 6: Geographic Units Form

WORKING WITH STRATIFICATION UNITS

This is not where you enter the Conservation Areas that emerge from the planning process, but rather any sections or analysis units you used for setting and assessing goals. You may enter whatever geographic divisions of the ecoregion you used for planning purposes.

To create a stratification unit:

1. Enter the Stratification Identifier - Name or Number. The names (or numbers) you enter here will be used later in the application when you are asked to define goals for targets by stratification units.
2. Select type of unit from the dropdown menu in the Type field. The menu lists the most common kinds of divisions that have been used. There is a selection “user-defined type” available if

the divisions you use do not fit into any of the pre-defined categories.

3. Enter the percentage of the Planning Unit included in the Stratification Unit, if known.
4. Repeat steps one through three for every stratification unit you have identified.

WORKING WITH POLITICAL / ADMINISTRATIVE UNITS

You may enter any political or administrative geographic units that intersect the ecoregion and seem relevant to the plan. The political/administrative units are not mutually exclusive, and may overlap. For instance, the ecoregion might be in a particular country, and at the same time might be included in an international treaty. For this reason, the percentages may add up to more than 100%.

To set a Political/Administrative unit:

1. Select the unit type. The most common choice is Political unit. You must then select a subtype.
2. Select the unit subtype. If you select “Political unit” as your type, the first four subtypes (Country, State/Territory (U.S.), State/Territory (Mexico), and Province/Territory (Canada)) have a fixed set of choices listed in the Name field. If the subtype is not Applicable, select Not Applicable.



Note: For all the other choices under “Subtype,” and for the other choices under “Type”, you must enter a name.

3. Enter a name for the unit, if it is not available via a dropdown menu. The name is the identifier of the political or administrative unit, so each entry must have a unique name.
4. Enter the percentage of the ecoregion in the Political/Admin unit, if known.
5. Repeat steps one through four for every unit you have identified.

3.4 WORKING WITH TARGETS

The Targets form has six sub-forms for collecting and displaying information about targets. Once you have started a record for the target, the scientific and common names of the target will be displayed in the boxes at the top of the targets form, so that you always know what target you’re dealing with. You can use the navigation buttons at the bottom of the tab

to move among targets. You may also select a target by typing or selecting its scientific or common name.

The six sub-forms display information about the targets considered for this ecoregion. You can use the targets section in one of two ways. You can use it to record information about all the units of biodiversity that you are considering for use as targets in this ecoregional plan, and later in the process note those that were selected as targets. Or, you may select the targets and then enter information about the specific targets you selected.

WORKING WITH TARGET CHARACTERISTICS

The first sub-form is Target Characteristics (Figure 7). Unless you import your data, you record your general target information using this form.

Figure 7: Target Characteristics Form

The Targets form opens to a blank record. To move to a new Targets record after you have entered the first target, select the New Record icon on the bottom of the form. It's the icon with the arrow and asterisk on it (Figure 8).



Figure 8: New Record icon

To create a new target, complete as much of the form as you can. Each field is briefly described below.

Scientific Name: Enter the scientific name of the target. If the target is an ecological feature that doesn't have an official scientific name ("Bat caves," for example), enter the most usual name here. Every target should have a name in the Scientific Name field. If you have entered or imported the same target before, you may select the scientific name from the dropdown list.

When you select a scientific name, if a record exists for that target in the current ecoregion, the application will display that record.

Common Name: Enter the common name of the target. Every target should have a name in the Common Name field. (It's all right for it to be the same as the Scientific Name). If you have entered or imported the same target before, you may select the common name from the dropdown list. When you select a common name, if a record exists for that target in the current ecoregion, the application will display that record.

Selected as Target?: If you are using CPT to enter all potential ecoregional targets, use this field to indicate which potential targets were ultimately selected as targets.

Date added to plan: Enter the date the potential target was selected as an ecoregional target.

Other names: Enter any alternate names in use for this target.

Global element code: For data collected from Heritage programs or CDCs, or from NatureServe, enter the Global Element Code. Leave blank for data from other sources.

Global rank: Enter the full Global Rank (G-rank) from the Natural Heritage conservation ranking system. (You can look up missing ranks at the NatureServe Explorer website, <http://www.natureserve.org/explorer>).

Rounded: Enter the rounded Global Rank. This value is used to summarize and select elements with similar global ranks.

USES A Rank: Select the status of the species under the United States Endangered Species Act (USES A), if applicable. (You can look up missing statuses at the NatureServe Explorer website, <http://www.natureserve.org/explorer>).

IUCN Rank: Select the status of the species on the International Union for Conservation of Nature and Natural Resources (IUCN) Red List of Threatened Species, if applicable. (You can look up missing statuses at the IUCN Red List website, <http://www.redlist.org>).

CITES Rank: Select the status of the species in the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES) species database, if applicable. (You can look up missing statuses at the

CITES database website, <http://www.cites.org/eng/resources/species.html>).

Other ranks: You can use this section to record the ranking of the target under any other system that is of interest to this ecoregional plan. You may want to record the state rank (S-rank) from the Natural Heritage system for the states included in the ecoregion, or the status in the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) system, for instance. You may record any number of ranks. Enter the rank (e.g., “S1”), and the ranking entity (e.g., “Oregon” or “COSEWIC”).

Level of Biological Organization: Select the level of biological organization of the target from the list in the dropdown box. Depending on which item you choose, a specific set of the remaining fields will become available.

Habitat Type: Select the predominant habitat type of the target from the dropdown list.

Geographic Scale: Select the geographic scale of the target in this ecoregion from the dropdown list.

Distribution: Select the distribution of the target in the ecoregion from the dropdown list.

Species General Taxonomic Group: For species, select the taxonomic group from the dropdown list. (Notice that you must scroll down to see the entire list).

Wide-ranging species: For species, check this box if the target is classified as a wide-ranging species in this ecoregion (whether the range is encompassed by the ecoregion or extends beyond it.)

Sub-species: For species, check this box if the target is a sub-species.

Spatial pattern: For plant communities, select the spatial pattern of the target in this ecoregion.

Int’l Ecological System Type: For ecological systems, if you use the system type classification developed for use in international planning, select the system type from the drop-down box.

Other Ecological Feature Type: For other ecological features, select the type from the drop-down box.

Other information: Use this space to record any other information about the target that you wish to display. You are not limited by the size of the box; everything you enter will be saved, and can be viewed and printed.



Note: Before you use the space, look through the other sub-tabs on the target tab to make sure there isn't a specific place for the information.

WORKING WITH TARGET RATIONALE

The next sub-form within Targets is Target Rationale (Figure 9). The Target Rationale sub-form is used to categorize the reasons an element of biodiversity was selected as a target for this ecoregion. The listed reasons are most relevant to species targets. From the rationales listed on this page:

- Choose one primary rationale for the choice of a target
- Select Yes for any other rationales that contributed to the decision.
- Select No for any rationales that are appropriate to the target but were not a reason for its selection.
- If you select Other as a relevant rationale, briefly explain the rationale in the text box.

Target Characteristics	Target Rationale	Goal Selection	Ranking Criteria	Occurrences	Goal Attainment
<p><i>Rationale for selecting this species as a target - check all that apply, but select only one primary reason.</i></p>					
Global (Heritage) Rank	Yes <input type="radio"/> No <input type="radio"/> Primary <input type="radio"/>	Newly discovered and/or described - rarity unknown		Yes <input type="radio"/> No <input type="radio"/> Primary <input type="radio"/>	
CITES Status	Yes <input type="radio"/> No <input type="radio"/> Primary <input type="radio"/>	Partners in Flight rank		Yes <input type="radio"/> No <input type="radio"/> Primary <input type="radio"/>	
USESAs Status	Yes <input type="radio"/> No <input type="radio"/> Primary <input type="radio"/>	Wide-ranging		Yes <input type="radio"/> No <input type="radio"/> Primary <input type="radio"/>	
IUCN Status	Yes <input type="radio"/> No <input type="radio"/> Primary <input type="radio"/>	Indicator Species		Yes <input type="radio"/> No <input type="radio"/> Primary <input type="radio"/>	
Declining	Yes <input type="radio"/> No <input type="radio"/> Primary <input type="radio"/>	Umbrella Species		Yes <input type="radio"/> No <input type="radio"/> Primary <input type="radio"/>	
Endemic	Yes <input type="radio"/> No <input type="radio"/> Primary <input type="radio"/>	Keystone Species		Yes <input type="radio"/> No <input type="radio"/> Primary <input type="radio"/>	
Disjunct	Yes <input type="radio"/> No <input type="radio"/> Primary <input type="radio"/>	Flagship (Charismatic) species		Yes <input type="radio"/> No <input type="radio"/> Primary <input type="radio"/>	
Vulnerable	Yes <input type="radio"/> No <input type="radio"/> Primary <input type="radio"/>	Species Aggregation		Yes <input type="radio"/> No <input type="radio"/> Primary <input type="radio"/>	
Peripheral	Yes <input type="radio"/> No <input type="radio"/> Primary <input type="radio"/>	Species Group		Yes <input type="radio"/> No <input type="radio"/> Primary <input type="radio"/>	
Specialist	Yes <input type="radio"/> No <input type="radio"/> Primary <input type="radio"/>	Other rationale		<input type="text"/> Yes <input type="radio"/> No <input type="radio"/> Primary <input type="radio"/>	

Figure 9: Target Rationale Form

WORKING WITH GOAL SELECTIONS

The third sub-form of targets is Goal Selection (Figure 10). You use this form to record the goals for each ecoregional target; both for the ecoregion as a whole, and for the stratification units if they were used. This form is only used to record goals; you will state whether those goals were met on a different sub-form.

Figure 10: Goal Selection Form

To create a target goal:

1. Enter a Conservation goal. This should be a numeric entry that approximates your target goal. Not all goals can be appropriately expressed as a single number, but comparable numbers are necessary in order to compare goals and the accomplishment of goals across ecoregions.
2. Enter the unit the goal is listed in. Your choices are: stream kilometers, hectares, occurrences, and percent.
3. Select whether the goal was based on the current distribution of the target or its historical distribution.
4. Enter a description of the goal in Explanation of Goal field. Use this box to describe the goal if it is not perfectly expressed by the numeric goal. You are not limited by the size of the box; everything you enter will be saved, and can be viewed and printed.

To create a stratification unit goal:

If the ecoregional plan specifies goals for stratification units, use this section to record the goals.

1. Select the stratification unit name from the dropdown box. The names in the dropdown box will be those you entered in the

“Stratification Unit” section of the Geographic Units Form.

2. Enter the same information as for the overall target goals described above.

WORKING WITH RANKING CRITERIA

The fourth sub-form of Targets is Ranking Criteria (Figure 11). You use this form to describe the criteria you used to rank the size, condition, and landscape context of occurrences of this target.

Target Characteristics | Target Rationale | Goal Selection | **Ranking Criteria** | Occurrences | Goal Attainment

Criteria for Ranking Occurrences

Enter the viability criteria (the ranking specifications) that were used to assess the size, condition, and landscape context of this target.

How you ranked size

How you ranked condition

How you ranked landscape context

Figure 11: Ranking Criteria Form

WORKING WITH OCCURRENCES

The fifth sub-form of Targets is Occurrences (Figure 12). This form accepts and displays information about the individual occurrences of each target.

Figure 12: Occurrences Form

There are now two sets of data navigation buttons at the bottom of the form. You use the top set to move among different occurrences of the same target. You use the bottom set to move among different targets. You can always tell what target you are on by looking at the green box near the top of the form. When you change targets, you automatically change to the occurrences of the new target.

Complete as much of the form as you can. Each field is briefly described below.

Occurrence ID: The Occurrence ID is assigned automatically as soon as you create an occurrence record by entering any information on the form. You cannot enter or change the Occurrence ID.

Occurrence Name: At various times when using CPT, you may want to know which particular occurrences of a target you are looking at. An example might be when you are reviewing the occurrences captured in a Conservation Area. Since the Occurrence ID's are difficult to remember and identify, you may want to assign an identifier that works for you.

Date last observed: Enter the most recent date that the occurrence was observed in the field.

Information Source: Select the source of the information about the occurrence. For some of the choices, additional fields will be enabled.

Heritage Occurrence Code: When the Information Source is “Heritage/CDC”, enter the Heritage Occurrence Code. Hovering your mouse over the text box will show an example of the format of the code.

EO Rank: When the Information Source is “Heritage/CDC”, select the EO rank from the dropdown list.

Expert name: When the Information Source is “Expert”, select the expert’s name from the dropdown list. To appear on the dropdown list, the name must be entered as a participant on the “Participants” tab.

Size, Condition, Landscape Context: Select the rating of the size, condition and landscape context of the occurrence, and add any comments about the rating. (The criteria by which the occurrence were rated should have been entered on the previous screen.)

Overall Viability Rank: Select the viability rank of the occurrence.

Centroid Latitude, Centroid Longitude: If you wish to, enter the centroid latitude and longitude of the occurrence, in decimal degrees to five digits beyond the decimal point. You may not wish to share data on the exact location of occurrences with partners or the general public. Data sharing agreements with Heritage programs may forbid sharing exact locations even within the Conservancy. If you include the information in CPT, please think carefully about how you will make sure that appropriate data security is maintained.

Occurrence comment: Enter any additional information about the occurrence that you wish to maintain. You are not limited by the size of the box; everything you enter will be saved, and can be viewed and printed.

Political/Administrative Unit: Allows you to enter and view information about the Political and Administrative units in which the occurrence is located. The fields are the same as those described above on the Planning Units tab.

Conservation Area: After conservation areas are defined and entered in to CPT, you can indicate which conservation area contains this occurrence. To do so, select the conservation area from the dropdown list.



Note: Usually occurrences will be assigned to conservation areas in a GIS process, and the results will be imported into CPT.

WORKING WITH GOAL ATTAINMENT

The sixth sub-form within Targets displays information about whether the goals were attained for the target (Figure 13). The overall conservation

goal, the Stratification Unit Names, and the goals for the stratification units are displayed as they were entered on the “Goal Selection” tab.

Figure 13: Goal Attainment Form

Complete as much of the form as you can. Each field is briefly described below.

Conservation Goal: The overall conservation goal for the target is displayed, as entered on the Goal Selection form. You cannot change the goal from this tab.

Goal Met? If the goal was met, select the box. A check mark will appear indicating the goal was met.

Reason Not Met: If the goal was not met, select from the dropdown box the reason that most closely describes why they goal was not met.

Comments: Use this space to describe more thoroughly why the goal was not met. You are not limited by the size of the box; everything you enter will be saved, and can be viewed and printed.

Number currently in portfolio: Enter a number that represents the amount of the target in the portfolio. The units and method used to approximate the amount should be the same as that used for the numeric representation of the target goal.

Units: Select the units in which the current amount of the target is expressed. This should match the units in which the target goal is expressed.

Stratification Units: Enter the information for the stratification units following the same rules as for the overall target goal.

3.5 WORKING WITH CONSERVATION AREAS

Working with Conservation Areas actually involves five sub-forms for collecting and displaying information. Once you have started a record for a

conservation area, the name of the conservation area will be displayed in the box at the top of the conservation areas form (Figure 14).

The screenshot shows a header bar with a dark background. Below it, there are two input fields: 'TNC ID' on the left and 'Conservation Area ID' on the right. The 'Conservation Area ID' field has '(AutoNumber)' written in small text to its right.

Figure 14: Top of the Conservation Area form

Below the conservation area name box there are two non-editable ID fields. The field on the right, Conservation Area ID, is the identifier of the conservation area in CPT, and is a random number assigned automatically when you begin a new conservation area record. The field on the left, TNC ID, is an identifier used throughout TNC’s data systems to distinguish areas of interest to TNC – conservation areas, action sites, legacy sites, etc. The TNC identifier is discussed below.

If you have defined more than one conservation area, use the navigation buttons at the bottom of the form to move among them. Or, you may select a conservation area by typing or selecting its name. A new conservation area record is created when you enter the first item of information for that area. The first item entered can be on any of the five sub-tabs.

WORKING WITH CONSERVATION AREA CHARACTERISTICS

You record general information about the conservation area on this form (Figure 15).

The screenshot shows a complex form with several sections and tabs. At the top, there are tabs for 'Conservation Area Characteristics', 'Interests', 'Target occurrences', 'Portfolio Selection', and 'Action Site Selection'. The 'Conservation Area Name' is a dropdown menu. To its right are 'Centroid Latitude' and 'Centroid Longitude' input fields. Below the name field is a table for 'Land Use/Land Cover' with rows for Developed, Agricultural, Natural, Water, and Perennial Snow and Ice, each with a '0.0 %' input field. To the right of this table are 'Area in hectares', 'Nominator', 'Functional?' (checkbox), 'Stratification Unit' (dropdown), and 'Scale' (dropdown). A large text area for 'Description of Conservation Area' is at the bottom right, with a note: 'Note: You are not limited by the size of the box. Everything you enter will be saved.' At the bottom left, there is a 'Record:' field with navigation buttons and '1 of 1'.

Figure 15: Conservation Area Characteristics Form

Each field is described in more detail below.

Conservation Area Name: Enter the name of the conservation area, or an identifier that will enable you to recognize the conservation area on a list.

Centroid latitude, Centroid longitude: Enter the centroid longitude of the conservation area, expressed in decimal degrees with five digits beyond the decimal point. You can generate the centroid latitude and longitude of a mapped conservation area using your GIS software.



Note: If you hover the mouse over the field, you will see an example of the desired format.

After you enter the centroid latitude and longitude of a conservation area, you will be able to assign the TNC ID by clicking the Assign TNC ID button. The TNC ID will appear in the field at the top right of the form.

Land Use/Land Cover: Enter the approximate division of the conservation area by generalized land use /land cover categories. The sum of the percentages must be equal to or less than 100.

Area in hectares: Enter the area of the conservation area in hectares.

Nominator: Select from the dropdown box the name of the person who nominated the location as a conservation area. To appear on the dropdown list, the name must be entered using the Participants form.

Functional?: Select the checkbox to indicate that the conservation area is functional. (See *Designing a Geography of Hope*, Volume II, page A27-5, for the definition of functionality).

Scale: Select from the dropdown list whether the conservation area is a conservation site, a landscape, or a network. (See *Designing a Geography of Hope*, Volume II, page A27-5, for the definition of these terms).

Stratification Unit: Select from the dropdown box the stratification unit in which the occurrence is primarily located. The names in the dropdown box will be those you entered in the Stratification Unit sub-form of Geographic Units.

Conservation Management Status: Enter the approximate division of the conservation area by GAP conservation management status categories. (See *Designing a Geography of Hope*, Volume II, page A17-1, for the definition of these categories). You may designate a portion of the conservation area as being in an “other” management category. If you do so, a field will be activated in which you should describe the “other” category.

Description of Conservation Area: Use this field for a text description of the conservation area. You are not limited by the size of the box; everything you enter will be saved, and can be viewed and printed.



Note: If you already have a text description of the conservation area elsewhere, you can cut and paste it into this field.

WORKING WITH INTERESTS

This sub-form (Figure 16) accepts and displays information about those entities that have political, administrative, ownership or other interests in this conservation area.

Figure 16: Interest Form

Each field is described in more detail below.

Political/administrative units: Enter the political and/or administrative units that overlap the conservation area. This section works the same way as the Political/Administrative Units section of Geographic Units.

Ownership: Enter the ownership of the conservation area. This section works the same way as the Ownership of Planning Units.

Conservation partners / stakeholders: Use this section to enter the name and the particular interest of any relevant stakeholders who are not owners, political jurisdictions or administrative units.

WORKING WITH TARGET OCCURRENCES

This form (Figure 17) displays all the occurrences that have been assigned to this conservation area. You cannot change the data here. To change the assignment of a particular occurrence, go to the Targets tab, then to the Target Occurrences sub-tab, then to the sub-sub-tab Conservation Area, and select a different conservation area. To assign or change the intersection of many occurrences and conservation areas, use GIS and import the results to CPT.

Figure 17: Target Occurrences Form

WORKING WITH PORTFOLIO SELECTION

You use the Portfolio Selection form (Figure 18) to indicate the whether the conservation area is included in the portfolio.

Figure 18: Portfolio Selection Form

Each field is described in more detail below.

Included in Portfolio?: Select a status from the dropdown list. For some statuses, additional fields will be activated.

Date added to Portfolio: If portfolio status is “Irreplaceable” or “Yes”, enter the date the Conservation Area was added to the portfolio.

Date Removed from Portfolio: If portfolio status is “Removed,” enter the date the Conservation Area was removed from the portfolio.

Rationale for status: Enter any information about the rationale for including or excluding the Conservation Area from the portfolio of sites. You are not limited by the size of the box; everything you enter will be saved, viewed and printed.

WORKING WITH ACTION SITE SELECTION

Use the Action Site Selection form (Figure 19) to record the results of the 10-year action site selection process.

Figure 19: Action Site Selection Form

Each field is described in more detail below.

Already Conserved?: Select this checkbox if the conservation area is already conserved.



Note: A conservation area that is already conserved is not eligible to be an action site. **Do Not** complete the rest of this form if the site is already conserved.

Selected as Action (Platform) Site?: Select this checkbox if the conservation area was selected as an action or platform site.

Did you manually override the values of the selection criteria?:

Select this checkbox if you selected the conservation area as an action site when the criteria indicated it should not be selected, or if you failed to select it when the criteria indicated it should be selected.

Targets Value, Biodiversity Health Value, Threat Value, Feasibility Value: Select the appropriate values from the dropdown boxes, and add additional information in the comment fields.

Leverage Value and Comment, Complementarity Value and Comment: For landscape scale sites, select the appropriate values from the dropdown boxes, and add any additional information in the comment fields. For non-landscape scale sites, select “Not applicable”.

3.6 WORKING WITH THREATS AND STRATEGIES

For now, TNC has not reached consensus on how to assess threats during the ecoregional planning process. Therefore, the Threats and Strategies form (Figure 20) allows many variations in the way threats and strategies are handled. You may associate a threat with a particular target or targets, and/or with a particular conservation area or areas.

Figure 20: Treats and Strategies Form

Each record represents a single threat. You can move among multiple threats by using the bottom navigation buttons at the bottom of the form. You may have more than one threat with the same threat category, as long as you distinguish between them in the threat description.

For each threat, you may create a list of targets and/or Conservation Areas where the effect is present. Lastly, you may suggest a strategy or

strategies to combat the threat. You may have more than one strategy per threat, and may navigate among multiple strategies relating to the same threat using the top row of navigation buttons at the bottom of the page.

Each field is described in more detail below.

Critical Threat Category: From the dropdown menu, select the threat category.

Description: Enter a description of the threat. You are not limited by the size of the box; everything you enter will be saved, viewed and printed.

Targets affected by threat: From the dropdown menu you can assign this threat to a previously defined target.

Conservation Areas affected by threat: From the dropdown menu you can assign this threat to a previously defined conservation area.

Strategy Category: If you desire, you can also record the strategy used to work against the threat. Use the dropdown menu to select a strategy. Or, choose “Other Strategy” and define your own.

Strategy Description: Enter a description of the strategy. You are not limited by the size of the box; everything you enter will be saved, and can be viewed or printed.

The rest of the Threats and Strategies form is optional, and follows the example in Appendix 21 of Geography of Hope, Second Edition, April 2000, pps. A21-1 – A21-2. For further explanation of the fields listed below, consult that reference.

Cost, Impact, Probability of Success: Select the cost, size and probability of success from the dropdown menu for each item.

Geographic Scale: From the dropdown menu, select the geographic scale the strategy could be applied to.

Urgency: Select the urgency from the dropdown menu choices. Urgency indicates how critical the strategy is to implement.

Partners: Enter in the name of any partner agencies you would work with. You are not limited by the size of the box; everything you enter will be saved.

Is this an appropriate strategy for TNC to undertake?: Select this checkbox is the strategy is an appropriate policy for TNC to undertake.

Lead Individual: Select an individual from the dropdown menu to indicate who has the lead on this project.

Lead Organization: Select an organization from the dropdown menu to indicate which agency is the lead on this project

3.7 WORKING WITH PARTICIPANTS

Use the Participants form (Figure 21) to enter the contact information for the individuals who participate in the plan’s development. The participant list populates several dropdown boxes in the rest of the application, so a person’s name must be entered on this page before you can access it in the dropdown boxes.

Figure 21: Participants Form

Complete the form with as much information as you know. To create a new record, select the new record icon,

View Participant List/View Participant Details button: Use this button to toggle between a list of the participants, and a view of the details of a single participant.

3.8 BACKING-UP YOUR DATA

It is a good idea to regularly back-up your CPT database. Ideally this should be done to a network server so that in case there is any problem with your PC you will have a working copy. The CPT team recommends that you back-up your data on a bi-weekly basis, at a minimum. However, the exact time frame is up to you.

The project team also recommends back-ups:

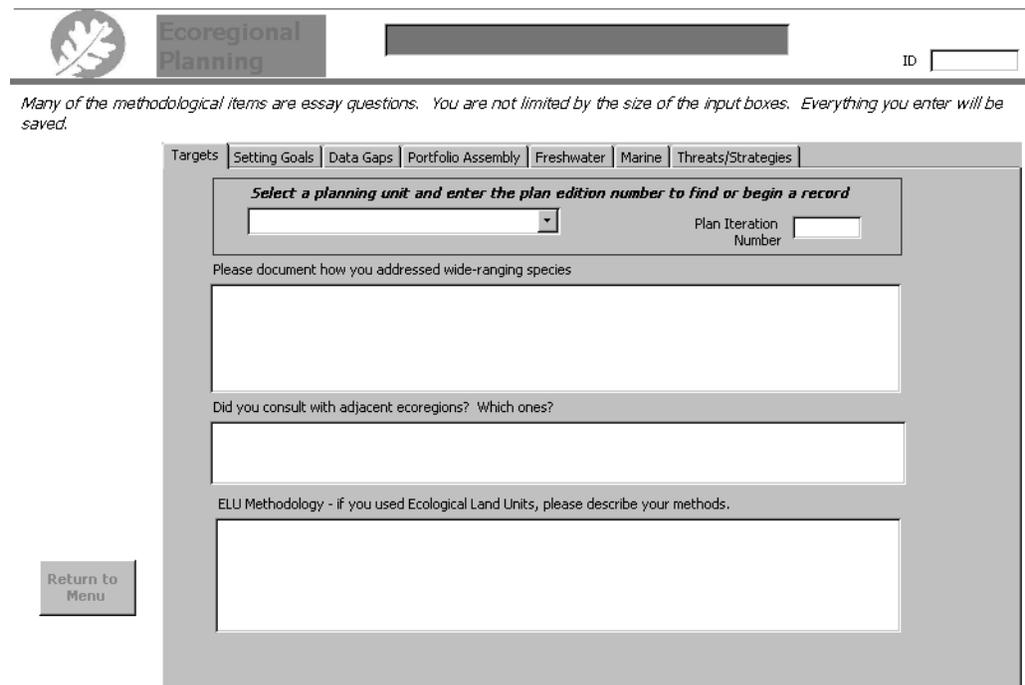
- Before making any major changes, or uploads. You might consider saving the file with a different name, just in-case you need to revert back to a earlier version.
- After you finish working, and making changes, to CPT.

SECTION 4: DOCUMENT METHODOLOGY

Geography of Hope outlines TNC’s ecoregional planning methodology. Within those parameters, there are many decisions you must make about specific ways to implement the methodology in your ecoregion. This part of CPT provides a place to document the decisions your planning team makes, and the reasons for the decisions. If you use this section of CPT as you’re developing the plan, you will have a good start on writing the methodology section of the final planning document.

4.1 WORKING WITH DOCUMENT METHODOLOGY

To enter your methodology, from the main menu select the box next to Document Methodology. The methodology forms appears (Figure 22).



Many of the methodological items are essay questions. You are not limited by the size of the input boxes. Everything you enter will be saved.

Targets | Setting Goals | Data Gaps | Portfolio Assembly | Freshwater | Marine | Threats/Strategies

Select a planning unit and enter the plan edition number to find or begin a record

Plan Iteration Number

Please document how you addressed wide-ranging species

Did you consult with adjacent ecoregions? Which ones?

ELU Methodology - if you used Ecological Land Units, please describe your methods.

Return to Menu

Figure 22: Document Methodology Forms

To begin or select a methodology record, select the ecoregion and plan iteration number on the first screen.

This information is entered on a series of seven forms, listed below.

- Setting Goals
- Targets
- Data Gaps

- Portfolio Assembly
- Freshwater
- Marine
- Threats/Strategies

Each form is self-explanatory and not described within this guide.

SECTION 5: PRINT OR PREVIEW REPORTS

CPT comes with nine predefined reports. These reports are designed to provide you quick summary information about the ecoregions, targets, and conservation areas you work with. Any report that you create and save can be listed here as well. See “Creating and Listing New Reports” on page 36.

5.1 WORKING WITH REPORTS

To access your reports:

1. From the main menu, select the box next to Print or Preview Reports. The report form appears (Figure 23).

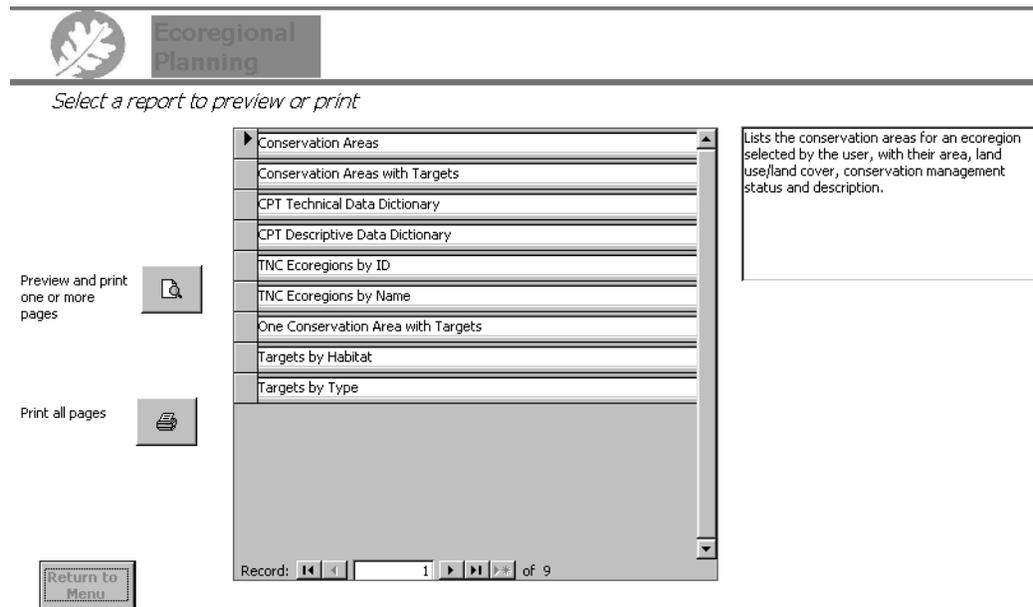


Figure 23: Reports Form

Table 2 briefly explains the purpose of each of the nine standard reports that come with CPT.

Table 2: CPT Standard Reports

Report Name	Description
Conservation Areas	Lists the conservation areas for the selected ecoregion, with the area, land use/land cover, conservation management status and description.

Table 2: CPT Standard Reports

Report Name	Description
Conservation Areas with Targets	Lists the conservation areas for selected ecoregion, with the area, land use/land cover, conservation management status, description, and targets. WARNING: THIS CAN BE A VERY LARGE REPORT! Preview first to decide if you want to print it. See also the report One Conservation Area With Targets.
CPT Technical Data Dictionary	Lists all the fields in all the data tables (not lookup tables) including a description of the data in the field, field type, field size, whether the field is coded, and which lookup table contains the list of valid codes for the field.
CPT Descriptive Data Dictionary	Lists all the fields in all the data tables (not lookup tables), with a description of the data in the field, whether the field is coded, and the name of the lookup table containing the data codes.
TNC Ecoregions by ID	Lists the Ecoregions identified by TNC, in order by the ID numbers used in this database.
TNC Ecoregions by Name	Lists the Ecoregions identified by TNC, in alphabetical order.
One Conservation Area with Targets	Lists the conservation areas for the selected ecoregion, with the area, land use/land cover, conservation management status, description, and targets.
Targets by Habitat	Lists the targets for an the selected ecoregion, grouped by habitat type.
Targets by Type	Lists the targets for the selected ecoregion, grouped by target type.

5.2 PREVIEWING AND PRINTING REPORTS

After you have selected a report you can either:

- Preview and print one or more pages.
- Print all pages

TO PREVIEW ALL OR PART OF A REPORT:

1. Select the report you want to run.
2. Select the “Preview and print one or more pages” icon, . Depending on the report, you may be prompted to enter an ecoregion ID. The report should then appear and you can select what pages, if any, you would like to print.

TO CLOSE A PREVIEWED REPORT

To close the previewed report:

- Select the “Close” icon from the toolbar, or
- Select the lower **X** in the upper right corner of the screen, or
- Select “Close” from the file menu.

TO PRINT ALL PAGES

1. Select the report you want to run.
2. Select the “Print all pages” icon, . The report will be sent to your default printer.

5.3 EXITING THE REPORTS FORM

To exit the report form, select the “Return to Menu” icon, . the main menu appears.

SECTION 6: BEHIND THE SCREENS

The form-based interface of CPT will not be sufficient for those users responsible for managing planning data. Data managers will need to work directly with the CPT tables, importing and exporting data, and writing queries, reports and macros.

To view the database window, from the Window menu, on the toolbar, select “cpt: Database.”

6.1 TABLES

There are 87 tables in CPT, named so that when they are sorted in alphabetical order they are arranged in categories.

To sort the tables in alphabetical order:

1. In the database window, select the Tables objects from the list on the left.
2. Select the Details icon,  , on the default toolbar.
3. Select the Names field at the top of the list of tables.



Note: If the list is in reverse alphabetical order, click the names bar again.

- The first 15 tables on the list (from CAOwnership to Threats) are the primary data tables.
- The next seven tables, whose names begin with “xIntersection...” are intersection or join tables that contain information about the linkages between the primary data tables – for instance, which threats are associated with which conservations areas.
- The next 40 tables, whose names begin with “xlpk...” are lookup tables that contain the values for the coded fields in the database.
- The next 4 tables, whose names begin with “xtbl...” are various utilities the application needs in order to function, most of which you don’t need to do anything with.
- The last 21 tables, whose names begin with “xUsr...” are table structures for you to use if you want to add fields to

existing tables. Each of the xUsr... tables corresponds to one of the primary or intersection data tables.

6.2 QUERIES

Selecting the Queries objects in the database window lists the queries that are used by the forms and reports that come with the database. Queries that you write and save will also show on this list.

6.3 FORMS

Selecting the Forms objects in the database window lists the forms and sub-forms that come with the database. As you have seen from touring the interface, there are only four main forms in the database:

- frmWelcome
- frmEcoregionEntry
- frmERPMethodology
- frmERPReports

The rest are all sub-forms or popup forms that relate to the main forms. Forms that you create and save will be listed here, and you will be able to add buttons to the main menu, or add ways to access your forms from the other main forms.

6.4 REPORTS

Selecting the Reports objects lists the pre-written reports that come with CPT. These are the same reports that you saw listed in a different way on the frmReports form. Reports that you create and save will be listed here.

CREATING AND LISTING NEW REPORTS

After you have created and tested a custom report, you can add it to the Preview or Print Reports page so other users can use it.

To add a new report to the Preview or Print Reports page:

1. Navigate to the Tables objects in the database window.
2. Open the table xtblERPReports.
3. Add a new record to the table by filling in these fields:

- **ReportName:** The name of the report, as listed in the Reports objects in the database window.
- **ReportDisplayName:** The report name you would like the user to see on the list of reports on the Preview or Print Reports page.
- **ReportCategory:** ERP.
- **ReportAuthor:** Your username.
- **ReportDateCreated:** Date you created the report.
- **ReportRequestor:** The person who initially wanted the report to be written. It could be you or someone else on the planning team or in the office.
- **ReportDescription:** The description of the contents of the report that appears on the Preview or Print Reports page. The description can be as long as you wish – there's no limit on the size of the field.

4. Save the database.

6.5 PAGES, MACROS, AND MODULES

Selecting the Pages objects will show that Data Access Pages are not used in CPT.

Selecting the Macros objects lists the pre-written macro(s) in CPT. Macros that you write will also be listed here.

Selecting the Modules objects lists the Visual Basic modules that CPT uses.

6.6 IMPORTING DATA

Often some of the plan data will have been collected in another data format outside of CPT. These data almost never need to be re-entered by hand into CPT, but can be imported. There are three steps involved:

1. Preparing the data for import
2. Importing the data table
3. Adding the data to the CPT data files.

PREPARING THE DATA

Often your data will need minimal preparation. Access can import Excel and Lotus 123 spreadsheets, dBase and Paradox tables, and text files. (This is not a comprehensive list. To find out about other formats, see Microsoft Access Help, under the topic Importing and Linking Data or

Objects.) If your data is in one of these formats, make sure you understand the data, and that the columns and rows contain consistent data. If you can, verify the accuracy of the data and correct data errors before importing it to Access.

If your data are in the attribute table of an ArcView shapefile or an ArcINFO coverage, you can export it as a dBase file and import that data into Access. To do this:

1. In ARCVIEW, make the theme containing the data the active theme.
2. Select the Open Theme Table icon. The table should appear.
3. With the table open, select Export from the File menu. When you are asked to select an export format, select dBase. You will be asked to name the output file, which will have the extension .dbf.



Note: Be sure you remember where you saved the file.

IMPORTING THE DATA

To import the data:

1. In the database window of CPT, select the Tables objects.
2. From the File menu, select Get External Data.
3. Select Import. A file selection box will appear.



Note: Note that you must first select the correct file-type in the Files of type: text box at the bottom of the box.

4. Navigate to the file you want to import and select it.
5. Select Import. The Import Wizard will guide you through the import process.

ADDING DATA TO THE CPT FILES

There are generally two techniques for adding imported data to the CPT tables.

- To add completely new records to a CPT table, use an Append Query.
- To add values to fields in existing records, use an Update Query.

For example, if you imported a list of targets (scientific name, common name, and global element code) and a separate list of global ranks for the same targets, first you would use an append query to add your targets to the CPT Targets table, and then you would use an update query to add the global ranks to the TargetGlobalRank field.

APPENDING NEW RECORDS TO CPT TABLES

1. Select the Queries objects. Create a new query in design view. Add the table you are importing *from* to the query.
2. Drag down to the query grid the fields you want to append. Run the select query to make sure you are getting the data you think you're getting. Note the number of records.
3. When you're satisfied that you've got the data you want, go back to the design view of the query and click the down arrow next to the Query Type icon on the toolbar. From the list of types of queries, select Append Query. A popup box will ask what table you want to append to. Enter the name of the table you are importing *to*. In the Append To line on the query grid, select the name of the field that corresponds with the field in that column.
4. If you try to run the append query now, you will get an error message "Conservation Planning Tool can't append all the records in the append query." The small print on the error message will identify the reason as "key violations". In order to create relationships or links between tables, the ID or key field from one table must be included as a *foreign key* on each record in the other table (the first table is called the *parent table*, and the table in which the parent key is included is called the *child table*).
5. When you are importing data, you must import the data for the parent table first, so that ID's are assigned to the records in the parent table. Then you must include the parent table in the append query for the child table, so that you can assign the correct value to the foreign key.
6. Looking at the list of fields in the Targets table, we see that ERID and ERPID are in that table. (The names of key fields end in "ID", and are not real words). ERID is the ecoregional ID. Including this makes sure your target record is assigned to the correct ecoregion, now and in the future if it is rolled up at a regional or

national level. ERID is displayed at the top of all the forms to the right of the Ecoregion name. Other ID's must be looked up in the appropriate tables. ERPID is the ecoregional plan ID. Cut and paste it from the Ecoregional Plans table into your query. Figure 24 shows the append query for the example given above.

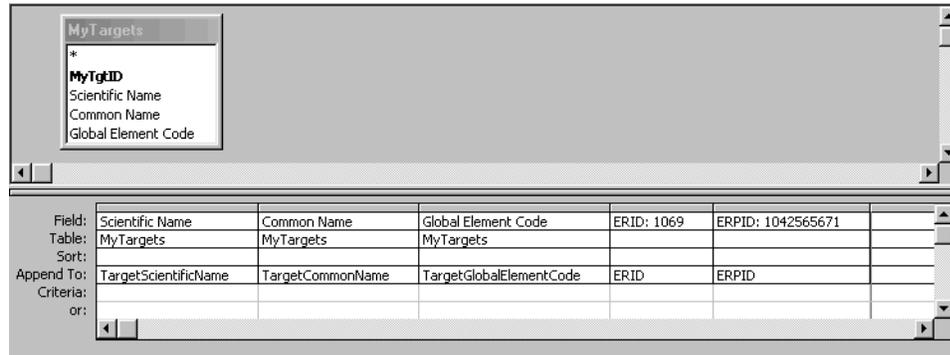


Figure 24: Example - Append Query

7. Run the append query, then close the query and open the table you've appended the data to and check the results. Check that the data ended up in the appropriate fields, that the correct number of records was appended, and that you didn't lose data because of different data types, lengths, or formats between the two datasets.



Note: Notice that an ID has been assigned to each record you appended. The ID's are assigned when the record is created, and are random. The advantages of automatically assigned random ID's are 1) you don't have to do anything to assign ID's when you enter or import data; and 2) the technique enables sharing data using Access replication.

UPDATING CPT RECORDS

1. Select the Queries objects. Create a new query in design view. Add the table you are importing *to* and the table you are importing *from* to the query. Join the two tables by a common field. The two tables must have a field in common. In the example, you can't add the global ranks to the list of targets unless my table of global ranks shows which rank goes with which target, and the target is identified in the same way in both lists. The identifying fields don't need to have the same name, but they need to have

the same content.

2. From the table you are importing *to*, drag the fields to be updated to the query grid. Run the select query and make sure you will be updating the number of records you expect to update. (The query should include one record for each record that is in both tables).
3. When you're satisfied that you're getting the data you want, go back to the design view of the query and click the down arrow next to the Query Type icon on the toolbar. From the list of types of queries, select Update Query. In the Update to: row, type the table name and field name of the field you want to import into that field, separated by a dot (.). (It won't work to drag a field to the Update to: row.) The update query for the example is illustrated in Figure 25.

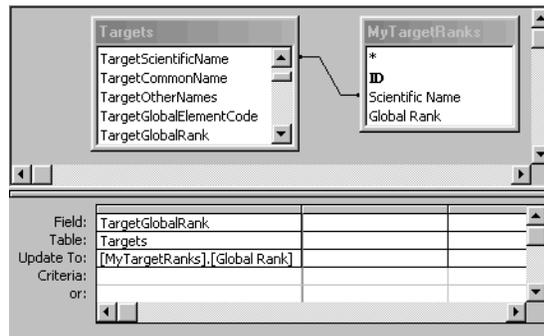


Figure 25: Example - Update Query

4. Run the query, then close the query and open the table you updated. Check that the correct field has been updated, and that the expected number of records have been updated.

In the previous example, the ERID and the ERPID were the same for each record you imported into the Targets table. In other cases, you will want to match the records in the new table

For instance, in the previous example, now that you have imported the targets, you have a list of target occurrences that you want to import. The TargetOccurrences table has a place in it for TGTID, the ID from the Tar-

gets table. If your list of target occurrences has a field in common with the Targets table, you can make the link directly, as in Figure 26.

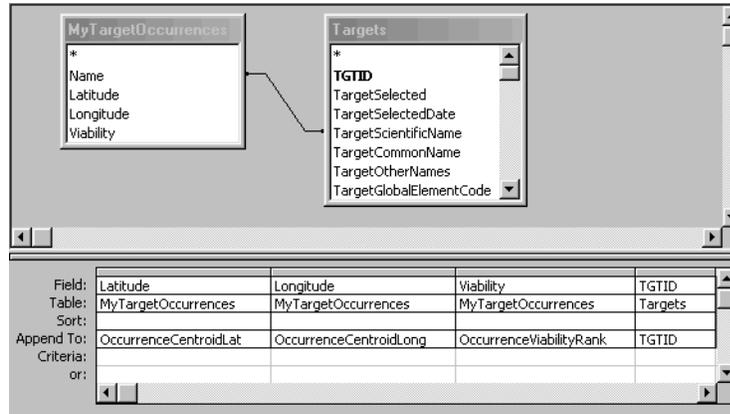


Figure 26: Example - Target Occurrences Table

Notice that you don't have to include the linking field (in this case Sci-Name/TargetScientificName) in the query grid.

Your list of target occurrences need not have a field in common with the CPT table Targets, as long as it has a field in common with the table you imported the targets from. In this case, all three tables must be included in the query, as in Figure 27.

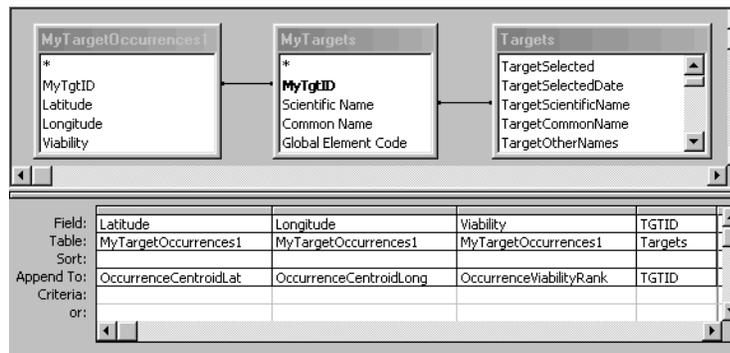


Figure 27: Example - Query with Three Included Tables

6.7 EXPORTING DATA

Using the built-in Access utilities, you can export CPT data in a variety of formats. This section explains generally exporting data, and then talks more specifically about exporting data for use by ArcView.

PERFORMING A SIMPLE EXPORT

Use this method to export a table or query out of CPT.

1. Select the table, or query, you wish to export.
2. Select File | Export. A window will appear, in which you select where you want to save the exported data.(Figure 28).

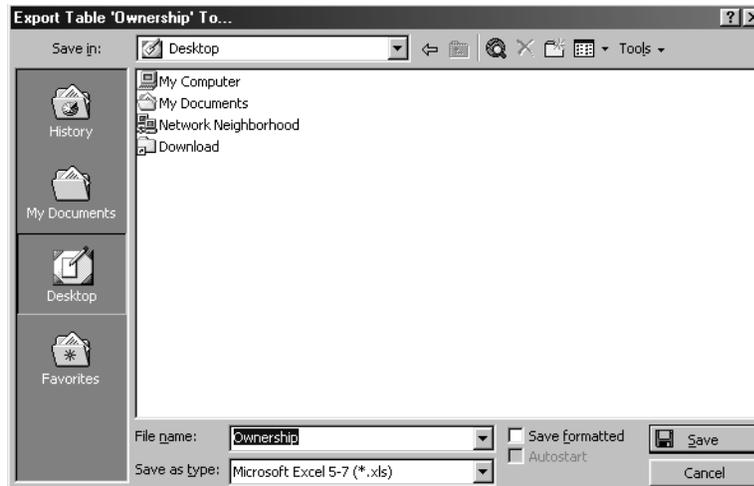


Figure 28: Example - Simple Export of Data

3. Enter the File name.
4. At the bottom of the window is a dropdown box labeled “Save as type:”. In this box select the type of file you want to export. If you choose “Microsoft Access”, you have to put the exported table in a database that already exists. If you choose to export a “Text” file, a wizard will lead you through the specifications for the file. For all other file types (dBase, Excel, etc.), the export will create a new file of that type.
5. Select Save. Your selection is saved and you are returned to the main database window.

Exporting Data for ArcView

ArcView tables are in dBase format. DBase (as of this writing) allows no more than eight characters in a field name. If you try to export CPT tables directly to dBase, it will try to truncate the field names to eight characters, most often ending up with meaningless and duplicate names (“Occuren”, for instance.) Therefore, you must write a query that changes the field names, and then export the query.

This process is describe below.

1. From the databases Objects menu, select Queries.
2. Create a new query in design view. Add to the query window the table or tables from which you want to export data. Join multiple

tables by a common field. Drag to the query grid the fields you want to export.

3. Change the names of the fields:
 - In the “Fields” row of the query grid, insert the new name, followed by a colon, before the actual name of the field. For example, to change the name of the field “OccurrenceCentroidLat” to “Lat”, the cell would read “Lat: OccurrenceCentroidLat” (Figure 29)..

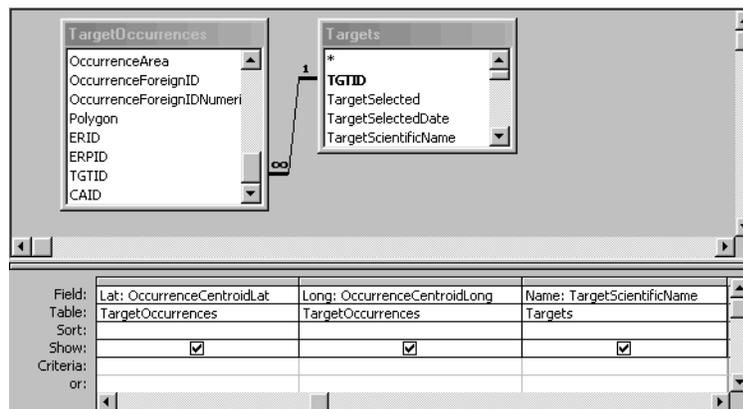


Figure 29: Example - Renaming Fields for ArcView Export

Note: You are only changing the field names in the query and its result, not in the underlying tables.

4. Run the query to make sure it looks the way you want it to.
5. Save the query.
6. Export the query as above in “Performing a Simple export.”

6.8 USING THE USER TABLES

The structure of the data tables in CPT cannot be changed by the user: you cannot add or delete fields, and you can’t change the data type, length or name of a field. This is because we are going to roll the CPT data up into divisional and worldwide databases, for which the data must be in an identical known format across ecoregions.

You are able to customize the data in CPT by using the user tables. Each of the 21 tables in CPT whose names begin with “xUsr...” corresponds by name with one of the basic data tables in CPT. Initially, each user table consists of one field and no records. The field corresponds to the ID field of the partner basic data table. You can add fields to the user tables and link them to the basic data tables. You can then use the linked tables in

queries, reports, or forms as if they were one table containing the basic data and your customized data.

For example, if you wanted to include information about the participants' attendance at various meetings in the Participants table, you would add the desired fields to the xUsrParticipants table. Then you would write a query to append a record for each participant to the xUsrParticipants table. You would then write a query that displays the attendance information along with the rest of the participant information, and add the existing attendance information to the xUsrParticipants table via the query. You would use that query as the basis for other queries and reports. If you wished, you could modify the Participants form to display the attendance information.

An example is detailed on the next page.

1. Open xUsrParticipants in design view.
2. Add the desired fields by filling in the field name and type, and a description of the field if you wish (Figure 30).

Field Name	Data Type	Description
PARTID	Number	ID from Participants table
Attended101002	Yes/No	whether participant was at project kickoff meeting, 10/10/02
Attended121502	Yes/No	whether participant was at expert's workshop, 12/15/02
Attended012703	Yes/No	whether participant was at portfolio assembly meeting, 1/27/03

Field Properties	
General	Lookup
Field Size	Long Integer
Format	
Decimal Places	Auto
Input Mask	
Caption	
Default Value	0
Validation Rule	
Validation Text	
Required	No
Indexed	Yes (No Duplicates)

A field name can be up to 64 characters long, including spaces.
Press F1 for help on field names.

Figure 30: Example - xUsrParticipants Table

3. Save and close the table.

Write a query to append a record for each participant to the xUsrParticipants table;

1. Create an append query that appends PARTID from Participants

to xUsrParticipants (Figure 31).

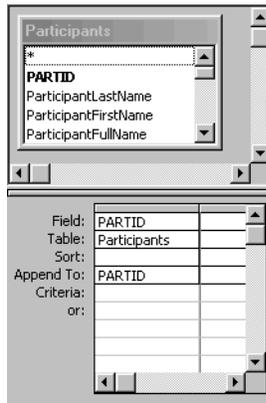


Figure 31: Example - Query to Append PARTID to xUsrParticipants

2. Run the query; check the xUsrParticipants table to see the results.

Write a query that displays the attendance information along with the rest of the participant information.

1. Write a select query that links Participants and xUsrParticipants by PARTID (Figure 32).

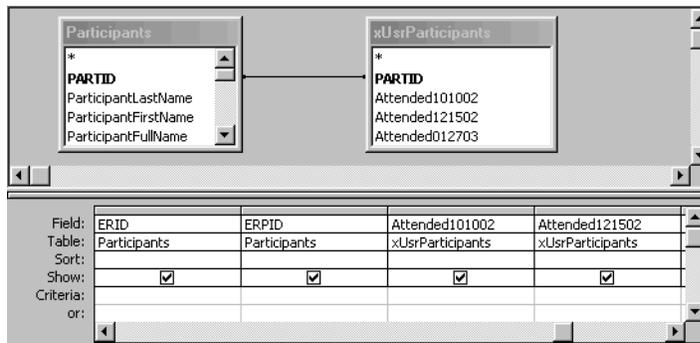


Figure 32: Example - Query Linking Participants and xUsrParticipants

2. Save and name the query. You will be using it from now on instead of the Participants table.

Add the existing attendance information to the xUsrParticipants table via the query.

1. Open the query.
2. Enter the appropriate data.



Note: You can use the Format/Hide Columns feature to view only the columns you want to work with.

Modify the Participants Form to display the attendance data.

1. In the Forms section of the database window, open frmParticipants in design view.
2. Double-click the small square in the upper right corner of the form to display the properties sheet of the form.
3. Find the Record Source property (at the top of the Data and All lists). Change the record source from the Participants table to the query you just created.
4. Close the properties sheet.
5. Click the Field List icon to display the list of fields in the source query. Add the attendance fields to the form by clicking and dragging each field to the form. Arrange the fields and their labels any way you want on the form.



Note: You may have to make the form larger to accommodate your new fields. If you do, you will have to open the forms properties sheet again and change the Scroll Bars property to show the appropriate scroll bar (vertical, horizontal, or both). In this example, we chose to use the existing area of the form.

6. Save and close the form.
7. Close CPT then open CPT and navigate to the Participants form to view your added fields (Figure 34).

The screenshot shows a web form titled "View Participant List". The form contains the following fields:

- Last Name:
- First Name:
- Title:
- Affiliation:
- Expertise:
- Mailing Address (first line):
- Mailing Address (second line):
- City: State/Province: Postal Code:
- Country:
- Telephone:
- Fax:
- e-mail:

At the top right of the form, there are three dates with small grid icons next to them: "Attended 10/10/02", "Attended 12/15/02", and "Attended 01/27/03".

At the bottom of the form, there is a record navigation bar: "Record: [Previous] [Next] 2 of 2".

Figure 33: Example - Modified Participants Form