IN THIS CHAPTER

- Working with form properties
- Creating your own controls
- Using sections and subforms effectively



By now you've got a good handle on how to manage the data in your Access applications. You can create and customize tables to store your data, and you know how to build the queries to present that data as information. Now it's time to turn your attention back to the user interface of your Access database. So far, you've let Access do most of the work of building forms for you. In this chapter, we'll show you how to tap the power of form design view to make your Access forms more usable and flexible and to make them look the way you want. This is also a good time for you to learn about the object dependencies task pane, which helps you keep track of how everything in your database fits together.

Setting Form Properties

Like just about everything else in Access, forms have properties. The properties of a form control some of its behavior, as well as its look and feel. For example, you can use form properties to prevent data from being accidentally deleted or to change the background color of a form from gray to lime green. In this section, you'll learn about two ways to set the properties of your forms. For a quick facelift, you can use the AutoFormat function. On the other hand, for complete control over all aspects of your forms, you can use the Properties window.



note

Using AutoFormat

AutoFormat in Access provides an easy way to change the overall appearance of a form.

Although this tool is easy to use, it requires you to work with your form in design view. That's nothing to be scared of—we're going to

work almost exclusively with design view in this chapter—but you need to be careful. In design view, you can change any aspect of a form, including things (such as its connection to the underlying data) that you might not want to alter.

Here's how you can use AutoFormat to dress up the Catalogs form:

- 1. Select the **Forms** shortcut in the Database window.
- 2. Select the **Catalogs** form.
- Click the **Design** button on the Database Window toolbar to open the form in design view.
- Select Format, AutoFormat, or click the AutoFormat button on the toolbar. Either way, the AutoFormat dialog box will open, as shown in Figure 13.1.



Notice that the Standard option is the default format; this feature defaults to the format last used, so don't worry if your system choose a different option.



- 5. The list at the left side of the AutoFormat dialog box includes all the available AutoFormats. As you click each one, the center section of the dialog box changes to show you a preview of the format. Select the **Blends** AutoFormat.
- 6. Click **OK** to apply the AutoFormat.
- 7. Select **View**, **Form View** to see the form with the selected AutoFormat applied, as shown in Figure 13.2.



8. Click the **Save** button on the toolbar to save the changes to the form. Close the form when you're done inspecting the results.

Applying an AutoFormat to a form doesn't affect any of the form's functions. Instead, it makes changes to the form's appearance. In particular, it can change the font used for labels and text, the color used for controls, the image used for the form's background, and the borders used around controls.

You can do two other things in the AutoFormat dialog box. First, if you click Options, you can selectively choose whether to apply the AutoFormat to fonts, colors, and borders or to leave them alone. Second, you can click Customize to modify the available AutoFormats as follows:

- You can create a new AutoFormat based on the contents of the current form.
- You can change the selected AutoFormat to match the current form (instead of changing the form to match the AutoFormat).
- Vou can delete an AutoFormat entirely.

When you come up with a look that you particularly like for a form, you can use the AutoFormat options to turn this look into a new AutoFormat. Then, you can apply that AutoFormat to the other forms in your database, allowing you to easily create a consistent user interface. You'll learn more about customizing AutoFormats in Chapter 14, "Dressing Up Your Reports."

Using the Properties Window

You'll recall from previous chapters that properties are the values that describe a particular object. Similar to other objects in Access, forms have a set of properties that control their appearances and behaviors. To change the properties of a form, you can use the Properties window. Some properties you can even change in form view. Here's an example:

- 1. Open the **Plants** form in form view. You'll see the first record in the Plants table displayed on the form.
- Do one of the following: select View, Properties or click the Properties toolbar button (as usual, Access provides more than one way to do things). This



in Access itself, not in individual databases. So, if you create a new AutoFormat in one database, you can use it in all your databases. opens the Properties window, as shown in Figure 13.3, which displays the properties of the control that has the focus (in this case, the CommonName text box). (Pressing F4 will open the Properties window in design view.)



- 3. Click twice—slowly (don't double-click)—in the gray area between the controls on the form. The Properties window changes to show the properties of the form itself.
- 4. Click the **Format** tab in the Properties window.
- 5. Scroll down the list of properties to locate the Picture property, which is currently set to (None). Click in this property to reveal a build button.
- Click the build button to open the Insert Picture dialog box. Browse to the Windows directory on your computer, and select the FeatherTexture.bmp file. Click **OK**.
- 7. Select the **Picture Tiling** property and change its value from No to **Yes**. Figure 13.4 shows the resulting form.
- 8. Close the Properties window and save the form.

Unlike AutoFormat, you can use the Properties window no matter which view you're using to display a form—either design view or form view. As you saw in this example, changes made through the Properties window take effect immediately (in form



FIGURE 13.3

view). The changes aren't permanent, though, unless you save the form after making the changes.



What else can you change with the Properties window? Anything! Well, just about. In fact, if you look at the properties that appear for the form, you'll find an almost frightening array of properties. Fortunately, you won't need to use most of these.

Five tabs appear at the top of the Properties window. As you click these tabs, the window displays different sets of properties. These tabs are as follows:

- **Format**—Properties that control the appearance of the selected item
- Data—Properties that control the data displayed by the selected item
- **Event**—Properties that control the code executed by the selected item
- Other—Properties that don't fit into one of the three previous classes
- **All**—All the properties of the item in one big list

We won't discuss event properties in this chapter; you'll learn a bit about them in Chapter 15, "Automating Your Database." In this chapter, you'll work only with properties from the Format, Data, and Other categories.

Table 13.1 lists some of the properties of the form that you might find useful.

TABLE 13.1Properties of an Access Form

Property	Meaning
Record Source	The table or query from which the form gets its data
Caption	The text displayed at the top of the form
Allow Edits	Controls whether the form can be used to edit data
Allow Deletions	Controls whether the form can be used to delete data
Allow Additions	Controls whether the form can be used to add data
Scroll bars	Controls whether scrollbars appear on the form

Property	Meaning
Record Selectors	Controls whether record selectors (the bars to the left of the data) appear on the form
Navigation Buttons	Controls whether the navigation bar appears at the bottom of the form
Dividing Lines	Controls whether lines appear between the records when the form is displayed in continuous forms view, as well as whether lines appear between sections of the form, such as the detail section and footer section
Auto Resize	Controls whether the form automatically resizes to show all its con- trols when it is opened
Auto Center	Controls whether the form is automatically centered on the screen
Picture	The picture (if any) to use for the form's background
Picture Size Mode	Specifies whether any background picture should be stretched to fill the form
Picture Tiling	Controls whether any background picture should be repeated to fill the form
Moveable	Controls whether the form can be moved onscreen after it has been opened

Here's how you might use some of these properties to further customize the Catalogs form:

- 1. Open the **Catalogs** form in design view.
- 2. If the Properties window is not already open, press F4 to open it.
- 3. Select the Format tab.

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- 4. Double-click in the **Dividing Lines** property to change its value from Yes to No.
- 5. Change the Navigation Buttons property to No.
- 6. Select the **Data** tab.
- 7. Change the Allow Deletions property to No.
- 8. Close the property sheet.
- 9. Select **Form View** from the View drop-down list on the toolbar. The form will display as shown in Figure 13.5. Note that the dividing lines and navigation bar are gone.
- Click in the navigation bar to the left of one of the records, and then press the **Delete** key. Access will beep, and the status bar will display the message Records can't be deleted with this form.
- 11. Save and close the form.

ne Catalogs	Name	Address	City	State	Zip	Country	Specialty
rm after fur-	Gurneys,	Capital Stre	Yankton	SD	57079	USA	
er design ork.	Rantree	391 Butts Road	Morton	WA	98356	USA	Fruit trees
	Richters		Goodwoo	Ontario	LOC 1.	Canada	
	Territoria	PO Box 158	Cottage (OR	97424	USA	Northwest varieties
	Wildseeg	PO Box 3000	Frederick	TX	78624	USA	

Using the Field List

Another tool that's available only in design view is the Field List. The Field List enables you to easily add new data to be displayed on a form. To see the Field List in action, you'll build a new form based on the Plantings table, which doesn't yet have a user interface in the database. To add one, follow these steps.

1. Select the **Forms** shortcut in the Database window.



Setting Allow Deletions to No only prevents deleting entire records. You can still delete the contents of any individual control.

- 2. Click the **New** button on the Database Window toolbar.
- 3. In the New Form dialog box, select **Design View**. Then select the **Plantings** table in the data source combo box, as shown in Figure 13.6.
- 4. Click **OK** to create the form and open it in design view.
- 5. Access might automatically display the Field List. If it doesn't, either click the **Field List** button on the toolbar or select **View, Field List**. The Field List (shown in Figure 13.7) lists all the fields in the table or query on which the form is based—in this case, the Plantings table.
- 6. To add controls to the form, you can drag and drop items from the Field List. For example, select the **DatePlanted** field in the Field List; then drag and drop it onto the form. When you release the mouse button, Access creates a label and text box for this field.
- 7. Drag and drop the **Notes** and **Future** fields from the Field List to the form.

FIGURE 13.6	New Form	?×
Creating a new form from scratch.	Create a new form without using a wizzrd.	Design View Form Wizard AutoForm: Columnar AutoForm: Tabular AutoForm: Datasheet AutoForm: PivotTable AutoForm: PivotTable Chart Wizard PivotTable Wizard
	Choose the table or query where the object's data comes from:	Zantinos v OK Cancel
FIGURE 13.7 The Field List.	Plan Red Notes NumberPlanted DatePlanted PurchasePrice PlantingKey Future	

Photo OnlineReference

- 8. Click the **Save** button on the toolbar. Name the form **Plantings** and click **OK**.
- 9. Select View, Form View to see your new form.

Chapter 11, "Customizing Your Tables," discussed the fact that properties in Access can be inherited from one object to another. The new Plantings form provides a good example of this. Because you set properties on fields when you built the Plantings table, the form automatically makes some settings for you:

- The Caption property for each field is used as the text for the label on the form.
- The Description property for each field is displayed on the status bar when that field is active.
- The data type for each field is used to determine the type of control to display. That's why the Future field (which accepts only Yes or No values) is displayed as a check box rather than as a text box.
- The Format and Input Mask properties control the appearance and function of the control that holds the Date field.

Access 2003 also keeps track of inherited properties as you work with the database. For example, follow these steps to change a property in the Plantings table:

- 1. Close the Plantings form.
- 2. Select the **Tables** shortcut in the database window.

- 3. Open the Plantings table in design view.
- Change the Description property of the DatePlanted field to Date that these plants were planted.
- 5. When Access displays the Property Update Options icon, click it and select the **Update Status Bar Text everywhere DatePlanted is used** option.
- 6. In the resulting Update Properties dialog box, select only the forms that you want to display the new Description, and click **Yes**.
- 7. Save and close the table.
- 8. Select the Forms shortcut in the database window.
- 9. Select the **Plantings** form.
- 10. Click the **Open** button.
- 11. Check the status bar of Access. You'll see that the status bar text for the DatePlanted control has been updated.

Using the Toolbox

The last major form design aid you need to know about is the Toolbox. The Toolbox is used to add new controls (labels, text boxes, check boxes, and so on) to forms. These controls can be attached to data (such as the text boxes and check box you just created on the Plantings form), or they can be independent of any data (such as the labels that contain the captions for those controls).

To see the Toolbox, place a form in design view and either click the **Toolbox** button on the toolbar or select **View, Toolbox**. Figure 13.8 shows the Toolbox and the buttons it contains (your Toolbox might be shaped differently; you can drag the borders to control its size and shape).

Most of the buttons on the Toolbox are used to select the type of control with which you want to work. We'll show you how to use the following six common buttons later in this section of the chapter:

- Label—Used to display unbound text
- Text box—Used to display an area in which the user can type



Check box—Used to allow making a yes or no choice



- List box—Used to display a list of information
- **Combo box**—Used to display a drop-down list of information
- **Command button**—Used to display a button

Three of the buttons in the Toolbox have special meanings:

- Select Objects arrow—Used to choose an already existing control with which to work.
- Control Wizards button—Turns the Control Wizards on or off. You should have them turned on for now.
- More Controls button—Allows you to add more controls to the Access Toolbox. We won't be using this button in this book.

Labels

Perhaps the simplest of all controls is the Label control, which is designed for displaying information, not editing information. When you see field names or captions displayed on a form, those are all Label controls. Although Label controls are not as complex as other controls, they do offer an easy way to practice some essential form design operations: placing, moving, sizing, and changing the properties of controls. Start by following these steps to add some Label controls to the Plantings form:



- 1. Open the **Plantings** form in design view. If the form is still on your screen in form view, you can select **View**, **Design View** to change it back.
- 2. Click the **Label** control in the Toolbox, and move your cursor to the form. It will display a crosshair and a capital letter *A*, indicating that it is ready to create a label. Click and hold the mouse button where you want the upper-left corner of the new label to be on the form. Then, drag the cursor down and to the right. A box will appear as you drag, indicating the dimensions of the new control.
- 3. Release the mouse button; the label will be displayed as a blank, white box with a blinking cursor. Type the text Number Planted and click **Enter** to finish creating the label. Access will place an alert Smart Tag next to the new label. If you hover your cursor over the alert, you'll see the text "This is a new label and is not associated with a control." That's nothing to worry about; you'll create the associated control later.
- 4. Create a second label beneath the first one, following the same steps. Enter the text **Purchase Price** for the second label.

You might not have managed to place the controls precisely where you want them when you created them. That's okay because Access offers flexible ways to control the sizes and positions of controls. Try these steps to see how you can alter the placement of the new controls:

- 1. Click in the **Number Planted** control, and Access displays eight dark boxes around the control. These boxes are called *sizing handles*; there's one at each corner of the control and one in the middle of each side of the control.
- 2. To resize the control, click one of the sizing handles, hold down the mouse cursor, and drag the handle in the direction in which you want to move that part of the control.
- 3. To make the control exactly the right size to display its contents, double-click any one of the sizing handles.
- 4. To move the control, move the cursor until it is over one of the sides of the control, between sizing handles. The cursor turns into an open-palmed hand at this point. Click and hold the mouse button, and you can drag the control wherever you want to place it.
- 5. Press F4 to display the Properties window if it's not already visible.
- 6. Click the **Format** tab of the Properties window.
- 7. Four properties dictate the size and position of the control. The Left property measures the distance between the left side of the control and the left side of the form, whereas the Top property measures the distance between the top of

the control and the top of the form. The Width property measures the width of the control, and the Height property measures the height of the control. Type a new value in one of these properties, and you'll see the control immediately change in response.

8. With the Number Planted control still selected, hold down the **Shift** key and click the **Purchase Price** control. This results in both controls being selected, as shown in Figure 13.9. Note that the Properties Window now displays values for the properties that the two controls have in common. For example, they're both the same height, so the Height value is displayed; but they have different widths, so the Width value is missing.

FIGURE 13.9	Microsoft Office Access 2003 Beta	- - ×
The Properties	Ele Edit View Insert Format Tools Window Help	Type a question for help 👻
window with		
multiple con-		
trols selected.	Plantings : Form Cotal Cota	Plan X Bed Notes NumberPlanted DatePlanted PurchasePrice Planting(ky) Future Photo OnlineReference
	Displayed caption of object	

- 9. Type a value in the Properties window for the Left property. You'll see that the new value is applied to both selected controls.
- 10. Select **Format**, **Size**, **To Widest** to make both controls the same width. The other choices on the Format, Size submenu offer other ways to make multiple controls the same width or the same height.
- 11. Hold down **Shift** and click the **Purchase Price** control again. This deselects that control, leaving only the Number Planted control selected.
- 12. Drag the **Number Planted** control to the left or right so that the two controls are not lined up vertically.

- 13. Place the mouse cursor at a point below and to the right of both controls. Now hold down the mouse button and drag the mouse up and to the left; Access draws a box that follows the mouse pointer as you do this. When the box includes both controls, release the mouse button. Both controls are now selected.
- 14. Select **Format**, **Align**, **Left** to set the Left property of both controls to the same value. The Format, Align submenu contains other choices for aligning controls.

Besides the sizing and placement properties, many other properties are available, even for a control as simple as the Label. Inspecting the Properties window with a Label selected shows you the entire list. Table 13.2 lists some of the properties that you'll most likely find useful as you're starting out.

Property	Meaning
Name	Each control on a form has a unique name. Until you start writing code, you won't need to worry about this. The caption of the Properties window shows both the control type and the control name when you have a control selected.
Caption	Specifies the text displayed in the control.
Left	Specifies the distance between the left edge of the control and the left edge of the form.
Тор	Specifies the distance between the top edge of the control and the top edge of the form.
Width	Specifies the width of the control.
Height	Specifies the height of the control.
Back Style	Specifies whether the background of the control is transparent.
Back Color	Specifies the background color of the control.
Special Effect	Specifies the 3D appearance (if any) of the control.
Border Style	Specifies the style of line used to draw the box around the control in form view.
Border Color	Specifies the color of the line around the control in form view.
Border Width	Specifies the width of the line around the control in form view.
Fore Color	Specifies the color of the text in the control.
Font Name	Specifies the font used to display text in the control.
Font Size	Specifies the size of the text in the control.
Font Weight	Specifies the boldness of the text in the control.

Property	Meaning
Font Italic	Controls whether the text in the control appears in italic.
Font Underline	Controls whether the text in the control appears underlined.
ControlTip Text	Specifies the control tip to appear when the user hovers the cursor over the control.

You can set any of the properties listed in Table 13.2 by making entries directly in the Properties window. However, user interface shortcuts exist for some of these properties as well. Follow these steps to explore some of the properties of the Label control:

- 1. Select the Purchase Price control.
- 2. Click the drop-down arrow next to the **Fill/Back Color** button on the toolbar. Select a background color for the control by clicking one of the color patches that appears.



- 3. Click in the **Fore Color** property in the Properties window. A build button appears to the right of the property—click it.
- 4. Select a color from the **Color** dialog box and click **OK** to assign that color to the text of the control.
- 5. Click the drop-down arrow next to the **Special Effect** button on the toolbar; then select the **Shadowed** special effect.
- 6. Click in the **Font Name** property in the Properties window. A drop-down arrow appears; click a font name to assign that font to the control.
- 7. Double-click in the **Font Italic** property in the Properties window to switch the property value from No to **Yes**.
- 8. Double-click one of the sizing handles for the control to ensure that it can still display all its text.

You might have noticed that the Fore Color and Back Color properties display numbers in the Properties window. That's because Access assigns a numeric code, ranging from 0 to 16 million, to each of the colors it can display. If you pick a number at random for a color property, you'll get a random color—although generally it's more useful to use the toolbar buttons or the Color dialog box to select the color you want!

Text Boxes

Text boxes provide a control that can display data from a table and that a user can use to edit or enter data. Most of the controls you've been working with on forms so far in this book are text boxes. You'll find that all your skills from manipulating labels apply equally well to text boxes. In fact, all controls are sized, placed, and so on using the same techniques.

Follow these steps to add some text boxes to the Plantings form:

- 1. Select the **Text Box** tool in the Toolbox. The Properties window displays the default properties for a text box control. Set the Auto Label property to **No**.
- 2. Now move your cursor to the form. It displays a crosshair and control with letters in it, indicating that it is ready to create a text box. Click and hold the mouse button where you want the upper-left corner of the new label to be on the form; start just to the right of the Number Planted label. Then, drag the cursor down and to the right. A box appears as you drag, indicating the dimensions of the new control.
- 3. Release the mouse button, and the text box is displayed with the contents Unbound.
- Click in the **Control Source** property to display both a drop-down arrow and a build button. Click the drop-down arrow and select **NumberPlanted** from the list.
- 5. Hold down **Shift** and click the **Number Planted** label so that both the text box and the label are selected. Use the Format menu to size and align the two controls.
- 6. Click the **Text Box** control in the Toolbox again.
- 7. Set the Auto Label property to Yes.
- 8. Draw another text box on the form. This time, however, when you release the mouse button, Access creates both a Text Box control and a Label control. Both controls will be selected.
- 9. Move the cursor until it is over the edge of one of the controls and displays the open hand.
- 10. Click and drag the cursor; both controls move together.
- 11. Move the cursor over the upper-left sizing handle of one of the controls. At this point, the cursor displays a hand with one finger sticking up. Click and drag the cursor to move just that control, without moving the other control.
- 12. Set the Control Source property of the new text box to Bed.

The Text Box control has many of the same properties as the Label control. However, it also has other properties because it can contain data. Figure 13.10 shows the Data tab of the Properties window with a Text Box control selected.



Data properties for a Text Box control.

💕 Text Box: Te	xt6	×
Text6		~
Format Data	Event Other	All
Control Source Input Mask Default Value Validation Rule Inabled Enabled Locked Filter Lookup Smart Tags	Yes No Database	e Default

Many of the data properties of a Text Box control are familiar to you from table design (and indeed, these properties inherit their values from the values assigned to the corresponding table field). This includes the Input Mask, Default Value, Validation Rule, and Validation Text properties. Three of the other properties on this tab will be important to you as you design forms:

- **Control Source**—Specifies the data field to which this control will be bound. The Control Source will be a field from the Record Source specified for the form.
- Enabled—Controls whether the control is displayed as a live control. If you set the Enabled property to No, the control is grayed out and the user is not able to type in it.
- **Locked**—Controls whether the user can enter data in the control. If you set the Locked property to yes, the user cannot edit the data contained in this control, but the control itself isn't grayed out.

Check Boxes

Check boxes are an appropriate control to use when you want the user to make a yes/no choice. Indeed, the Form Wizard and the Field List use Check Box controls to represent any data field with the Yes/No data type. That's why the Future control on the Plantings form is a check box.

If you select the Future control on the Plantings form, you'll see that we've already discussed many of the properties of the control. The following are two more properties we want to point out:

- Status Bar Text—Holds the text to be displayed on the Access status bar when this control is selected. Access automatically initializes this property from the description property of the corresponding table field, but you can override that here if you want.
- Triple State—Controls whether the control is just a yes-or-no choice or whether it has a third, indeterminate state. If you set the Triple State property to Yes, a Check Box control can be checked, unchecked, or grayed out. The grayed-out state corresponds to a null value in the underlying table.

List Boxes and Combo Boxes

List boxes and combo boxes are the most complex controls you'll be working with as you design your first databases. These controls actually relate data from one table to data from another table. You can think of the List Box and Combo Box as little machines that allow the user to pick a value from one table and then pump that value into a field from another table.

Fortunately, although these controls are complex, they aren't hard to build because Access includes a Control Wizard to help you build them. Here's how you can create a simple List Box control:

- 1. Open the **Plants** form in design view.
- 2. Make sure that the **Control Wizards** button in the Toolbox is selected. If it isn't, click it before you continue so Access will automatically launch the appropriate control wizard. This button is a toggle button and remains selected until you click it to deselect it.
- 3. Select the List Box control in the Toolbox.
- 4. Use the cursor to draw a control in the empty area of the form, just as you earlier drew Label and Text Box controls. When you release the mouse button, instead of creating the new control, Access launches the List Box Wizard, as shown in Figure 13.11.
- On the first panel of the List Box Wizard, select I Want the List Box to Look Up the Values in a Table or Query. Then, click Next.
- 6. On the second panel of the List Box Wizard, select the **Types** table as the source of data for the List Box. Click **Next**.
- On the third panel of the List Box Wizard, click the >> button to move both the TypeID field and the Description field from the Available Fields list to the Selected Fields list. Click Next.

FIGURE 13.11	List Box Wizard	
The first panel of the List Box Wizard.		This wizard creates a list box, which displays a list of values you can choose from. How do you want your list box to get its values?
		Cancel < Back Next > Finish

- 8. The next panel of the List Box Wizard allows you to specify a sort order for the data. Select **Description** in the first combo box on this panel and then click Next.
- 9. The next panel of the List Box Wizard, shown in Figure 13.12, displays the way the List Box control will look. You'll see that Access has chosen to hide the TypeID column. Click Next.



- 10. On the sixth panel of the List Box Wizard, select **Store That Value in This** Field. Select the TypeID field from the drop-down list and click Next.
- 11. Assign the name **Type** to the List Box. Then click **Finish** to create the list box.
- 12. Select View, Form View to see the effects of your changes. Figure 13.13 shows the form at this point.



As you scroll through the records displayed by this form, you'll notice that the new List Box control and the existing Combo Box control always show the same selected value. The reason is that they're both bound to the same underlying field in the Plants table. There's nothing to prevent you from displaying the same data in two different controls, although users of your database might find this a bit confusing.

The major difference between a list box and a combo box is that the list box shows the entire list at all times, whereas the combo box shows only the selected value until you click the drop-down arrow. A list box is also limited to the values that are already in the list. A combo box, on the other hand, can let the user enter a value that's not in the list, although this capability is usually turned off.

To see the properties that control the behavior of a combo box or list box, switch the Plants form back to design view and click the **TypeID** combo box (the one that existed before you added the list box). Here's what you'll find:

- **The Control Source property is set to TypeID**—This is the field in the Plants table in which the user's selections are stored.
- The Row Source Type property is set to Table/Query—In most cases, this is the setting you'll want here. You can also choose Value List, which lets you embed the list directly on the form rather than taking it from another table.
- The Row Source property is set to SELECT Types.TypeID, Types.Description FROM Types—You might recognize this as a select query. Fortunately, you don't have to build the row source by typing such code in; when you click in the Row Source property, the Properties window displays a build button that opens the query design grid. The row source specifies the source of the list of values in this control. In this case, it's using all the TypeID and Description values from the Types table to build the list.

- **The Column Count property is set to 2**—This tells the form that there are two columns in the row source.
- **The Column Widths property is set to 0**"; **1**"—This tells the form that the first column should be hidden (by setting its width to 0) and the second column should be 1" wide.
- **The Bound Column property is set to 1**—This tells the form that when the user selects a row in the list, the value from the first column of that row should be stored in the field specified by the control source property.
- The List Rows property is set to 8—This is the maximum number of rows Access will display in the drop-down list at once. If more than eight rows are in the list, Access displays a scrollbar.
- The Limit to List property is set to Yes—This prevents the user from entering a value not in the list.

Access also offers a useful tool to change the type of a control, which comes in handy when you change your mind about the best user interface for a form. For example, the Plants form currently contains a text box to enter the catalog, but you know that all the catalogs are listed in the Catalogs table. By converting this control to a combo box, you can let the user select from a list rather than forcing her to type in a value:

- 1. Select the **Type** list box you created earlier in this section, and press the **Delete** key to remove it from the form. This will also remove the associated label control.
- 2. Select the CatalogName text box.
- 3. Select Format, Change To, Combo Box.
- 4. Click in the **Row Source** property for the new combo box, which displays a build button. Click the build button.
- 5. Select the **Catalogs** table in the Show Table dialog box and click **Add**.
- 6. Click **Close** to dismiss the Show Table dialog box.
- 7. Drag the **Name** column from the field listing in the Query Builder down to the query grid. Set the Sort property for this field to **Ascending**.
- 8. Click the **Close** button to close the Query Builder.
- 9. Access displays an error message, as shown in Figure 13.14. Even though this is not the friendliest dialog box possible, its appearance is completely normal. Click **Yes** to finish building the Row Source property.



- 10. Set the Column Widths property by typing 1.5".
- 11. Set the Limit to List property by selecting Yes.
- 12. Save the form.
- 13. Switch to form view. Now you can select the catalog name from a list, instead of having to type it in for each record.

Command Buttons

The last important control that we'll look at in this chapter is the Command Button control. Command buttons, as you might guess from their name, are used to tell Access to do something. To get deeply into the subject of commands requires more programming than you'll learn in this book, although there's a short introduction in Chapter 15. But for now, you'll use one of the Control wizards to construct a command button to give you a feel for what they can do. Follow these steps:

- 1. Open the **Plants** form in design view.
- 2. Click the **Command Button** button in the Toolbox.
- 3. Click in an empty area on the form to launch the Command Button Wizard, shown in Figure 13.15.

FIGURE 13.15 Command Button Wizard					
The Command Button Wizard.	Sample:	What action do you want to hap pressed? Different actions are available fo <u>Qategories:</u> Record Navigation Record Operations Form Operations Report Operations Application Miscellaneous	pen when the button is r each category. <u>Actions:</u> Find Next Find Record Go To First Record Go To Last Record Go To Next Record Go To Next Record Go To Previous Record		
		Cancel < Back	Next > Einish		

- 4. Select **Report Operations** in the Categories list. Then select **Preview Report** in the Actions list and click **Next**.
- 5. On the second panel of the wizard, select the Plants report. Click Next.
- 6. On the third panel of the wizard, accept the default picture and click Next.
- 7. On the final panel of the wizard, accept the default name and click **Finish**.
- 8. Save the form and switch back to form view.
- 9. Click the newly created button. The Plants report opens in print preview view.

Working with Sections and Subforms

Now we'll take a brief look at two more form design topics: sections and subforms. Access forms can have multiple sections and can display subforms.

Form Sections

Form sections provide a way to logically group some of the controls on forms. The list of available sections is fixed by Access. In practice, the following are the three sections you're likely to use:

- **Form header**—This section appears at the top of the form, above all the records.
- Form detail—This section is where the actual records appear. The detail section might be displayed many times, if you have the form set to continuous view.
- **Form footer**—This section appears at the bottom of the form, below all the records.

To see form sections in action, you can work with the Catalogs form by doing the following:

- 1. Open the **Catalogs** form in design view.
- 2. In design view, you'll see several gray bars running the width of the form. You might have ignored these, but now you can see that they mark the sections of the form. Place your cursor at the bottom of the Form Footer bar and drag it downward to create an actual footer section.
- 3. Click the **Command Button** control in the Toolbox.
- 4. Click in an empty area in the footer section of the form to launch the Command Button Wizard.
- 5. Select **Record Navigation** in the Categories list. Then select **Go To Last Record** in the Actions list and click **Next**.

- On the second panel of the wizard, accept the default picture and click Next.
- On the final panel of the wizard, accept the default name and click Finish.
- 8. Save the form and switch back to form view.

Figure 13.16 shows the modified form. You can see that the controls in the form header (the labels for Name, Address, and so on) appear only once at the top of the form. The con-



trols in the detail section appear multiple times, and the command button control in the form footer appears only once at the bottom of the form.

Subforms

You first saw a subform in Chapter 8, "Creating and Using Data Entry Forms." Now we'll take a brief look at using subforms in design view. As you'll recall, a subform lets you show a group of related records on a parent form. For example, on the CatalogsMain form, the main part of the form (the parent form) displays information on types, whereas the subform displays a list of plants of the currently displayed type.

	Tenter	carato 52							ی کارک
Form sections in		Name	Address	City	State	Zip	Country	Specialty	
action.		<u>Gurney's</u>	O Capital Stre	Yankton	SD	57079	USA		
		Rantree	391 Butts Road	Morton	WA	98356	USA	Fruit trees	
		Richters		Goodwoo	Ontario	LOC 1.	Canada		
		Territoria	PO Box 158	Cottage (OR	97424	USA	Northwest varieties	
		 	4						=

To see the details of how forms and subforms work together, follow these steps:

- 1. Open the **TypesMain** form in design view.
- 2. Click the subform area in design view. You can tell the subform because it has its own set of rulers and its own header and detail section.

- 3. Inspect the Properties window for the subform. The Link Child Fields and Link Master Fields properties specify how the form and subform are related. At any time, the subform displays records whose Link Child Fields have the same value as the current Link Master Fields values on the main form.
- 4. Although you can edit the subform directly in the main form, this can get confusing. Click outside of the subform to deselect it. Then right-click the subform and select **Subform in New Window** to edit the subform in a new window, as shown in Figure 13.17.



- 5. Select the form header in the subform by clicking the gray bar above the header.
- 6. Change the Back Color property of the subform header by clicking in the property and using the build button to select a new color.
- 7. Click the **Save** button to save the changes to the subform.
- 8. Close the subform.
- 9. Switch the main form back to design view; the subform now has the colored header you selected.

Object Dependencies

By now you're starting to accumulate quite a few objects in your database. Access keeps track of the relationships between these objects, and it can show them to you as well. To see this in action, follow these steps:

- 1. Click the **Tables** shortcut in the database window.
- 2. Right-click the Catalogs table and select Object Dependencies.

- 3. Access may ask whether to update the dependency information in the database. Click **OK**.
- 4. Access will display the dependency information in a task pane at the side of the screen, as shown in Figure 13.18.



The dependent objects are presented in a treeview. You can click the plus signs to expand the treeview, up to four levels deep. For example, in this case clicking the + sign next to the Plants table will show you the objects that depend directly on that table.

This default view allows you to perform easy impact analysis. You can immediately see which objects in your database will be affected by a change to the selected object. This lets you see the repercussions of major changes (such as deleting an object or changing the columns returned by a query) before you make them.

You can also reverse the process and see the ancestors of the selected object by clicking the **Objects That I Depend On** option button in the Object Dependencies task pane.

THE ABSOLUTE MINIMUM

We covered a lot of ground in this chapter, and yet we did not see everything that you can do in form design mode. This is one of the areas of Access where there is much more depth than we can cover in an introductory book. As you're working with forms in design mode, keep these points in mind:

- AutoFormats enable you to quickly change the appearance of a form.
- The Field List can be used to add new bound controls to a form.
- Both forms and the controls on forms have properties that control their appearances and behaviors. You can alter these properties by manipulating the controls directly or by changing values in the Properties window.
- The Toolbox enables you to add new controls of various types to your Access forms.
- Sections and subforms provide more advanced ways of managing the design of forms.
- You can use the Object Dependencies task pane to see how the objects in your database are related.