

# Beyond Excel

ADD-IN

## COMBOBOX WITH SEARCH BY DESCRIPTION

### Entries

tblEntries - Make entries here

ID	Name	St	State
10	Rusty Wommack	AK	ALASKA
4	Pete Pauls	VA	VIRGINIA
33	Mariann Lehoux	AS	AMERICAN SAMOA
14	Annamae Thill	HI	HAWAII
16	Lida Crumpler	GA	GEORGIA
29	Debra Tincer	GA	GEORGIA
15	Kena Rothenberger	GU	GUAM
23	Gretchen Manfredi	HI	HAWAII
24	Virgie Lenoir	ID	IDAHO
30	Leanora Labonte	IL	ILLINOIS
40	Krishna Lofgren	IN	INDIANA

GA	GEORGIA
GU	GUAM
HI	HAWAII
ID	IDAHO
IL	ILLINOIS
IN	INDIANA
IA	IDAHO
KS	KANSAS

Find by Text

Search

OK

Cancel

GEORGIA

Code	Description
AL	ALABAMA
AK	ALASKA
AS	AMERICAN SAMOA
AZ	ARIZONA
AR	ARKANSAS
CA	CALIFORNIA
CO	COLORADO
CT	CONNECTICUT
DE	DELAWARE
DC	DISTRICT OF COLUMBIA
FM	FEDERATED STATES OF MICRONESIA
FL	FLORIDA
GA	GEORGIA
GU	GUAM
HI	HAWAII
ID	IDAHO
IL	ILLINOIS
IN	INDIANA



# WHAT IS BEYOND EXCEL?

**Beyond Excel** is a free “cookbook” approach to extending Excel with **VBA**. Practical solutions are offered instead of abstract theory. Those desiring more theory and/or a **VBA** language reference are encouraged to seek out the many superior resources available for purchase or free on the internet. Links to some of those resources are provided inside.



“Cookbook approach” is an analogy to recipes that provide instructions on how to prepare a final product, such as a cake or casserole, instead of theory on how to cook in general.

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## Why Read This?

Make data entry easier.

### Problem

Data validation's dropdown lists do a good job of preventing bad entries and for small lists they help find the right code. Dropdowns, however, fall short for larger lists or longer codes. We need what dropdowns lack. We need autocomplete. We need lists positioned by partial entries. We need to search for codes by description.

### Autocomplete

*ComboBoxes* find matching entries as we type and they often autocomplete with the correct entry after just a few keystrokes. This greatly improves data entry efficiency *if* we know the correct spelling. What if we don't?

### Position by Partial Entry

Like dropdowns we can scroll through *ComboBoxes'* value list to pick a code that looks right. This helps if we have some idea of what the code is. What if we don't?

### Search for Code by Description

This add-in provides another very useful feature, *find-by-text*. With the *ComboBox* displayed, press **F4** to display and search by code descriptions.

### Entries

tblEntries - Make entries here

ID	Name	St	State
10	Rusty Wommack	AK	ALASKA
4	Pete Pauls	VA	VIRGINIA
33	Mariann Lehoux	AS	AMERICAN SAMOA
14	Annamae Thill	HI	HAWAII
16	Lida Crumpler	GA	GEORGIA
29	Debra Tinch	GA	GEORGIA
15	Kena Rothenberger	GU	GUAM
23	Gretchen Manfredi	HI	HAWAII
24	Virgie Lenoir	ID	IDAHO
30	Leanora Labonte	IL	ILLINOIS
40	Krishna Lofgren	IN	INDIANA

F4 launches  
Find-by-Text

ComboBox  
display Codes

Find-by-Text  
displays  
Descriptions

### Easy as $\pi$

Implementing vastly superior data entry support couldn't be easier. Just set your data validation as you normally would, load this add-in and switch it on. That's it!

### Making the Magic Happen

The add-in finds all cells with data validation set to *list*. When users select one of those cells, the add-in loads a *ComboBox* from the cell's validation formula and displays the *ComboBox* over the cell. When the user exits the *ComboBox* the add-in hides it keeping our data entry area clean.

### Seeing is believing

Install the demo. Try it out. See how easy data entry can be. And if you like coding, open the VBE, examine the code, and use this guide to understand how to add feature rich *ComboBoxes* to your own projects without the add-in.



## Installing the Demo

### Requirements

This demo requires **MS Excel 2007®** or later. VBA (macros) must be enabled.

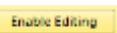
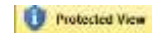
### Installing

IMPORTANT! Follow these steps. Don't skip any.

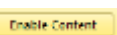
1. Download [ComboBox.Zip](#)
2. Open your **Downloads** folder, NOT the zip file.
3. Right click [ComboBox.Zip](#) and select *Extract All*.
4. Make sure *Show extracted files when complete* is checked.
5. Make note of the extracted folder's path.

### Running

1. Open the extracted folder
2. Double click **AddInDemo.xls**
3. If *Protected View* displays click *Enable Editing*.



4. If *Security Warning* displays click *Enable Content*.



Find the ComboBox tab in the Ribbon and check ComboBox checkbox

ComboBox.zip's URL is:

<https://dl.dropboxusercontent.com/u/13737137/Projects/ComboBox/ComboBox.zip>



## Demo Walkthrough

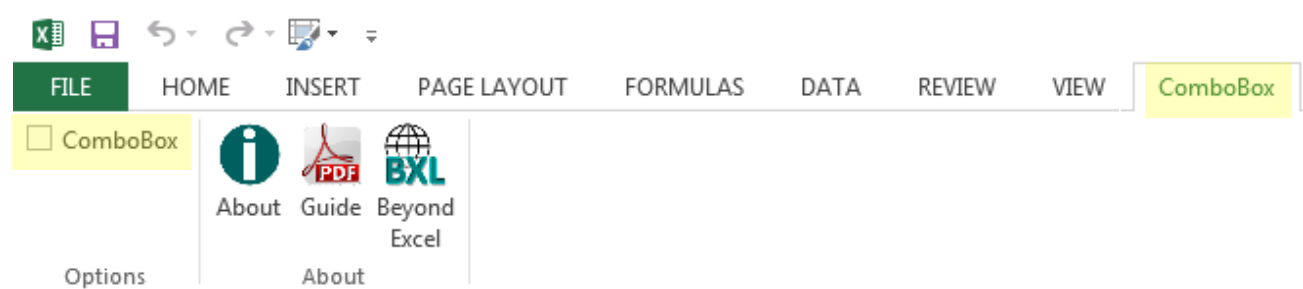
This section walks us through the demo so we can see what this app does.

### Basic Concept

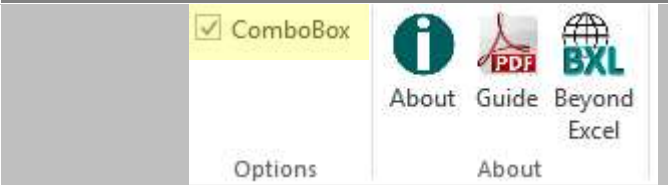
Set up data validation as we would normally (see [Data Validation Tips](#) for more on setting Excel's data validate)

then check the Ribbon's ComboBox. At that point, all dropdown data validation uses a ComboBox instead of a dropdown

listbox and a form to search for codes by description is accessible using function key F4.



### Walkthrough

Instruction	Figure																																																
1. Find the ComboBox tab and check the ComboBox checkbox.																																																	
2. Click on a name.	<p><b>Entries</b></p> <p>tblEntries - Make entries here</p> <table><tr><th>ID</th><th>Name</th><th>St</th><th>State</th></tr><tr><td>10</td><td>Rusty Wommack</td><td>AK</td><td>ALASKA</td></tr><tr><td>4</td><td>Pete Pauls</td><td>VA</td><td>VIRGINIA</td></tr><tr><td>33</td><td>Mariann Lehoux</td><td>AS</td><td>AMERICAN SAMOA</td></tr><tr><td>14</td><td>Annamae Thill</td><td>▼</td><td>HAWAII</td></tr><tr><td>16</td><td>Lida Crumpler</td><td>GA</td><td>GEORGIA</td></tr><tr><td>29</td><td>Debra Tincher</td><td>SC</td><td>SOUTH CAROLINA</td></tr><tr><td>15</td><td>Kena Rothenberger</td><td>PA</td><td>PENNSYLVANIA</td></tr><tr><td>23</td><td>Gretchen Manfredi</td><td>MD</td><td>MARYLAND</td></tr><tr><td>24</td><td>Virgie Lenoir</td><td>NC</td><td>NORTH CAROLINA</td></tr><tr><td>30</td><td>Leanora Labonte</td><td>FL</td><td>FLORIDA</td></tr><tr><td>40</td><td>Krishna Lofgren</td><td>NY</td><td>NEW YORK</td></tr></table>	ID	Name	St	State	10	Rusty Wommack	AK	ALASKA	4	Pete Pauls	VA	VIRGINIA	33	Mariann Lehoux	AS	AMERICAN SAMOA	14	Annamae Thill	▼	HAWAII	16	Lida Crumpler	GA	GEORGIA	29	Debra Tincher	SC	SOUTH CAROLINA	15	Kena Rothenberger	PA	PENNSYLVANIA	23	Gretchen Manfredi	MD	MARYLAND	24	Virgie Lenoir	NC	NORTH CAROLINA	30	Leanora Labonte	FL	FLORIDA	40	Krishna Lofgren	NY	NEW YORK
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40	Krishna Lofgren	NY	NEW YORK																																														

## Instruction

3. Type an "N".

**NOTE!** Nancie's name appears. Dropdowns don't do that.

## Figure

### Entries

tblEntries - Make entries here

ID	Name	St	State
10	Rusty Wommack	AK	ALASKA
4	Pete Pauls	VA	VIRGINIA
33	Mariann Lehoux	AS	AMERICAN SAMOA
14	Nancie Milligan	▼	HAWAII
16	Lida Crumpler	GA	GEORGIA
29	Debra Tincher	SC	SOUTH CAROLINA
15	Kena Rothenberger	PA	PENNSYLVANIA
23	Gretchen Manfredi	MD	MARYLAND
24	Virgie Lenoir	NC	NORTH CAROLINA
30	Leanora Labonte	FL	FLORIDA
40	Krishna Lofgren	NY	NEW YORK

4. Click the expansion triangle.

**NOTE!** The list positions to Nancie. Dropdowns don't do that.

As you can see, ComboBoxes make data entry where longer lists are involved much more manageable and efficient.

In this particular case, I decided to ask our data entry clerk to select by name and use a formula to retrieve the code. Now let's try an example where we ask our data entry clerk to enter a code.

### Entries

tblEntries - Make entries here

ID	Name	St	State
10	Rusty Wommack	AK	ALASKA
4	Pete Pauls	VA	VIRGINIA
33	Mariann Lehoux	AS	AMERICAN SAMOA
14	Nancie Milligan	▼	HAWAII
16	Nancie Milligan	▲	GEORGIA
29	Ona Brugnoli		SOUTH CAROLINA
15	Pete Pauls		PENNSYLVANIA
23	Ramonita Sloan		MARYLAND
24	Refugio Becher		NORTH CAROLINA
30	Renaldo Buckingham		FLORIDA
40	Rusty Wommack	▼	NEW YORK
	Shawana Stamper		

5. Click one of the State codes (column **St**)

**NOTE!** This is the same ComboBox. The add-in moved it from our previous entry to this entry. It behaves exactly the same way no matter where the add-in positions it.

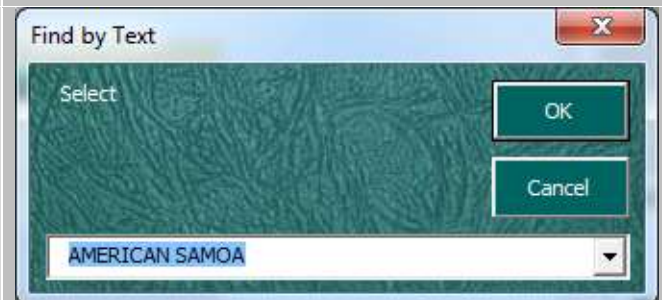
If you are like me, we sometimes get abbreviations for Alaska and Arkansas mixed up. No worries. This app helps us. See next.

### Entries

tblEntries - Make entries here

ID	Name	St	State
10	Rusty Wommack	AK	ALASKA
4	Pete Pauls	VA	VIRGINIA
33	Mariann Lehoux	AS	AMERICAN SAMOA
14	Annamae Thill	HI	HAWAII
16	Lida Crumpler	GA	GEORGIA
29	Debra Tincher	SC	SOUTH CAROLINA
15	Kena Rothenberger	PA	PENNSYLVANIA
23	Gretchen Manfredi	MD	MARYLAND
24	Virgie Lenoir	NC	NORTH CAROLINA
30	Leanora Labonte	FL	FLORIDA
40	Krishna Lofgren	NY	NEW YORK

6. Press your computer keyboard's F4 function key to display this

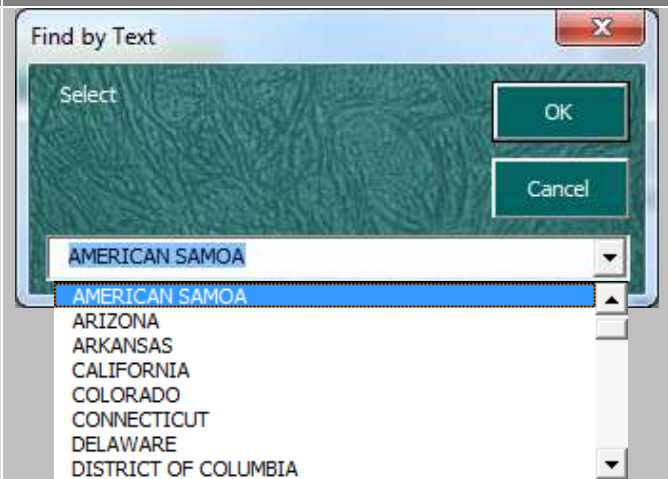


## Instruction

8. The Find-by-Text's ComboBox works just like all ComboBoxes. We can click the Expansion triangle to display a positioned list, or just start typing and it will autocomplete. Whatever we select from here is properly translated to our code entry.

**NOTE!** This is useful also for data entry tables that, due to lack of screen real estate, display only the code. Data entry clerks can display the code's description, thus confirming it is the appropriate code, simply by selecting the code and pressing the F4 key.

## Figure





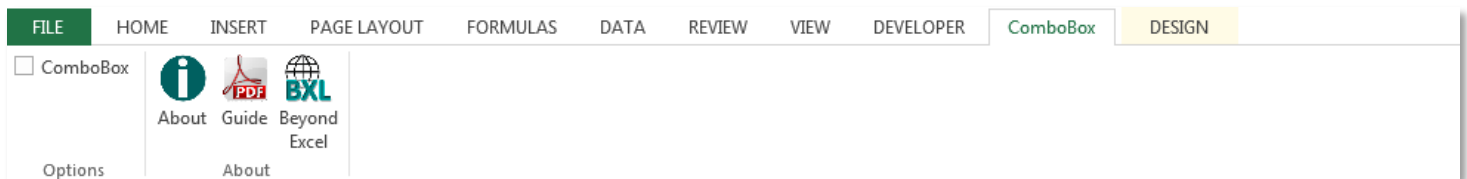
## User Instructions

Using ComboBox is automatic. Simply select any cell with **Data Validation** set to **Allow List** and the add-in instantly swaps out the dropdown listbox for a ComboBox.




If we want the old dropdown's to return, simply uncheck the ComboBox checkbox in the ComboBox tab.

## User Interface Elements

This add in installs its own tab on Excel's Ribbon. This is only automatic with the add-in (there is no menu tab when incorporating the modules directly into your project).



### Ribbon Buttons

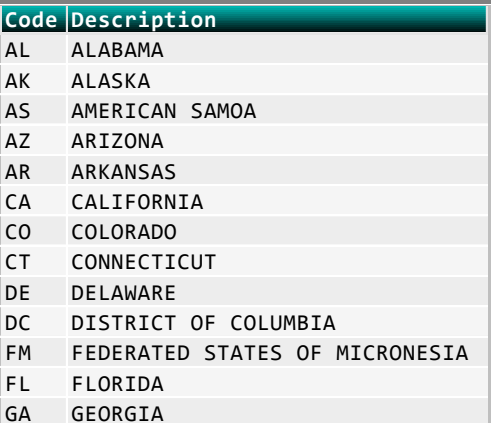

Button	Description
<input type="checkbox"/> ComboBox <i>On/Off Checkbox</i>	Turn ComboBox feature on or off. When checked all data validation dropdown lists are replaced with ComboBoxes for the current worksheet.
 <i>About</i>	<b>About</b> this add in.
 <i>Guide</i>	<b>Guide</b> (this document) display
 <i>Website</i>	<b>Beyond Excel Website</b> display

## Data Validation Tips

Here are some tips for setting up data validation for lists.

### Tables – Glorious Tables!

Tables are not required; but, if you have not started using tables yet, you are in for a treat. They are marvelous. I particularly like them for **Data Validation** even though **Data Validation** is a bit clueless when it comes to tables.

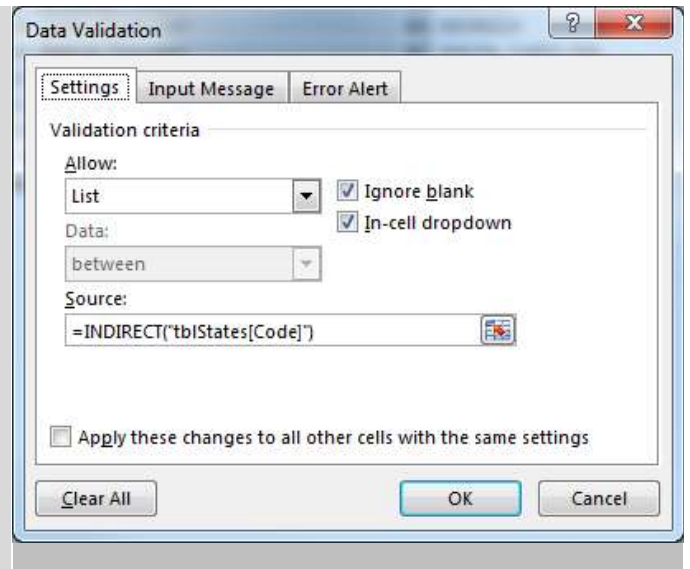
Instruction	Figure
<p>If you have XL2007 or later, you can take advantage of tables and tables' structured references. Tables are automatic dynamic named ranges. As they expand and contract all table references automatically expand and contract.</p> <p>Setting up tables is easy. Enter your data in columns with column headings.</p> <p><b>NOTE!</b> Adding a "Description" column enables the <b>F4 Find-by-Text</b> feature.</p> <p><b>NOTE!</b> It does not matter what the column headings are. The <b>F4 Find-by-Text</b> feature assumes code descriptions are immediately right of the code column.</p>	
<p>Click anywhere inside the list then press <b>CTRL-T</b>. The <b>Create Table</b> dialog appears. Make sure the <b>Create Table</b> dialog has properly assumed you table's range, check <b>My table has headers</b>, then click <b>OK</b></p>	

A new ribbon tab appears, **Table Tools**. On the far left of this tab is the **Table Name** box. Change the name to something meaningful. Personally, I like to name my tables with a "tbl" prefix, but that's totally a matter of preference.

AddInDemo.xlsm - Excel											TABLE TOOLS												
FILE		HOME		INSERT		PAGE LAYOUT		FORMULAS		DATA		REVIEW		VIEW		DEVELOPER		POWER QUERY		ComboBox		DESIGN	
Table Name: tblStates		Summarize with PivotTable		Insert Slicer		Export		Refresh		Open in Browser		<input checked="" type="checkbox"/> Header Row		<input type="checkbox"/> First Column		<input type="checkbox"/> Filter Button							
Remove Duplicates		Convert to Range				Unlink				<input type="checkbox"/> Total Row		<input type="checkbox"/> Last Column		<input type="checkbox"/> Banded Columns									
Resize Table												<input checked="" type="checkbox"/> Banded Rows											
Properties		Tools						External Table Data								Table Style Options							

We can now use our **Table** in **Data Validation** without having to know precisely where it is, or how large it is, and never having to worry about changes to either position or size. There is just one drawback.

Excel's **Tables** feature is newer than Excel's **Data Validation** feature and, so, Excel's **Data Validation** needs some assistance from us to use tables and tables' [structured references](#). All we need to do is surround our table reference with the old Excel function **INDIRECT**. **INDIRECT** converts our table reference to a reference **Data Validation** understands.



## Sort Carefully

Sort by how people search. I sorted **tblNames** by the **Name** column because data entry clerks will search by **Name**. They won't search by **ID**. I sorted the **tblStates** by **Code** because people who use such tables expect them sorted that way.

## Dependent Lists

We often find data element choices depends on earlier choices. As an example **AddInDemo.xlsm** has two columns: **Favorite Meat Type**, and **Favorite Cut**. If users select **Pork**, under **Favorite Meat Type** we want to display only Pork cuts in **Favorite Cut**.

### Entries

tblEntries - Make entries here					
ID	Name	St	State	Favorite Meat Type	Favorite Cut
10	Rusty Wommack	AK	ALASKA	Pork	Chef's Prime
4	Pete Pauls	VA	VIRGINIA	Pork	Bratwurst
33	Mariann Lehoux	VA	VIRGINIA	Pork	Pork Jerky
14	Annamae Thill	HI	HAWAII	Beef	Pork Jerky
16	Lida Crumpler	GA	GEORGIA	Pork	Pork Liver
29	Debra Tinch	SC	SOUTH CAROLINA	Chicken	Pork Steak
15	Kena Rothenberger	PA	PENNSYLVANIA	Chicken	Rack of Pork
23	Gretchen Manfredi	MD	MARYLAND	Pork	Sausage (Hot, Regular and
24	Virgie Lenoir	NC	NORTH CAROLINA		Side Pork
30	Leanora Labonte	FL	FLORIDA		Slab Bacon*
40	Krishna Lofgren	NY	NEW YORK		Sliced Bacon

The easiest way to address dependent lists is to name dependent lists using the primary list's values. At right we have a primary list, **Meats**. **Meats** contains three values: **Beef**, **Chicken** and **Pork**. We also have three corresponding dependent lists: **Beef**, **Pork**, and **Chicken**.

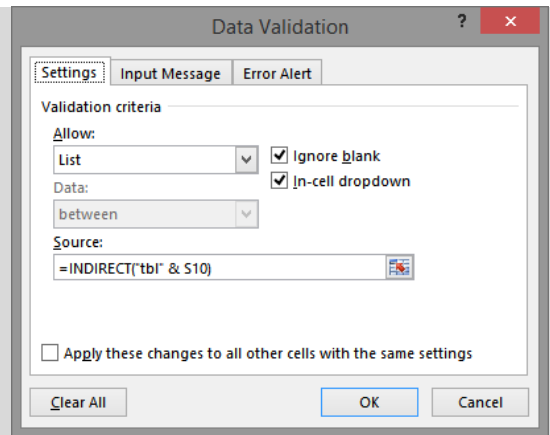
**NOTE!** I like to name tables with the prefix "tbl". Thus these tables are named: **tblMeats**, **tblBeef**, **tblPork**, and **tblChicken**

Meats	Beef	Pork	Chicken
Types	Cuts	Cuts	Cuts
Beef	Back Ribs	America's Cut Pork Chops (Boneless)	Back
Chicken	Beef for Stew	Baby Back Ribs*	Breast
Pork	Brisket	Bacon Ends	Drum
	Chuck Roast	Bean Bacon*	Feet
	Filet Mignon	Bone-In Ham (Whole: \$3.95)	Giblets
	Flank Steak	Bone-in Shoulder Roast	Neck
	Flat Iron	Boneless Center-Loin Roast*	Thigh
	Ground Beef	Boneless Fresh Leg Roast	Wing
	Prime Rib	Boneless Ham	
	Ribeye Steak	Boneless Shoulder Roast	
	Sirloin Steak	Bratwurst	
	Skirt Steak	Breakfast Ham Slices	
	Strip Steak	Breakfast Links (Regular and Hot)	
	T-bone Steak	Center-Cut Pork Chops	
	Tenderloin Roast	Chef's Prime	
	Top Round Roast	Chorizo	
	Tri-tip Roast	Country-Style Ribs	

To set data validation to display dependent dropdowns we use **INDIRECT** as shown at right. In English, the Source formula says:

Add *tbl* to the value in cell **S10** and convert that name to an address.

If cell **S10** contains *Pork*, the formula will read **=INDIRECT("tblPork")**. **tblPork** contains our Pork Cuts list and that will be loaded into our dropdown.



**NOTE!** In this example I opened the Data Validation dialog with cell **T10** selected; thus, **S10** is the cell immediately left of cell **T10**.

**NOTE!** The absence of \$ make **S10** a relative reference instead of an absolute reference. As a relative reference Excel knows we don't mean cell **S10**, we mean the cell left of **T10**. If we then copy this validation rule to other cells, the **Source** formula will always point to the cell immediately left of the cell containing this validation rule.

**NOTE!** I normally don't use cell references. I normally use structured references. Instead of cell address **S10** we could use the structured reference **tblEntries[@[Favorite Meat Type]]** except there is a problem with Excel's **Evaluate** function in VBA and this specific type of structured reference. The **ComboBox Add-in** uses Excel's **Evaluate** function and so we cannot use table row structured references with this add-in at this time.



## Technical Documentation



The following section is for VBA Developers only. It is mind-numbing to all others.

You do not need to read ANY of this section if you just want to use this feature. If you are not interested in how the code works, skip this.

### Adding ComboBox to Workbooks

Load and play with [AddInDemo.xls](#). This automatically installs the add-in into your PC and adds it to the [Add-Ins](#) dialog box (see below right). From this point on, you can add it to your projects by following these simple steps:

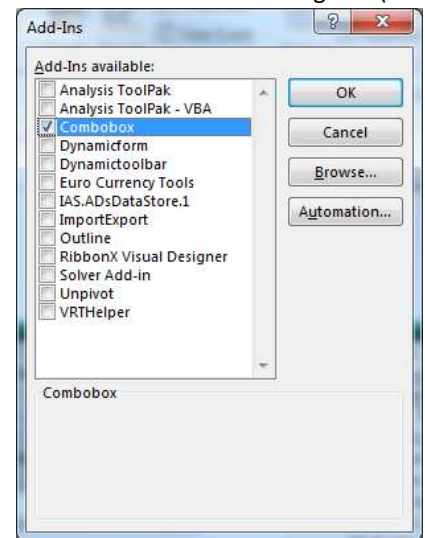
1. Use the Add-Ins dialog and place a check next to [ComboBox](#) (see right).  
-OR-
2. Add the following code to your [ThisWorkbook](#) module to automatically load and unload [ComboBox](#) with your project.

```
Private Sub Workbook_Open()  
    Application.AddIns("ComboBox").Installed = True  
End Sub  
  
Private Sub Workbook_BeforeClose(Cancel As Boolean)  
    Application.AddIns("ComboBox").Installed = False  
End Sub
```

-OR-

3. Drag and drop modules [clsCBO](#), [modGeneral](#), [clsSettings](#) and [modAddIn](#) from [ComboBox.xlsm](#) to your project

When either of these options is completed, [ComboBox](#) is ready for use with your XL apps.



### Bypassing the Add-In

[clsCBO](#) (the main class module) is NOT limited to replacing data validation dropdown list boxes. [clsCBO](#) was created as part of a package to make custom data validation possible, custom data validation that far exceeds the limits of Excel's data validation. This add-in is merely a means to provide [clsCBO's](#) functionality as easily as possible. To get the most out of [clsCBO](#) we should incorporate this apps components directly into our projects.

## Components

We can incorporate this functionality directly into our projects to simplify distribution by packaging everything into a single workbook requiring no external add-ins. The components we must include are:

- [modGeneral](#) BXL's general purpose function library
- [frmInputBox](#) BXL's InputBox replacement used for Find-by-Text functionality
- [clsForm](#) BXL's Userform formatting class (for frmInputBox)
- [clsCBO](#) BXL's ComboBox class used to setup, fill, and display the ComboBox

The other add-in components are only used by the add-in. With the components listed above loaded into our workbook, we need to write just a few lines of code to implement the class.

Description	Code
Create a variable to hold the class	<code>Dim oMyClass As clsCBO</code>
Create a new instance of the class	<code>Set oMyClass = New clsCbo</code>
Set the class's worksheet	<code>Set oMyClass.Worksheet = ActiveSheet</code>
Save the class to the class server. The class server will keep the class instance in memory so it can respond to events.	<code>modGeneral.SavCls _     sSaveAs:="ComboBox:" &amp; Thisworkbook.Name &amp; "!" &amp; ActiveSheet.Name, _     oClass:=oMyClass</code>

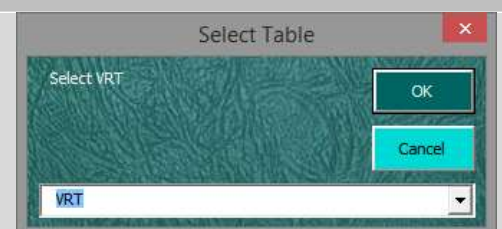
**NOTE!** Each component's coding contains its own documentation. See the source for a more detailed description of what is happening within each routine. I believe documenting the *intent* of each block of code to be beneficial. I believe documenting each line of a code's *function* is of no value. It clutters code making it harder to understand. If a coder runs across an XL object or a VBA function they do not understand, Googling the XL object or VBA function with the added keyword "MSDN" will provide a much better and complete understanding than anything I could write.

## Modules

Component	Description
<a href="#">modGeneral</a>	This is BXL's general purpose library of routines common to all BXL apps. Because this is a general purpose library, please see the module for documentation on each routine. Not all are used in this project.

## Forms

Form	Description
<a href="#">frmInputBox</a>	This is a general purpose, formatted InputBox.



## Classes (Event Handlers)

Component	Description														
<b>clsForm</b>	<p><b>clsForm</b> provides glowing effects and other user form formatting.</p> <p>For more on this see:</p> <p><a href="https://dl.dropboxusercontent.com/u/13737137/Projects/Hover/FormColorClass.pdf">https://dl.dropboxusercontent.com/u/13737137/Projects/Hover/FormColorClass.pdf</a></p>														
<b>clsCBO</b>	<table border="1"> <thead> <tr> <th>Public Properties</th><th>Description</th></tr> </thead> <tbody> <tr> <td><b>Worksheet</b> (Write Only)</td><td> <p>If we do not want to use <a href="#">Setup</a> we can use this to tell the class which worksheet to monitor. It also adds a ComboBox to the worksheet if one has not already been setup for it.</p> <p>Here is an example code snippet setting this property.</p> <pre>Public Sub InstantiateClass()     Set oMyClass = New clsCbo     Set oMyClass.Worksheet = ActiveSheet End Sub</pre> </td></tr> <tr> <td><b>ComboBox</b> (Write Only)</td><td> <p>If we do not want to use <a href="#">Setup</a> or <a href="#">Set Worksheet</a> we can use this to assign an existing ComboBox to the class.</p> </td></tr> <tr> <td><b>AutoReplaceValidation Dropdowns</b> (Write Only)</td><td> <p>If we do not want to use <a href="#">Setup</a> we can set this to TRUE to instruct the class to take over all dropdown data validation.</p> <p>Here is an example code snippet setting this property.</p> <pre>Public Sub InstantiateClass()     Set oMyClass = New clsCbo     Set oMyClass.Worksheet = ActiveSheet     Set oMyClass.AutoReplaceValidationDropdowns = TRUE End Sub</pre> </td></tr> <tr> <td><b>Value</b> (Read Only)</td><td>Use this to manually retrieve the ComboBox's current value</td></tr> <tr> <td><b>Cell</b> (Read Only)</td><td>Use this to manually set the cell that the ComboBox is for</td></tr> <tr> <td><b>Visible</b> (Read Only)</td><td>Use this to manually make the ComboBox visible</td></tr> </tbody> </table>	Public Properties	Description	<b>Worksheet</b> (Write Only)	<p>If we do not want to use <a href="#">Setup</a> we can use this to tell the class which worksheet to monitor. It also adds a ComboBox to the worksheet if one has not already been setup for it.</p> <p>Here is an example code snippet setting this property.</p> <pre>Public Sub InstantiateClass()     Set oMyClass = New clsCbo     Set oMyClass.Worksheet = ActiveSheet End Sub</pre>	<b>ComboBox</b> (Write Only)	<p>If we do not want to use <a href="#">Setup</a> or <a href="#">Set Worksheet</a> we can use this to assign an existing ComboBox to the class.</p>	<b>AutoReplaceValidation Dropdowns</b> (Write Only)	<p>If we do not want to use <a href="#">Setup</a> we can set this to TRUE to instruct the class to take over all dropdown data validation.</p> <p>Here is an example code snippet setting this property.</p> <pre>Public Sub InstantiateClass()     Set oMyClass = New clsCbo     Set oMyClass.Worksheet = ActiveSheet     Set oMyClass.AutoReplaceValidationDropdowns = TRUE End Sub</pre>	<b>Value</b> (Read Only)	Use this to manually retrieve the ComboBox's current value	<b>Cell</b> (Read Only)	Use this to manually set the cell that the ComboBox is for	<b>Visible</b> (Read Only)	Use this to manually make the ComboBox visible
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	Private Event Handlers	Description																				
	<i>Class_Initialize</i>	Turns on <a href="#">AutoReplaceValidationDropdown</a> feature																				
	<i>Class_Terminate</i>	Makes sure the ComboBox is hidden when the class terminates																				
	<i>oWks_SelectionChange</i>	Monitors the worksheet for cell selection and sets up the ComboBox if the activecell uses Allow List Data Validation																				
	<i>oCbo_KeyDown</i>	Monitors key presses within the ComboBox to determine if the user wants to exit the ComboBox, and in which direction, or if the user wants to use the <i>Find-By-Text</i> feature																				
	Public Methods	Description																				
	<i>Setup</i>	<p>Fills a ComboBox with items and displays it over the target cell</p> <pre>Public Sub InstantiateClass()     Set oMyClass = New clsCbo     oMyClass.Setup "A,B,C,D", Range("A1") End Sub</pre> <p><b>NOTE!</b> This method automatically sets the <b>Worksheet</b> property from the target cell.</p> <p><b>NOTE!</b> If we omit the target range parameter, <b>Setup</b> defaults to <b>ActiveCell</b>.</p> <p><b>NOTE!</b> See <a href="#">Fill(vList)</a> for notes on <b>vList</b>.</p>																				
	<i>Clear</i>	Use this to manually clear the ComboBox list.																				
	<i>Fill</i>	<p>Use this to manually Fill the ComboBox list</p> <p><b>NOTE!</b> <b>vList</b> can be a comma delimited list, an array, a range, or one of several special names:</p> <table><tr><td>CHARTS</td><td>All Charts in <b>oTarget's</b> workbook</td></tr><tr><td>NAMES</td><td>All Names (excludes table names) in <b>oTarget's</b> workbook</td></tr><tr><td>PIVOTTABLES</td><td>All Pivot Tables in <b>oTarget's</b> workbook</td></tr><tr><td>QUERYTABLES</td><td>All Query Tables in <b>oTarget's</b> workbook</td></tr><tr><td>SHAPES</td><td>All Shapes in <b>oTarget's</b> workbook</td></tr><tr><td>STYLES</td><td>All Styles in <b>oTarget's</b> workbook</td></tr><tr><td>PIVOTTABLESTYLES</td><td>All Pivot Table Styles in <b>oTarget's</b> workbook</td></tr><tr><td>TABLES AND NAMES</td><td>All Names with Table Names in <b>oTarget's</b> workbook</td></tr><tr><td>WORKBOOKS</td><td>All currently open workbooks</td></tr><tr><td>WORKSHEETS</td><td>All worksheets in <b>oTarget's</b> workbook</td></tr></table>	CHARTS	All Charts in <b>oTarget's</b> workbook	NAMES	All Names (excludes table names) in <b>oTarget's</b> workbook	PIVOTTABLES	All Pivot Tables in <b>oTarget's</b> workbook	QUERYTABLES	All Query Tables in <b>oTarget's</b> workbook	SHAPES	All Shapes in <b>oTarget's</b> workbook	STYLES	All Styles in <b>oTarget's</b> workbook	PIVOTTABLESTYLES	All Pivot Table Styles in <b>oTarget's</b> workbook	TABLES AND NAMES	All Names with Table Names in <b>oTarget's</b> workbook	WORKBOOKS	All currently open workbooks	WORKSHEETS	All worksheets in <b>oTarget's</b> workbook
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Component	Description	
	Private Functions	Description
	<i>AddOLEObject</i>	Adds an ActiveX ComboBox to the worksheet in a way that does not reset the Visual Basic Project.
	<i>FindByDesc</i>	Displays the <i>Find-by-Text</i> feature

## Appendix

### Jargon and Terms

Topic	Description
<b>Structured References</b>	<a href="https://support.office.com/en-us/article/Using-structured-references-with-Excel-tables-f5ed2452-2337-4f71-bed3-c8ae6d2b276e">https://support.office.com/en-us/article/Using-structured-references-with-Excel-tables-f5ed2452-2337-4f71-bed3-c8ae6d2b276e</a>

### Additional References and Documentation

Subject	Description	
<b>BXL Error Handling</b>	<p>This explains how BXL apps handle errors including theory and best practices. Click image to download or go to:</p> <p><a href="https://dl.dropboxusercontent.com/u/13737137/Starters/Error_Handling.pdf">https://dl.dropboxusercontent.com/u/13737137/Starters/Error_Handling.pdf</a></p>	
<b>BXL Coding Best Practices</b>	<p>This explains some of BXL's philosophies regarding development in VBA.</p> <p><a href="https://dl.dropboxusercontent.com/u/13737137/Starters/Coding%20Best%20Practices.pdf">https://dl.dropboxusercontent.com/u/13737137/Starters/Coding%20Best%20Practices.pdf</a></p>	