# **VBA Macro Installation Instructions for ArcGIS**

If you have a VBA macro – i.e. a script written in Visual Basic for Applications – that calls on ArcObjects for automating processes in ArcGIS applications, then follow these import instructions to create your own VBA macro button to use in the User Interface of ArcMap. The example used is frmIterateRandom, which is downloadable from: www.biology.ualberta.ca/facilities/gis/index.php?Page=485



To use these instructions with a different VBA macro form, substitute your file name anywhere in the text below where you see **frmiterateRandom**.frm. Also, substitute a more appropriate name for the custom button control and toolbar that you create.

## Import the VBA macro:

- Copy and unzip IterateRandom.zip to your local hard drive (e.g. create a new folder named C:\ArcGIS\VBA for permanent storage)
- 2. Start ArcMap with a new empty map document
- Choose TOOLS >>> MACROS >>> VISUAL BASIC EDITOR
- 4. The Visual Basic Editor appears; locate the Project Explorer to the left
- 5. Right click on **Project** and choose IMPORT FILE
- 6. Navigate to find **frmIterateRandom.frm** file and click OPEN

## Create a new button control in ArcMap:

- Return to the ArcMap program and choose TOOLS >>> CUSTOMIZE
- In the COMMANDS tab, select to Save in: <u>Untitled</u>
- In the Categories window, scroll down to find the UICONTROLS category
- 10. Click on the NEW UICONTROL button
- 11. Click CREATE
- 12. In the Commands window, click once to highlight Project.UIButtonControl1;

Categories:	Commands:
TabletPCS	New UlControl
TIN Tools Topology Tracking A Utility Netw Versioning View WMS Laye XML Suppo	UIControl Type UIEditBoxControl UIEditBoxControl UIEcontrol UIEcontrol UIEcontrol CUEcontrol Create and Edit Cancel
	New UlControl Delete UlControl Description

wait a second, then click again to access the text editing box so you can change its name

13. Making sure that all the text is selected, type "**Random**" as the new name and press ENTER

2		
R	andom 🗾 Click	-
	Private Sub Random_Click() Load frmIterateRandom 'loads form frmIterateRandom.Show 'shows form End Sub	* •
Ξ		

# Associate the new button control with the macro:

- 14. Double click on **Project.Random** to open up the Visual Basic Editor
- 15. Place the mouse cursor on the next line below "Private Sub Random\_Click()"

16. Type the following lines of code: Load frmIterateRandom `loads form frmIterateRandom.Show `shows form

### Create a new toolbar with the custom button control:

- 17. Return to ArcMap
- 18. Choose TOOLS >>> CUSTOMIZE
- 19. In the TOOLBARS tab, click NEW
- 20. Type the name "**Random**" and choose to save in: <u>Untitled</u>
- 21. Click OK
- 22. In the COMMANDS tab, scroll to find the UICONTROLS category
- 23. Click and drag **Project.Random** to the new toolbar
- 24. On the new RANDOM toolbar, right





click on the default button

- and choose TEXT ONLY 25. Click CLOSE on the
- CUSTOMIZE dialog
- 26. Finally, SAVE your Untitled map document to your working directory; e.g. IterateRandomPts.mxd

#### Saving a VBA macro in the Normal.mxt:

If this is a macro tool that you wish to use all the time, then you may opt to save the VBA macro and new toolbar with custom button control into your Normal template (i.e. Normal.mxt). Make the following substitutions to the above instructions:

- Step 5: Instead of Project, right click on Normal
- Step 8: Instead of Untitled, save in Normal
- Step 16: After typing in code, choose FILE >>> SAVE NORMAL.MXT
- Step 20: Instead of Untitled, save in Normal

Now every time you start ArcMap, the new toolbar with the custom button control will be accessible just like any other toolbar.

\*\*\* Search <u>http://arcscripts.esri.com</u> for free VBA macros (Language = Visual Basic) that may be useful to your own GIS work.