Collect Data in the Field with Survey 123

SCHOLARS' LAB

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Class Page
http://guides.lib.virginia.edu/gis
Click **Teaching Resources > Spring 2021 Workshops**

Survey 123
https://survey123.arcgis.com

Getting Started Tutorial
https://learn.arcgis.com/en/projects/get-started-with-arcgis-survey123/

Create or Login to ArcGIS Online Account

*****If you're not a UVA affiliate, or don't have an Eservices login, please stop here and await further instructions.**

Go to: https://uvalibrary.maps.arcgis.com/home/signin.html

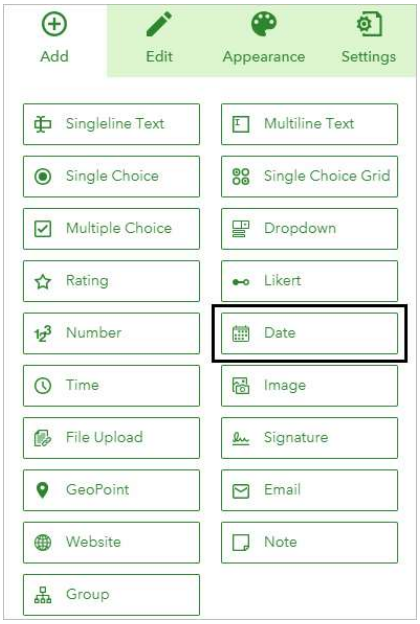
- Click **University of Virginia**

- Sign in using your NetBadge credentials.

There are several ways to collect geospatial data, and the tool used will depend largely on the nature of the data collection and the device being used. Having said that, we generally suggest Survey 123. The scenario for today is data collection in the field. We're going to – virtually – go out and collect statues on Grounds.

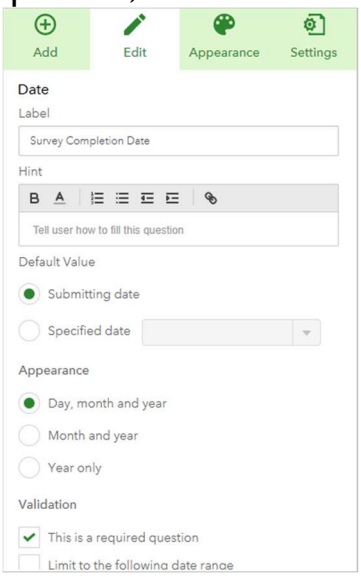
Build a Survey

1. If you haven't already, open a browser, navigate to https://uvalibrary.maps.arcgis.com, and sign in using the steps outlined above.
2. Open a new tab and navigate to https://survey123.arcgis.com
3. If you're not taken to the **My Surveys** page, click **Sign In**
4. Click **New Survey** at the top of the page
5. Choose **Blanks survey** under the **Using the web designer** options.
6. Name your survey "**Statues"**, enter "Statues" as a tag, and click **Create**.



7. Click **Date**. On the Edit tab, for **Label**, type "Survey Completion Date:"

As you type the label, it appears on the survey layout. You can configure multiple parameters for each survey question, depending on the type of question. In this case, you can control the default dates and validation rules. You can assign a default value of the date when the survey is submitted or a specific date. You can also specify a limited date range. You'll set a default date and require that the question be answered before the survey can be submitted.



8. For **Default Value**, select "Submitting date". For **Validation**, check the "This is a required question" box.

9. Click the **Add** button and select **Map**. Enter "Statue Location" for the Label. For **Map and extent**, choose **Imagery with Labels**. On the map search, enter "Rotunda Charlottesville" and choose the first suggestion. Pan the map so that it's centered on The Lawn. Check the box for **This is a required question**.

10. Click the **Add** button, click **Singleline Text**, and enter "Name" for the Label.

11. Click the **Add** button, click **Single Choice**, and enter "Condition" for the Label. In the boxes under **Choices**, enter "Excellent", "Good", "Bad".
12. Click **Save**.

13. Click the **Add** button, click **Multiline Text**, and enter "Notes" for the Label.

Take a moment to look at the options for survey inputs. Along with a variety of data types, we have the ability to collect images, files and signatures. For our purposes, we're going to keep our survey very simple. However, feel free to explore these options when you have time.

14. Click **Options** on the side pane and check the box to **Show message to prompt the user to submit another record**.
15. Click **Save**.

16. Click **Publish**. On the Publish Survey pane, click **Publish.**

Collect Data

1. Click the **Collaborate** tab. Notice the options we have for accessing, sharing, and controlling outside access to the survey. In the **Who can submit to this survey?** Section, check the box for **Everyone**.

2. Click the Open the survey in a new tab button. 

A new tab should open to your survey. We're going to collect three statues on Grounds. The steps for each will be the same, only the location and attributes will be different. If you're unable to find the location of the statues, feel free to choose a building or other location. For the Notes field, get creative.

Enter the following information into the form for each location. When done with a location, click **Submit**. After submitting, click "**here"** in **Press here to submit again** to start a new survey.

Collecting Location: The point at the bottom of the Blue flag in the middle of the map represents the location being collected. Move the map under the flag to set the location.

Location 1: Statue of Homer, in front of Old Cabell Hall at the south end of The Lawn.

Name: Homer

Condition Excellent

Location 2: Statue of Thomas Jefferson, north of The Rotunda.

Name: Thomas Jefferson

Condition: Good

Location 3: Aviator Statue between Clemons and Alderman libraries.

Name: Aviator

Condition: Bad

As mentioned, this is virtual field work, but you can imagine being out in the field collecting these data. In our case, we're selecting the location by moving the map. However, in the field, the location would be collected by your actual location as determined by the GPS sensor on your device, and your observations and notes would be based on actual, in-person observations of the statues. In addition, you would probably take pictures of the statue and attach them to your survey.

Results

1. Click the **Analyze** button at the top of the page. Here we can see statistics related to our survey answers. With enough responses, a word cloud will be displayed

2. Click the **Data** button. Here we can see our results mapped, with the collected attributes below. We can filter our results by date collected or attribute values, export our feature layer, and view our feature layer in a Web Map. Instead, let's look at the actual feature layers and map them directly in ArcGIS Online

Mapping Survey Data

1. Go back to the ArcGIS Online tab and click **Content**.
2. Under **Folders** on the left side, click the **Survey-Statues** folder.

Here, you'll see your survey, and what appear to be three Feature Layers. We won't get into too much detail on this, but these layers are essentially separate versions of the same dataset. The layer with "_fieldworker" in the name is a view of the Statues feature layer. It points to the same data but has different settings and permissions. This allows you to have one layer for data collection, a separate layer for viewing, and a main layer for administration. One of the views can be open to the public with editing disabled for display on public maps or apps, while the other can be restricted to specific users with editing enabled for use in data collection.

3. Click the **Statues_fieldworker** feature layer to open the Item Details page.
4. Click the **Data** tab. Look at the attribute data that was collected.
5. Click the **Settings** tab and scroll down to the **Editing** section. Notice that this layer has editing enabled.

In order to add new features to this feature layer, editing must be enabled. The remaining settings are up to you and will depend on how you plan to use this layer. **Note**, if your survey is public, the underlying layer must be public as well, meaning anybody can manipulate the data in this layer. In such cases, these settings become critical to preventing unwanted deletion or updates to the data in your layer. Check out the **Statues** and **Statues_stakeholder** feature layers to see the different settings.

6. Click the **Overview** tab. Click **Open in Map Viewer** to open the layer in a new map.
7. Click the More Options ellipses on the **Statues_stakeholder** layer and click **Zoom To**.
8. Click the **Change Style** on the **Statues_stakeholder** layer.
9. Select **Condition** in the attribute dropdown. Click **Done.**
10. Click a point on the map to open the Pop-up and view the data you entered.

11. Click **Save.** Give your map a meaningful name and tag and click **Save Map**.