



- Agenda

- What is ArcGIS Field Maps?
- How can you do more with the application **(BENEFITS)**.
- Case studies.
- How to setup and use application **(BASIC)**.
- Demonstration.
- References.
- Appendix.





- What is ArcGIS Field Maps?
  - All-in-one app that uses data-driven maps and mobile forms to help workers perform data capture and editing, find assets and information, and report their real-time locations;
  - Go-to field app that streamlines the critical workflows mobile personnel use every day.
  
- How can you do more with the application? **(BENEFITS)**.
  - Streamline field workflows: Replace paper processes and disparate tools to bring efficiency to mobile work.
  - Empower your mobile workforce: Provides mobile workers with secure, 24/7 access to your organization's ArcGIS map.
  - Access current data 24/7: Greater accuracy when reporting data from the field by using a mobile data collection and editing app that avoids errors.
  - Transparency in field activities: Achieve real-time location awareness of mobile personnel so you know where everyone is and can quickly adapt to changing circumstances.
  - Deploy quickly and easily: As an all-in-one field app, one download supports many capabilities and means greater efficiency for your mobile workers and IT associates.



■ Case Study #1.

– Charlottesville Fire Department Tracks Fire Hydrant Inspections with an All-in-One Mobile Work App.

1. Insurance Services Office (ISO) creates ratings for fire departments that calculate how well-equipped fire departments are to put out fires in a community;
2. The City of Charlottesville has a Class 1 ISO rating - One requirement necessary to uphold this rating is an annual inspection of fire hydrants;
3. Previously, inspections performed by firefighters consisted of a paper-based workflow that had those in the field manually taking notes, writing emails, etc.;
4. The Department, working with ESRI, created a solution that enabled each shift to inspect hydrants in real time (by shift) and create zones to provide quick information on hydrant specifications.
5. Result:
  - Increased inspection time saving valuable time for firefighters to perform other duties;
  - Increased speed and productivity;
  - Ability to visualize hydrant inspection data in real time and see where hydrants were being inspected, and by what crews and shifts, was another significant benefit;
  - Real-time updates with Field Maps have also improved communications with Charlottesville Public Works.





## ■ Case Study #2

### – Open Space Institute Gives Everyone in their Organization the Power to Visualize Data and Answer Geographical Questions

1. Central server in the New York City home office held OSI's geographic information, which staff across the East Coast accessed through VPN;
2. Remote access was cumbersome and time-consuming, which discouraged remote staff from accessing the information;
3. To avoid this process, they would save a copy to their local drive or send an email to the GIS team asking for the specific data and map to fulfill their current project.
4. Result:
  - Using Fields Maps and Dashboards, everyone in the organization, regardless of where they reside, has the power to quickly visualize and answer their geographical questions;
  - Staff are using the maps and dashboards to independently answer their questions;
  - OSI GIS team includes two people who serve an organization of 60 individuals in multiple offices along the East Coast.





- How to setup and use application **(BASIC)**.
  - Step #1: Prepare a database for collection
    1. Setup a domain – constrain input information by limiting choice of values;
    2. Setup feature class fields – stores information for the data collection model (attributes);
    3. Symbolize features - use of symbols to represent the features and attributes of a map layer;
    4. Publish features – publish feature layer to ArcGIS Online.
  - Step #2: Prepare a map for data collection
    1. Create a map – add feature layer to map and save;
    2. Setup additional display options – i.e. configure pop-ups and display options;
    3. Share the map – share map to owner, organization or everyone (public).
  - Step #3: Collect data using ArcGIS Field Maps (formerly known as Collector)
    1. Start ArcGIS Field Map (client is a free download). Link posted to reference slide.
    2. Enter the data on map by clicking location, enter data collection information.
    3. View the map in ArcGIS Online or from Field Map phone application.



- **Demonstration**
  - Problem Statement: How can I determine the amount of trees lost to the 'Ambrosia Beetle Tree Infestation' ?
  - Solution: Utilize ArcGIS Field Maps to complete a physical inventory of the new trees planted and do periodic checks to determine what trees are affected.
- Webmap Name: GEOG677\_Presentation
- Webmap ID: 02bbb2d0045e4e759326fb8e5f7ac726
- UMD GIS Presentation URL: [KGClark GEOG677 Presentation Webpage](#)



## ■ References

- ESRI ArcGIS Field Maps: [Overview](#)
- ESRI ArcGIS Field Maps: [Tutorials](#)
- ESRI ArcGIS Field Maps: [Client Downloads](#)
- ESRI ArcGIS Field Maps: [Quick Reference Guide](#)
- GEOG677 Presentation Page: [ArcGIS Field Maps](#)
- Ambrosia Beetle Pest of Nursery and Landscape Tree: [NC State Study](#)
- Charlottesville Fire Department Tracks Fire Hydrant Inspection: [Case Study #1](#)
- Open Space Institute Gives Everyone in their Organization the Power to Visualize Data and Answer Geographical Questions: [Case Study #2](#)
- ‘Getting to Know ArcGIS Pro 2.8’, Fourth Edition, Michael Law | Amy Collins.
- What's New in ArcGIS Field Maps: [Version 23.2.0 and 23.3.0](#)



Appendix: Screen shots of ArcGIS Pro client settings (Step #1).

Domains

Domain Name	Description
Hazard	Tree damaged, diseased or hazard to property
LandUse	Land use on which the tree is located
Status	What is the status of the tree
Type	What type of tree in inventoried

Fields

Field Name	Alias	Data Type	Allow Null	Domain	Default	Length
OBJECTID		Object ID				
SHAPE		Geometry				
TREED	TREED	Long	<input checked="" type="checkbox"/>			
DATE	DATE	Date	<input checked="" type="checkbox"/>			
COLLECTOR	COLLECTOR	Text	<input checked="" type="checkbox"/>			255
LANDUSE	LANDUSE	Text	<input checked="" type="checkbox"/>	LandUse		255
HEIGHT	HEIGHT	Long	<input checked="" type="checkbox"/>			
DIAMETER	DIAMETER	Long	<input checked="" type="checkbox"/>			
HAZARD	HAZARD	Text	<input checked="" type="checkbox"/>	Hazard		255
NOTES	NOTES	Text	<input checked="" type="checkbox"/>			255
STATUS	STATUS	Text	<input checked="" type="checkbox"/>	Status		255
TREE	TREE	Text	<input checked="" type="checkbox"/>	Type		255

Symbology

Symbology - Trees

Primary symbology

Unique Values

Field 1: STATUS

Add field

Color scheme

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Classes Scales

Symbol	Value	Label
	Dead	Dead
	Diseased	Diseased
	Ingrowth	Ingrowth
	Planted	Planted
	Unknown	Unknown

Publish

Share As Web Layer

Sharing Easton\_Village As A Web Layer

General Configuration Content Messages

Item Details

Name: Easton\_Village

Summary: Easton Village community tree inventory for data collection.

Tags: inventory, tree, Easton\_Village

Layer Type: Feature

Location: Folder

Share with: Everyone, University of Maryland

Feature Layer

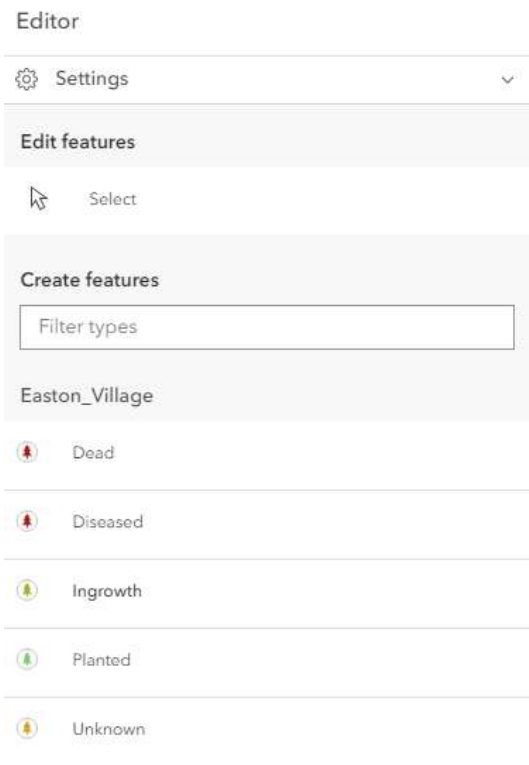
Title	Modified
Easton_Village (Feature Layer (hosted))	Apr 28, 2024
Easton_Village (Service Definition)	Apr 28, 2024



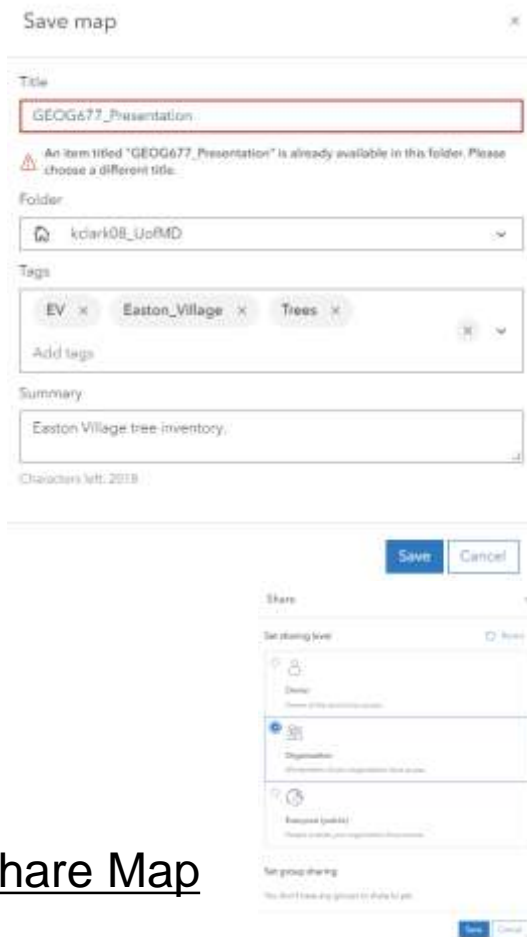


- Appendix: Screen shots of ArcGIS Pro online settings (Step #2).

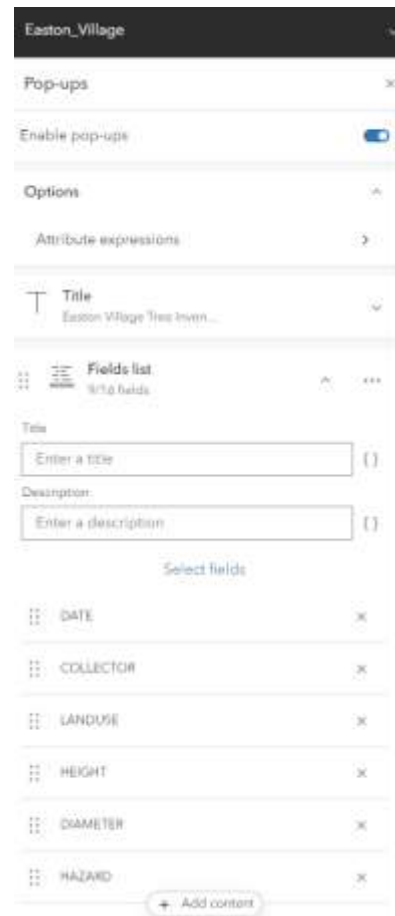
### Add Feature



### Save Map



### Configure Pop-Ups

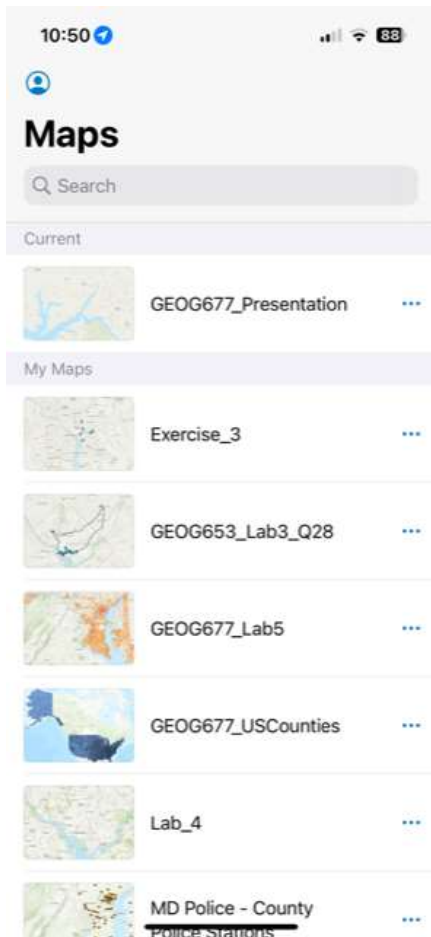


### Share Map

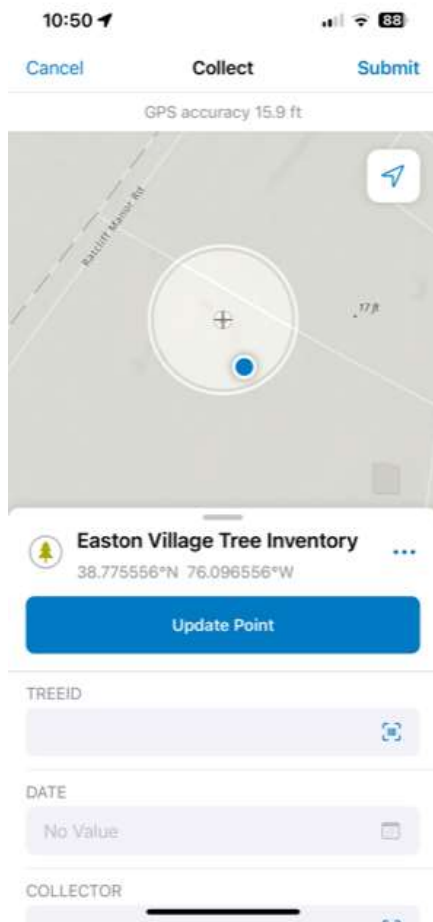


- Appendix: Screen shots of ArcGIS Pro collection settings (Step #3).

### Field Map Client



### Collect Data



### View Map

