Home Grown Solution for Replacing Cool, Cheap and Easy Mapping Apps

NEARC 2016
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Should You Stay?

• Remember when...NEARC ‘15, NEARC ‘16 talks
• CLEAR’s Geospatial Training Program
• Cool, cheap and easy mobile mapping apps we used to use
• “Fancy” GIS alternatives
• Our own solution
• Demo
“Using Smartphone Apps for Basic GPS Data Collection”
NEARCl 2015

“Cool, Cheap, and Easy Mobile Mapping Tools”
Center for Land Use Education & Research (CLEAR)

Connecticut NEMO
National NEMO Network
Geospatial Training Program
Land Use Academy
Extension Forestry Program
Lab for Earth Resource Information Systems (LERIS)

Water
Land & Climate
Mapping & Geospatial

CAHNR Dept. of Extension, CAHNR Dept. of Natural Resources, Connecticut Sea Grant
Geospatial Training Program

• Introduction to Desktop GIS
• Introduction to Web Mapping
• Introduction to ArcGIS Online
• Introduction to ArcGIS Online for Organizations
• ArcGIS Online for Organizations, Advanced Topics
• Introduction to Smartphone GPS Apps and Maps
GPS Mapping Workshops

• CLEAR has offered GPS classes for 15+ years.
• Several revisions (Trimble, Garmin, Photo2GPS)
• Low tech, low budget audience.
• First smartphone training Fall 2014.
Citizen Volunteers

CT Land Conservation Council
Land Trusts
Municipal Commissions
Inland Wetlands
Conservation
Shellfish
Focus on Land Trusts
What do they need?

- Cheap
- Easy
- Cloud based
- Points, lines, polygons, photos
- Forms and simple databases
You Might Be Thinking…

Collector for ArcGIS!

Survey123!
GPS Data - Track Kit

- Collect tracks, points, photos, audio
- Offline maps
- Monitor friends
- Upload to Track-Kit website
- Share, embed, present, print
- Export GPX, KML/KMZ
- iOS & Android*
- $3
Data Entry - Google Forms + AppSheet

- Turn any spreadsheet into data collection app
- No Coding!
- Shareable
- Data saved to cloud (Google Drive)
- Works w/ Google Forms, Google Sheets, OneDrive, Box, DropBox, SmartSheet
- iOS, Android, Web
- Free (to a point)
Largely Successful
Challenges

• Track Kit Concerns
  • Security/Privacy
  • Company stability
  • Not customizable

• AppSheet Concerns
  • Not intuitive
  • Scary for novice users

• 2 Apps?
You Might Be Thinking…

Collector for ArcGIS!  
Survey123!
But what if we could build...
But what if we could build...
Student Labor

From left to right: Steven Demurjian, Andrew Schaffer, William Stewart III, and Alex Nicoll
What they used

Leaflet

Open source is good for me. I will fully embrace it.
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Enter TractNotes

TractNotes
TractNotes Demo
TractNotes Demo

Basemaps
TractNotes Demo

Tracking
TractNotes

Google Forms
TractNotes

WMS Connections
Not Quite Ready for P.T.

- Track Accuracy – HTML-based issues
- Connecting map and form
- Design
- Known unknowns
Thank You!

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