

Point Feature Generating Tool

A Field Tool for the Insect Trapper



By Chad Long

Uses of Tool



- Developed for exact coordinates
- Used in field with GPS
- Possible uses extend to survey technicians
- Personally generated for Use with Insect Survey Technician

The Trapper Form – GUI

- Original Interpretation from a Survey Technician Trap Card
- Important Features:
 - Territory Number
 - County Number
 - Trap Number
 - Map Name
 - Map Number
 - Location
 - Address
 - Comments
 - Permission Box
 - Optional Check Boxes

Developing A Gui Scheme

- Scanned In Trap Card
- Removed Unnecessary Card Information
- Resized Card Image
- Added in Form:
 - Control Buttons,
 - Check Boxes,
 - Option Buttons
 - Text Boxes
 - Labels

Ideal Usage Part 1 Auto Fill

- Would be fully integrated with Auto Fill when Form is opened (Green Boxes):
 - Computer Information
 - Latitude / Longitude Location (info retrieved from portable GPS)
 - Date
 - Tech Number and Initials
 - Locational Coordinate vs. Map Info:
 - Map Name and ID Number
 - Territory Number
 - County Number
- Would Add a point to Map Layer when control is clicked

Location	<input type="text"/>	<input type="text"/>	Date	<input type="text"/>	Initials	<input type="text"/>
	Latitude	Longitude				

d Initials

inate vs. Map Info:

D Number

Territory No. <input type="text"/>		Trap No. <input type="text"/>
County No. <input type="text"/>		Map Name <input type="text"/>

Ideal Usage Part 2 Data Input

- Information based on individual traps (Yellow Boxes)
 - Permission obtained
 - Address
 - Comments
- Site Based Information (Red Boxes)
 - Insect Species Tested
 - Activity performed
 - Check Box Information

(CS)

permission obtained

Address

Comments

Check all that apply:

Based Information (Red Boxes)

Select Species Tested

Activity performed

Check Box Information

Check all that apply:

R/Campgrounds (GM) ☐ Nursery (JB) ☐ Site flagged? ☐

Demonstration (GM) ☐ Demonstration (JB) ☐ Handout provided? ☐

Mass Trapping (GM) ☐ Demonstration (AGM) ☐ Not an ideal site ☐

Permission:

Verbal: ☐ Written: ☐

Pre-arranged: ☐

Comments:

ALB / EAB
Species Tagged:

Site tagged or tested ☐

Site captured or tested ☐

Site processed or tested ☐

GM AGM JB

Handout provided?

Not an ideal site

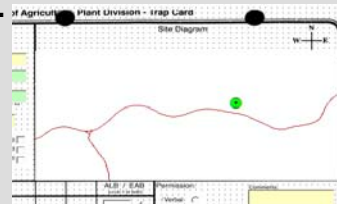
Species Tagged

Species Captured

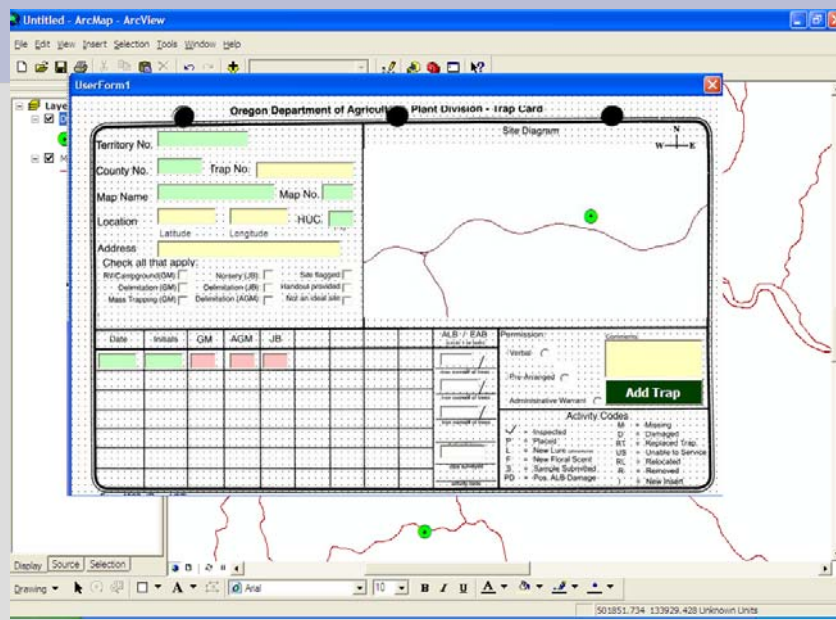
Species Processed

Ideal Usage Part 3 Data Display

- Clicking “Add Trap” Control would:
 - Add a point to the points layer on the appropriate map
 - Save a copy of the form including
 - Info from All filled in boxes
 - A small copy of the map at a zoomed layer
 - Adds new data fields to attribute table
- Corner image would be a zoomed version of the Map, possibly even an interactive zoom.



My Final Project Gui



What Differed In My End Result

- Much of the GUI is still uncoded
- Many of the features lack usability
- The idea is original idea is essentially unchanged, however program coding still needs to be done.
- With hours of proper coding, and a good debugging my AP would eventually work!

Sources Cited

- Getting to Know Arc Objects – Robert Burke
- Add a Point to an SDE Layer (AP) - Finn Dahl
- Photo Credits
 - Slide 1 - <http://www.agr.state.il.us/images/GypsyMothFemale.gif>
 - Slide 2 - http://z.about.com/d/archaeology/1/7/8/m/gps_unit.jpg