

PDA - FIELD EXERCISE



Figure 1.

Exercise:

This activity will provide exposure in the utilization of field data collection technologies. This field exercise will provide you hands-on experience in using a personal digital assistant (PDA) to collect data, while the indoor session will focus on transfer, storage, and maintenance of data. The primary application used in this field session is the COE Routine Wetland Determination.

The exercise is designed to engage the user in data entry in just one type of field project, thus gaining an appreciation and better understanding of the benefits of this technology.

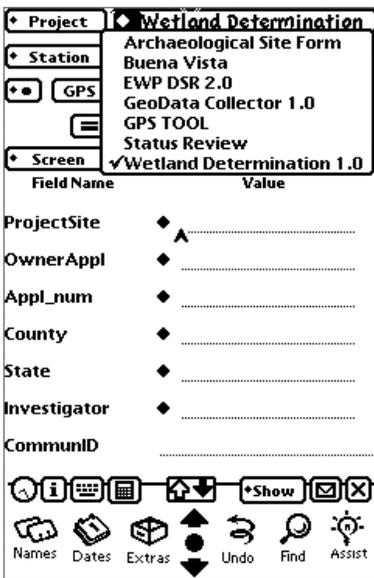


Figure 2.

Activity 1 - Getting Started

- Ensure GPS is on and the almanac updated
- Turn on the PDA
- Adjust the contrast and locate the stylus

→ Using the stylus, select the "FW Pro" icon from start-up screen (Fig. 1)
Note: All further data entry is completed using the stylus

Activity 2 - Wetland Determination Project

- Select the "♦ Wetland Determination" button to open a list of projects (Fig. 2)
- Select "Wetland Determination" project (Fig. 2)
- Select "Station" and select "New"
- Hand print "1421" on the line as a sample tract number

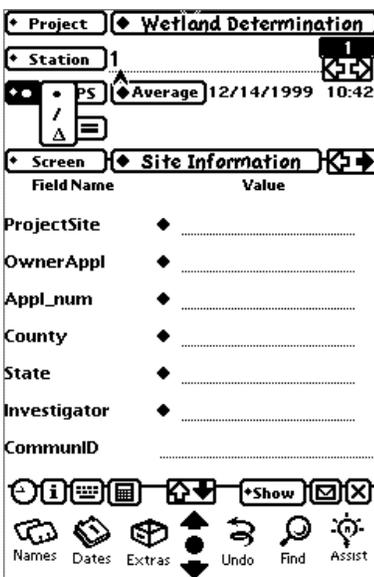


Figure 3.

Activity 3: - GPS Tool

Note: Coordinate data may be collected as point, line, or polygon

- Select the "♦ Δ" button (Fig. 3)
- Select "•" to collect point data
- Select "♦ Average" button
- Select "Average of All Points"
- Select "GPS" button to capture Lat/Lon coordinates
- After 30 seconds, again select "GPS" button to stop communication

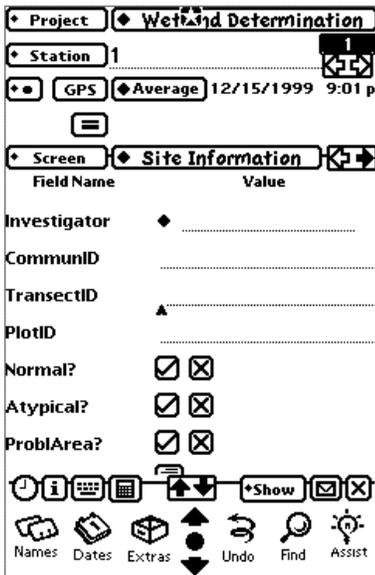


Figure 4.

Activity 4 - Data Entry Procedures

Note: Data may be entered in a number of different ways depending on how a given project was created.

In this project, to enter data, either (Fig. 4):

- 1) Select the ♦, and choose an entry from the choice list.
- 2) Tap the line for a ^, then hand-write an entry.
- 3) Tap the line for a ^, select the keyboard button at the bottom of the screen, then type in an entry.
- 4) Select the ✓ or X boxes to indicate yes or no.
- 5) "Remarks" screens require a typed or handwritten entry.
- 6) "Sketch" screens require a hand-drawn sketch.

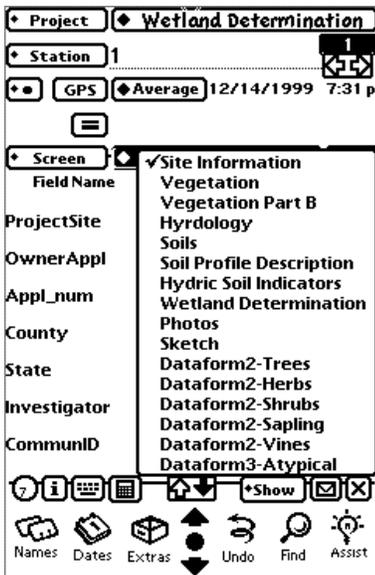


Figure 5.

Activity 5 - Site Information

- Select the "" Site Information" button (Fig. 5) and note the choice list of data entry screens.
- Select "Site Information" and enter the data below for each respective field.
 - Project Site: tap line for a ^; hand-write **45th Street**
 - Owner/Applicant: tap line for a ^; hand-write **J. Johnson**
 - Application number: (leave blank)



Figure 6.

Activity 5 - Site Information (cont.)

- County: select the keyboard, type in "**Marshall**" (Fig. 6)
- State: **IA** should already be entered, if not, enter it now
- Investigator: tap line for a ^; hand-write "**your name**" on the line.
- Community ID: tap line for a ^; use keyboard to enter a "**2**"
- Transect ID: (leave blank)
- Plot ID: tap line for a ^; type in a "**B**"
- Use the up/down arrows in the lower-center of screen to complete the following:
 - Normal?: select ✓ for **Yes**
 - Atypical?: select X for **No**
 - ProblArea?: select X for **No**
 - Remarks1: (leave blank)

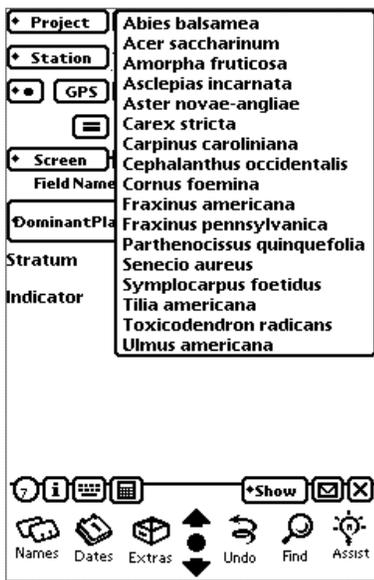


Figure 7.

Activity 6 - Vegetation

→ Select the " ♦ Site Information" button and select "**Vegetation**"

Note: Plant specie, stratum, and indicator are entered in groups for each respective plant.

→ On the "Dominant Plant" line, select the far right " ♦ " to get a nested-pick list of plants (Fig. 7)

→ Select **Tilia Americana**

→ On the "Stratum" line, select the " ♦ " to get a choice list of strata.

→ Select "**Tree**" for the specie selected

→ On the "Indicator" line, select the " ♦ " to get a choice list of indicators.

→ Select "**FACU**"

→ Select the "Dominant Plant" button and select "New" to enter each new plant, followed by stratum and indicator, listed below:

Carex stricta, herb, OBL

Carpinus caroliniana, sapling, FAC

Cornus foemina, shrub, FACW-

Fraxinus americana, tree, FACW

Senecio aureus, herb, FACW

Symplocarpus foetidus, herb, OBL

Ulmus americana, sapling, FACW-

ADD: Carex Sp., herb, OBL

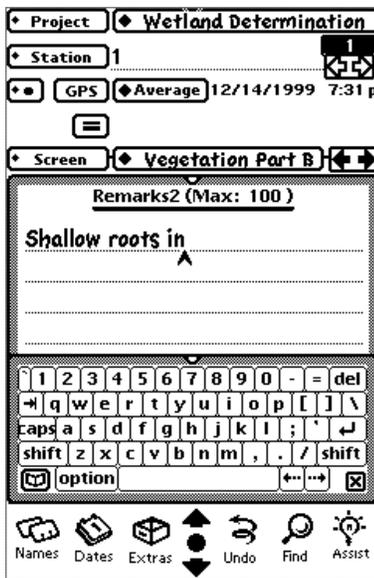


Figure 8.

Activity 6 - Vegetation (cont.)

→ Select the " ♦ Vegetation" button and select "**Vegetation Part B**"

→ Tap the "Percent" line and type in **87.5**

→ Tap the "Remarks" box and type in the following remark (Fig. 8):

Shallow roots in Tilia. FAC-Neutral Test = 6 wet:1 nonwet

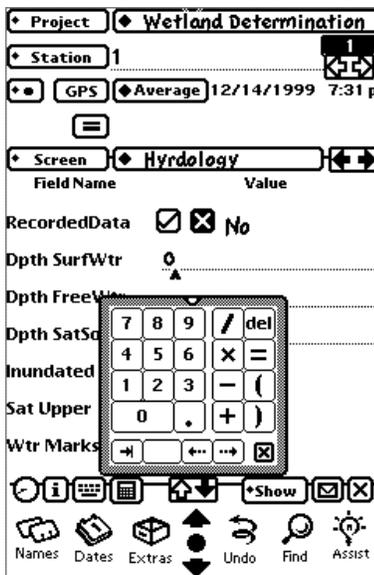


Figure 9.

Activity 7 - Hydrology

→ Select the " ♦ Vegetation B" button and select "**Hydrology**"

→ Select the or X boxes for a Yes/No response, or type in the respective value for the following:

Recorded Data Available: **NO** (Fig. 9)

Depth of Surface Water: **0** (Fig. 9)

Depth to Free Water: **16**

Depth to Saturated Soil: **4**

Inundated: **NO**

Saturated in Upper 12 Inches: **YES**

Water Marks: **NO**

Drift Lines: **NO**

Sediment Deposition: **NO**

Drainage Patterns in Wetlands: **NO**

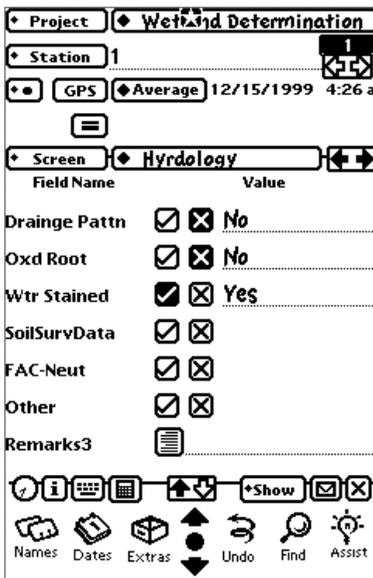


Figure 10.

Activity 7 - Hydrology (cont.)

Oxidized Root Channels in Upper 12 Inches: **NO** (Fig.10)
 Water-Stained Leaves: **YES**
 Local Soil Survey Data: **YES**
 FAC Neutral Test: **YES**
 Other: **NO**

Tap the "Remarks" box and type in the following remark:

Soil survey indicates high water table 0-1.0 ft. Sept-May. Growing season 20 APR - 27 OCT.

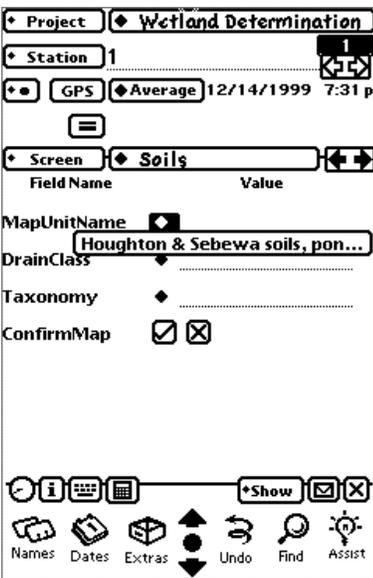


Figure 11.

Activity 8 - Soils

- Select the "Hydrology" button and select "Soils"
- Enter the following:
 - Map Unit Name: **Houghton & Sebewa soils, ponded** (Fig. 11)
 - Drainage Class: **Very Poor**
 - Taxonomy: **Typic**
 - Confirmed Mapped: **YES**

Activity 9 - Soil Profile Description

- Select the "Soils" button and select "Soil Profile Description"
- On the "Depth in" line, tap the line to the right,
 - Enter **0-9** (Fig. 12)
- On the "Horizon" line, select the "♦" to get a choice list.
 - Select **"A"**
- On the "Matrix Color" line, select the "♦" to get a choice list.
 - Select **"10YR 3/1"**
- On the "Mottle Color" line, select the "♦" to get a choice list.
 - (leave blank)
- On the "Mottle Abundance" line, select the "♦" to get a choice list.
 - (leave blank)
- On the "Texture, Concretions" line, select the "♦" to get a choice list.
 - Enter **"FSL"**

→ Select the "**Depth in**" button and select "New" to enter each new set of profile data listed below:

Depth:	9-14	14 -
Horizon:	B	(leave blank)
Matrix Color:	10YR 4/1	10YR 5/1
Mottle Color:	7.5 YR 6/6	7.5 YR 5/6
Mottle Abun:	Few, Distinct	Common, Distinct
Texture, Con:	CL	CL

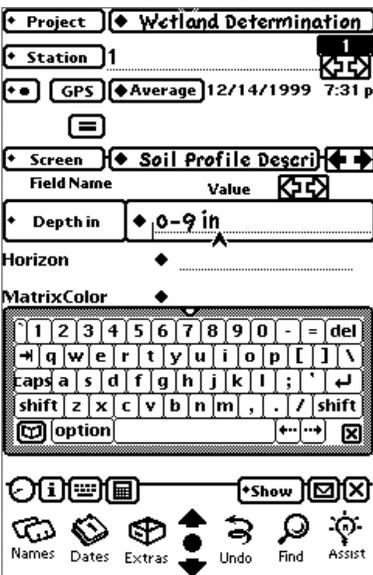


Figure 12.

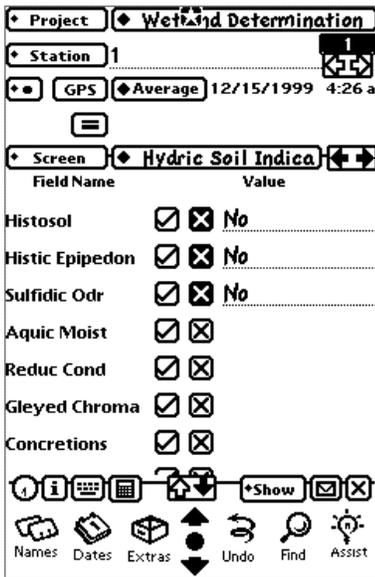


Figure 13.

Activity 10 - Hydric Soil Indicators

→ Select the "Soil Profile Description" button and select "Hydric Soil Indicators"

→ Enter the following (Fig 13):

Histosol: NO
 Histic Epipedon: NO
 Sulfidic Odor: NO
 Aquic Moisture Regime: NO
 Reducing Conditions: NO
 Gleyed or Low-Chroma Color: YES

Concretions: NO
 High Organic Content: NO
 Organic Streaking: NO
 Local Hydric Soils: YES
 National Hydric Soils: YES
 Other: NO

Remark: (leave blank)

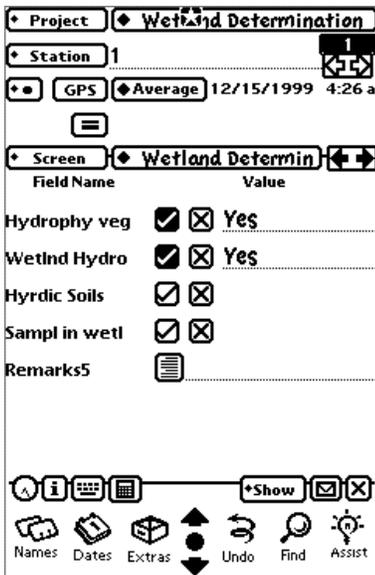


Figure 14.

Activity 11 - Wetland Determination

→ Select the "Hydric Soil Indicators" button and select "Wetland Determination"

→ Enter the following (Fig 14.):

Hydrophytic Vegetation Present: YES
 Wetland Hydrology Present: YES
 Hydric Soil Present: YES
 Sampling Point Within a Wetland: YES

Remark: (leave blank)



Figure 15.

Activity 12 - Sketch

→ Select the "Wetland Determination" button and select "Sketch"(Fig.15)

→ Draw a sketch on the grid-screen using the stylus.