



## About Wilderness Mobile

Wilderness Mobile is an application that allows you to digitally capture wilderness campsite monitoring data in the field using a Personal Data Recorder (PDR) and then use your PC to upload the data into the Infra-WILD database upon your return to the office.

Use of this tool has two significant advantages over the traditional approach. First, the workload burden of entering the data from the hard-copy field data collection forms into a database for subsequent analysis often prevents the data from ever being used. Many offices have the proverbial shoebox filled with hard-copy forms that never got converted to an electronic format. Second, this transcription step also introduces additional sources of error into the process when the person entering the data is not the same as the person who collected the data and is most familiar with it.

## Installation

To use Wilderness Mobile, you must install software on both your PC and your PDR. Step-by-step installation instructions are located at:

<https://iweb.fs.usda.gov/mobileweb/ima/i-mobile-wilderness.html>.

Among the various software components that get installed is an application called I-Web Mobile Builder. This software allows you to upload and download data between the Infra-WILD database (from a PC) and the PDR.

## Initial Data Preparation

Before you start Wilderness Mobile, you must use Infra-WILD to prepare the necessary data set that will be used in the mobile application. You then use I-Web Mobile Builder to transfer this data to the PDR. This pre-work ultimately improves the accuracy of the data and makes data entry in the field much more efficient.

The data set that is downloaded to the PDR includes:

- Existing recreation site records, along with their wilderness names and their immediate parent records (such as a concentrated use area) from the Wilderness Hierarchy.  
NOTE: If you have not entered a recreation site in Infra-WILD for the specific survey, you'll need to create a general "template site record"—this allows the accompanying data set for sites to get downloaded to the PDR. Without this, the LOVs on the PDR will have no values.
- Information needed to create a Data Collection Event (DCE) on the PDR, such as the survey name, the protocol, and names of the data collectors.
- Customized data entry forms that reflect the specific requirements of your data collection protocol. This includes the attributes you are monitoring, as well as localized LOVs, default values, and standard units of measure.
- Pre-existing campsite monitoring data can be reviewed (not edited) on the PDR. If you need to edit this information, it will need to be changed in Infra-WILD upon your return to the office.

## Download Data to PDR

Before you download data to the PDR, use Infra-WILD to ensure that the data set (recreation sites, survey, protocol, data collectors, etc.) fits your needs. You will need the Wilderness Manager role to do this.

When you are ready, follow the steps below:

NOTE: Be sure that you have uploaded any existing Wilderness data that is on the PDR as it will be deleted in this process.

1. Connect your PC to the PDR and turn the PDR on. Be sure that your device is connected to your PC via ActiveSync and your PC is connected to the FS network.
2. Open I-Web Mobile Builder by double-clicking the icon on your PC's desktop.
3. From the I-Web Login window, select the Production Server and click OK. Click Yes on any security alerts that are displayed.
4. When the eAuthentication page displays, click on the Continue button and login using your eAuth ID and password. Then click the Login button. The I-Web Mobile Builder opens to the first "wizard" window.
5. Select the Download Data from I-Web option and click the Forward button.
6. Select the PDA/Mobile Devices option and click the Forward button.
7. From the list of business areas in the left pane, select Wilderness and then select the application in the right pane.
8. Enter a name for the records you will download in the Mobile Dataset Name field. Click the Forward button.



I-Web Mobile Builder now guides you through the process of selecting records, tables, and LOVs (lists of values) to be downloaded. You may be prompted to choose several items. In some cases, you will notice that records are already selected for you. I-Web Mobile Builder selects these records if they are linked or are required by the parent record.

9. Enter search criteria into one or more of the yellow fields and then click on the Enter Query button.
10. Review the Available Records list that is displayed. To select a record, click on the gray area next to the record to highlight it and then use the blue down-arrow button to move the record to the lower Selected Records block—these are the records that will be downloaded to the PDR. Repeat this process for as many of the records as you need. You can move all records at the same time by clicking on the button with the double arrow. Click the Forward button when you are done and repeat the process for additional data, as prompted.
11. When you are done selecting data to be downloaded, I-Web Mobile Builder checks to see if other applications share the same data source. If they do, you will be prompted to download additional records for the same data set (this is optional). If this data is not shared with other applications, you will be prompted to simply click on the Forward button to proceed.
12. Once the data is downloaded, a confirmation message is displayed and you can now exit I-Web Mobile Builder and disconnect the PDR.

## Using Wilderness Mobile

1. On your PDR, tap Start and then tap I-Web Mobile. The Wilderness Mobile application will open to the Wilderness icon. Tap on this icon to start.
2. With the Site form displayed, tap on the Query button (binoculars) in the toolbar.
3. Select or enter search criteria into any of the yellow fields. If you want to get all site records, leave these fields blank.
4. Tap the Query button again. Once the query has run, the first site record will be displayed; use the arrow buttons in the toolbar to advance to other records.
5. With a site record selected, you can now proceed by editing the current site or creating a new one by tapping the Add button in the toolbar.
6. To enter data on a PDR that does not have a physical keyboard on the device, click on the keyboard icon at the bottom of the screen to open a virtual one. Click the icon again to hide the keyboard.



NOTE: Some PDRs may be configured to recognize your handwriting instead of using the keyboard. Either method can be used—choose your preference.

7. Use the DCE and Monitor buttons to go to the other Wilderness Mobile forms. The next page of this guide offers an overview of these forms as well as more information about using the application.

## Using GPS

If your PDR has GPS functionality, Wilderness Mobile can use it to acquire location data for a recreation site. (You can also enter location data manually without a connected GPS unit.) Most PDR devices will first need to be configured for GPS use, particularly those units that use an external GPS, which must first be “paired” to the PDR (via Bluetooth, for example). Refer to the user documentation that came with your equipment to learn how to do this. You’ll also need to select a GPS comm port on your PDR that Wilderness Mobile can use. The GPSConfig Tool (accessed from an icon after opening I-Web Mobile) can help you do this. (Instructions for using this tool are available from its Help menu.)

## Upload Data from PDR

Upon your return to the office, you will want to upload the data on your PDR to the Infra-WILD database. Again, this is done by using I-Web Mobile Builder. Follow the same steps that were used to download data, except select the Upload Data from I-Web option on the first screen of the wizard.

## More Resources

To learn more about using Wilderness Mobile and the GPSConfig Tool, check out the Help:

<http://fsweb.nrm.fs.fed.us/support/help/wilderness/>

A shorter version of this Help system can also be opened directly from the PDR by clicking on the Help menu in Wilderness Mobile.



## Wilderness Mobile Forms

The Wilderness Mobile interface consists of three main forms that are used in this order: **Site**, used to find/create a recreation site; **DCE**, used to create a data collection event; and **Monitor**, used to record specific findings in the field.

4	Name	Icon
	Add	
	Delete	
	Save	
	Revert	
	Query	
	Clear Query	
	Previous	
	Next	

- 5 Data entry fields that are required have red titles with an asterisk (\*). Optional fields have black titles. In addition, data entry fields are color-coordinated for these purposes:
- Cyan** (bluish green): These fields indicate that you are in “insert mode” and can add data.
  - Yellow**: These fields indicate that you are in “query mode” where you can enter search criteria. To execute the query, tap on the Query button in the toolbar.
  - White**: These fields allow data to be edited.
  - Gray**: These fields indicate that they are read-only; data cannot be edited.

### 1 Site Form

This form is used to identify your location, which includes the name of your wilderness and recreation site as well as specific geographic data. There are three tabs that can be used depending on the type of data you are going to use: Latitude-Longitude (which can be pulled from a connected GPS unit), UTM, and PLSS.

### 2 DCE Form

Use this form to define your Data Collection Event—the date of your visit, the name of the survey, the protocol being used, and the name of the people who collected the data.

### 3 Monitor Form

This form is used to enter your monitoring data. There are nine tabs available (you may have fewer depending on your configuration): Site Rec (customized protocol), Barren Core, Trail Conditions, Trail Count, Site Development, Stock Impact, Proximity to Water, Damaged Trees, and Invasive Plants.

### 4 Toolbar

The toolbar at the bottom of each form includes these eight functions.

### 5 Data Entry Fields

The data entry fields include these conventions (see left).