

The version of Pedon PC software is identified in the lower right hand corner of the Main Menu.

NASIS 51 Tables

- 22 Horizon tables
- 9 Pedon tables
- 6 Site Observation Tables
- 8 Site Tables
- 2 Transect Tables
- 4 Site Associate Tables
- 51 Point Tables

Pedon PC 8 Tabs

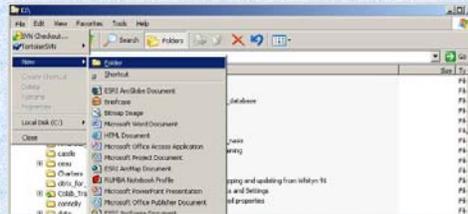
- 3 Pedon tabs
- 3 Site tabs
- 1 Transect Form
- 1 Site Association Form

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The main distinction between NASIS and Pedon PC is that NASIS must be accessed via the web, while Pedon PC can be used as a stand alone application.

In addition, the 51 point data tables in NASIS have been organized into 8 customizable forms for ease of use.

Step 1. Create a Folder on the C drive



Step 2. Rename the "New Folder" to "pedon"



Result: C:/pedon

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Pedon PC does not have an install script.

The user or ITS has to follow these steps to set up the application.

The default location for running Pedon PC is in the c:/pedon directory.

Pedon PC is used by individuals outside of the National Cooperative Soil Survey and by various partners of the Cooperative Soil Survey. These individuals include consultants, educators, and supporters of the National Cooperative Soil Survey.

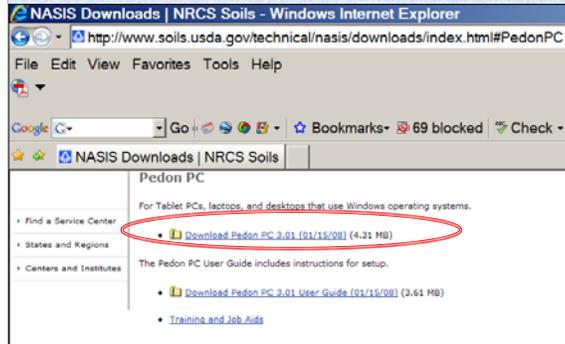
In order to use Pedon PC you will need to download files from a few sources.

If you only want to enter pedons, all you need are the files from the NASIS download site.

If you want a choice list for soil names you will need the SSURGO template from the soil datamart plus the tabular data from a county or multiple counties.

Step 3. Browse to the NASIS Downloads Page

<http://www.soils.usda.gov/technical/nasis/downloads/index.html#PedonPC>



Step 4. Download the latest version of Pedon PC

Pedon PC 3.02 is available at this time (August 2008).

Pedon PC 3.02 Contains Choices from the September 2006 updates to NASIS.

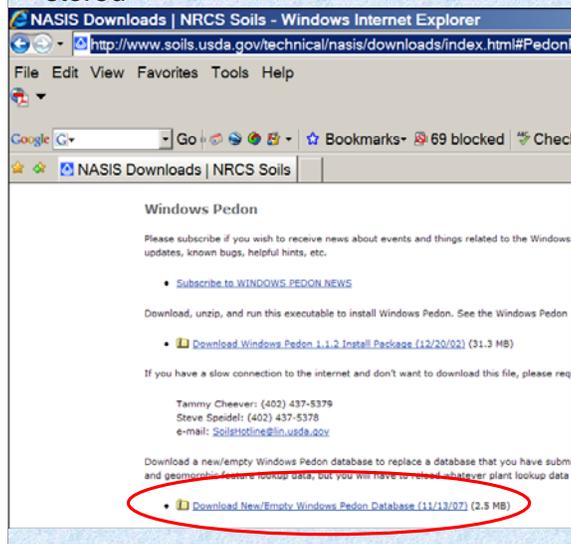
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Step 3: Browse to the NASIS download site
<http://nasis.nrcs.usda.gov/downloads/>

Currently Pedon PC 3.0 is available from the NASIS download page.

Step 5. Download a New/Empty Windows Pedon Database

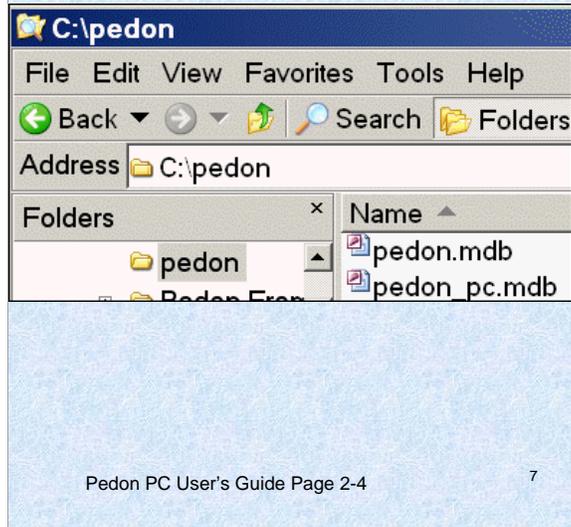
- The pedon.mdb file is where the data is stored



The Pedon.mdb file (New/Empty Windows Pedon Database), which is available from the NASIS web site, includes domain changes (choice lists) made in September (09/2006). The basic structure of the pedon.mdb file has not changed for several years and does not include all of the fields available in NASIS.

Because PedonPC depends upon the pedon.mdb file, it does not include all of the fields that are currently in NASIS. The reason for this is that the upload script to NASIS has not been modified. Therefore, the upload script does not support all of the fields that are currently in NASIS. If the fields were added to Pedon PC, the data entered would be lost during the upload to NASIS and this is not a desirable condition.

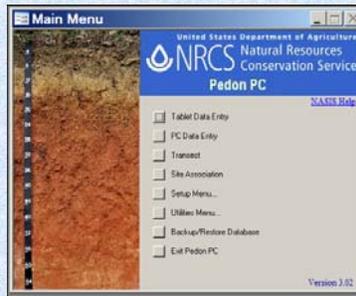
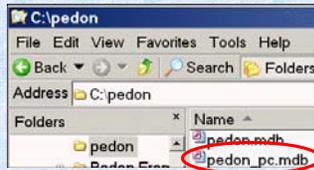
Step 6. Unzip the two files and place the contents in c:/pedon



The minimum setup includes the pedon.mdb file for storing data and the pedon_pc.mdb file which acts as the user interface.

The default location for pedon_pc is the c:/pedon directory.

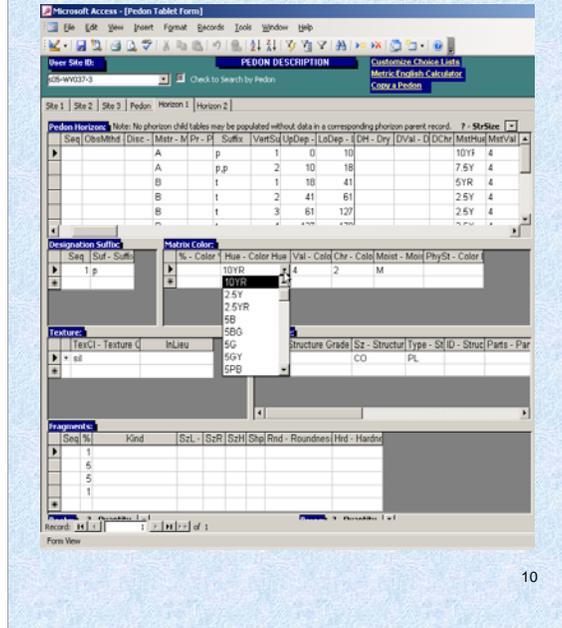
Step 7. Start Pedon_PC by double clicking on the pedon_pc.mdb file or make a short cut to it and double click on the shortcut.



Step 8. As Pedon PC opens, click through the Security Warning by pressing the Open button. Warnings may vary by computer depending upon the setup of the computer and version of Access.



Step 9. With the default setup of the first two files, you can enter most site and horizon data

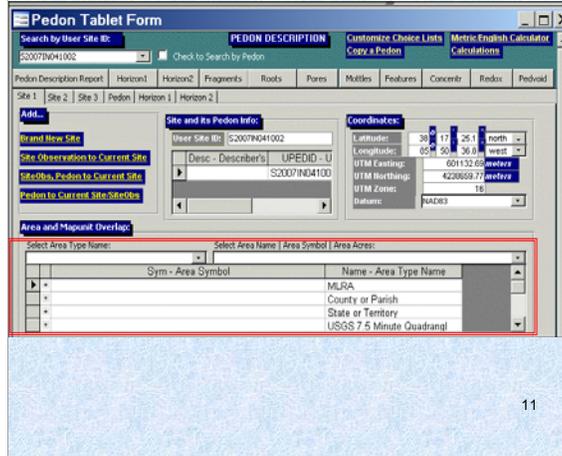


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All that is needed is the blank pedon database and the Pedon PC application to input most data.

The Pedon.mdb file is a Windows Pedon file so the two applications (Pedon PC and Windows Pedon) can be used interchangeably.

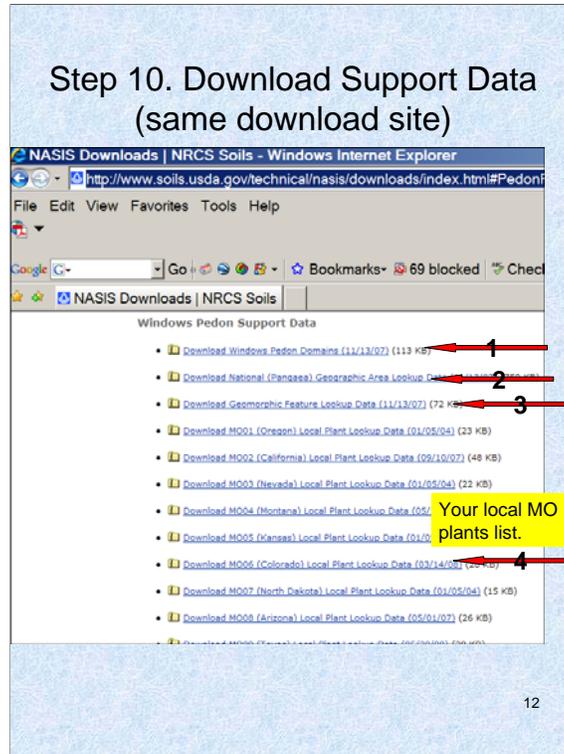
Some fields in Pedon PC require additional support data for them to have drop down lists. Area types, local plants, and geomorphic features are three of them.



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The Blank Pedon.mdb file does not contain any area names. This is because it is known that area names change on a regular basis. Instead of posting a new pedon.mdb file on a frequent basis, the area names are updated in a separate text file which is also posted on the NASIS download page.

Step 10. Download Support Data (same download site)

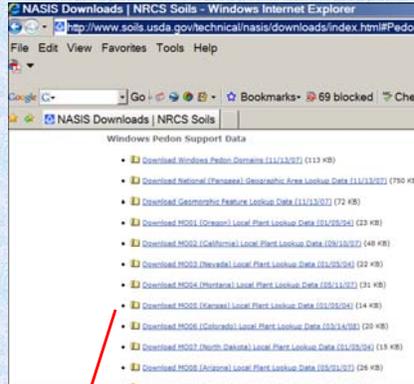


Geomorphic features, Geographic areas, and Local Plant Names all are distributed as zip files from the NASIS download page.

The Windows Pedon Domains can also be updated from this page if they change.

Remember that there are about 51 tables in NASIS pedon. Pedon PC can be used to populate 48 of them using the blank pedon.mdb file. The choice lists for the additional tables come from these text files.

Step 10b. Includes Local Plants



Pick the appropriate plant list for your area

Name	Size	Type
GeomorphicFeatures.zip	68 KB	WinZip
locplnt.zip	13 KB	WinZip
NationalGeographicAreas.zip	747 KB	WinZip

Step 11. UnZip Support Data

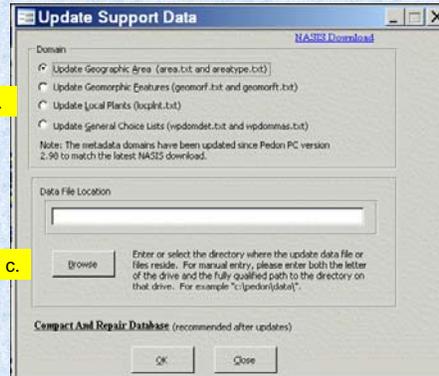
Step 12. a. Choose Setup Menu
b. Update Support Data



Step 12.

c. Browse to the text files

d. Choose each of the four buttons and choose OK four times (Ignore warnings and errors)



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If you download the support data to a single location, you only have to browse to the location once.

Results from step 12 are choice lists from "Support Data"

The screenshot displays a software interface with three main sections. The top section, titled "Area and Mapunit Overlay", contains a table with columns for "Sym - Area Symbol", "Name - Area Type Name", and "Mapunit Name". The middle section, titled "Site Existing Vegetation", includes a "Plant Association Name" field and a table with columns for "Symbol - Local Plant Co" and "Scientific - Local Plant Scientific Name". The bottom section, titled "Site Geomorphic Description - Choice List from Setup >> Update Support Data", features a table with columns for "Mod", "Geom", "Feat", "Feature Typ", "FeatID", "Feature", and "ExistsOn". A red oval highlights the "Update Support Data" link in this section. The number "16" is visible in the bottom right corner of the screenshot.

The support data supplies choice lists for the Area names, Plant names, and Geomorphic descriptions.

Step 13. Once support data is updated, the Area Names can be Populated

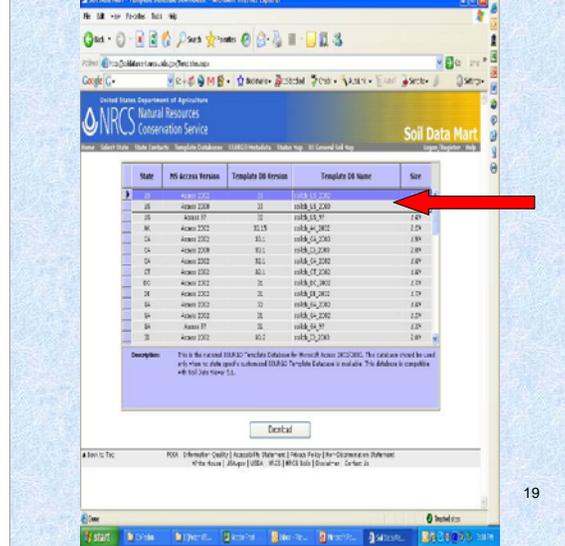
The screenshot displays the 'Pedon Tablet Form' software interface. At the top, there is a search bar for 'User Site ID' containing 'S2007ND43003' and a 'Check to Search by Pedon' checkbox. Below this are navigation tabs for 'Pedon Description Report', 'Horizon1', 'Horizon2', 'Fragments', 'Roots', 'Pores', 'Hottles', 'Features', 'Concentr', 'Redox', and 'Pedvoid'. The main interface is divided into several sections:

- Site and its Pedon Info:** Contains fields for 'User Site ID' (S2007ND43003), 'Desc - Descriptor's' (UPEPID - U), and 'Pedon' (S2007ND43003).
- Coordinates:** Includes input fields for Latitude (30 17 25.2 north), Longitude (85 50 27 west), UTM Easting (601126.01 meters), UTM Northing (429860.94 meters), UTM Zone (16), and Datum (NAD83).
- Area and Mapunit Overlay:** Features a table for selecting area types. The table has columns for 'Sym - Area Symbol', 'Area Name', 'Area Symbol', and 'Area Acres'. A dropdown menu is open, showing options: 'Kentucky and Indiana Sandstone and Shale Hills and Valley' (MLRA), 'Floyd' (County or Parish), 'Indiana' (State or Territory), and 'New Albany, Indiana' (USGS 7.5 Minute Quadrangle).

Another choice list for Pedon PC is that for the Soil Name as Sampled (Optional)

The soil name as sampled can come from the component name in the template.mdb from the Soil Data Mart.

Step 14a. Download a SSURGO template from the Soil DataMart.
<http://soildatamart.nrcs.usda.gov/Default.aspx>
 Pedon PC will work without this file but you will not have a soil name choice list.

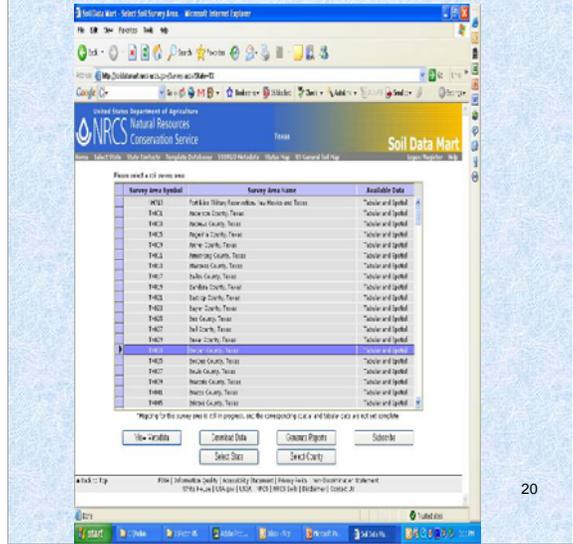


All that the templatedb.mdb supplies is a list of component names that can be accessed through a drop down list in the Soil Name as Sampled field. If the Templatedb.mdb is not included, the user can just type in the soil name as sampled without using a pick list.

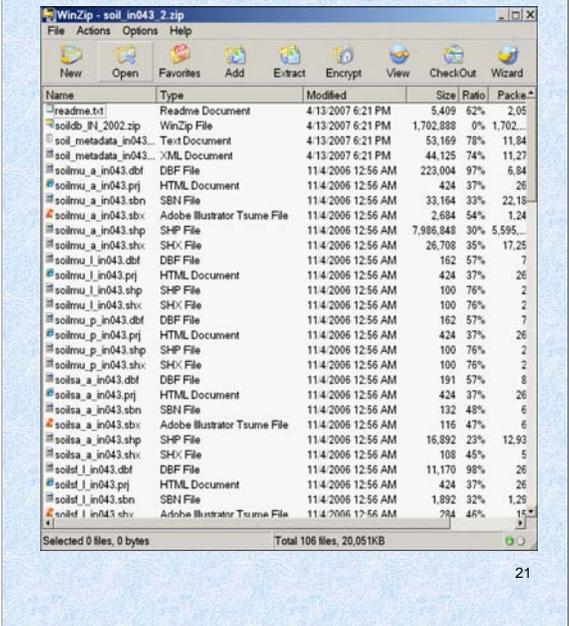
Step 14B. Download your selected county or counties from the same site.

Follow the SSURGO instructions* to import county tabular data into the SSURGO template. You can have more than one county in the template.

* Open the template by double clicking on it. Then type in the path to the tabular data.

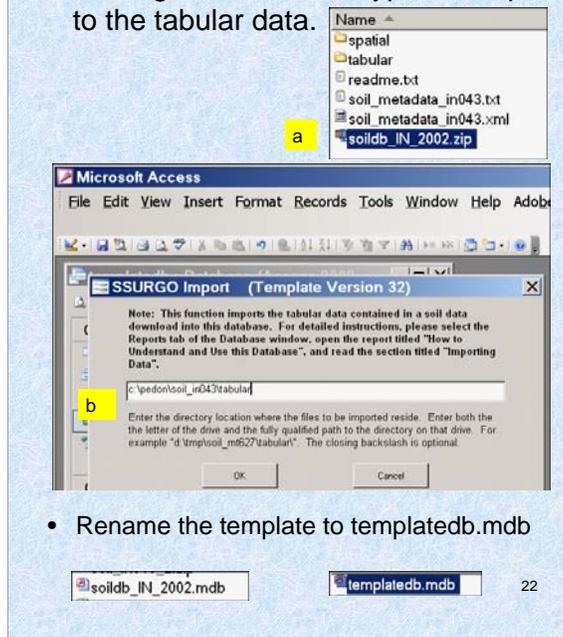


The Zip file contains a template, spatial data, and tabular data



Directions from Soil DataMart

- * a. Open the template by double clicking on it. b. Then type in the path to the tabular data.



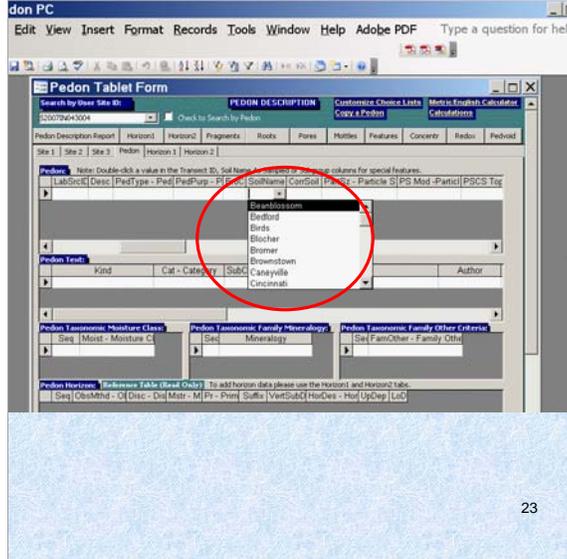
- Rename the template to templatedb.mdb

The resulting file should be in c:/pedon.

C:/pedon/templatedb.mdb

The user also has the option of using the setup form to link to any SSURGO template irrespective of the name.

Pointing to the Templatedb.mdb in the setup menu adds the choice list for the Soil Name as Sampled Field. The default is c:/pedon/templatedb.mdb.



Other Optional User Defined Choice Lists can be created for some text fields in NASIS/Pedon PC

- Soil Survey Personnel
- Note Type
- Fieldsheet
- Geologic Formation
- Site Observation Text Category
- Local Physiographic Name
- Text Category
- Pedon Horizon Field Measured Properties Name (phfmp_name)
- Pedon Horizon Field Measured Properties Unit of Measure (phfmp_uom)

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Step 15 - From the Setup Menu,
go to --
a. - Customize Choice Lists
b. - Edit Choice Lists

domain_name	domain_id
local_survey_persona	100
note_type	200
fieldsheet	300
geologic_formation	400
siterefs_text_category	500
local_physiographic_name	600
textcat	700
phfmp_name	800
phfmp_uom	900

Domain ID	Show/Hide	Choice Sequence	Choice ID	Choice	Choice Label	Choice Obsolete
900	<input checked="" type="checkbox"/>	1	1	Percent		No
900	<input checked="" type="checkbox"/>	1	2	petrochemical		No
900	<input checked="" type="checkbox"/>	1	3	sulfurous		No
900	<input checked="" type="checkbox"/>	1	4	grams per cc		No
900	<input checked="" type="checkbox"/>	1	5	none		No

This example is for the Pedon Horizon Field Measured Properties, Unit of Measure.

The Choice ID is a made up number for this particular field. Choice ID's are fixed for all but the local tab.

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Under the local tab there are several lists that can be added to. By creating these choice lists, the user is able to pick from a list rather than type out text fields. The describer name is a good example of a choice list.

The Choice ID is a made up number for the computer. The Choice is actually what is stored in the Pedon.mdb database and what is uploaded into NASIS.

This example is for the Pedon Horizon Field Measured Properties, Unit of Measure.

Step 16 – Enter pedon data using customized choice lists and NASIS domains

The screenshot displays the 'Pedon Tablet Form' in Microsoft Access. The form is titled 'PEDON DESCRIPTION' and includes a 'Have Site ID?' dropdown menu with '05-W037-3' selected. A 'Check to Search by Pedon' checkbox is also present. The form is organized into several sections:

- Geology:** Fields for 'Local Physiographic Name (Optional Local List)' and 'Geologic Formation (Optional Local List)', each with an '(Add records to add table)' button.
- Bedrock:** Fields for 'Bedrock Depth', 'Bedrock Kind', 'Bedrock Hardness', 'Bedrock Fracture Intensity', 'Bedrock Weathering', and 'Bedrock Strata (0-360)'. A 'Bedrock Dip (0-90)' field includes 'Low' and 'High' sub-fields with 'degrees' units.
- Elevation/Slope:** Fields for 'Elevation', 'Slope Aspect (0-360)', 'Slope Gradient', 'Slope Length (ft)', 'Slope Lengths', 'Hillslope Profile', 'Slope Position', 'Slope Shape Aspect', 'Slope Shape Upflow', and 'Slope Complexity'.
- Geomorph. Components:** Fields for 'Geo Comp - Hills', 'Geo Comp - Mountains', 'Geo Comp - Terraces', and 'Geo Comp - Flats'. A 'Hillslope' section includes 'Profile Class', 'Drainage Class', and 'Soil Permeability Class'.
- Site Geomorph. Description:** A choice list from a setup menu with an 'Update Support Data' button.

At the bottom, there is a table with columns: 'Mid', 'GeoFeat', 'PType', 'Feature Type', 'FeatID - Feature ID', and 'ExistsOn'. Below the table, it says 'Record: 1 of 1' and 'User must enter records in the metadata_domain_detail_local table.'

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At this point Pedon PC is set 26up to accept data. There are other customizations that can be made to enhance the efficiency of the application in the field and in the office, but this initial setup is enough to get the application up and running.