

# Soil Resource Inventory Tool Box (SRITB)

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## ABSTRACT

The purpose of the Soil Resource Inventory Toolbox (SRITB) project is to develop simple, intuitive geospatial tools for field soil scientists. This tool box will incorporate existing ESRI tools and applications with customized tools and applications to support the production of digital soil surveys. Digital soil survey production is broken down into four parts: data capture, data editing, data maintenance, and QA/QC.

1. SRITB – Digital Editing Tool Box
  - Version 1.1.18 for ArcGIS 9.2 was released in May 2008
  - ArcMap extension with six custom toolbars designed to simplify GIS data management processes, increase efficiency of field digitizing and editing, and maximize screen real estate on table computers
    - Edit Manager (setup and preferences)
    - Edit Toolbar
    - Sketch Toolbar
    - Topology Toolbar
    - QC Toolbar
    - GPS Toolbar
  - ArcMap to ArcScene viewing tool
  - Pedon Auto population Toolbar that supports projection of location data to NAD83 or WGS84
  - Integrated process steps that reduce the number of keystrokes and mouse clicks to perform common tasks
  - Pre-set defaults help improve consistency of application.
  
2. SRITB – Analysis PC
  - Version 1.0 was released in April 2008
  - Install package includes a Microsoft Access application and database, a default ESRI ArcMap project, and a Microsoft Access database linking Access to Arc
  - Supports import of Site and Pedon data downloaded from NASIS for analysis and display purposes
  - Data exported from NASIS for use in Analysis PC is decoded from the native NASIS numeric codes
  - Includes as set of default queries; users can also write their own custom queries
  - Users can also use existing Microsoft Access tools to sort, filter, view, and analyze data
  - Query results at the Pedon level (information about Pedons with appropriate geo-referencing coordinates) can be sent to ArcMap to display labeled point locations
  - Selected points in ArcMap can be sent back to Access to filter query output
  - Site level and aggregate query results can be viewed on-screen, printed, or include in Access reports

- Includes button to export query results to Microsoft Excel for further analysis.
3. SRITB – Pedon PC
- Version 3.01 was released in February 2008
  - Separate install packages include a Microsoft Access application (pedon\_pc.mdb) and the backend database (pedon.mdb)
  - Supports collection and data entry of Site and Pedon descriptions on tablets, laptops, and PCs
    - Includes separate forms sized for tablets and for laptops and PCs
  - Supports user customization of data entry forms, selected data dictionary elements, and other set up features
  - Includes routine to export data into a delimited file for transfer to the Soils Hotline for uploading into NASIS
  - Integrated with ArcMap and the SRITB Digital Editing Tools Auto population toolbar

The SRITB tools are described during presentation.

## **REFERENCES**

National Cooperative Soil Survey Training web site  
<http://www.soils.usda.gov/education/training/>

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