Data Harvesting for Agriculture

CarpentryCon 2020 Lightning Talk

Overview

"Our motivation for creating this workshop is the recent, rapid increase in the volume of data produced on farms and the use of such data for decision making by farmers.

"After attending our workshop, you will be able to develop small computer programs of your own for analysis, visualization, and decision making, and will be able to share those programs with others."

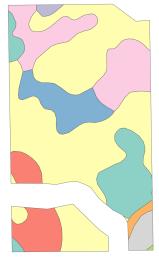
Scope

- 1 Non-academic audience
- 2 No prior programming assumed
- 3 Target: Use or modify packaged scripts

Topics

- 1 R/R Studio basics
- 2 Geospatial data (QGIS)
- 3 Trial design
- 4 Weather history and soil types

Products



Soil Type

Bennington silt loam, 0 to 2 percent slopes Bennington silt loam, 2 to 6 percent slopes

Bennington silt loam, 2 to 6 percent slopes Cardington silt loam, 2 to 6 percent slopes Cardington silt loam, 6 to 12 percent slopes, eroded Condit-Bennington silt loams

Hennepin-Alexandria silt loams, 18 to 50 percent slopes
Lobdell silt loam
Present silty day loam, low carbonate St. 6 to 2 percent slopes

Preveno sity clay issen, low carbonate till. It to 2 percent slop Shoels silt loam, II to 2 percent slopes, frequently floor

Products







Feedback

- + "Good intro to working with spatial data in R"
- + "How using farm data can improve farming operations"
- Needs less emphasis on trials, more hands-on work with QGIS and mapping
- Needs more time working with own data

Next Steps

- 1 Refine focus for field operations
- 2 Include irrigation-based farming
- 3 Expand mapping operations and QGIS
- 4 Retool exercises for working with own data

Finding Us



data-carpentry-for-agriculture/trial-lesson