QUICK LOOK

Anyone can use the Quick Look feature, with or without uploading soil test data. From the Welcome Page of the Portal, Click on either the Quick Look Tab in the top menu bar or on the Quick Look Button at the bottom of the Welcome Page.

| Soil Health Interpretation Portal | | | | | | | |
|-----------------------------------|--|--|--|--|--|--|--|
| | Welcome Background Information Maps Quick Look Sign Up Sign In | | | | | | |
| | This free portal is designed for lowa farmers, agronomists and landowners to track, interpret and employ key soil health metrics for improved crop management. The tool is funded by the lowa Soybean Association with support from an lowa NRCS Conservation and Innovation Grant. | | | | | | |
| Account Information | An account enables exploration of two different datasets of Iowa soil test results to explore the impact of tillage, manure and cover crops on soil health by Iowa physiographic subregion. One dataset contains select soil health metrics from the Haney protocol and the other contains select metrics from standard soil tests plus a site-specific soil health measure derived from organic matter, weather and soil. | | | | | | |
| Field Selection | The background data comes from research programs conducted by Iowa Soybean Association and Iowa Corn Growers. Farmers, agronomists and landowners who set up a free, private account will have full access to their own information and both exploratory interfaces since account data is integrated into the anonymized soil health background database. | | | | | | |
| New Field * | For users with only standard soil test data, there is a "Quick Look" feature, also available for soil health test results, to obtain a one-time report and one-time access to the data exploration interface. Data may be donated, or users may exit the portal without it being saved. | | | | | | |
| Help & Support | Click the "Background Information" button below to learn more. | | | | | | |
| Report a Problem with this Page | Background Information Quick Look Sign Up Sign In | | | | | | |

This will open a Standard Data Quick Look Disclaimer box and beneath it a second menu bar. Read the Disclaimer and click the "Dismiss" button. This will enable you to select the type of soil test data you wish to upload from the second menu bar – standard soil test data, aka soil fertility test data, or soil health test data, which as you can see from the column headings on the previous page, are different than standard fertility soil test measures.

| Standard Data Quick Look Disclaimer | Welcome Background Information Maps Quick Look Sign Up Sign In Standard Data Soil Health Data |
|--|--|
| Georeferenced information (i.e., X, Y or Long, Lat data columns) for each sample's lab result is required to provide a relative soil health measurement (see 'the SHAPE score' under background information). Non-precederated | Standard Soil Test Comparison |
| data cannot be donated to the anonymous benchmark database. | Upload Soil Data Upload Standard Soil Test Data Browse No file seler |

Now you may browse to your file of lab results for the Portal to temporarily upload. The Portal will notify you when the data is uploaded and partially show the file name.



Spatially referenced data will automatically identify the associated Physiographic Subregion and will summarize and present data for that subset of the background including the count of fields in the dataset.

| Field Parameters |
|---|
| When you upload data that has X/Y coordinates, your subregion will be automatically selected. If no geographic data is provided, we'll default to showing all of Iowa, but you can change this option as you see fit. |
| Soil Physiographic Subregion Audubon Rolling Plains |
| Field Location Count: 44 |

Non-spatially referenced data or no data upload will default to "All Iowa". All Iowa or any other individual subregion may be added to the selection of data to be visualized on the map and in the summarizations. Click on the box listing the subregion currently selected and add to it or delete from it.

| oil Physiographic Subregion | | Soil Physiographic Subregion | | |
|-----------------------------|------------------------------|------------------------------|--|--|
| Audubon Rolling Plains | Soil Physiographic Subregion | Altamont Till Plain | | |
| All Iowa | <u>^</u> | Algona Till Plain | | |
| Algona Till Plain | All Iowa | Audubon Rolling Plains | | |
| Altamont Till Plain | | | | |
| Bemis Till Plain | | | | |
| Corydon Rolling Plains | Field Location Count: 530 | Field Location Count: 116 | | |

Below the **Field Parameters** are **Comparison Choices** related to three management categories that can affect soil health, Manure Status, Tillage Type and Use of Cover Crops. The Portal defaults to showing all the available options, but viewers may deselect categories to observe changes in results. **The Comparison** Map below the **Comparison Choices** also reflects field locations with the selected management categories within the subregions chosen.



The Standard Benchmark database includes a large dataset from 2011 where farmers were asked to soil sample in both a good area and a poor area of their field so results could be compared. We have no cover crop information for these fields, so to exclude 2011 from your query results, simply uncheck "Cover Crop Status Unknown"



Below the Comparison Map any uploaded test results will appear. If geographic coordinates and Organic Matter values were present in the data, The SOC and SHAPE scores will appear.

Your Soil Health Test Results

| ID | Organic C | Organic N | Organic CN | CO2C_Burst | MAC% | SH_Calc | SOC | SHAPE SOC |
|----|-----------|-----------|------------|------------|--------|---------|------|-----------|
| 1 | 247.37 | 17.83 | 13.87 | 71.03 | 28.72 | 13.83 | 2.62 | 0.56% |
| 2 | 91.49 | 9.28 | 9.86 | 211.14 | 230.78 | 17.84 | 2.73 | 0.61% |
| 3 | 106.82 | 9.47 | 11.28 | 91.35 | 85.52 | 12.22 | 2.38 | 0.47% |
| 4 | 190.02 | 13.69 | 13.88 | 60.45 | 31.81 | 11.21 | 2.09 | 0.34% |
| 5 | 141.19 | 11.75 | 12.02 | 44.49 | 31.51 | 8.45 | 2.03 | 0.32% |
| | 152.22 | 12.17 | 12.51 | 57.73 | 37.93 | 10.03 | 2.27 | 0.42% |
| 7 | 130.72 | 12.60 | 10.37 | 61.31 | 46.90 | 10.01 | 2.33 | 0.44% |
| 8 | 168.68 | 16.53 | 10.20 | 39.80 | 23.59 | 9.01 | 2.27 | 0.42% |

When you upload your Soil Health Test Data, your results will display below.

Below the data that was read into the Portal will appear Averages for the benchmark background and averages by subregion(s).

| Averages for Benchmark Background | | | | | | | | | |
|-----------------------------------|-----------------------|-----------|------------|------------|-------|---------|-----------|-----------|--|
| | Organic C | Organic N | Organic CN | CO2C_Burst | MAC% | SH_Calc | SOC | SHAPE SOC | |
| | 210.45 | 16.34 | 12.81 | 77.02 | 36.74 | 11.39 | 2.1 | 0.40% | |
| Subre | gion SOC Scores | | | | | | | | |
| Subreg | gion | | | | SOC | | SHAPE SOC | | |
| Audub | on Rolling Plains | | | | 1.88 | 0.32% | | | |
| Bemis | Till Plain | | | | 1.88 | | 0.59% | | |
| Glacial | Lake Wright | | | | 2.78 | | 0.55% | | |
| Grundy | Center Rolling Plains | | | | 2.1 | | 0.41% | | |
| Illinoia | n Till Plain | | | | 2.41 | 0.46% | | | |
| Iowa-Cedar River Lowland | | | | 2.49 | | 0.71% | | | |
| lowan | Erosion Surface | | | | 2.7 | | 0.57% | | |
| Orange | e City Plains | | | | 2.81 | | 0.62% | | |
| Paleozoic Plateau | | | | 1.73 | | 0.33% | | | |
| Tama Rolling Plains | | | 2.2 | | 0.50% | | | | |

At the bottom of the Quick Look page is a button enabling those who uploaded georeferenced data the opportunity to generate a report. A progress bar will appear when the generate report button is clicked.



Sample reports are available to view under the Background Information Tab in the second menu bar from the Tab labeled "Sample Reports".

NOTE: To donate your data, you will need to know the name of the lab where samples were processed, the month and year your samples were collected, the maximum depth of samples in inches (0-6" would simply be 6"), crop of sample crop year and crop of year prior to sample crop year. You will also be asked to select from these 3 general field management practices cover crop or no cover crop, manure or no manure, conventional till, strip or vertical till, or no-till. Donated data is sequestered at first to verify that metric units are compatible with the background dataset. We automatically receive a notification when donations are made. Thank you for your donation!