

Soil Compaction Assessment

Site Preparation & Background Information

Gather necessary information about the site, including history, planned use, and any previous compaction issues. Document existing conditions before assessment.

Assessment Date	

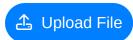
	Set My Current Location		
Google		Map data ©2025	
Brief Site Desc	cription (Land Use, Topography)		
Brief Site Desc Write something			
Write something			
Write something	J		
Write something Previous Land	J		
Write something Previous Land Cropland	J		
Previous Land Cropland Pasture	Use (Select all that apply)		
Previous Land Cropland Pasture Forest	Use (Select all that apply)		
Previous Land Cropland Pasture Forest Urban/Develo	Use (Select all that apply)		
Previous Land Cropland Pasture Forest Urban/Develo Other (Specify	Use (Select all that apply)		

Enter a number	
Known Compaction Iss	sues or Concerns?
Write something	
quipment & To	ools
sure all necessary equip	ment and tools are available, calibrated, and in working order
Penetrometer Calibration	on Value (kg/cm²)
Enter a number	
Ponotromotor Typo	
Penelionielei Type	
Penetrometer Type Digital	
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Digital Manual	
Digital Manual Penetrometer Calibration	on Certificate (if applicable)
Digital Manual	on Certificate (if applicable)
Digital Manual Penetrometer Calibration	

NDG Moisture Gauge Calibration Status (if applicable) Calibrated Needs Calibration
Soil Core Sampler Type (if used)
Write something
Other Tools Present (check all that apply) Tape Measure GPS Device Camera Soil Core Sampler
Visual Assessment Perform a visual inspection of the soil surface to identify signs of compaction.
Observe and select any visible signs of compaction: Cracks in soil surface Standing water on surface Reduced infiltration rate Stunted root growth Uneven soil surface Soil pans (hard layers) None observed

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ord the location	on of observed compaction symptoms using Gl	PS.
	Set My Current Location	
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	centage of the assessed area exhibiting signs of	f compact
er a number		
er a number	revious land use or activities that may have conf , heavy machinery use, livestock grazing).	
er a number ument any pre	revious land use or activities that may have con	

Upload photos illustrating visible compaction symptoms.



Penetrometer Testing

Conduct penetrometer tests at various locations to quantify soil compaction. Record depth and readings.

Penetrometer Reading (Depth: 0-15cm)	
Enter a number	
Penetrometer Reading (Depth: 15-30cm) Enter a number	
Penetrometer Reading (Depth: 30-60cm)	
Enter a number	

	Set My Current Location	
Docarintian (Soil Type at Test Legation	
Jescription (Soil Type at Test Location	
Write somethi	g	
Soil Moisture	Content (if measured)	
Soil Moisture Enter a numb		
Enter a numb		
Enter a numb	`	
Enter a numb	`	
Enter a numb Method Used Manual	`	
Enter a numb Method Used Manual Automated	for Penetrometer Test (e.g., manual, automated)	
Enter a numb Method Used Manual Automated	`	

Nuclear Density Gauge (NDG) Testing (if applicable)

If NDG testing is being used (ensure proper licensing and training), document procedures and results.

Enter a number	
NDG Density Reading (Dry)	
Enter a number	
NDG Density Reading (Wet)	
Enter a number	
Gauge Calibration Status	
Calibrated - Within Date	
Calibrated - Expired	
Not Calibrated	
Gauge Calibration Expiration Date	
Enter date	
NDG Operator Name	
Write something	

Write something		
GPS Coordinat	tes of NDG Testing Location	
2	Set My Current Location	

Soil Sampling & Laboratory Testing (if applicable)

Collect soil samples for laboratory analysis to determine soil moisture content and compaction characteristics.

	Set My Current Location	
Sample Depth (cm)	
Enter a number		
Soil Moisture C	ontent (%)	
Enter a number		
Dry Density (g/o	cm³)	
Enter a number		
Bulk Density (g	/cm³)	
Enter a number		

Soil Type Sandy Silty Clay Loamy Other
Laboratory Notes & Observations
Write something
Laboratory Report (PDF) Lipload File
Data Analysis & Interpretation
Analyze collected data to determine the extent and severity of soil compaction.
Average Penetrometer Reading (N)
Enter a number
Range of Penetrometer Readings (Minimum - Maximum)
Enter a number

Soil Moisture Content (%)
Enter a number
Soil Type (Based on Assessment)
Sandy
Loamy
Clayey
Silty
Other (Specify)
Qualitative Assessment of Compaction (e.g., Minor, Moderate, Severe)
Write something
Comparison to Acceptable Limits (if available)
Within Acceptable Range
Slightly Exceeds Limits
Significantly Exceeds Limits
No Limits Available
Notes on Potential Impact of Compaction (e.g., Root Growth, Water Infiltration)
Write something

Bulk Density (g/cm³)		
Enter a number		

Reporting & Recommendations

Prepare a detailed report outlining the assessment findings, including recommendations for remediation if needed.

Summary of Findings	
Write something	
Overall Compaction Severity Score (1-10)	
Enter a number	
Primary Cause of Compaction (if identified)	
Heavy Machinery	
_	
Livestock Traffic	
Livestock Traffic Tillage Practices	

Recommended Remediation Techniques (Select all that apply)
Reduced Tillage
Cover Cropping
Amendment Application (e.g., compost, gypsum)
Controlled Traffic Patterns
Aeration
Subsoiling
Detailed Remediation Plan
Write something
Estimated Cost of Remediation (USD) Enter a number
Date of Next Assessment Enter date
Liner date
Assessor Signature
Supporting Documentation (maps, photos, calculations)
♣ Upload File

Documentation & Record Keeping

Maintain thorough records of the assessment, including data, phoactions taken.	tos, and any corrective
Assessment Date	
Enter date	
Assessment Time	
Assessor Name	
Write something	
Detailed Notes/Observations	
Write something	
Number of Test Locations	
Enter a number	
Photos of Assessment Site	
♣ Upload File	
Equipment Calibration Status	
Calibrated	
☐ Not Calibrated☐ Calibration Record Available	
Calibration Record Available	

Write something		
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ssessor Signa	ture	
	_	
PS Coordinate	s of Assessment Area	
	Set My Current Location	