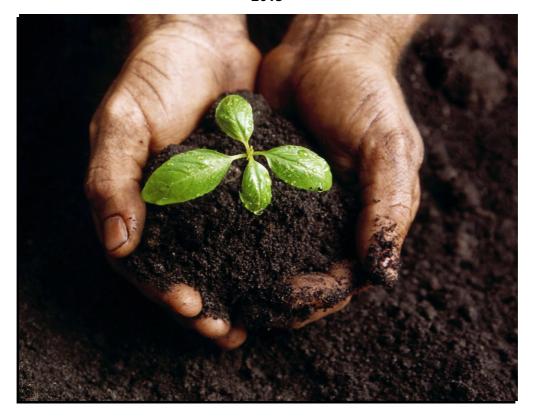
# Permaculture Research: Soil Test Record Sheet

Chris Warburton-Brown and Tom Kemeny 2015



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This booklet should be used with the accompanying *Soil Tests Handbook* and *Soil Advice Booklet*, downloadable for free:

https://www.permaculture.org.uk/research/soil-yield-and-biodiversity-tests-project



The Permaculture Research: Soil Record Sheet.

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Hollybush Conservation Centre, Broad Lane, Kirkstall, Leeds, LS5 3BP.

Website: <a href="https://www.permaculture.org.uk/">https://www.permaculture.org.uk/</a>

Telephone/Fax: + 44 (0)845 458 1805 (calls charged at local rate)

E-mail: <a href="mailto:research@permaculture.org.uk">research@permaculture.org.uk</a> E-mail: <a href="mailto:research@permaculture.org.uk">research@permaculture.org.uk</a>

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Permaculture Research: Soil Record Sheet, Version 2

### Site details

Name of site: Name of person doing tests:

Location of soil test area within the site:

Current use of this area:

Other use/s of area in last five years:

# <u>Preliminary tests</u> 1) Anaerobic conditions and pollution

#### The smell test

Sour, putrid or chemical smell	Do not proceed with tests
No smell	Proceed with tests
Earthy, sweet or fresh smell	Proceed with tests

## 2) Waterlogging and dryness

The squeeze test

Dry soil	Do not proceed with tests
Moist soil	Proceed with tests
Wet soil	Do not proceed with tests

# Main Soil tests 1. Drainage

How long did it take, in minutes, for the water to completely drain away	How long	did it take	, in minutes	, for the water to	completely	v drain awa	av?
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Quick draining soil (5 minutes or less) will not hold the water plants need in dry weather. Slow draining soil (15 minutes or more) may become waterlogged.

### 2. Earthworms

The more earthworms, the better. They indicate a high level of soil biology. There is no 'ideal number', but 3 worms or more suggests your soil has a good level of soil life.

## 3. Top soil depth

How deep is your soil?

11011 4226 13 7 0 41 1 0 111	
Very shallow (<15 cm)	
Shallow (15-30 cm)	
Moderately deep (30-60 cm)	
Deep (>60 cm)	

The deeper your soil the better. It holds more water and supports deep roots.



Permaculture Research: Soil Record Sheet, Version 2

	4. Soil texture	
What texture is your s	SOII?	
	<u>5. Soil structure</u>	
<b>The visual inspectio</b> Is your soil:	n test	
Soft		
Cloddy		
Platey		
_	are undesirable, blocking root o	and water penetration.
The slaking and disp Record the state of sla		
-		After 24 hours
-	aking in the jar:	After 24 hours
Record the state of sla	aking in the jar:	After 24 hours
Record the state of sla	aking in the jar:	After 24 hours
None Partial Complete	aking in the jar:  After 2 hours  aks up, the better; this indicate of the second partners.  6. Soil pH	After 24 hours s a high degree of organic matter
Record the state of slands None Partial Complete The slower the soil brewhich holds the soil to What is the pH of you	aking in the jar:  After 2 hours  aks up, the better; this indicate of the second partners.  6. Soil pH	s a high degree of organic matter
Record the state of slands None Partial Complete The slower the soil brewhich holds the soil to What is the pH of you	aking in the jar:  After 2 hours  aks up, the better; this indicate of the second seco	s a high degree of organic matter

In sandy soil, a bulk density score below 1.6 is desirable, higher than 1.8 is a problem. In silty soil, a bulk density score below 1.4 is desirable, higher than 1.6 is a problem. In clay soil, a bulk density score below 1.1 is desirable, higher than 1.5 is a problem.

