

USING WEEDS AS SOIL INDICATORS.

Wild plants, or weeds, grow within the confines of specific niches, that is, the conditions of soil and other factors which promote their survival. With a little practice, it is possible to assess the condition of soil by the wild plants, or weeds that grow in it. This can be especially valuable when bringing new land into cultivation as it helps inform the techniques to employ and the soil conditioners to incorporate. For an existing plot, the changes in preponderance of certain weeds over time can provide a subtle, but useful gauge to the health or otherwise of the soil.

When assessing a new site, try to establish which weed plants are dominant, as these will be the best overall indicators of major soil characteristics. Pockets of predominance would suggest certain individual features. For example, an area of dock and horsetail may indicate a wet, acidic soil, yet amongst this area may be a patch of stinging nettle which has colonised and dominated where the soil is nitrogen rich and less compacted. It is not unusual to find the odd seemingly inappropriate, or counter-indicative species scattered about, but in small numbers these can be dismissed as having been sown by chance; blown in or dropped by birds, especially if they are sickly, spindly or diminutive examples of the species.

In the context of an existing cultivated site, the variety of certain weeds, and their health and vigour, is a sound pointer to the condition of the soil: For example, healthy examples of shepherds purse, sow thistle, red dead nettle, dandelion and chickweed growing together indicate a balanced, conditioned soil, whereas a dominance of creeping buttercup and dock would indicate an insufficiently drained, probably acidic, soil requiring bulky organic matter and further cultivation.

The table below lists some of the commoner weeds and their indications. A wildflower field guide can be used to find out details of the natural habitats of other species to equal effect. Common sense dictates that this technique works best combined with other observations typical to surveying a site, but it is nevertheless useful in providing valuable clues to the character of different soils.

PLANT	HEAVY	LIGHT	ACID	ALKALI	WET	OTHER
Bindweed		yes				
Bracken			yes			
S.Burnett				yes		
Buttercup	yes				yes	
Bl.Campion				yes		
W.Campion		yes				
Clover	yes		yes	yes		compacted
Cinquefoil			yes			
Coltsfoot	yes				yes	
Cornflower		yes				
C.Marigold		yes	yes			
Daisy	yes					compacted
Dandelion	yes					
Dock	yes					
Hawkweed			yes			
Horsetail					wet	panned
Knotweed			yes			
Mayweed		yes				
St.Nettle		yes				N-rich
SPimpernell				yes		
Plantain	yes		yes			compacted
Redshank					yes	
Shep.Purse		yes				
Silverweed					yes	
Sorrel			yes			
Spurrey		yes	yes			
SowThistle			yes			

