

Reducing the productivity gap in organic farming –  
balancing nutrient supply and demand

# **Monitoring nutrient balances at Pound Farm**

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# Pound Farm

- 228 hectares
  - Arable and leys: 106
  - Permanent : 43
- Rotation: 2 – 3 years ley, wheat, oats, beans, wheat
- Cattle: 40 Hereford sucklers, progeny to finish
- Sheep: 400 ewes
- Soils: light to heavy clay loams
- Manure: principally own composted FYM
- Stocking rate 1.44 LU/forage hectare at Pound farm

# Nutrient Budget Pound Farm

(Public Good/Sustainable farming analysis ORC, 2011 year, 150 ha farmland)

	IN	OUT	Net surplus (+) or deficit (-)	Balance per Hectare	
N	21,251	5,644	+ 17,357	116	This surplus is a bit higher than the desirable 30 – 80 kg N/ha
P	191	1,978	- 1,788	- 12	Small deficit - acceptable
K	248	2,774	- 2,526	- 17	Acceptable deficit on clay loam

# Soil analysis changes

	Crop	Org. Mtr	pH	P	K	Mg
		Park House				
2001	WBly	2.6	6.5	3	1	3
2003	RCL	4.7	6.5	2	1	3
2004	Wht	3.5	6.6	2	1	2
2005	SBly	-		3	1	4
2007	WCL	2.2	6.6	2	1	3
2009	Pots	2.6	6.6	2	1	3
2010	Wht	2.8	6.7	3	1	3
2012	Pea/bl y	2.9	6.4	3	2-	3

Crop	Org. Mtr	pH	P	K	Mg
	Mill Field				
S. Beet	2.5	6.7	4	2-	4
Trit	3.2	7.1	3	2-	4
RCL	6.7	6.7	3	1	4
	-	-	-	-	-
Wht	2.7	6.6	3	1	4
RCL	2.4	7	3	2+	4
Oats	-	-	-	-	-
	3.1	6.6	3	2-	4