

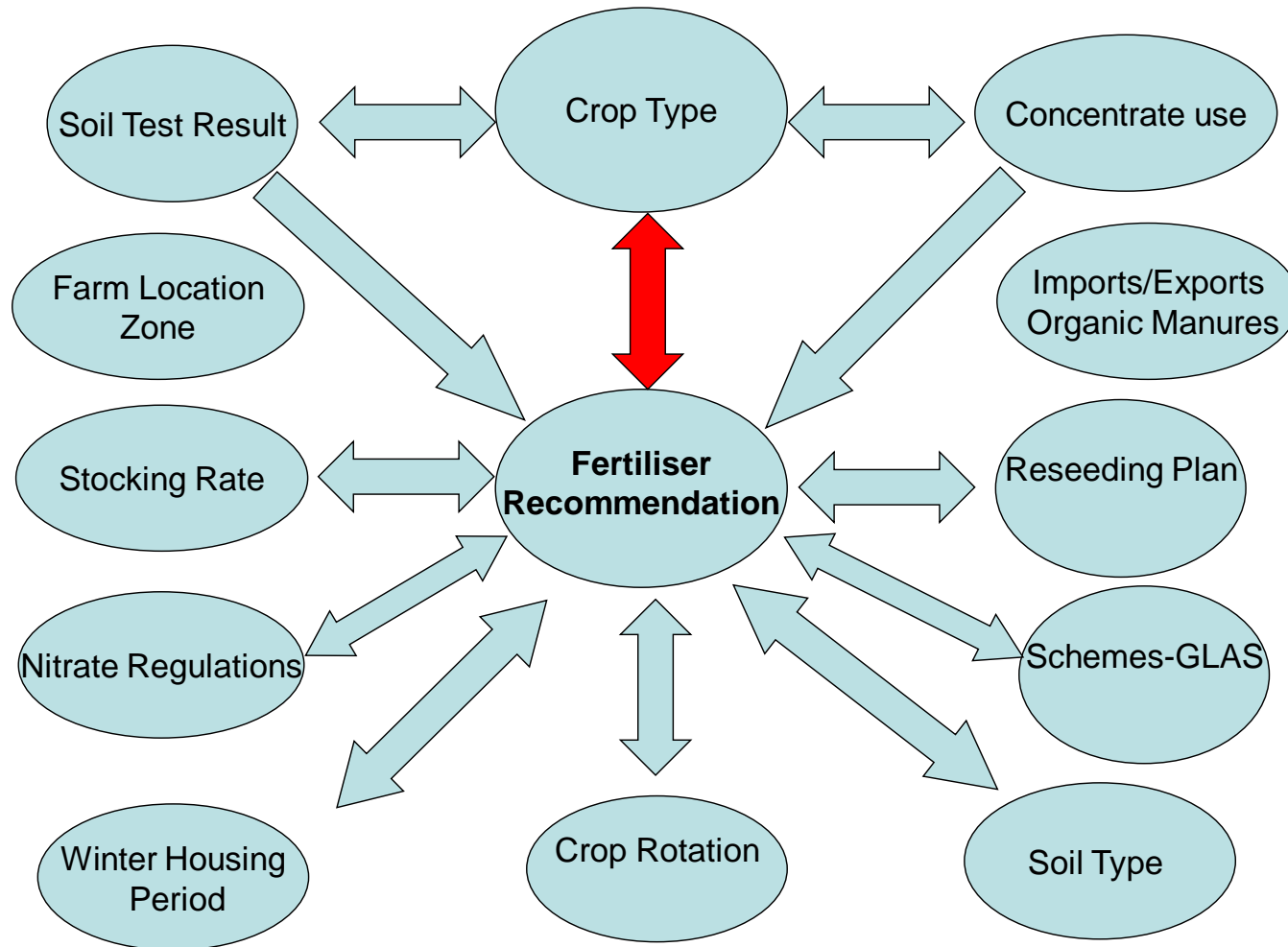
Teagasc Soil Fertility Conference

NMP-Online Planning Farm Lime & Nutrient Requirements

Christy Watson
B & T Adviser

Teagasc Naas

Nutrient Management Planning is Simple ?



NMP-Online



Client		Advisor	Sample Details	
[Redacted]		M. Christy Watson - (94)	Received	05 February 2018
[Redacted]		Teague, Friary Road, Naas,	Autoclaved	22 February 2018
[Redacted]		Co. Kildare	Analysed 200	04_16(52)38(1)
[Redacted]		0	Comment on Sample	

Nutrients Test Results		Laboratory Results			Nutrient Advice								
Ident	Field/NP	Crop	pH	P	K	OM	Other	LR	N	P	K	Slurry Rate	
				mg/l	Index	mg/l	Index	%	tha	kg/ha	kg/ha	kg/ha	
WH120(4)	1	Good Permanent Grass	6.6	6.8	162.0				XSL	0	0	0	0C
WH120(2)	2	Good Permanent Grass	6.3	5.4	169.0				1.5	0	0	0	0C
WH120(5)	3	Good Permanent Grass	6.3	3.4	142.0				1.5	0	0	0	0C
WH120(2)	10	Good Permanent Grass	6.5	9.2	205.0				XSL	0	0	0	0C
WH120(2)	11	Good Permanent Grass	6.7	8.8	189.0				XSL	0	0	0	0C
WH120(2)	13	Good Permanent Grass	6.6	5.0	121.0				XSL	0	0	0	0C
WH120(2)	160	Good Permanent Grass	6.3	4.2	105.0				XSL	0	0	0	0C
WH120(2)	24	Good Permanent Grass	7.0	6.9	98.3	2			XSL	0	0	0	0C
WH121(2)	26	Good Permanent Grass	7.0	4.4	170.0				XSL	0	0	0	0C
WH122(2)	15	Good Permanent Grass	6.1	3.6	146.0				XSL	0	0	0	0C

Conversion table kg/ha to t/ha: Nitrogen 1.4-4-metabolic; Sulphur 1.6-metabolic; Boron 1.6-metabolic; P 1.0-metabolic; Potassium 1.0-metabolic; LR: Linn maximum
This table is for guidance only for the area sampled and is based on test results from a Teagasc selected laboratory and on the information supplied with the soil sample. Do not exceed N & P limits set out in the NMP on a whole farm basis. Teagasc cannot be responsible for any losses which occur from the use of this report.



Manure Allocation				Planned Fertilisers		Nutrient Balance			
Fertiliser	Substrat T	Applied T	Status T	Fertiliser	Tonnes	N	P	K	
Cattle Slurry	20	20	0	Sheep/W	1.5	Chemical	4.88	1.00/1.00	2.28
Poultry Slurry	17	16	1	16-0-0	16.0	16-0-0-0	5.37	1.98	1.08
Total P-Nutrients	37	36	1	16-0-0	17.5	Chemical	4.34	1.72	2.28
				OM-45(27%)	3.9				

Plot	Crop	Area (ha)	Soil Sample	Index	Nutrients Applied (t/ha)			Organic Resources			Chemical Fertilisers		
					N	P	K	Cattle Slurry (T/ha)	Poultry Slurry (T/ha)	Sheep/W (t/ha)	16-0-0 (t/ha)	16-0-0 (t/ha)	OM (t/ha)
Waters Ferry No	CLAS/PP	11.4	0899(2)	1112	27.3	1.8	0.5	0.5	0.5	1.5	0.5	0.5	
Waters RR	Water Slurry	0.6	0897(2)	1112	19.43	1.07	0.5	0.5	0.5	0.5	0.5	0.5	
Waters Hey	1.0t+Grass	6.0	0899(2)	1112	18.38	7.2	0.5	0.5	0.5	0.5	0.5	0.5	
CLAS/EC	CLAS/16/0/0/0	0.5	0899(2)	1111	41.15	3.36	0.5	0.5	0.5	1.5	0.5	0.5	
Waters Field Head	Tillage Spring	6.7	0899(2)	1111	114.38	6.0	0.5	0.5	0.5	0.5	0.5	0.5	
Waters small stage	1.0t+Grass	3.6	0899(2)	1112	105.44	17.0	3.00	0.5	1.0	0.5	0.5	0.5	
Waters Stage	1.0t+Grass	1.7	0899(2)	1122	105.44	17.0	3.00	0.5	1.0	0.5	0.5	0.5	



Christy Watson

NMP-Online



- Fertiliser Expenditure €500m.
- NFS-39 Fertiliser Types account for 95% of fertiliser used.
- Produce detailed Nutrient Management Plan for clients.
- Map based programme-Field unit.
- Electronic Import of Soil test results.
- Capacity waste storage facilities on the farm.
- Need for Organic manure exports.
- Capacity for Organic manure imports-throughout year.

NMP-Farmer Report

Derogation - Fertiliser Plan 2018



Name	Sheep and Farm
Address	60c Henz Eggen, Sheepsdown, Bains, Co. Kildare,
County (Zone)	Kildare (A)
Herd No.	11131055

This fertiliser plan is based on the information provided to Teagasc. Teagasc cannot accept responsibility for inaccurate information being supplied.

This report contains the following:

- 1.; Cover Page
- 2.; Farm Summary of Soil fertility and fertiliser requirements
- 3.; Lime Report
- 4.; Fertiliser plan for the Farm
- 5.; Summary of All Livestock on the holding
- 6.; Soil Sample Results
- 7.; Sample Fertiliser on Farm
- 8.; Summary of Land area, Cropping and max fertiliser allowances
- 9.; Concentrate feed usage on the farm in 2017
- 10.; Cereals dry distillers relevant.

Detailed Plan



Detailed Maps



Lime Maps

- Detailed Liming programme.
- Field Specific.
- Annual programme.
- Correct PH-More efficient use of N,P,K



Soil pH & Lime

Lime Planned

2017	142 Tonnes
2018	0 Tonnes
2019	48 Tonnes
2020	0 Tonnes

Phosphorous Maps

- P status of all fields clearly shown.
- Map legend Index and status
- Targeted application of P by Farmer, fields to avoid.

Legend

P value

- Index 1 Very Low
- Index 2 Low
- Index 3 Satisfactory
- Index 4 High



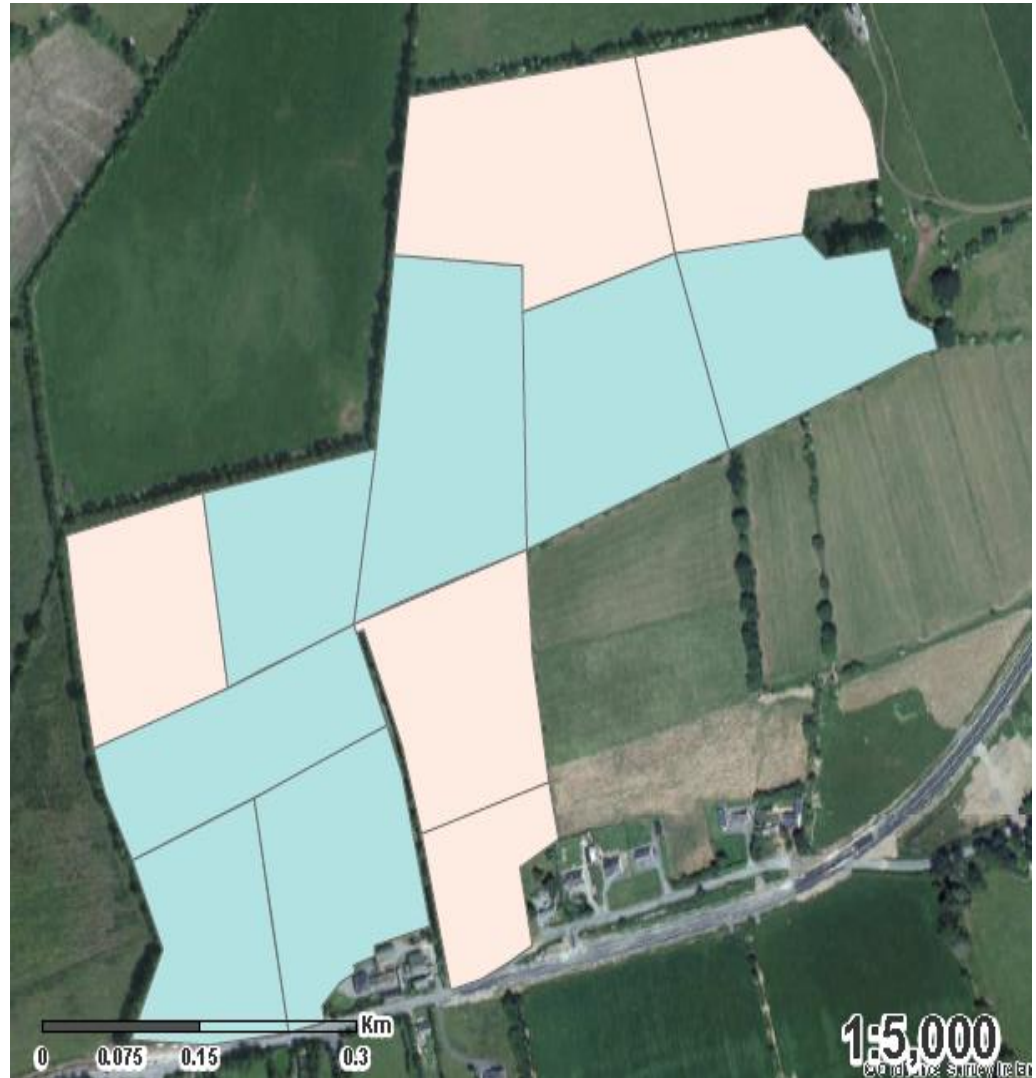
Potassium K Maps

- K the Cinderella nutrient.
- Priority fields shown.
- Spring Plans-Autumn Application-Reminder.
- Map legend Index & Status

Legend

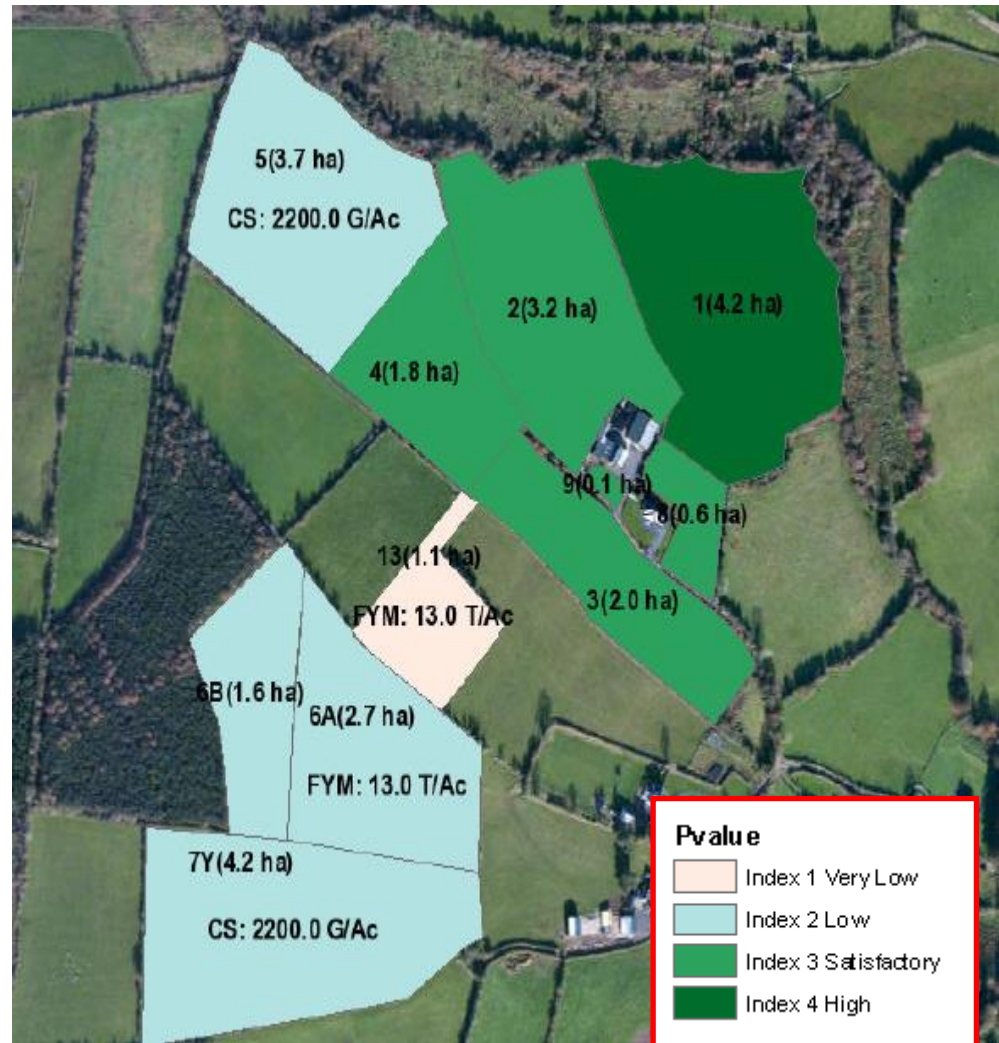
Kvalue

- Index 1 Very Low
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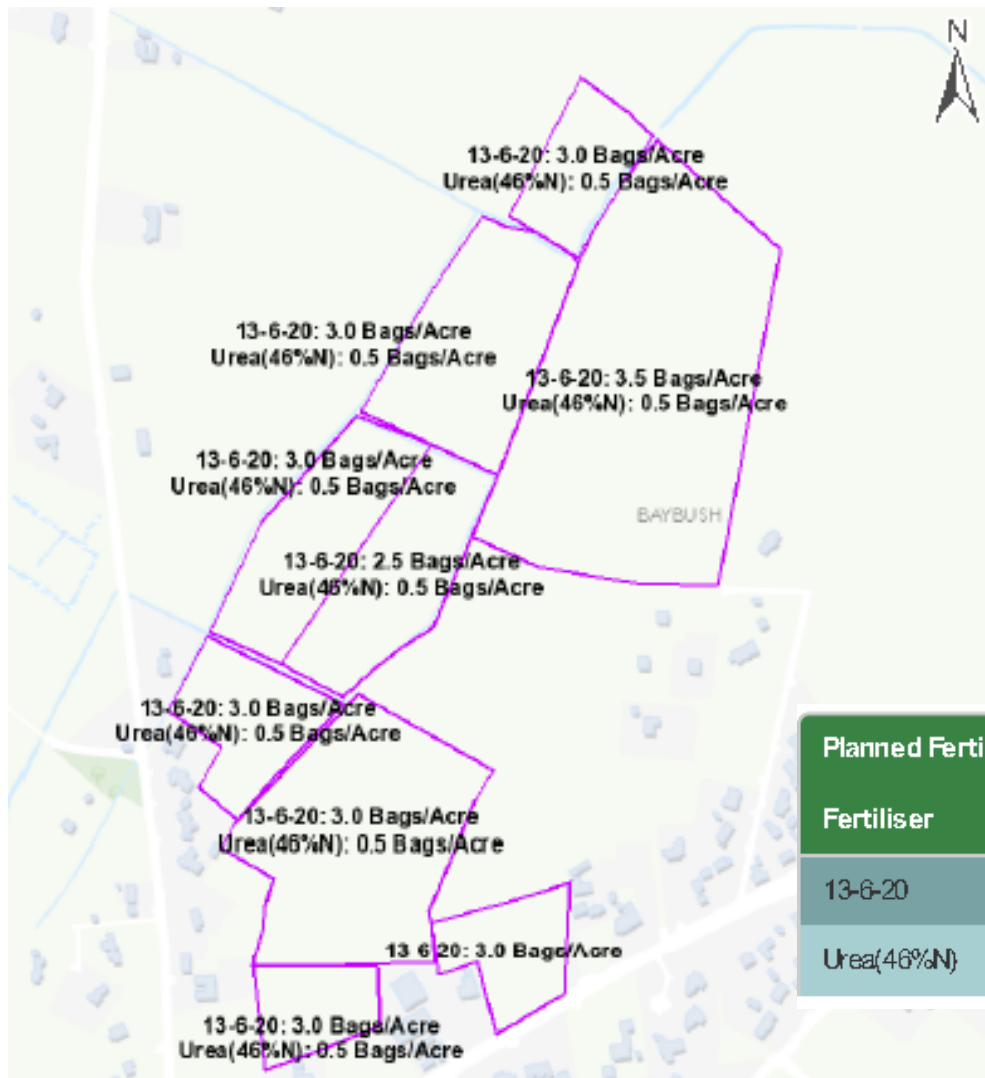


P Map with Organic Manure Application Plan

- Soil fertility status combined with organic manure plan.
- Better use of Organic Manures-where needed.
- Financial and environmental benefits.
- Clear practical plan for farmer.



Map-Chemical Fertiliser Plan



Planned Fertilisers	
Fertiliser	Tonnes
13-6-20	9.11
Urea(46%N)	1.39

Farm and soil fertility Summary

%reduction in farm capacity to perform based on current fertility levels compared to optimal fertility

pH, P and K	pH	P	K
25	6	13	10

Soil pH & Lime

Lime Planned

2017	220 Tonnes
2018	22 Tonnes
2019	37 Tonnes
2020	0 Tonnes

Target pH

Soil Type	Grass	Tillage
Mineral Soil	6.3	6.5
Organic Soil	5.5	5.5

Organic Manure Plan

Chemical Fertiliser Advice

Nutrient Balance

	N(kg)	P(kg)	K(kg)
Chemical Recommended	6,716	916 (77%)	2,960
Max Chemical Allowed	12,611	969	
Chemical Usage	5,447	736	857

Planned Fertilisers

Fertiliser	Tonnes
25-4-0	7.68
27-2.5-5	8.39
18-6-12	3.65
CAN +S(27%N)	2.25

NMP-Online Farm Case Study

- Turnout March 13
- 40 Bulls @ 420 kg
- 28 Heifers @ 390 kg
- 2 Suckler cows plus calves
- 2,400 kgs Liveweight/ha
- As stock finished/housed replaced with Weanlings

Fertilizer/Lime Use 2017

- Autumn 2016 2 tonnes lime/acre
- 0.5 Bag Urea/acre
- 5 Bags/acre 18-6-12 +S

Total Units/acre

N 113-P 30-K 60-S 20

Fert/Lime Inputs

- Fertilizer €2,812
 - €225/ha.
- 20% More than home farm (+€37/ha).
- Lime €400

Total €3,212

Outputs

- 240 Grazing days.
- 9,000 kgs lwt (€21,150)
- 60 Round bales Silage.(€1,500)
- 13.75 Tonnes grass grown/ha.

Total €22,650

NMP-Online Conclusions

- NMP-online is an essential tool for advisers when advising farmers on the use of Fertilizer and lime on their farms.
- Nutrient recommendations are presented in a very user friendly and practical format.
- NMP-online is a map based programme, which creates a very visible field link for the farmer and adviser to the all important soil sample results, nutrient recommendations.
- As well as giving guidance on crop requirements, NMP-online also provides critical information on regulatory compliance.
- By following good nutrient advice farmers can reduce their costs of production, reduction in nutrient use by correction soil acidity-growing more grass reduces need for rented land.

Thank you