

Your Fertilizer Use and Crop Record

**This record book provides for a six year history
of field fertility and farming practices,
on a field-by-field basis.**

EXTENSION DIVISION
VIRGINIA POLYTECHNIC INSTITUTE

Publication 36
April 1968

Publication 36
Cooperative Extension Service
Reprint April 1968
(Formerly Circular 1041)

Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U. S. Department of Agriculture. W. E. Skelton, Dean, Extension Division, Cooperative Extension Service, Virginia Polytechnic Institute, Blacksburg, Virginia 24061.

Your Fertilizer Use and Crop Record

You need to “jot it down for the record” so you won’t have to scratch your head each year to remember what crop you had in each field. It will give you a record of how much lime and fertilizer were used and what deficiency symptoms and soil tests revealed.

This booklet is designed to aid you in keeping a 6-year record of your cropping operation on a field-by-field basis. It assembles the information you will need to make better crop management decisions.

Table 1 Nutrient Content of Crops*

Crop	Yield	Part of Crop	N	P ₂ O ₅	K ₂ O	Total
Alfalfa	4 tons	hay	180	40	180	400
Barley	65 bu. 1.5 tons	grain	57	26	19	102
		straw	17	6	44	67
		Total...	74	32	63	169
Corn	100 bu. 3 tons	grain	90	35	25	150
		stover	70	25	95	190
		Total...	160	60	120	340
Ladino clover	2 tons	all	130	30	120	280
Lespedeza	2 tons	all	85	20	40	140
Oats	80 bu. 2 tons	grain	50	20	15	85
		straw	25	15	80	120
		Total...	75	35	95	205
Peanuts	2,500 lbs. 4,500 lbs.	nuts	90	10	15	115
		vines	105	25	95	225
		Total...	195	35	110	340
Potatoes	500 bu.	tubers	100	40	190	330
		vines	125	20	140	285
		Total...	225	60	330	615
Red clover	2 tons	all	80	20	70	170
Soy beans	40 bu.	grain	150	35	55	240
		straw	30	10	25	65
		Total...	180	45	80	305
Sweet potatoes	300 bu.	roots	45	15	75	135
		vines	30	5	40	75
		Total...	75	20	115	210
Timothy	2 tons	all	55	20	60	135
Tobacco	1,800 lbs.	leaves	65	13	95	173
		stalks	30	12	40	82
		Total...	95	25	135	255
Tomatoes	20 tons	fruit	120	40	160	320
		vines	80	40	240	360
		Total...	200	80	400	680
Wheat	40 bu.	grain	50	25	15	90
		straw	20	5	35	60
		Total...	70	30	50	150

* Courtesy, American Potash Institute.

Table 2 Nitrogen Supplied by Legumes to the Crop that Follows

Legume Crop	Nitrogen in Lbs./A
Alfalfa	50-- 70
Red clover	30--50
Lespedeza ^a	15--20
Crimson clover	30--50
Ladino clover	50-- 70
Soybeans	10--20

Notes:

1. Figures in the table are based on good stands.
2. Top growth returned to the soil will add 50 to 60 lbs. more N for each ton of dry hay equivalent. About 60% of this is available to the crop following incorporation of the material into the soil.

Table 3 Tons of Manure and Pounds of N, P₂O₅, and K₂O Produced Annually by Farm Animals per 1000 lbs. Live Weight

Animal	Exc. Wt. (Tons)	Bed Wt. (Tons)	Tot. Wt. (Tons)	Nutrient Content Pounds		
				N	P ₂ O ₅	K ₂ O
Horse	9.00	3.0	12.0	158	61	145
Cow	13.50	1.5	15.0	171	47	148
Steer	7.50	1.5	9.0	135	54	72
Hog	15.25	3.0	18.25	180	122	170
Sheep	6.25	3.5	9.75	154	65	175
Hen	4.25	--	4.25	85	68	34

Manure varies greatly in composition depending primarily on kind, age, and condition of animal; amount, composition, and digestibility of feed consumed; litter used; and handling and storage. In addition to N, P, and K, appreciable quantities of Ca, Mg, and S, and small amounts of Mn Zn, Cu, and B may be present. Since the liquid portion of manure contains an appreciable amount of its nutritive value, its preservation is important.

Data indicate N availability from manures is approximately 50% that from commercial fertilizer, while P₂O₅ and K₂O availability is approximately equal to that from commercial fertilizer.

YOUR FARM PLAN

┌ ─ ─ ─ ─ ─ ─ ─ ─ ─ ┐

┆ + + + + + + + + ┆

┆ + + + + + + + + ┆

┆ + + + + + + + + ┆

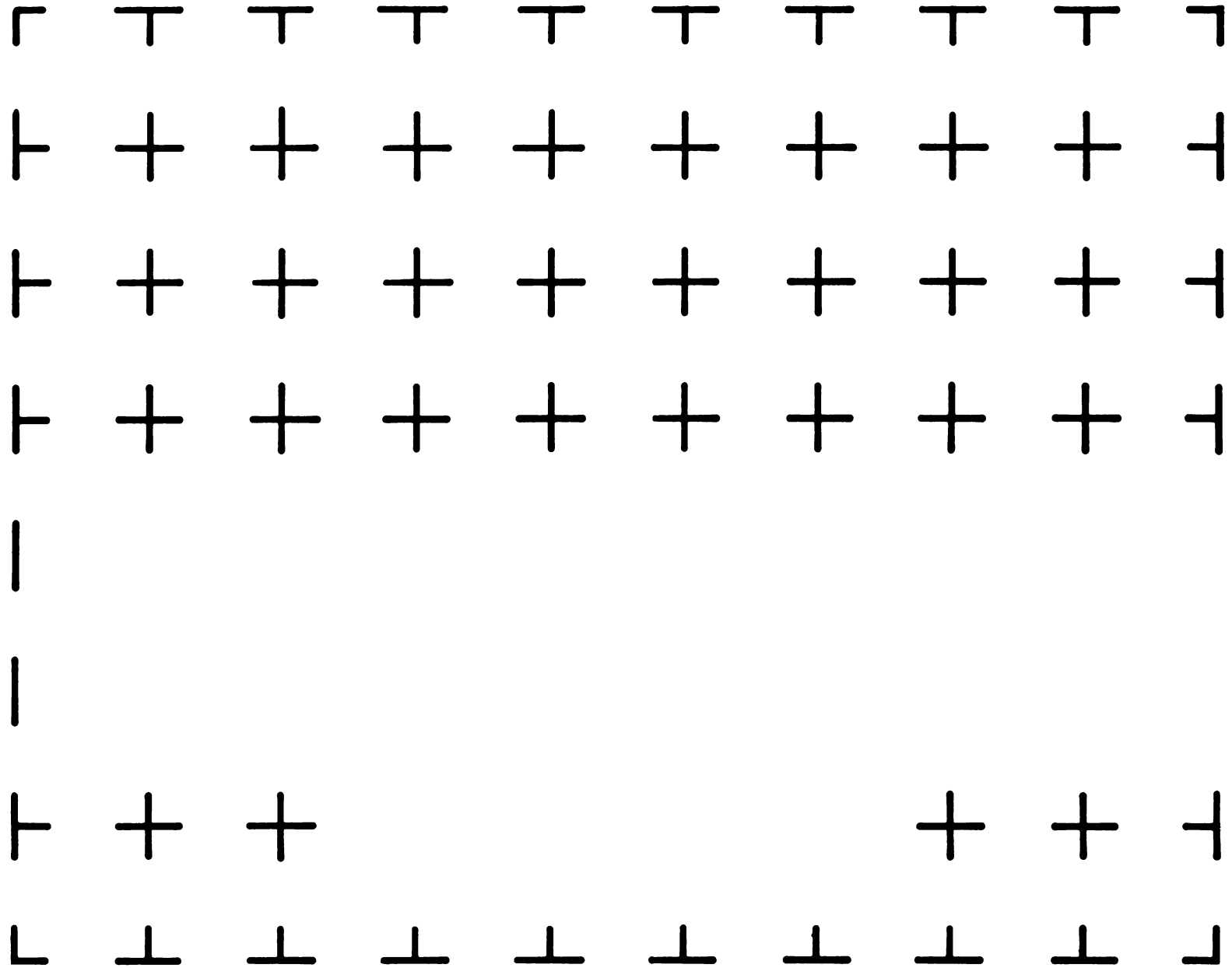
|

|

┆ + + + + ┆

└ ─ ─ ─ ─ ─ ─ ─ ─ ─ ┘

YOUR FARM PLAN



Field Fertility Appraisal and Practice Record Sheet

Year	Crop	Yield Goal	Soil Test Results						Recommendations				Sod & Residue Plow Under ^{1/}	
			Soil pH	P ₂ O ₅	K ₂ O	Ca	Mg	D.M.	Lime T/A	N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅
FIELD														
19														
ACRES														
19														
SOIL TYPES														
19														
19														
SLOPES														
19														
19														
FIELD														
19														
ACRES														
19														
SOIL TYPES														
19														
19														
SLOPES														
19														
19														

^{1/} From table 2
^{2/} From table 3
^{3/} Season, quality, diseases, insects, etc.

Field Fertility Appraisal and Practice Record Sheet

Year	Crop	Yield Goal	Soil Test Results						Recommendations				Sod & Residue Plow Under ^{1/}	
			Soil pH	P ₂ O ₅	K ₂ O	Ca	Mg	D.M.	Lime T/A	N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅
FIELD														
19														
ACRES														
19														
SOIL TYPES														
19														
19														
SLOPES														
19														
19														
FIELD														
19														
ACRES														
19														
SOIL TYPES														
19														
19														
SLOPES														
19														
19														

^{1/} From table 2
^{2/} From table 3
^{3/} Season, quality, diseases, insects, etc.

Field Fertility Appraisal and Practice Record Sheet

Year	Crop	Yield Goal	Soil Test Results						Recommendations				Sod & Residue Plow Under ^{1/}	
			Soil pH	P ₂ O ₅	K ₂ O	Ca	Mg	D.M.	Lime T/A	N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅
FIELD														
19														
ACRES														
19														
SOIL TYPES														
19														
19														
SLOPES														
19														
19														
FIELD														
19														
ACRES														
19														
SOIL TYPES														
19														
19														
SLOPES														
19														
19														

^{1/} From table 2
^{2/} From table 3
^{3/} Season, quality, diseases, insects, etc.

Field Fertility Appraisal and Practice Record Sheet

Year	Crop	Yield Goal	Soil Test Results						Recommendations				Sod & Residue Flow Under 1/	
			Soil pH	P ₂ O ₅	K ₂ O	Ca	Mg	D.M.	Lime T/A	N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅
FIELD														
19														
ACRES														
19														
SOIL TYPES														
19														
19														
SLOPES														
19														
19														
FIELD														
19														
ACRES														
19														
SOIL TYPES														
19														
19														
SLOPES														
19														
19														

1/ From table 2
 2/ From table 3
 3/ Season, quality, diseases, insects, etc.

Field Fertility Appraisal and Practice Record Sheet

Year	Crop	Yield Goal	Soil Test Results						Recommendations				Sod & Residue Plow Under ^{1/}	
			Soil pH	P ₂ O ₅	K ₂ O	Ca	Mg	D.M.	Lime T/A	N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅
FIELD														
19														
ACRES														
19														
SOIL TYPES														
19														
19														
SLOPES														
19														
19														
FIELD														
19														
ACRES														
19														
SOIL TYPES														
19														
19														
SLOPES														
19														
19														

1/ From table 2
 2/ From table 3
 3/ Season, quality, diseases, insects, etc.

Field Fertility Appraisal and Practice Record Sheet

Year	Crop	Yield Goal	Soil Test Results						Recommendations				Sod & Residue Plow Under ^{1/}	
			Soil pH	P ₂ O ₅	K ₂ O	Ca	Mg	D.M.	Lime T/A	N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅
FIELD														
19														
ACRES														
19														
SOIL TYPES														
19														
19														
SLOPES														
19														
19														
FIELD														
19														
ACRES														
19														
SOIL TYPES														
19														
19														
SLOPES														
19														
19														

^{1/} From table 2

^{2/} From table 3

^{3/} Season, quality, diseases, insects, etc.

