Woburn Ley-arable experiment cropping sequence 1938-2020

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Description: Cropping details of the Woburn Ley-arable Experiment, 1938-2020, with details of the arable and ley rotation sequences in each of the five Blocks (I-V), and the different treatment crops.

- **Page 1-2:** Cover page
- **Page 3:** Generic plan showing plot and block layout and dimensions
- **Pages 4-5:** Cropping sequence 1938-1972/76
- **Pages 6-7** Cropping sequence 1973/77-2007/11
- **Pages 8-9:** Cropping sequence 2008/12-2020

Site: W/RN/3. Stackyard field, Woburn Experimental Farm, Husborne Crawley, Woburn, Bedfordshire, UK. Geographic location: 51.99906, -0.61673

Derived from:

- Rothamsted Experimental Station (1966) *Details of the Classical and Long-term experiments up to 1962*. Lawes Agricultural Trust, Harpenden. pp. 87 https://doi.org/10.23637/ERADOC-1-191
- Rothamsted Experimental Station (1970) *Details of the Classical and Long-Term Experiments up to 1967*, Rothamsted Experimental Station, Lawes Agricultural Trust, Harpenden UK, pp. 128 https://doi.org/10.23637/ERADOC-1-192
- Rothamsted Experimental Station (1978) *Details of the Classical and Long-term experiments 1968-73*. Lawes Agricultural Trust, Harpenden. pp. 77 https://doi.org/10.23637/ERADOC-1-193
- Annual *Results of the Field Experiments*, *Yields of the Field Experiments* and *Results of the Classical and other Long-term experiments* published by Rothamsted Research, 1939-2020 http://www.era.rothamsted.ac.uk/eradoc/books/2

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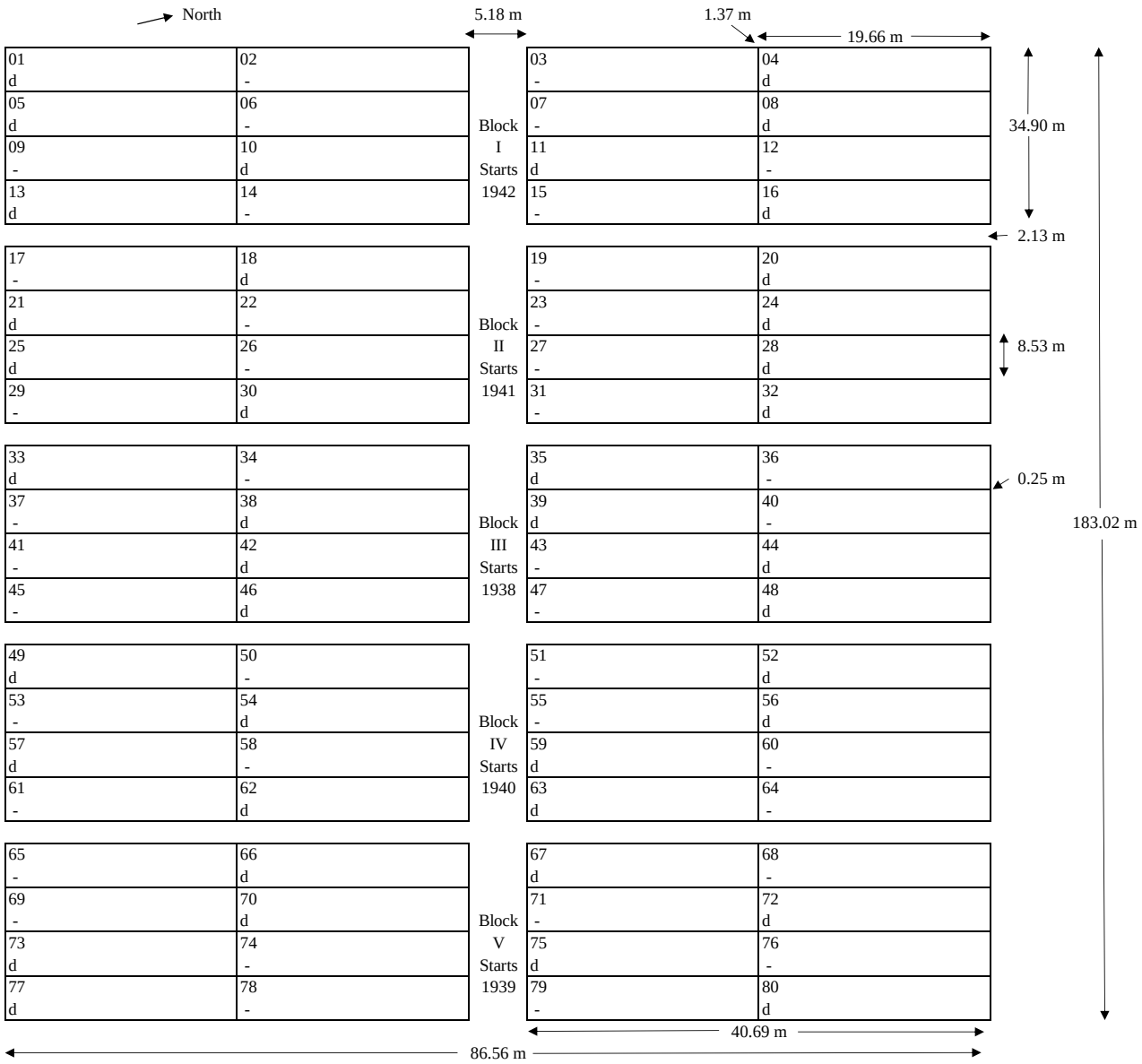
Generic plan of the Woburn Ley-arable experiment



01 d	02 -		03 -	04 d
05 d	06 -		07 -	08 d
09 -	10 d	Block I Starts 1942	11 d	12 -
13 d	14 -		15 -	16 d
17 -	18 d		19 -	20 d
21 d	22 -		23 -	24 d
25 d	26 -	Block II Starts 1941	27 -	28 d
29 -	30 d		31 -	32 d
33 d	34 -		35 d	36 -
37 -	38 d		39 d	40 -
41 -	42 d	Block III Starts 1938	43 -	44 d
45 -	46 d		47 -	48 d
49 d	50 -		51 -	52 d
53 -	54 d		55 -	56 d
57 d	58 -	Block IV Starts 1940	59 d	60 -
61 -	62 d		63 d	64 -
65 -	66 d		67 d	68 -
69 -	70 d		71 -	72 d
73 d	74 -	Block V Starts 1939	75 d	76 -
77 d	78 -		79 -	80 d

d = plots receiving dung (FYM) every five years until the mid-1960s.

W/RN/3 Woburn Ley-Arable Cropping 1938-1972.

The experiment began in 1938 but was "phased-in" so the 1st Test crops following the various Treatment crops were on Block III in 1941, Block V in 1942, Block IV in 1943, Block II in 1944 and Block I in 1945

Changes/exceptions to cropping are given in the footnotes below. See also "Details of the Classical and Long-term Experiments up to 1962", "Details…up to 1967" and "Details…1968-73"

Block	Rotation[1]		Plots - / D[2]					Treatment crops			1st Test crop	2nd Test crop	Treatment crops			1st Test crop	2nd Test crop	Treatment crops			1st Test crop	2nd Test crop	Treatment crops			1st Test crop	2nd Test crop	Treatment crops			1st Test crop	2nd Test crop	Treatment crops			1st Test crop	2nd Test crop	Treatment crops			1st Test crop	2nd Test crop
								1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972
III[3]	Cont. Rtns	Ar	40/39					P	W	K	P	B	P	W	SBe	P	B	P	R	SBe	P	B	P	R	SBe	SBe	B	P	R	C	SBe	B	P	R	C	SBe	B	P	R	C	P	W
	" "	Ah	45/46					P	W	H	P	B	P	W	H	P	B	P	R	H	P	B	P	R	H	SBe	B	P	R	H	SBe	B	P	R	H	SBe	B	P	R	H	P	W
	" "	L	43/44					L1	L2	L3	P	B	L1	L2	L3	P	B	L1	L2	L3	P	B	L1	L2	L3	SBe	B	L1	L2	L3	SBe	B	L1	L2	L3	SBe	B	L1	L2	L3	P	W
	" "	Lu	34/33					Lu1	Lu2	Lu3	P	B	Lu1	Lu2	Lu3	P	B	Lu1	Lu2	Lu3	P	B	Lu1	Lu2	Lu3	SBe	B	Lu1	Lu2	Lu3	SBe	B	Lu1	Lu2	S	SBe	B	S1	S2	S3	P	W
	Alter. Rtns	Ar/Lu	36/35					P	W	K	P	B	Lu1	Lu2	Lu3	P	B	P	R	H	P	B	L1	L2	L3	SBe	B	P	R	H	SBe	B	Lu1	Lu2	S	SBe	B	P	R	C	P	W
	" "	Ah/L	47/48					P	W	H	P	B	L1	L2	L3	P	B	P	R	SBe	P	B	Lu1	Lu2	Lu3	SBe	B	P	R	C	SBe	B	L1	L2	L3	SBe	B	P	R	H	P	W
	" "	Lu/Ar	37/38					Lu1	Lu2	Lu3	P	B	P	W	SBe	P	B	L1	L2	L3	P	B	P	R	H	SBe	B	Lu1	Lu2	Lu3	SBe	B	P	R	C	SBe	B	L1	L2	L3	P	W
	" "	L/Ah	41/42					L1	L2	L3	P	B	P	W	H	P	B	Lu1	Lu2	Lu3	P	B	P	R	SBe	SBe	B	L1	L2	L3	SBe	B	P	R	H	SBe	B	S1	S2	S3	P	W
							1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973
V	Cont. Rtns	Ar	74/73				B	P	W	K	P	B	P	W	SBe	P	B	P	R	SBe	P	B	P	R	C	SBe	B	P	R	C	SBe	B	P	R	C	SBe	B	P	R	C	P	W
	" "	Ah	68/67				B	P	W	H	P	B	P	W	H	P	B	P	R	H	P	B	P	R	H	SBe	B	P	R	H	SBe	B	P	R	H	SBe	B	P	R	H	P	W
	" "	L	65/66				B	L1	L2	L3	P	B	L1	L2	L3	P	B	L1	L2	L3	P	B	L1	L2	L3	SBe	B	L1	L2	L3	SBe	B	L1	L2	L3	SBe	B	L1	L2	L3	P	W
	" "	Lu	79/80				B	Lu1	Lu2	Lu3	P	B	Lu1	Lu2	Lu3	P	B	Lu1	Lu2	Lu3	P	B	Lu1	Lu2	Lu3	SBe	B	Lu1	Lu2	Lu3	SBe	B	S1	S2	S3	SBe	B	S1	S2	F	P	W
	Alter. Rtns	Ar/Lu	71/72				B	P	W	H	P	B	Lu1	Lu2	Lu3	P	B	P	R	SBe	P	B	L1	L2	L3	SBe	B	P	R	H	SBe	B	S1	S2	S3	SBe	B	P	R	C	P	W
	" "	Ah/L	76/75				B	P	W	K	P	B	L1	L2	L3	P	B	P	R	H	P	B	Lu1	Lu2	Lu3	SBe	B	P	R	C	SBe	B	L1	L2	L3	SBe	B	P	R	H	P	W
	" "	Lu/Ar	69/70				B	Lu1	Lu2	Lu3	P	B	P	W	H	P	B	L1	L2	L3	P	B	P	R	C	SBe	B	Lu1	Lu2	Lu3	SBe	B	P	R	H	SBe	B	L1	L2	L3	P	W
	" "	L/Ah	78/77				B	L1	L2	L3	P	B	P	W	SBe	P	B	Lu1	Lu2	Lu3	P	B	P	R	H	SBe	B	L1	L2	L3	SBe	B	P	R	C	SBe	B	S1	S2	F	P	W
						1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
IV	Cont. Rtns	Ar	64/63			P	B	P	W	K	P	B	P	W	SBe	P	B	P	R	SBe	P	B	P	R	C	SBe	B	P	R	C	SBe	B	P	R	C	B	B	P	R	B	P	W
	" "	Ah	53/54			P	B	P	W	H	P	B	P	W	H	P	B	P	R	H	P	B	P	R	H	SBe	B	P	R	H	SBe	B	P	R	H	B	B	P	R	H	P	W
	" "	L	58/57			P	B	L1	L2	L3	P	B	L1	L2	L3	P	B	L1	L2	L3	P	B	L1	L2	L3	SBe	B	L1	L2	L3	SBe	B	L1	L2	L3	B	B	L1	L2	L3	P	W
	" "	Lu	60/59			P	B	Lu1	Lu2	Lu3	P	B	Lu1	Lu2	Lu3	P	B	Lu1	Lu2	Lu3	P	B	Lu1	Lu2	Lu3	SBe	B	Lu1	Lu2	Lu3	SBe	B	S1	S2	S3	B	B	S1	CL2	CL3	P	W
	Alter. Rtns	Ar/Lu	51/52			P	B	P	W	K	P	B	Lu1	Lu2	Lu3	P	B	P	R	H	P	B	L1	L2	L3	SBe	B	P	R	C	SBe	B	S1	S2	S3	B	B	P	R	H	P	W
	" "	Ah/L	50/49			P	B	P	W	H	P	B	L1	L2	L3	P	B	P	R	SBe	P	B	Lu1	Lu2	Lu3	SBe	B	P	R	H	SBe	B	L1	L2	L3	B	B	P	R	B	P	W
	" "	Lu/Ar	61/62			P	B	Lu1	Lu2	Lu3	P	B	P	W	SBe	P	B	L1	L2	L3	P	B	P	R	H	SBe	B	Lu1	Lu2	Lu3	SBe	B	P	R	C	B	B	L1	L2	L3	P	W
	" "	L/Ah	55/56			P	B	L1	L2	L3	P	B	P	W	H	P	B	Lu1	Lu2	Lu3	P	B	P	R	C	SBe	B	L1	L2	L3	SBe	B	P	R	H	B	B	S1	CL2	CL3	P	W
					1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
II	Cont. Rtns	Ar	19/20		B	P	B	P	W	K	P	B	P	W	SBe	P	B	P	R	SBe	P	B	P	R	C	SBe	B	P	R	C	SBe	B	P	R	C	B	B	P	B	B	P	W
	" "	Ah	17/18		B	P	B	P	W	H	P	B	P	W	H	P	B	P	R	H	P	B	P	R	H	SBe	B	P	R	H	SBe	B	P	R	H	B	B	P	B	H	P	W
	" "	L	31/32		B	P	B	L1	L2	L3	P	B	L1	L2	L3	P	B	L1	L2	L3	P	B	L1	L2	L3	SBe	B	L1	L2	L3	SBe	B	L1	L2	L3	B	B	L1	L2	L3	P	W
	" "	Lu	29/30		B	P	B	Lu1	Lu2	Lu3	P	B	Lu1	Lu2	Lu3	P	B	Lu1	Lu2	Lu3	P	B	Lu1	Lu2	Lu3	SBe	B	Lu1	Lu2	Lu3	SBe	B	S1	S2	S3	B	B	CL1	CL2	CL3	P	W
	Alter. Rtns	Ar/Lu	27/28		B	P	B	P	W	K	P	B	L1	L2	L3	P	B	P	R	H	P	B	Lu1	Lu2	F	SBe	B	P	R	C	SBe	B	L1	L2	L3	B	B	P	B	H	P	W
	" "	Ah/L	22/21		B	P	B	P	W	H	P	B	Lu1	Lu2	Lu3	P	B	P	R	SBe	P	B	L1	L2	L3	SBe	B	P	R	H	SBe	B	S1	S2	S3	B	B	P	B	B	P	W
	" "	Lu/Ar	26/25		B	P	B	Lu1	Lu2	Lu3	P	B	P	W	H	P	B	L1	L2	L3	P	B	P	R	C	SBe	B	Lu1	Lu2	Lu3	SBe	B	P	R	H	B	B	L1	L2	L3	P	W
	" "	L/Ah	23/24		B	P	B	L1	L2	L3	P	B	P	W	SBe	P	B	Lu1	Lu2	Lu3	P	B	P	R	H	SBe	B	L1	L2	L3	SBe	B	P	R	C	B	B	CL1	CL2	CL3	P	W
				1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
I	Cont. Rtns	Ar	6/5	B	K	P	B	P	W	K	P	B	P	W	SBe	P	B	P	R	SBe	P	B	P	R	C	SBe	B	P	R	C	SBe	B	P	R	C	B	B	P	B	B	P	W
	" "	Ah	2/1	B	H	P	B	P	W	H	P	B	P	W	H	P	B	P	R	H	P	B	P	R	H	SBe	B	P	R	H	SBe	B	P	R	H	B	B	P	B	H	P	W
	" "	L	14/13	B	H	P	B	L1	L2	L3	P	B	L1	L2	L3	P	B	L1	L2	L3	P	B	L1	L2	L3	SBe	B	L1	L2	L3	SBe	B	L1	L2	L3	B	B	L1	L2	L3	P	W
	" "	Lu	3/4	B	K	P	B	Lu1	Lu2	Lu3	P	B	Lu1	Lu2	Lu3	P	B	Lu1	Lu2	Lu3	P	B	Lu1	Lu2	F	SBe	B	Lu1	Lu2	Lu3	SBe	B	S1	S2	S3	B	B	CL1	CL2	CL3	P	W
	Alter. Rtns	Ar/Lu	9/10	B	K	P	B	P	W	H	P	B	L1	L2	L3	P	B	P	R	SBe	P	B	Lu1	Lu2	F	SBe	B	P	R	H	SBe	B	L1	L2	L3	B	B	P	B	B	P	W
	" "	Ah/L	15/16	B	H	P	B	P	W	K	P	B	Lu1	Lu2	Lu3	P	B	P	R	H	P	B	L1	L2	L3	SBe	B	P	R	C	SBe	B	S1	S2	S3	B	B	P	B	H	P	W
	" "	Lu/Ar	12/11	B	H	P	B	Lu1	Lu2	Lu3	P	B	P	W	SBe	P	B	L1	L2	L3	P	B	P	R	H	SBe	B	Lu1	Lu2	Lu3	SBe	B	P	R	C	B	B	L1	L2	L3	P	W
	" "	L/Ah	7/8	B	K	P	B	L1	L2	L3	P	B	P	W	H	P	B	Lu1	Lu2	Lu3	P	B	P	R	C	SBe	B	L1	L2	L3	SBe	B	P	R	H	B	B	CL1	CL2	CL3	P	W

[1] at the start of the experiment, plots were in either Continuous Rotations or Alternating Rotations.

The Continuous Rotations were:-

Ar; three arable Treatment crops, including one year root crop, followed by two arable Test crops

Ah; three arable Treatment crops, including one year hay, followed by two arable Test crops

L; three year grazed grass-clover ley Treatment crops, followed by two arable Test crops.

Lu; three year lucerne ley Treatment crops, followed by two arable Test crops.

The Aternating Rotations were designated as either **Ar/Lu**, **Ah/L**, **Lu/Ar** or **L/Ah** according to the order in which the first six Treatment crops appeared.

Woburn Ley-Arable Cropping Sequence 1973-2007.

In 2018 it was realised that the legume leys for 1971-75 were incorrectly described/designated. Changes to previous spreadsheets (1971-75) are shown in red (P R Poulton, 2nd July 2018). See also the footnotes.

			1st Test crop	2nd Test crop								1st Test crop	2nd Test crop				1st Test crop	2nd Test crop				1st Test crop	2nd Test crop				1st Test crop	2nd Test crop				1st Test crop	2nd Test crop
								Treatment crops						Treatment crops					Treatment crops						Treatment crops						Treatment crops			
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Block	**Rotation**	**Plots**																																	
			1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
III	AF	40/39	P	B	B	W	B	F	F	O	W	B	F	F	BE	W	B	F	F	BE	W	R	F	F	BE	W	R	R	BE	M	W	R	R	BE	M	W	R
Year 1-1973	AB	45/46	P	B	H	W	B	B	B	O	W	B	B	B	BE	W	B	B	B	BE	W	R	B	B	BE	W	R	R	M	BE	W	R	R	M	BE	W	R
	Ln3	43/44	L1	L2	L3	W	B	1	2	3	W	B	1	2	3	W	B	1	2	3	W	R	1	2	3	W	R	1	2	3	W	R	1	2	3	W	R
	Lc3	34/33	CL1	CL2	CL3	W	B	1	2	3	W	B	1	2	3	W	B	1	2	3	W	R	1	2	3	W	R	1	2	3	W	R	1	2	3	W	R
1st cycle	LLn8	36/35	L1	L2	L3	4	5	6	7	8	W	B	1	2	3	4	5	6	7	8	W	R	1	2	3	4	5	6	7	8	W	R	1	2	3	4	R
""	LLc8	47/48	CL1	CL2	CL3	4	5	6	7	8	W	B	1	2	3	4	5	6	7	8	W	R	1	2	3	4	5	6	7	8	W	R	1	2	3	4	R
2nd cycle	LLn8	37/38	P	B	H	W	B	1	2	3	4	5	6	7	8	W	B	1	2	3	4	5	6	7	8	W	R	1	2	3	4	5	6	7	8	W	R
""	LLc8	41/42	P	B	B	W	B	1	2	3	4	5	6	7	8	W	B	1	2	3	4	5	6	7	8	W	R	1	2	3	4	5	6	7	8	W	R
			1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
V	AF	74/73	P	B	O	W	B	F	F	BE	W	B	F	F	BE	W	B	F	F	BE	W	R	F	F	BE	W	R	R	BE	M	W	R	R	BE	M	W	R
Year 1-1974	AB	68/67	P	B	O	W	B	B	B	BE	W	B	B	B	BE	W	B	B	B	BE	W	R	B	B	BE	W	R	R	M	BE	W	R	R	M	BE	W	R
	Ln3	65/66	L1	L2	3	W	B	1	2	3	W	B	1	2	3	W	B	1	2	3	W	R	1	2	3	W	R	1	2	3	W	R	1	2	3	W	R
	Lc3	79/80	CL1	CL2	3	W	B	1	2	3	W	B	1	2	3	W	B	1	2	3	W	R	1	2	3	W	R	1	2	3	W	R	1	2	3	W	R
1st cycle	LLn8	71/72	L1	L2	3	4	5	6	7	8	W	B	1	2	3	4	5	6	7	8	W	R	1	2	3	4	5	6	7	8	W	R	1	2	3	W	R
	LLc8	76/75	CL1	CL2	3	4	5	6	7	8	W	B	1	2	3	4	5	6	7	8	W	R	1	2	3	4	5	6	7	8	W	R	1	2	3	W	R
2nd cycle	LLn8	69/70	P	B	C*	W	B	1	2	3	4	5	6	7	8	W	B	1	2	3	4	5	6	7	8	W	R	1	2	3	4	5	6	7	8	W	R
	LLc8	78/77	P	B	H*	W	B	1	2	3	4	5	6	7	8	W	B	1	2	3	4	5	6	7	8	W	R	1	2	3	4	5	6	7	8	W	R
			1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
IV	AF	64/63	P	F	O	W	B	F	F	BE	W	B	F	F	BE	W	B	F	F	BE	W	R	F	F	BE	W	R	R	BE	M	W	R	R	BE	M	W	R
Year 1-1975	AB	53/54	P	B	O	W	B	B	B	BE	W	B	B	B	BE	W	B	B	B	BE	W	R	B	B	BE	W	R	R	M	BE	W	R	R	M	BE	W	R
	Ln3	58/57	L1	2	3	W	B	1	2	3	W	B	1	2	3	W	B	1	2	3	W	R	1	2	3	W	R	1	2	3	W	R	1	2	3	W	R
	Lc3	60/59	CL	2	3	W	B	1	2	3	W	B	1	2	3	W	B	1	2	3	W	R	1	2	3	W	R	1	2	3	W	R	1	2	3	W	R
1st cycle	LLn8	51/52	L1	2	3	4	5	6	7	8	W	B	1	2	3	4	5	6	7	8	W	R	1	2	3	4	5	6	7	8	W	R	1	2	O	W	R
	LLc8	50/49	CL	2	3	4	5	6	7	8	W	B	1	2	3	4	5	6	7	8	W	R	1	2	3	4	5	6	7	8	W	R	1	2	BE	W	R
2nd cycle	LLn8	61/62	1	2	3	W	B	1	2	3	4	5	6	7	8	W	B	1	2	3	4	5	6	7	8	W	R	1	2	3	4	5	6	7	8	W	R
	LLc8	55/56	1	2	3	W	B	1	2	3	4	5	6	7	8	W	B	1	2	3	4	5	6	7	8	W	R	1	2	3	4	5	6	7	8	W	R
			1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
II	AF	19/20	F	F	O	W	B	F	F	P	W	B	F	F	BE	W	B	F	F	BE	W	R	F	F	BE	W	R	R	BE	M	W	R	R	BE	M	W	R
Year 1-1976	AB	17/18	B	B	O	W	B	B	B	P	W	B	B	B	BE	W	B	B	B	BE	W	R	B	B	BE	W	R	R	M	BE	W	R	R	M	BE	W	R
	Ln3	31/32	1	2	3	W	B	1	2	3	W	B	1	2	3	W	B	1	2	3	W	R	1	2	3	W	R	1	2	3	W	R	1	2	3	W	R
	Lc3	29/30	1	2	3	W	B	1	2	3	W	B	1	2	3	W	B	1	2	3	W	R	1	2	3	W	R	1	2	3	W	R	1	2	3	W	R
1st cycle	LLn8	27/28	1	2	3	4	5	6	7	8	W	B	1	2	3	4	5	6	7	8	W	R	1	2	3	4	5	6	7	8	W	R	1	BE	O	W	R
	LLc8	22/21	1	2	3	4	5	6	7	8	W	B	1	2	3	4	5	6	7	8	W	R	1	2	3	4	5	6	7	8	W	R	1	O	BE	W	R
2nd cycle	LLn8	26/25	1	2	3	W	B	1	2	3	4	5	6	7	8	W	B	1	2	3	4	5	6	7	8	W	R	1	2	3	4	5	6	7	8	W	R
	LLc8	23/24	1	2	3	W	B	1	2	3	4	5	6	7	8	W	B	1	2	3	4	5	6	7	8	W	R	1	2	3	4	5	6	7	8	W	R
			1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
I	AF	6/5	F	F	O	W	B	F	F	BE	W	B	F	F	BE	W	B	F	F	BE	W	R	F	F	BE	W	R	R	BE	M	W	R	R	BE	M	W	R
Year 1-1977	AB	2/1	B	B	O	W	B	B	B	BE	W	B	B	B	BE	W	B	B	B	BE	W	R	B	B	BE	W	R	R	M	BE	W	R	R	M	BE	W	R
	Ln3	14/13	1	2	3	W	B	1	2	3	W	B	1	2	3	W	B	1	2	3	W	R	1	2	3	W	R	1	2	3	W	R	1	2	3	W	R
	Lc3	3/4	1	2	3	W	B	1	2	3	W	B	1	2	3	W	B	1	2	3	W	R	1	2	3	W	R	1	2	3	W	R	1	2	3	W	R
1st cycle	LLn8	9/10	1	2	3	4	5	6	7	8	W	B	1	2	3	4	5	6	7	8	W	R	1	2	3	4	5	6	7	8	W	R	R*	BE	O	W	R
	LLc8	15/16	1	2	3	4	5	6	7	8	W	B	1	2	3	4	5	6	7	8	W	R	1	2	3	4	5	6	7	8	W	R	R*	O	BE	W	R
2nd cycle	LLn8	12/11	1	2	3	W	B	1	2	3	4	5	6	7	8	W	B	1	2	3	4	5	6	7	8	W	R	1	2	3	4	5	6	7	8	W	R
	LLc8	7/8	1	2	3	W	B	1	2	3	4	5	6	7	8	W	B	1	2	3	4	5	6	7	8	W	R	1	2	3	4	5	6	7	8	W	R

Crops: P=Potatoes; B=Spring barley; W=Winter wheat; K=Kale; H=one-year Hay; SBe=Sugar beet; R=Winter rye; C=Carrots; O=oats; BE=Winter beans; M=Maize; F=Fallow.

C*=carrots failed 1976; H*=one-year Hay failed 1976; R*=Spring Rye

L1, L2, L3 = 1st, 2nd, 3rd year of grass-clover ley [given little N, grazed by sheep until 1968 (except for existing 3rd year leys which were grazed in 1969), cut thereafter];

Lu1, Lu2, Lu3 = 1st, 2nd, 3rd year of Lucerne ley; S1, S2, S3 = 1st, 2nd, 3rd year of Sainfoin (replaced Lucerne from 1964); Lc1, Lc2, Lc3 = 1st, 2nd, 3rd year of Red clover ley (replaced Sainfoin from 1971).

Ln3, 1, 2, 3 = 1st, 2nd, 3rd year of grass ley given N; Lc3, 1, 2, 3 = 1st, 2nd, 3rd year of grass/clover ley.

LLn8, 1, 2, 3. 4, 5, 6, 7, 8 = 1st, 2nd, 3rd, 4th, 5th, 6th, 7th, 8th year of grass ley given N; LLc8, 1, 2, 3. 4, 5, 6, 7, 8 = 1st, 2nd, 3rd, 4th, 5th, 6th, 7th, 8th year of grass/clover ley.

Between 1973 and 1980, on Block III (and in subsequent years on Blocks V, IV, II and I) major changes were made.Thus:-

At the start of the experiment, plots were in either Continuous Rotations or Alternating Rotations.

The Continuous Rotations were:-

AF (replaced Ar); two years fallow and one arable Treatment crop, followed by two arable Test crops. In 1998 on Block III (and in subsequent years on Blocks V, IV, II and I) this changed to **AM**; R, BE, M Treament crops followed by two arable Test crops.

AB (replaced Ah); three arable Treatment crops, followed by two arable Test crops. In 1998 on Block III (and insubsequent years on Blocks V, IV, II and I) this changed to **ABE**; R, M, BE Treament crops followed by two arable Test crops.

Ln3 (replaced L); three year grass ley with N Treatment crops, followed by two arable Test crops.

Lc3 (replaced Lu); three year grass/clover ley Treatment crops, followed by two arable Test crops.

The Aternating Rotations were changed completely so that the effects of eight year leys on the subsequent arable Test crops could be included.

So that this could be tested every five years (as with the Continuous Rotations) changes to two of the four Alternating Rotations were phased in from 1973 on Block III (and in subsequent years on Blocks V, IV, II and I; **1st cycle**);

and two were phased in from 1978 on Block III (and in subsequent years on Blocks V, IV, II and I; **2nd cycle**).

LLn8 1st cycle (replaced Ar/Lu); eight year grass ley with N Treatment crops, followed by two arable Test crops.

LLc8 1st cycle (replaced Ah/L); eight year grass/clover ley Treatment crops, followed by two arable Test crops.

LLn8 2nd cycle (replaced Lu/Ar); eight year grass ley with N Treatment crops, followed by two arable Test crops.

LLc8 2nd cycle (replaced L/Ah); eight year grass/clover ley Treatment crops, followed by two arable Test crops.

Woburn Ley-Arable New Cropping Sequence - revised for 2008 onwards. Fully in phase by 1st Test Crop in 2011

						1st test	2nd test				1st test	2nd test				
	Treatment		**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	
Block	**Code (since 1973)**	**Plots**														
			2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
III	(AF) (AM) AO	39/40	R	BE	O	W	R	R	BE	O	W	R	R	BE	O	
	(AB) (ABe) ABe	45/46	R	O	BE	W	R	R	O	BE	W	R	R	O	BE	
	Ln3	43/44	1	2	3	W	R	1	2	3	W	R	1	2	3	
	Lc3	33/34	1	2	3	W	R	1	2	3	W	R	1	2	3	
	LLn/AO	35/36	R	BE	O	W	R	R	BE	O	W	R	R	BE	O	Into continuous arable from 2007 (LLn/AM)
	LLc/ABe	47/48	R	O	BE	W	R	R	O	BE	W	R	R	O	BE	Into continuous arable from 2007 (LLc/ABe)
	LLn/Ln3	37/38	1	2	3	W	R	1	2	3	W	R	1	2	3	Into 3-yr grass leys from 2008 (LLn/Ln)
	LLc/Lc3	41/42	1	2	3	W	R	1	2	3	W	R	1	2	3	Into 3-yr grass/clover leys from 2008 (LLc/Lc)
			2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020		
V	(AF) (AM) AO	73/74	R	BE	O	W	R	R	BE	O	W	R	R	BE		
	(AB) (ABe) ABe	67/68	R	O	BE	W	R	R	O	BE	W	R	R	O		
	Ln3	65/66	1	2	3	W	R	1	2	3	W	R	1	2		
	Lc3	79/80	1	2	3	W	R	1	2	3	W	R	1	2		
	LLn/AO	71/72	R	BE	O	W	R	R	BE	O	W	R	R	BE		Into continuous arable from 2007 (LLn/AM)
	LLc/ABe	75/76	R	O	BE	W	R	R	O	BE	W	R	R	O		Into continuous arable from 2007 (LLc/ABe)
	LLn/Ln3	69/70	1	2	3	W	R	1	2	3	W	R	1	2		Into 3-yr grass leys from 2009 (LLn/Ln)
	LLc/Lc3	77/78	1	2	3	W	R	1	2	3	W	R	1	2		Into 3-yr grass/clover leys from 2009 (LLc/Lc)
			2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020			
IV	(AF) (AM) AO	63/64	R	BE	O	W	R	R	BE	O	W	R	R			
	(AB) (ABe) ABe	53/54	R	O	BE	W	R	R	O	BE	W	R	R			
	Ln3	57/58	1	2	3	W	R	1	2	3	W	R	1			
	Lc3	59/60	1	2	3	W	R	1	2	3	W	R	1			
	LLn/AO	51/52	R	BE	O	W	R	R	BE	O	W	R	R			Into continuous arable from 2007 (LLn/AM)
	LLc/ABe	49/50	R	O	BE	W	R	R	O	BE	W	R	R			Into continuous arable from 2007 (LLc/ABe)
	LLn/Ln3	61/62	1	2	3	W	R	1	2	3	W	R	1			Into 3-yr grass leys from 2010 (LLn/Ln)
	LLc/Lc3	55/56	1	2	3	W	R	1	2	3	W	R	1			Into 3-yr grass/clover leys from 2010 (LLc/Lc)
			2011	2012	2013	2014	2015	2016	2017	2018	2019	2020				
II	(AF) (AM) AO	19/20	R	BE	O	W	R	R	BE	O	W	R				
	(AB) (ABe) ABe	17/18	R	O	BE	W	R	R	O	BE	W	R				
	Ln3	31/32	1	2	3	W	R	1	2	3	W	R				
	Lc3	29/30	1	2	3	W	R	1	2	3	W	R				
	LLn/AO	27/28	R	BE	O	W	R	R	BE	O	W	R				Into continuous arable from 2007 (LLn/AM)
	LLc/ABe	21/22	R	O	BE	W	R	R	O	BE	W	R				Into continuous arable from 2007 (LLc/ABe)
	LLn/Ln3	25/26	1	2	3	W	R	1	2	3	W	R				Into 3-yr grass leys from 2011 (LLn/Ln)
	LLc/Lc3	23/24	1	2	3	W	R	1	2	3	W	R				Into 3-yr grass/clover leys from 2011 (LLc/Lc)
			2012	2013	2014	2015	2016	2017	2018	2019	2020					
I	(AF) (AM) AO	5/6	R	BE	O	W	R	R	BE	O	W					
	(AB) (ABe) ABe	1/2	R	O	BE	W	R	R	O	BE	W					
	Ln3	13/14	1	2	3	W	R	1	2	3	W					
	Lc3	3/4	1	2	3	W	R	1	2	3	W					
	LLn/AO	9/10	R	BE	O	W	R	R	BE	O	W					Into continuous arable from 2007 (LLn/AM)
	LLc/ABe	15/16	R	O	BE	W	R	R	O	BE	W					Into continuous arable from 2007 (LLc/ABe)
	LLn/Ln3	11/12	1	2	3	W	R	1	2	3	W					Into 3-yr grass leys from 2012 (LLn/Ln)
	LLc/Lc3	7/8	1	2	3	W	R	1	2	3	W					Into 3-yr grass/clover leys from 2012 (LLc/Lc)

Crops: P=Potatoes; B=Spring barley; W=Winter wheat; K=Kale; H=one-year Hay; SBe=Sugar beet; R=Winter rye; C=Carrots; O=oats; BE=Winter beans; M=Maize; F=Fallow.

C*=carrots failed 1976; H*=one-year Hay failed 1976; R*=Spring Rye

L1, L2, L3 = 1st, 2nd, 3rd year of grass-clover ley [given little N, grazed by sheep until 1968 (except for existing 3rd year leys which were grazed in 1969), cut thereafter];

Lu1, Lu2, Lu3 = 1st, 2nd, 3rd year of Lucerne ley; S1, S2, S3 = 1st, 2nd, 3rd year of Sainfoin (replaced Lucerne from 1964); Lc1, Lc2, Lc3 = 1st, 2nd, 3rd year of Red clover ley (replaced Sainfoin from 1971).

Ln3, 1, 2, 3 = 1st, 2nd, 3rd year of grass ley given N; Lc3, 1, 2, 3 = 1st, 2nd, 3rd year of grass/clover ley.

LLn8, 1, 2, 3. 4, 5, 6, 7, 8 = 1st, 2nd, 3rd, 4th, 5th, 6th, 7th, 8th year of grass ley given N; LLc8, 1, 2, 3. 4, 5, 6, 7, 8 = 1st, 2nd, 3rd, 4th, 5th, 6th, 7th, 8th year of grass/clover ley.

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AB (replaced Ah); three arable Treatment crops, followed by two arable Test crops.

In 1998 on Block III (and insubsequent years on Blocks V, IV, II and I) this changed to ABE; R, M, BE Treament crops followed by two arable Test crops.

Ln3 (replaced L); three year grass ley with N Treatment crops, followed by two arable Test crops.

Lc3 (replaced Lu); three year grass/clover ley Treatment crops, followed by two arable Test crops.

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So that this could be tested every five years (as with the Continuous Rotations) changes to two of the four Alternating Rotations were phased in from 1973 on Block III (and in subsequent years on Blocks V, IV, II and I; **1st cycle**);

and two were phased in from 1978 on Block III (and in subsequent years on Blocks V, IV, II and I; **2nd cycle**).

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LLc8 1st cycle (replaced Ah/L); eight year grass/clover ley Treatment crops, followed by two arable Test crops.

LLn8 2nd cycle (replaced Lu/Ar); eight year grass ley with N Treatment crops, followed by two arable Test crops.

LLc8 2nd cycle (replaced L/Ah); eight year grass/clover ley Treatment crops, followed by two arable Test crops.