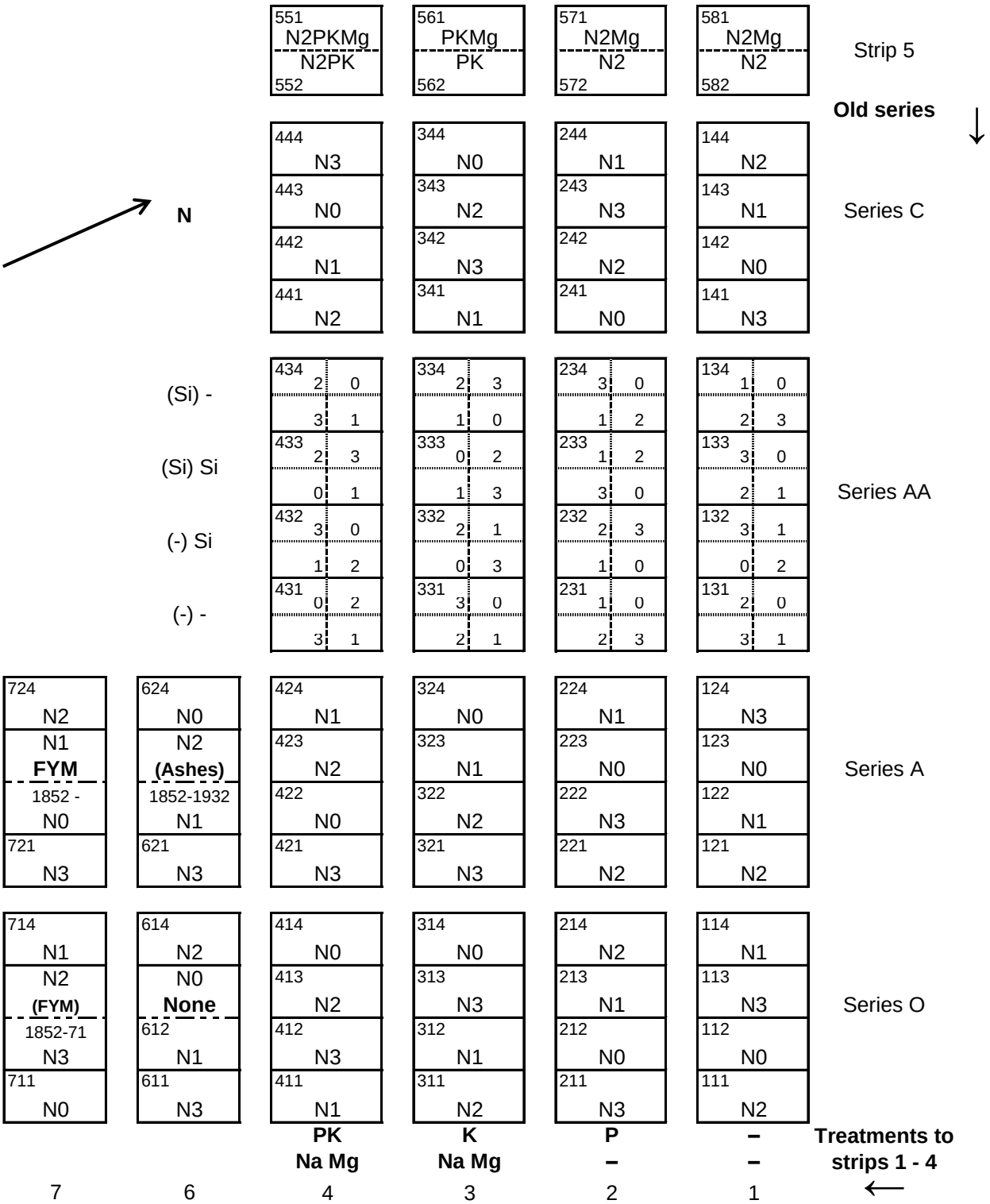
Hoosfield spring barley 1979 - 2000



Rates of N shown (N0,N1,N2 & N3) are those applied in 1991; they have changed cyclically every year since 1981 in the order N3→N2→N1→N0→N3

Derived from plan in 'Rothamsted Experimental Station Guide to the Classical Experiments, 1991' Lawes Agricultural Trust, p20.

Hoosfield Fertilizer and organic manure treatments 1979-2000

(see other plans for other years)

Treatments (per hectare per year unless indicated)

Nitrogen (applied in the spring)

N0, N1, N2, N3	0, 48, 96, 144kg N as calcium ammonium nitrate (Nitro-chalk)

Organics (applied before ploughing, usually in the autumn)

FYM 1852 -	35t Farmyard manure since 1852
(FYM) 1852-71	35t Farmyard manure, 1852-1871 only

Minerals (applied before ploughing in the autumn)

P	35kg P as triple superphosphate (47% P_2O_5)
K	90kg K as potassium sulphate
Mg	35kg Mg as Kieserite every 3 years
Si	450kg as sodium silicate since 1980
(Si)	450kg as sodium silicate 1862-1979

(Ashes) Ashes were added to minerals to aid spreading, 1852-1932 only

Note: 15kg Na as sodium sulphate discontinued in 1974 (applied with K and Mg);
P, K and Mg last applied to Series C for 1979
1970-72 plots 551 and 561 received 18kgP and 168kg K in error

Series treatments (last applied 1966, 1967 for parts of Series C)

O	No fertilizer N
A	48kg N as ammonium sulphate
AA	48kg N as sodium nitrate
C	48kg N as castor bean meal since 1941; previously rape cake

Lime: Lime has been applied as required since the 1950s to maintain soil pH at a level that does not compromise yield.

Cropping:
Spring barley grown every year, except 1912, 1933, 1943 and 1967 when the whole experiment was fallowed to control weeds.

From 1968-1978 there was a rotation of barley - beans - potatoes on some plots of Series AA and C. See Plan 1968-78 for details.

Reference: 'Rothamsted Experimental Station Guide to the Classical Experiments, 1991' Lawes Agricultural Trust, p20.