



Carrs Farm General information

Background to Carrs Farm

Location

Carrs Farm is located 2 km southwest of Wolsingham in Co. Durham. The farm is on a north-facing slope around Ashes Beck, a tributary of the River Wear. The farm ranges in height from 200m to 320m above sea level.

History

Most of the new farms to the south of Wolsingham, across the River Wear, are 15th or 16th century in origin. Carrs Farm, then Carrs House, was probably added in the 16th century and consisted of old Medieval land reclaimed in the 13th century and new 15th century intake land. The careful sharing of old and new land resulted in many new fields and walls and all were planned to include inbye land backing directly onto the fell. The farm's long history is illustrated by the 'rigg and furrow', which can be seen in many of the fields. Rigg and furrow is a remnant of a medieval farming system. There is also a small, disused quarry, which provided the original stone for the farm steading and drystone walls on the farm.

Introduction to Carrs Farm

Carrs Farm is a 50-hectare upland hill farm. The farm is an organic farm and is mainly managed for wild-life. To help with this management the land is rented to a neighbouring farmer, who puts animals on the fields as required by the Carrs Farm management plan.

The fields are divided into those that are used for making hay (hay meadows) and those, which are only grazed (pastures). Between September and January 100 mule sheep (Swaledale/Leicester crosses) graze the pastures and 20 cows graze the hay meadows after the hay has been cut to help 'plodge' the seed into the ground. The rent of the land provides an income for the farm.

There are also two areas of upland mixed ash woodland and a small block of coniferous woodland. The farm consists of two groups of buildings. The main group represents the old farmstead and is made up of the farmhouse, attached byres, hay shed, feed shed, bullpen, a stone barn and a pole barn for storing hay. The second group of new sheds are for housing cattle during the winter.

Prior to the 1990s the farm was a dairy farm with Northern Dairy Shorthorns and a small flock of sheep. Once milk could no longer be collected in churns the farm converted to beef production.

Farming practises

The farm has been in the Countryside Stewardship Scheme for a number of years, but recently the whole farm has been included in the Organic Entry Level and Higher Level Stewardship schemes (OELS/HLS). The OELS/HLS agreement is for period of 10 years from 2007 to 2017.

The OELS/HLS agreement for Carrs Farm requires specific management of environmental features and a number of capital works to be undertaken. These are briefly outlined below and illustrated on the Higher Level Stewardship Options Map.

Specific management of environmental features

HC7 – Management of woodland

The aim of this option is to maintain existing woodland in good condition to benefit biodiversity and the historic and landscape characteristics of the area. This includes the areas semi-natural woodland on the farm comprising oak, ash, rowan, hawthorn and alder. The woodland structure is to be maintained and nesting habitat for birds is to be encouraged.

HK6 – Maintenance of species-rich, semi-natural grassland

The aim of this option is to maintain and protect species-rich grassland, as recognised by the UK BAP (Biodiversity Action Plan). At Carrs Farm this option is focused on the upland hay meadows. Specific management of the hay meadows includes cutting hay after the 15 July each year to allow the plants to seed, grazing the aftermath so the cattle ‘plodge’ the seed into the ground and excluding livestock for at least 7 weeks before the hay is cut.

HK7 – Restoration of species-rich, semi-natural grassland

This option is targeted at grassland potentially rich in plants and associated animal life. The meadows identified at Carrs Farm are to be enhanced by spreading seed from more species-rich meadows on the farm.

HK18 – Supplement for hay making

This option aims to ensure the continued and re-introduction of hay making.

HL7 – Maintenance of rough grazing for birds

This option is targeted at areas in the ‘Less Favoured Area’ designation that already support good populations of upland birds (particularly breeding waders). The management required on areas under this option at Carrs Farm must ensure no topping or harrowing between November and June, the area should be grazed by cattle and stocking densities are specified to avoid poaching, encourage areas of flush or wet, marshy grassland by blocking drains, ditches and grips and only well-rotted farmyard manure should be used as fertiliser. The target bird species are lapwing, snipe, redshank and curlew.

HN8 and HN9 – Educational access

This option offers incentives to farmers to host educational visits by schools and other groups. The farm need to have a Farm Facts Leaflet and a Teachers’ Information Pack.

HR1 – Supplement for cattle grazing

This supplement is aimed at promoting grazing cattle where it will be beneficial in meeting environmental objectives. Cattle grazing produces a more varied sward structure than sheep grazing and creates a greater diversity of plants, invertebrates and birds.

Capital works specification

Chemical bracken control

Bracken must be controlled but it must have a minimal adverse impact on other environmental interests on the site. In general chemical control causes less disturbance to archaeological sites, ground nesting birds and invertebrates than mechanical control, but it will kill other species of fern and may be more damaging to other plants.

Footbridge

A small wooden bridge to cross the watercourse is required.

Sheep fencing

All sheep fencing should be erected in accordance with British Standard 1722.

Education pack

This option supports the drafting and production of a high quality information package tailored to the site.

Parkland tree guard (post and rail/wire)

Tree guards should be capable of protecting the trunk of a standard tree against vandalism, mowing or bark stripping by deer, other wildlife and livestock. Parkland tree guards should be constructed in a manner typical of the local area.

Stone wall supplement – top wiring

This option is for the top-wiring of stone walls to provide better protection against livestock.

Stone wall restoration

Dry stone walls are to be restored according to the style and customs of the area and maintained for the lifetime of the agreement.

Stone wall supplement – stone from holding

Stone for walling should come from the quarry in field 4145 and any spoil should be backfilled not the quarry workings.

Farm diversification

Carrs Farm has recently diversified by converting the stone byre adjacent to the farmhouse into a camping barn. The camping barn offers self-catering accommodation for up to 21 people. It has three bedrooms: two en suite, which sleep six people and a larger room, which sleeps nine. There is a fully equipped kitchen, but in addition breakfast, evening meals and packed lunches can be provided on request.

The camping barn aims to be as sustainable as possible with wind power, solar hot water, wood-burning stove, spring water supply and a rainwater harvesting system.

The centre provides farm visits for schools and other groups and is an ideal base for a range of outdoor activities. Cycling, fishing and horse-riding opportunities are all within easy reach and Carrs Farm's partnership with Outdoor-Ambition provides the opportunity to experience a variety of adventure activities. The centre is close to the Weardale Way and Pennine Way and the C2C cycleway. The traditional farming methods used on the farm have helped to maintain species-rich upland pastures and hay meadows that attract a large number of wading birds.

Research undertaken on the farm

Research at Carrs Farm has been undertaken by a number of organisations. The following is a summary.

RSPB Volunteer and Farm Alliance Survey – 2008

In total 66 bird species were seen. These species were grouped as high (red), medium (amber) or low (green) conservation value. The table below lists the birds identified and their status.

Species	BTO Code	Status	Species	BTO Code	Status
Blackbird	B	Green	Little owl	LO	Green
Blackcap	BC	Green	Long-tailed tit	LT	Green
Black-headed gull	BH	Amber	Magpie	MG	Green
Blue tit	BT	Green	Mallard	MA	Green
Buzzard	BZ	Green	Meadow pipit	MP	Amber
Canada goose	CG	Green	Mistle thrush	M	Amber
Carrion crow	C	Green	Oystercatcher	OC	Amber
Chaffinch	CH	Green	Osprey	OP	Amber
Chiffchaff	CC	Green	Peregrine	PE	Amber
Coal tit	CT	Green	Pheasant	PH	Green
Common gull	CM	Amber	Pied flycatcher	PF	Green
Cuckoo	CK	Amber	Red-legged partridge	RL	Green
Curlew	CU	Amber	Redshank	RK	Amber
Dunnock	D	Amber	Redstart	RT	Amber
Fieldfare	FF	Amber	Robin	R	Green
Garden warbler	GW	Green	Rook	RO	Green
Goldcrest	GC	Amber	Siskin	SK	Green
Goldfinch	GO	Green	Skylark	S	Red
Great black-backed gull	GB	Green	Snipe	SN	Amber
Great spotted wood-pecker	GS	Green	Song thrush	ST	Red
Great tit	GT	Green	Sparrowhawk	SH	Green
Greenfinch	GR	Green	Spotted flycatcher	SF	Red
Grey heron	H	Green	Starling	SG	Red
Grey partridge	P	Red	Swallow	SL	Amber
Greylag goose	GJ	Amber	Swift	SI	Green
Herring gull	HG	Amber	Tawny owl	TO	Green
House martin	HM	Amber	Treecreeper	TC	Green
House sparrow	HS	Red	Whitethroat	WH	Green
Jackdaw	JD	Green	Willow warbler	WW	Amber
Jay	J	Green	Wood pigeon	WP	Green
Kestrel	K	Amber	Woodcock	WK	Amber
Lapwing	L	Amber	Wren	WR	Green
Linnet	LI	Red	Yellowhammer	Y	Red

North Pennines AONB Partnership's Hay Time Project survey – 2006

The purpose of the North Pennines AONB Partnership's Hay Time Project is to help restore species-rich upland hay meadows in the North Pennines by harvesting seed from existing species-rich sites and spreading this seed on sites being restored as part of an agri-environment scheme.

The survey at Carrs Farm was carried out in summer 2006 and each field was looked at for its potential as a seed donor site as well as its potential to be restored. There are generally two stages in restoring meadows. The first is to introduce (if not already present) a range of fairly common species, which help to change the soil conditions to make it more suitable for other species to become established. The species that help at this stage include yellow rattle, sweet vernal grass, meadow buttercup, red clover and other legumes. These species generally need to be present for about five years before proceeding to stage two and introducing seed from a more species-rich meadow.

The survey listed the species present for each field. These are divided into positive indicator species, negative indicator species and other species. Positive indicator species are the species being encouraged and are divided into groups 1 – 3, where group 1 species are present in reasonably good meadows and group 3 species mostly occur in the most diverse meadows. The negative indicator species are either species that are particularly prominent in agriculturally-improved grasslands or are species that cause problems when trying to restore a meadow. The most problematic species are in the –2 group, while other negative indicator species are in the –1 group.

The results also show the frequency of the species identified on a 5-point scale, with 1 being the least frequent and 5 the most frequent.

Using this system each meadow can be scored so that the vegetation in a meadow can be compared over time and a comparison made between meadows. As a point of reference, from 138 meadows surveyed by the Hay Time Project, the lowest score was –36 and the highest score 100. Two thirds of all meadows had a score between 0 and 36.

The results below give the field number of the field surveyed, a list of species, the group number, the frequency, overall score of the meadow and recommendations. The fields can be identified from the Higher Level Stewardship Options Map.

Field number NZ06352074

Scientific name	Common name	Group	Frequency
Positive indicator species			
Anthoxanthum odoratum	Sweet vernal grass	1	5
Centaurea nigra	Common knapweed	2	3
Dactylorhiza fuchsii	Common spotted-orchid	3	2
Dactylorhiza maculata	Heath spotted-orchid	3	2
Equisetum sylvaticum	Wood horsetail	2	1
Euphrasia officinalis agg	Eyebright	2	4
Filipendula ulmaria	Meadowsweet	2	1
Helictotrichon pratense	Meadow oat-grass	2	1
Helictotrichon pubescens	Downy oat-grass	2	1
Hypochaeris radicata	Cat's ear	1	2
Leontodon hispidus	Rough hawkbit	2	2
Leucanthemum vulgare	Oxeye daisy	2	2
Lotus corniculatus	Common birds-foot-trefoil	2	2
Plantago lanceolata	Ribwort plantain	1	3
Potentilla erecta	Tormentil	2	1
Prunella vulgaris	Selfheal	1	3
Ranunculus acris	Meadow buttercup	1	4
Rhianthus minor minor	Yellow rattle	2	5
Rumex acetosa	Common sorrel	1	3
Sanguisorba officinalis	Great burnet	3	5
Stachys officinalis	Betony	3	4
Trifolium pratense	Red clover	1	3
Trifolium dubium	Lesser trefoil	1	3
Vicia cracca	Tufted vetch	2	1
Negative indicator species			
Deschampsia cespitosa	Tufted hair grass	-1	1
Holcus lanatus	Yorkshire fog	-1	3
Juncus conglomeratus	Compact rush	-1	1
Lolium perenne	Perennial ryegrass	-1	1
Phleum pratense	Timothy	-1	2
Ranunculus repens	Creeping buttercup	-2	1
Trifolium repens	White clover	-1	3
Other species			
Agrostis stolonifera	Creeping bent		5
Alopecurus pratensis	Meadow foxtail		2
Cerastium fontanum	Common mouseear		2
Cynocurus cristatus	Crested dog's tail		5
Total number of species			
	35		
Positive indicators score			
	113		
Negative indicators score			
	-13		
Overall meadow score			
	100		
Recommendations			
	Very nice herb-rich meadow. Excellent seed donor site.		

Field number NZ06352786

Scientific name	Common name	Group	Frequency
Positive indicator species			
Anthoxanthum odoratum	Sweet vernal grass	1	4
Centaurea nigra	Common knapweed	2	2
Dactylorhiza fuchsii	Common spotted-orchid	3	1
Dactylorhiza maculata	Heath spotted-orchid	3	2
Euphrasia officinalis agg	Eyebright	2	2
Filipendula ulmaria	Meadowsweet	2	2
Hypochaeris radicata	Cat's ear	1	2
Lathyrus pratensis	Meadow vetchling	2	1
Leucanthemum vulgare	Oxeye daisy	2	1
Lotus corniculatus	Common birds-foot-trefoil	2	2
Plantago lanceolata	Ribwort plantain	1	4
Prunella vulgaris	Selfheal	1	3
Ranunculus acris	Meadow buttercup	1	4
Rhianthus minor minor	Yellow rattle	2	4
Rumex acetosa	Common sorrel	1	3
Sanguisorba officinalis	Great burnet	3	4
Stachys officinalis	Betony	3	3
Trifolium pratense	Red clover	1	3
Trifolium dubium	Lesser trefoil	1	3
Vicia cracca	Tufted vetch	2	2
Negative indicator species			
Bromus hordaceus hordaceus	Soft brome	-2	2
Deschampsia cespitosa	Tufted hair grass	-1	1
Holcus lanatus	Yorkshire fog	-1	3
Juncus acutifloris	Sharp-flowered rush	-1	2
Juncus effusus	Soft rush	-1	1
Phleum pratense	Timothy	-1	2
Ranunculus repens	Creeping buttercup	-2	1
Trifolium repens	White clover	-1	3
Other species			
Agrostis stolonifera	Creeping bent		5
Bellis perennis	Daisy		1
Cynocurus cristatus	Crested dog's tail		4
Festuca rubra	Red fescue		3
Total number of species	32		
Positive indicators score	88		
Negative indicators score	-18		
Overall meadow score	70		
Recommendations	Nice herb-rich meadow. The soft brome limits this field as donor site.		

Field number NZ06353995

Scientific name	Common name	Group	Frequency
Positive indicator species			
Anthoxanthum odoratum	Sweet vernal grass	1	4
Carex nigra	Common sedge	2	2
Dactylorhiza maculata	Heath spotted-orchid	3	1
Euphrasia officinalis agg	Eyebright	2	3
Filipendula ulmaria	Meadowsweet	2	1
Hypochaeris radicata	Cat's ear	1	2
Lathyrus pratensis	Meadow vetchling	2	2
Leucanthemum vulgare	Oxeye daisy	2	1
Plantago lanceolata	Ribwort plantain	1	4
Prunella vulgarus	Selfheal	1	3
Ranunculus acris	Meadow buttercup	1	4
Rhianthus minor minor	Yellow rattle	2	5
Rumex acetosa	Common sorrel	1	4
Sanguisorba officinalis	Great burnet	3	3
Trifolium pratense	Red clover	1	3
Vicia cracca	Tufted vetch	2	2
Negative indicator species			
Deschampsia cespitosa	Tufted hair grass	-1	1
Holcus lanatus	Yorkshire fog	-1	3
Juncus acutifloris	Sharp flowered rush	-1	1
Lolium perenne	Perennial ryegrass	-1	4
Phleum pratense	Timothy	-1	4
Ranunculus repens	Creeping buttercup	-2	1
Trifolium repens	White clover	-1	3
Other species			
Agrostis stolonifera	Creeping bent		4
Alopecurus pratensis	Meadow foxtail		2
Cynocurus cristatus	Crested dog's tail		4
Total number of species	26		
Positive indicators score	68		
Negative indicators score	-18		
Overall meadow score	50		
Recommendations	Nice herb-rich meadow. Excellent seed donor site for starting the restoration process.		

Field number NZ06355898

Scientific name	Common name	Group	Frequency
Positive indicator species			
Euphrasia officinalis agg	Eyebright	2	2
Lathyrus pratensis	Meadow vetchling	2	2
Leontodon autumnalis	Autumn hawkbit	1	1
Plantago lanceolata	Ribwort plantain	1	5
Primula vulgaris	Primrose	3	3
Ranunculus acris	Meadow buttercup	1	4
Rhianthus minor minor	Yellow rattle	2	3
Rumex acetosa	Common sorrel	1	3
Trifolium pratense	Red clover	1	2
Negative indicator species			
Cirsium vulgare	Spear thistle	-2	1
Holcus lanatus	Yorkshire fog	-1	3
Lolium perenne	Perennial ryegrass	-1	3
Phleum pratense	Timothy	-1	3
Trifolium repens	White clover	-1	3
Other species			
Agrostis stolonifera	Creeping bent		4
Bellis perennis	Daisy		1
Cynocurus cristatus	Crested dog's tail		4
Total number of species	17		
Positive indicators score	38		
Negative indicators score	-14		
Overall meadow score	24		
Recommendations	This field was managed as pasture during the survey year and so it is not possible to assess its potential as fully. It is normally a meadow.		

Field number NZ06354178

Scientific name	Common name	Group	Frequency
Positive indicator species			
Achillia ptarmica	Sneezewort	3	1
Anthoxanthum odoratum	Sweet vernal grass	1	2
Centaurea nigra	Common knapweed	2	1
Filipendula ulmaria	Meadowsweet	2	1
Helictotrichon pubescens	Downy oat-grass	2	1
Lathyrus pratensis	Meadow vetchling	2	3
Plantago lanceolata	Ribwort plantain	1	3
Ranunculus acris	Meadow buttercup	1	2
Rhianthus minor minor	Yellow rattle	2	1
Rumex acetosa	Common sorrel	1	3
Sanguisorba officinalis	Great burnet	3	1
Stachys officinalis	Betony	3	1
Stellaria graminea	Lesser Stitchwort	2	1
Trifolium pratense	Red clover	1	2
Trifolium dubium	Lesser trefoil	1	2
Trisetum flavescens	Yellow oat grass	2	2
Vicia cracca	Tufted vetch	2	2
Vicia sepium	Bush vetch	1	2
Negative indicator species			
Bromus hordaceus hordaceus	Soft brome	-2	1
Dactylis glomerata	Cock's foot	-1	1
Deschampsia cespitosa	Tufted hair grass	-1	1
Holcus lanatus	Yorkshire fog	-1	5
Juncus acutifloris	Sharp-flowered rush	-1	1
Juncus conglomeratus	Compact rush	-1	1
Juncus effusus	Soft rush	-1	1
Phleum pratense	Timothy	-1	4
Ranunculus repens	Creeping buttercup	-2	2
Rumex obtusifolius	Broad-leaved dock	-2	1
Trifolium repens	White clover	-1	3
Other species			
Agrostis stolonifera	Creeping bent		4
Cerastium fontanum	Common mouse ear		1
Cynocurus cristatus	Crested dog's tail		3
Heracleum sphondylium	Hogweed		1
Poa trivialis	Rough meadow grass		3
Total number of species	34		
Positive indicators score	49		
Negative indicators score	-26		
Overall meadow score	23		
Recommendations	This field receives more muck and the vegetation is quite different. The crop is more grassy and productive. The field has a high potential for enhancement.		

Field number NZ06357388

Scientific name	Common name	Group	Frequency
Positive indicator species			
<i>Anthoxanthum odoratum</i>	Sweet vernal grass	1	4
<i>Centaurea nigra</i>	Common knapweed	2	1
<i>Euphrasia officinalis</i> agg	Eyebright	2	3
<i>Plantago lanceolata</i>	Ribwort plantain	1	4
<i>Prunella vulgaris</i>	Selfheal	1	3
<i>Ranunculus acris</i>	Meadow buttercup	1	4
<i>Rhianthus minor</i> minor	Yellow rattle	2	5
<i>Rumex acetosa</i>	Common sorrel	1	3
<i>Trifolium pratense</i>	Red clover	1	3
<i>Trifolium dubium</i>	Lesser trefoil	1	2
Negative indicator species			
<i>Holcus lanatus</i>	Yorkshire fog	-1	3
<i>Juncus acutifloris</i>	Sharp-flowered rush	-1	3
<i>Juncus conglomeratus</i>	Compact rush	-1	1
<i>Lolium perenne</i>	Perennial ryegrass	-1	4
<i>Phleum pratense</i>	Timothy	-1	4
<i>Ranunculus repens</i>	Creeping buttercup	-2	2
<i>Trifolium repens</i>	White clover	-1	4
Other species			
<i>Bellis perennis</i>	Daisy		1
<i>Cynocurus cristatus</i>	Crested dog's tail		4
<i>Poa trivialis</i>	Rough meadow grass		2
<i>Taraxacum</i> agg	Dandelion		1
Total number of species	21		
Positive indicators score	41		
Negative indicators score	-23		
Overall meadow score	18		
Recommendations	This field is not as species-rich but has a range of positive indicators, including a good population of yellow rattle. The field would make an excellent source of yellow rattle for starting off the restoration process on other meadows. The field has a high potential for further enhancement.		

Rural Development Service soil analysis – 2007

The following is a summary of the results of the soil analysis undertaken by the Rural Development Service for Carrs Farm. The fields can be identified from the Higher Level Stewardship Options Map.

Field number NZ06539492

Analysis undertaken	Results
Age of grass sward	>20
FYM frequency	1
FYM rate (Tonnes/ha)	12
PH (Water)	5.8
Olsens P (mg/l)	6
Index P	0
Soil K (mg/l)	144
Index K	2-
Soil MG (mg/l)	161
Index MG	3
Total N (%)	0.41
Soil texture	Silt loam

Field number NZ06532074

Analysis undertaken	Results
Age of grass sward	>20
FYM frequency	1
FYM rate (Tonnes/ha)	12
PH (Water)	5.6
Olsens P (mg/l)	8
Index P	0
Soil K (mg/l)	97
Index K	1
Soil MG (mg/l)	108
Index MG	3
Total N (%)	0.56
Soil texture	Silt loam

Field number NZ06532786

Analysis undertaken	Results
Age of grass sward	>20
FYM frequency	1
FYM rate (Tonnes/ha)	12
PH (Water)	5.7
Olsens P (mg/l)	9
Index P	0
Soil K (mg/l)	123
Index K	2-
Soil MG (mg/l)	137
Index MG	3
Total N (%)	0.65
Soil texture	Silt loam

Field number NZ06533864

Analysis undertaken	Results
Age of grass sward	>20
FYM frequency	1
FYM rate (Tonnes/ha)	12
PH (Water)	5.7
Olsens P (mg/l)	11
Index P	1
Soil K (mg/l)	206
Index K	2+
Soil MG (mg/l)	121
Index MG	3
Total N (%)	0.57
Soil texture	Silt loam

Field number NZ06533995

Analysis undertaken	Results
Age of grass sward	>20
FYM frequency	1
FYM rate (Tonnes/ha)	12
PH (Water)	6
Olsens P (mg/l)	4
Index P	0
Soil K (mg/l)	110
Index K	1
Soil MG (mg/l)	103
Index MG	3
Total N (%)	0.44
Soil texture	Silt loam

Field number NZ06534145

Analysis undertaken	Results
Age of grass sward	>20
FYM frequency	Not applied
FYM rate (Tonnes/ha)	0
PH (Water)	5.4
Olsens P (mg/l)	8
Index P	0
Soil K (mg/l)	104
Index K	1
Soil MG (mg/l)	105
Index MG	3
Total N (%)	0.36
Soil texture	Silt loam

Field number NZ06534178

Analysis undertaken	Results
Age of grass sward	>20
FYM frequency	1
FYM rate (Tonnes/ha)	12
PH (Water)	5.8
Olsens P (mg/l)	8
Index P	0
Soil K (mg/l)	136
Index K	2-
Soil MG (mg/l)	127
Index MG	3
Total N (%)	0.64
Soil texture	Silt loam

Field number NZ06535369

Analysis undertaken	Results
Age of grass sward	>20
FYM frequency	None applied
FYM rate (Tonnes/ha)	0
PH (Water)	5.6
Olsens P (mg/l)	6
Index P	0
Soil K (mg/l)	112
Index K	1
Soil MG (mg/l)	123
Index MG	3
Total N (%)	0.39
Soil texture	Silt loam

Field number NZ06535898

Analysis undertaken	Results
Age of grass sward	>20
FYM frequency	1
FYM rate (Tonnes/ha)	0
PH (Water)	6.1
Olsens P (mg/l)	4
Index P	0
Soil K (mg/l)	91
Index K	1
Soil MG (mg/l)	107
Index MG	3
Total N (%)	0.46
Soil texture	Silt loam

Field number NZ06536152

Analysis undertaken	Results
Age of grass sward	>20
FYM frequency	None applied
FYM rate (Tonnes/ha)	0
PH (Water)	5.5
Olsens P (mg/l)	8
Index P	0
Soil K (mg/l)	120
Index K	1
Soil MG (mg/l)	142
Index MG	3
Total N (%)	0.52
Soil texture	Silt loam

Field number NZ06537483

Analysis undertaken	Results
Age of grass sward	>20
FYM frequency	1
FYM rate (Tonnes/ha)	12
PH (Water)	5.5
Olsens P (mg/l)	5
Index P	0
Soil K (mg/l)	76
Index K	1
Soil MG (mg/l)	86
Index MG	2
Total N (%)	0.46
Soil texture	Silt loam

Field number NZ06539172

Analysis undertaken	Results
Age of grass sward	>20
FYM frequency	None applied
FYM rate (Tonnes/ha)	0
PH (Water)	5.9
Olsens P (mg/l)	9
Index P	0
Soil K (mg/l)	164
Index K	2-
Soil MG (mg/l)	162
Index MG	3
Total N (%)	0.45
Soil texture	Silt loam