

FERTILISER FOR SMALL BLOCKS

Lifestyle farming is a very popular pursuit in New Zealand. Although smaller in size than large-scale commercial farms, lifestyle farms still require good management to ensure high productivity and animal health.

Regular soil testing and application of fertiliser and/or lime will help to maintain soils and support both pasture growth and quality.

Determining fertiliser needs

Many factors influence the type and amount of fertiliser a farm needs. These include past fertiliser history, soil type, aspect, local climate, rainfall, land use, stock type and stocking rate.

The only way to be sure of your fertiliser and lime requirements is to take soil and herbage tests. Soil tests on small blocks should be taken once every three years, at least

three months after the last application of fertiliser or lime.

For the majority of small blocks (those with a sedimentary soil type), the ideal soil and herbage nutrient ranges are shown in Table 1.

Capital fertiliser applications

Capital fertiliser applications are made to overcome nutrient deficiencies and raise the productivity of the land. They usually involve high rates of fertiliser and are most often made when the land is being first developed. They will also be required if fertiliser has not been applied to the land on a regular basis, or if insufficient fertiliser has been applied over the years. Superten products are commonly used for capital applications.

Test	Optimum range
Olsen P	20-30
Quick Test K	7-10
Sulphate sulphur	10-12
Quick Test Mg	25-30
Soil pH	5.8-6.2
Herbage Co	>0.08 ppm
Herbage Se	>0.03 ppm

TABLE 1

Target soil test ranges for small blocks.



Maintenance fertiliser applications

Once soil fertility has reached desired levels, fertiliser should be applied regularly to replace nutrients removed by farming (e.g. when stock or products are sold) and by natural loss, e.g. leaching. Nutrigro products are ideal for maintenance applications.

Applying fertiliser

Fertiliser should be applied evenly and in a way that does not risk harm to the environment. Using a calibrated spreader is important as it helps deliver the correct rate.

Nitrogen-containing fertilisers such as Nutrigro should be applied when conditions favour grass growth. They should not be applied in winter, as plant growth is too slow to take advantage of the nutrients.

Fertiliser should not be applied when soils are saturated with water, or when heavy rain is forecast. They should not be applied to waterways.

Care must also be taken to avoid impacts on stock. If animals ingest phosphate fertiliser, they can succumb to fluorosis, also known as phosphate poisoning. To minimize the chance of this occurring, try to allow a 10-day gap between fertiliser application and putting stock back on the land to graze. Be careful not to apply fertiliser to wet pastures (e.g. when dew is present), as this will cause fertiliser particles to stick to the grass and increase the amount of phosphate ingested by

stock. Ideally, 25 mm of rain should fall before stock graze land that has received phosphate fertiliser.

Further advice on good spreading practice can be found at www.fertiliser.org.nz

Lime

As plants grow, they change the condition of the soil, making it more acidic. Over time, this reduces the soil's ability to support pasture growth. Applying lime helps to neutralise the acidity of the soil, creating more favourable conditions for soil micro-organisms, worms and plants.

If soil tests show that pH has fallen below optimum, lime will need to be applied. In most situations, lime will need to be applied once every three or four years, at a rate of 2 tonne per hectare.

Trace elements

If herbage tests or animal health symptoms indicate a trace element deficiency or excess, seek advice from your local veterinarian. Stock should not be treated for trace element deficiencies unless you have sought professional advice on the matter.

Regular applications of a maintenance fertiliser such as those in the Nutrigro range will help to prevent the animal trace element deficiencies most commonly encountered on New Zealand lifestyle farms.

	N	P	K	S	Co	Se
Nutrigro	18.0%	14.9%	0%	6.6%	160 ppm	27 ppm
Nutrigro 13K	13.5%	11.2%	12.5%	4.9%	120 ppm	20 ppm

TABLE 2

Nutrient analysis of Nutrigro and Nutrigro 13K. Based on the typical stocking rate on lifestyle farms, Nutrigro should be applied at 150–250 kg/ha and Nutrigro 13K at 250–300 kg/ha

