



FARM SOIL MAP

Dougal & Di McIntosh

Tokomaru West Road, Brunswick

- Ths** **Tahape hill soil** An imperfectly drained soil commonly found on steep hill slopes (28-35 degrees) formed from weakly to moderately consolidated sandy alluvium.

Profile description: 20 cm moderately developed dark brown fine rusty silt loam over 20 cm moderately developed light olive brown fine blocky silt loam with a few clay coatings; on 15 cm weakly to moderately developed yellowish brown fine rut silt loam with a few sandy silt loam fragments and thin clay coatings; on 35 cm weakly developed light olive brown fine blocky silt loam with a few fine nodules and thin clay coatings; and rock fragments on consolidated sandy silt stone. Topsoil is friable when moist & plastic when wet, and has a moderately developed soil physical structure.

Comments: Prone to moderate to severe soil slip erosion. Pugging risk is moderate.


- WeH** **Westmore Hill soil** Well drained soil formed from old volcanic and fine sediment deposits (andesite teph) that sit atop sandstone. Common on rolling and hilly country (15-30 degrees).

Profile description: 20 cm dusky orange weakly to moderately developed fine to medium rusty crumb loam, friable when moist, plastic when wet; on 10 cm weak orange weakly developed fine rusty crumb with few fine blocks, friable when moist, clay loam; on weakly developed dusky orange yellow fine rusty crumb clay loam. Topsoil is friable when moist, plastic when wet, and has a weak to moderate degree of physical structure development.

Comments: The weakly developed topsoil makes this soil prone to pugging and trampling damage (moderate pugging risk).


- E** **Egmont brown loam** Well drained soil on flat to undulating land, formed from a layer of volcanic ash (Egmont Ash) sitting on top of sandstone.

Profile description: 23 cm weakly to moderately developed dark brown fine rusty crumb all loam; on 13 cm weakly developed light brown fine rusty crumb loam; on light brown compacted loam. Topsoil is friable when moist, slightly plastic when wet, and has a weakly developed soil physical structure.

Comments: Very limited areas of this soil type with average access. It occurs on a high terrace that is exposed. Pugging susceptibility is medium to medium, so care with heavy cattle during wet periods is necessary. Pugging susceptibility is low to medium.


- WeH+Pk** **Parakao sandy loam** Well drained soil found in the easy country in association with Westmore Hill Soils. Formed from unconsolidated sandy deposits with some ash content.

Profile description: 22 cm weakly developed basic fine rut and crumb sandy loam; on 10 cm weakly developed yellowish brown fine rut crumb sandy loam; on 25 cm weakly developed yellowish brown fine rut sandy loam; or very weakly developed brownish yellow very fine crumb and granular sand; on massive firm brown yellow granular sand. Topsoil is weakly developed, friable when moist, and slightly plastic when wet.

Comments: Volcanic ash is not identifiable as a discrete layer. Gully erosion is an ever present risk. Like other soil types only a weak structure for cropping, on dry soil readily in summer, and has a low to medium pugging susceptibility. Management considerations include being proactive to avoid gullies, maintaining soil fertility, and limit cropping damage through direct drilling techniques.


- Phs** **Pohangina Hill soils** Moderately well drained soils from unconsolidated sandy deposits found in some of the steeper hill country (slopes >18 degrees), sometimes in association with Tahape Hill Soils.

Profile description: 5 cm weakly developed fine crumb brown fine sandy loam; on 15 cm pale olive weakly developed crumb friable loamy sand with many fine medium strong brown mottles; on massive firm olive loamy sand. Topsoil is weakly developed, friable when moist, and non plastic when wet.

Comments: Prone to extreme gully and severe soil slip erosion, and has a moderate pugging susceptibility. Where erosion is moderate to severe under pasture a change of land use should be considered if long term sustainability is considered important.


- KI** **Kiwi series** Imperfectly drained soils found along stream terraces. Formed from alluvial (new terraces) deposits of silty sandstone origin.

Profile description: 35 cm weakly developed (WC3) fine country rut with low granular sandy silt loam; on 27 cm very weakly developed the granular (WC2) sandy loam with low orange mottles, on loamy sand. Topsoil is weakly developed, friable when moist, and slightly plastic when wet.

Comments: Susceptible to pugging and trampling damage under wet conditions is high to medium, so care is needed with heavy cattle during extended wet periods.


- WeH+MgH** **Mangweke Hill soil** Moderately well drained soil commonly found throughout the property, often in association with Westmore Hill Soils, and on hill and steepland slopes.

Profile description: 23 cm moderately developed fine rusty crumb and some medium rusty dark yellow brown sandy loam; on 25 cm moderately developed fine rusty crumb dusky yellow brown sandy loam; on weakly developed yellowish brown silty sandstone. Topsoil is friable when moist, slightly plastic when wet, and has a moderate degree of structural development.

Comments: The good internal drainage means that this soil will warm up quicker in the spring. Although it only has a medium susceptibility to pugging, the soil health should be monitored if cattle numbers are increased. Pugging susceptibility is medium. Soil health monitoring using ICA could be considered, especially if cattle numbers are increased.



Date:	1 October 2006	Surveyors:	S Dudin & L Grant Landvision Ltd.
Property owner(s):	Dougal & Di McIntosh	Survey scale:	1:10,000
Property:	Ratamanumu Farm Tokomaru West Road Brunswick Wanganui	Aerial photo:	Supplied by Horizons Regional Council (0.75m orthophoto from Terraink). Flown 2004/05.