

## SOIL REPORT 09 06 23

- The soil in each field was tested with test holes and samples taken on a grid pattern.
- The soil from each sample was tested for 3 minerals and for acidity.
- These tests were carried out using two commercial test kits so 96 individual tests.
- There was no indication on the kits to say how old they were as they have a shelf life.
- After completing the tests on one field I separately tested some commercial compost and some of Jo's homemade compost to act as a control. These latter tests showed a strong response to mineral presence and were alkaline in pH.

The tests were for:

- Nitrates essential for growth, especially for grass and leafy plants.
- Phosphorus for strong root growth and for formation of buds and healthy stems.
- Potassium for development of flowers and shrubs.
- Ph for soil acidity to which some plants are very encouraged/discouraged by extremes of acidity or alkalinity.

The results showed:

- Both fields tested alkaline, pH 7.5. Except possibly two areas in the lower field that were marginally on the neutral side of alkaline.
- The upper field for Nitrate scores was 50% Low and 50% medium low.
- The upper field for Phosphorus scores was 33% low, 25% medium, 25% high to medium with the remainder medium to low.
- The upper field potassium scores were 33% low, 41% medium to low with the remainder medium.
- Lower field Nitrate scores 100% low
- Lower field Phosphorus scores 25% low, 41% medium, 33% high to medium.
- Lower field Potassium scores 41% medium, 16% medium to low, 33% high to medium and 8% high ( i.e. in one hole!).

SOIL depth:

The soil was rock hard on the surface with compaction and the dry weather. Being shillet one could only get half a spade depth of soil in the upper parts of the field increasing to almost a whole spade depth at the bottom of the fields. No surprise.

There was the impression that there was more soil in the deeper depths just mixed in with the usual pieces of rock and slate.

Conclusion:

Both field appear mineral depleted to a degree with the upper field being most affected. The lower field although Nitrate depleted had positive levels of Phosphorus and Potassium.

The lower field was used by the Duplessis family to grow and breed daffodils from the late 1940's until the late 1970's perhaps the soil was treated differently for this purpose.

The proposed wildflower strips between trees will probably not need yellow rattle planting to reduce the levels of grass because of the reduced nitrogen levels.

As to the pH readings most plants have a tolerance of around 1 pH point but the results were definitely alkaline at 7.5

I list some pH preference list for fruits.

Apple	5.0-6.5
Apricot	6.0-7.0
Blackberry	5.0-6.0
Cherry	6.0-7.5
Cranberry	5.5-6.5
Blackcurrent	6.0-8.0
Damson	6.0-7.5
Gooseberry	5.0-6.5
Grapevine	6.0-7.0
Hazelnut	6.0-7.0
Hop	6.0-7.5
Mulberry	6.0-7.5
Nectarine	6.0-7.5
Peach	6.0-7.5
Pear	6.0-7.5
Plum	6.0-7.5
Quince	6.0-7.5
Raspberry	5.0-6.5
Strawberry	5.0-7.5
Camelia	4.5-5.5
Olive	5.5-6.5