

V2

(Maber, 2009b)

## Story: Topdressing

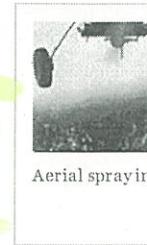
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### The Resource Management Act 1991

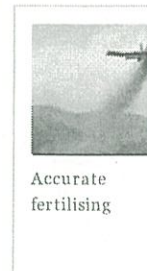
Fertiliser nutrients have an impact on the environment. This may be through direct application to waterways, or from nutrients leaching from enriched soil into waterways. Added nitrogen or phosphorus in lakes or rivers can cause a rapid increase in algal or weed growth.

The purpose of the Resource Management Act 1991 is to promote the sustainable management of natural and physical resources, and one of the basic principles is to 'avoid, remedy or mitigate adverse effects on the environment'. This is done through regional council plans and consent processes. Normally topdressing will be permitted in a regional council plan, but there may be conditions, including:

- preventing the direct application of fertiliser into specified areas such as water bodies and wetlands
- asking for evidence or assurance that 'good agricultural practice' is being followed. This may relate to avoiding very uneven application, where some soils receive an unnecessarily high level of nutrients, and there is therefore a higher risk of their being washed into the waterways.



Aerial spray in



Accurate fertilising

1949  
Commercial aerial topdressing begins

### Quality assurance schemes

Quality assurance schemes provide information for regional councils. One is the Spreadmark scheme, operated by the Fertiliser Quality Council. This aims to ensure that fertilisers are applied where they will be of the most benefit, and cause the least environmental harm.

The New Zealand Fertiliser Quality Council consists of representatives from Federated Farmers, FertResearch, fertiliser companies (with registered products), the research community, the New Zealand Institute of Primary Industry Management, and the Ground and Aerial Fertiliser Spreading associations.

### Safety

#### Aerial topdressing

Every year, preventable accidents occur in the aerial topdressing industry. Reasons include:

- the poor condition and siting of airstrips
- the lime or fertiliser is not 'free flowing'. It may contain lumps of turf picked up at the fertiliser bin site, or be too moist, which can block the fertiliser hopper and upset the aircraft's aerodynamics.
- aircraft hitting fences, overhead power or telephone lines that the pilot was not aware of.

Increasing awareness of health and safety has reduced the aircraft accident rate. In 1999–2000 there were five fatal accidents – two involving fixed-wing aircraft and three involving helicopters; in 2005–6 there was only one fatal accident, involving a fixed-wing plane.

In 2006 a guideline was prepared for all those involved in the aerial application of lime or fertiliser. This sets out where problems can occur, and identifies who should be responsible for dealing with them: the farmer or airstrip owner, the transport company that carts the fertiliser, the fertiliser or lime suppliers, and the aerial topdressing companies.

#### Ground-spreading

The ground-spreading industry is not without casualties. Each year there are injuries and sometimes fatalities, often as a result of the groundspreader vehicle rolling over on steep hills.