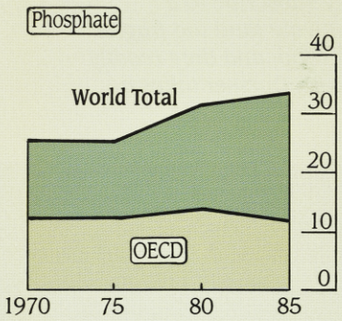
the Ford Falcon!

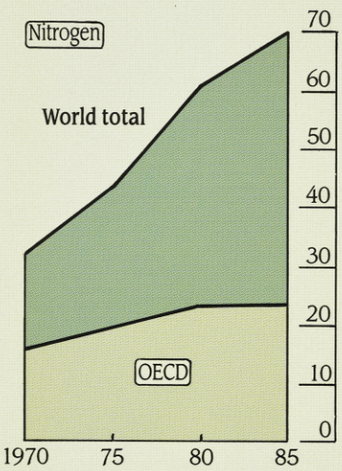
- Any area of land that does not directly generate income is often considered undesirable, even embarrassing.
- If environmental considerations stand in the way of profit, they are avoided, often despite the long term economic benefit. Examples include the loss of potassium from disposal of dairy effluent into waterways, and the loss of carbon compounds from burning crop residues.
- Much research has gone into developing technologies to combat problems which are more the fault of inappropriate land use and management. Instead of analysing the agroecosystem and questioning whether pests and disease are the result of poor nutrition, the use of mono cultures, the wrong species or stress, farmers typically look for a chemical solution. Universities and government research bodies appear to support this approach and have been the "trailing edge" in many ways, simply responding to cries for "cost effective symptom overpowering technology."

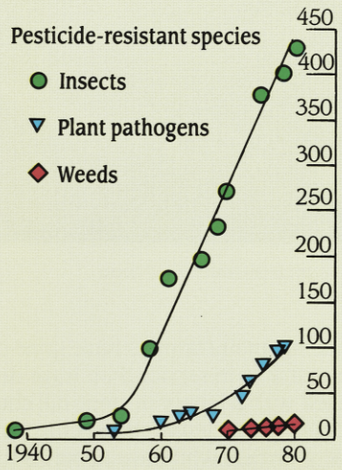
A MAF scientist wrote in 1983 "everyone knows that what any farmer is really interested in is profit per hectare." Even if that is the case, there are many ways of achieving realistic levels of profit but in an environmentally sensitive and resource conserving fashion. Some of these include not burning crop residues, avoiding soil fallowing over periods of high rainfall in order to minimise leaching losses, conserving soil by minimal cultivation, using appropriate vehicles (motorbikes rather than tractors for everyday transport, for example) and so on.

The "profit per hectare" mentality has had unfortunate side effects. Take the case of DDT. Much of New Zealand's grasslands were treated regularly with DDT during the 1950s and 60s. Now, nearly 20 years since most pastoral spraying with the chemical ceased, approximately 25 percent of New Zealand's and 40 percent of Canterbury's lamb exceeds

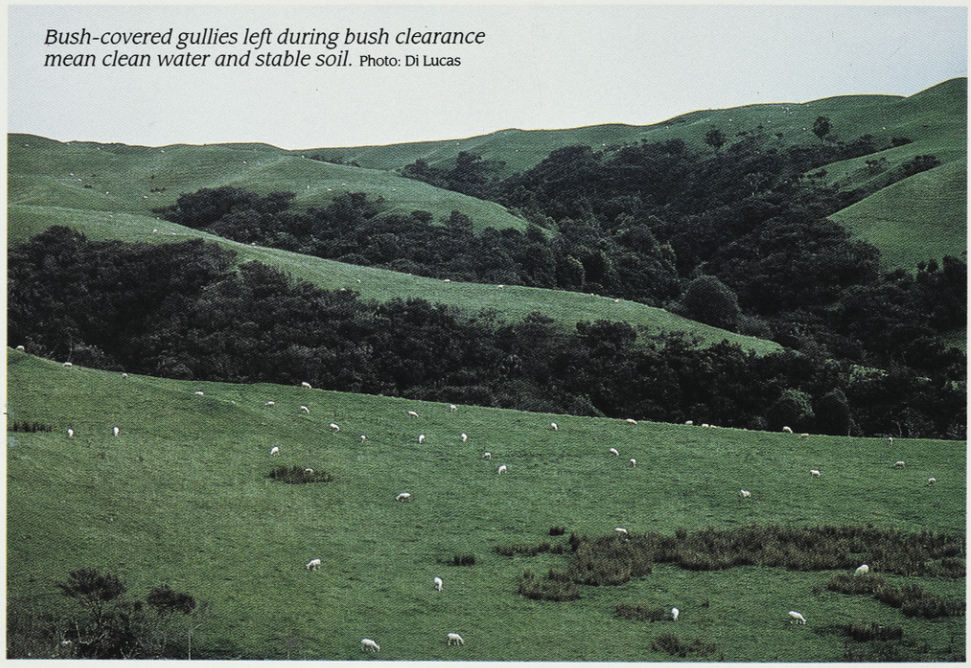
World Fertiliser Use in Tonnes







Bush-covered gullies left during bush clearance mean clean water and stable soil. Photo: Di Lucas



Two contrasting methods of dealing with pests: on the one hand encouraging ground cover for predatory mites and thus reducing the need for pesticides; and herbicide is sprayed under fruit trees, destroying an overwintering site for beneficial mites. Photos: Lincoln University Entomology Dept