



We look forward to hearing from readers. In selecting letters for publication, preference is given to those dealing with research topics covered in *Ecos*—providing additional information or commenting on conclusions reached in articles. Please keep letters as brief as possible. When necessary, they will be edited for publication.

The address for letters is: The Editor, *Ecos*, P.O. Box 225, Dickson, A.C.T. 2602.

### Not only hearing loss

Your review (Noise pollution and the cost of hearing loss, *Ecos* 25) appeared to me too hedged in favour of the noise-makers, especially in its exclusive emphasis on hearing loss.

While that may prove the easiest to measure ('Kelvin's Ghost', as Prof. Alvin Feinstein of Yale calls the obsession with the measurable), my experience suggests that greater damage—leading to loss of limb or even life—may result from noise as a distraction, which can occur at much lower decibels than 80, I believe, from quite a brief exposure.

Some months ago Dr Ingelfinger, editor of the *New England Journal of Medicine*, wrote that, while every hospital administrator complained of lack of funds, it had become virtually impossible to get on with serious work because of construction noises. My experience both here and in my previous job confirms that.

Interestingly, the environment protection personnel can hardly help, because such noise comes under the local government's control—or so I was told by an officer. Politicians have many ways to hoodwink the public.

H. K. Ghosh,  
Royal Newcastle Hospital,  
N.S.W.

### Chemical ploughing

I was very interested in your article 'Soil erosion: can we dam the flood?' (*Ecos*, August 1980). I am in a 1400-mm-rainfall area and it has long been known what devastation can be caused by clearing hillsides. Despite this, some recently clear-felled areas for wood chips resemble moonscapes.

In the article you say 'the best protection was zero tillage'. Is this the same as what was called chemical ploughing 15 years ago? I can recall reading of large experiments being carried out in Iran using chemical ploughing. From memory 2,4-D and 2,4,5-T were being used. This combination is of course Agent Orange, and we all know the drastic effects this had on the environment in Vietnam.

Is there any information available on the Iran experiments, i.e. were they successful or were there too many side effects? What chemicals are being recommended now?

I am particularly interested to know if chemical ploughing can be used on steep slopes in high-rainfall areas such as ours. I am also interested to know how the chemicals should be applied. In some places it would not be practical to use boom sprays, and aerial spraying would be necessary. Would drift adversely affect neighbouring bushland and shade trees?

F. E. Peters  
Cathcart, N.S.W.

*Comment by Dr R.A. Fischer, CSIRO Division of Plant Industry:*

Zero tillage is the modern American name for chemical ploughing; in Australia we often use the English term direct drilling. Extensive overseas studies have shown that zero tillage can reduce erosion by an order of magnitude, permitting 'safe cropping' (that is, keeping erosion down to an acceptable level) on slopes of up to about 10%.

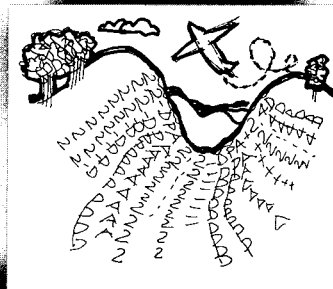
Experiments conducted over the last few years by this CSIRO Division and elsewhere have confirmed that zero tillage could open up good possibilities for cropping in hilly, high-rainfall areas of Australia.

I have not heard of any such experiments in Iran. Presumably 2,4-D and 2,4,5-T could not have been used alone, as they do not kill grasses.

For chemical ploughing on annual pasture land paraquat and diquat are the chemicals commonly applied.

Steep slopes require aerial spraying. The NSW Department of Agriculture's Agricultural Research Centre at Orange publishes a leaflet on aerial spraying and sowing. This says the most commonly used herbicides are 2,2-DPA with amitrole or 2,2-DPA with 2,4-D.

The Centre warns that 2,4-D can kill some trees, shrubs, and crops, and advises landowners to consult the district agronomist before selecting a herbicide, as each paddock requires a different prescription.



### Research directory

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