

## Responding to climate change

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Sir, – Danny Healy-Rae TD asserts that we should not attribute global warming to human activity, because it is known that the Earth’s climate changed in the past without human intervention. This common misconception should not go unchallenged. Studies of global climate over the last 50 years have failed to establish a link between the warming we observe and any known natural cycle. On the other hand, the time-frame of the warming correlates quite precisely with a measured increase in greenhouse gases in the Earth’s atmosphere – an increase caused by human activities such as the burning of fossil fuels. As it has long been known that the climate of any planet is sensitive to atmospheric greenhouse gases, the main source of the warming is not hard to identify. All of the above has been well-known for many years now. The problem is to convince politicians worldwide to take meaningful action. – Yours, etc,

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Sir, – While the recent Royal Irish Academy Climate Change and Environmental Science committee expert statement on the potential of Irish grassland soils to sequester atmospheric carbon is welcome and timely, I fear there may be unrealistic expectations in this regard ([“Growing more grass could be key to hitting emission targets”](#), May 4th).

There is considerable evidence that many temperate soils could potentially store more carbon, but enhanced storage is unlikely to be compatible with increased livestock production to the extent envisaged in the Food Harvest 2020 strategy. Many factors are known to influence carbon storage, including soil characteristics and grassland management. While there is some evidence that moderate increases in fertiliser use and improved stock management can increase carbon sequestration in poor grasslands, reduction in fertiliser use and stocking densities are generally required to enhance carbon storage in intensively managed grasslands. The Food Harvest 2020 target of a 50 per cent increase in milk production poses a particular problem, as milk production has a high “carbon footprint”, and the additional greenhouse gas emissions are unlikely to be offset by carbon storage in soil. – Yours, etc,

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