The effects of soil acidity on agricultural land

Draft issue

Many soils in the Natural Resources Adelaide and Mount Lofty Ranges region are naturally acidic, however light-textured soils in high rainfall areas are most at risk. Soil acidity is a gradual process. It is best addressed before the effects become irreversible.

Regular monitoring of soil pH and the application of lime at appropriate rates has been shown to reduce acidity in surface soils, although rates of adoption of these practices are below that which is required to meet the predicted rate of acidification in the region.

Of even greater concern is the largely unknown extent of subsoil acidification and the intergenerational issues that will arise if this develops to levels where mineral dissolution occurs and soils are beyond remediation.

It is clear that subsoil testing to raise awareness of the issue is a critical first step. Addressing subsoil acidity is likely to be unaffordable for most landholders to address directly, due to the difficulty in applying lime at depth.

Actions to address soil acidification include:

- soil test for pH
- adding lime at rates that are effective for arresting acidification
- add lime at high rates, sufficient to reverse acidification in soils that have already acidified
- use acid - tolerant plant species where available (as a short - medium term measure).

Subregions affected by the issue

- Central Hills
- Fleurieu Peninsula
- Northern Hills
- Willunga Basin

Conceptual models related to the issue

- Building capacity of natural resources managers
- Sustainable primary production
- Terrestrial landscape health

Read about regional conceptual models at:


What are these draft issues?

The information in this document relates to a list of draft issues that are impacting on the natural resources of the region.

The issues list has been developed based on information collected during a regional planning process, and a range of projects that the Adelaide and Mount Lofty Ranges Natural Resources Management Board has undertaken.

New issues are added to the list as they become apparent, and as issues are addressed by projects they drop off the list. As the issues are constantly evolving, the information in this document may no longer be relevant. Check the current list for the most up-to-date issues:


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