## Soil and land fact sheet no. 19

# Scalding

Much of the scalded land in South Australia dates from illfated attempts to farm lower rainfall country in the late 1800s **Scalding** occurs where thin sandy to loamy topsoils have been eroded, exposing sub-surface or subsoil material which is physically and/or chemically hostile to plant establishment and growth. This material is sometimes sodic and/or saline and often seals over. The bare surface is susceptible to further erosion, and may shed sufficient water to cause off-site erosion. Scalding is primarily a condition affecting land in low rainfall environments. Land with minor scalding is only semi-arable because of its fragility and consequent need for conservative management. Moderately to severely scalded land is non-arable but has pastoral potential if well managed. Management techniques for scalded land aim to encourage revegetation by controlling livestock and feral animal access, trapping seed in pits, furrows or rip lines and increasing water infiltration by water ponding or spreading techniques. In this assessment, scalds are not associated with a watertable.

#### Land assessment in southern South Australia

Assessment of scalded land is based simply on observations of presence or absence, and visual estimation of the proportion of bare soil across the total land area. Bare ground caused by <u>Magnesia</u> <u>patches</u> (related to high levels of near-surface soluble salts, not linked to a watertable) and <u>watertable-induced salinity</u>, are considered separately.

Soil properties can vary across the landscape in a subtle or dramatic fashion. <u>Mapping at a regional</u> <u>scale</u> is not able to display this level of variability, however proportions of each *Scalding* class (e.g. Z1, Z2, etc.) have been estimated for each map unit.

Further information can be found in <u>Assessing</u> <u>Agricultural Land</u> (Maschmedt 2002).



Scalded land

#### Area statistics

Presence of scalding	Area	Cleared land	Class*
Not affected	97.35%	98.17%	Z1
Affected	1.25%	0.16%	Z2
Not applicable	1.40%	1.68%	ZX
TOTAL HECTARES	15,765,460	10,439,300	

\* The letter 'Z' denotes classes that are specific to Scalding





### Fact sheet

#### Displaying data in soil maps

Soil and land attribute maps display a simplified version of the underlying data. Mapping classes are based on an interpretation of soil landscape map units. In this mapping of *Scalding*, map units are categorised according to the estimated area proportion of affected land.



Shallow calcareous loam soil with sporadic scalding



#### **Further information**

- View data on <u>NatureMaps</u> (→ Soils)
- Read the <u>metadata</u> for this layer
- Read more about soil attribute mapping
- Contact Mapland

Download from Enviro Data SA:

- <u>Statewide map</u> and <u>spatial datase</u>
- <u>Assessing Agricultural Lands</u> (Maschmedt 2002)
- Soils of Southern SA book Part 1 and Part 2



This work is licensed under the Creative Commons Attribution 4.0 International License.

To view a copy of this license, visit http://creativecommons.org/licenses/by/4.0/

© Crown in right of the State of South Australia, through the Department of Environment, Water and Natural Resources 2016. Last updated June 2016.



**Government of South Australia** Department of Environment, Water and Natural Resources

