Stock containment areas

More than a drought measure

Cattle in a containment area.

A stock containment area (SCA) is a carefully selected, small, fenced section of the property which is set up to intensively hold, feed and water livestock to protect soil and pasture resources, maintain animal health and condition and reduce demand on labour during adverse times and seasons.

A stock containment area suits sheep and cattle. It can be used following a fire, during droughts, early spring finishes or late autumn breaks when paddock feed is limited.

It should be considered part of a property management plan and once established, should be maintained and available for use during emergencies.

However, if considering containment areas to manage stock when paddock feed is limited, also take into account other possible management strategies such as seeking agistment or selling stock to reduce feed demand on the property.

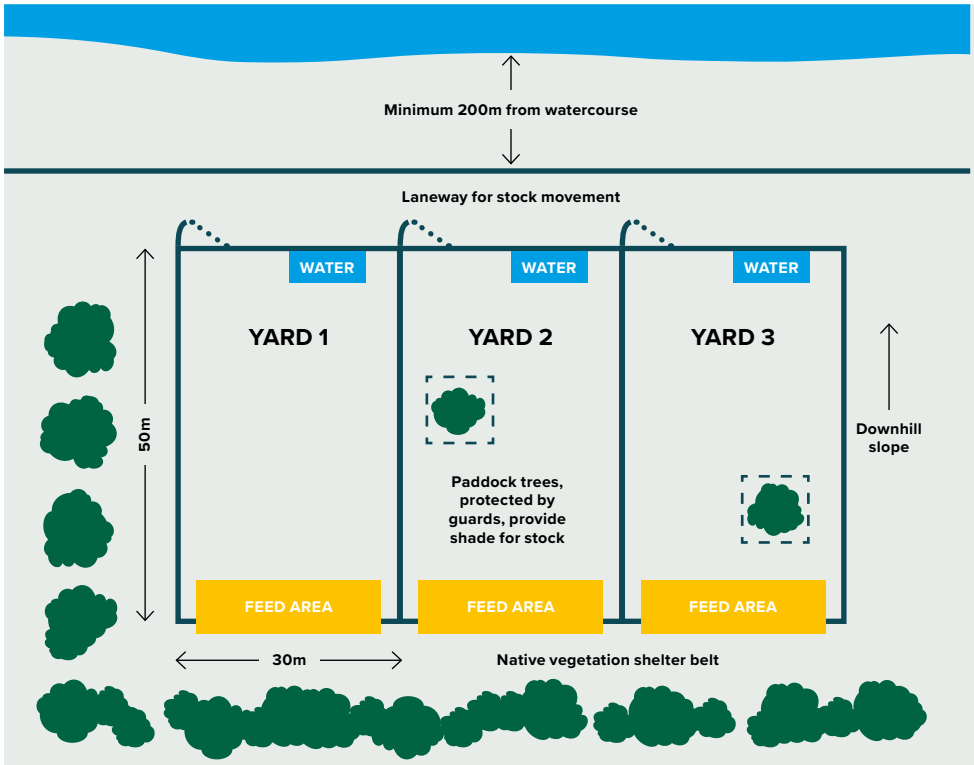
Benefits to containing stock

Stock containment areas should be part of a farm management system to reduce soil erosion, maintain and enhance soils and pastures, save labour and can improve the productivity of animals.

They can also be used to quarantine new stock, for weaning and for holding stock prior to other handling tasks. Given this, it is worth spending time and money setting up a robust and labour efficient SCA.

There are a number of benefits to containing stock. These include:

- reduced feeding, watering and handling time for stock as they are located in one area
- containing weeds potentially brought onto the property with imported feed
- stock control when areas may need fencing rebuilt (e.g. following a fire)
- less chance of soil erosion or damage to paddocks during a drought or dry conditions
- quarantine areas for new stock
- reduced energy expenditure of stock from walking around paddocks looking for scarce feed
- pasture maintenance or improvement due to the ability to rest paddocks, prevent over-grazing (especially of perennial grasses) and allow pasture to recover after opening rains
- better ability to monitor stock and keep them in good condition and health
- efficient ways of supplying quality water to stock.



Suggested design for a stock containment area

Total size of STC:
30m x 50m = 1500m^2

Carrying capacity:
Sheep 5m^2/hd = 300 head
Cattle 15m^2/hd = 100 head

This STC design provides stock with shade and shelter

Site requirements

- A stock containment area should be sited on 3-5% sloping, compacted, smooth, stable soils such as a clay or clay loam.
- Pens should be constructed across the slope and aligned with the natural contour of the land, to avoid pen to pen drainage.
- Include the provision of stock shelter and shade. Shelter from prevailing winds should be considered to minimise dust.
- Avoid areas of important remnant vegetation to prevent damage to them.
- Site in close proximity to the manager's residence (for easier monitoring and task completion) but in a location to minimise issues from noise and smell.
- Consider proximity to neighbours and other sensitive sites.
- Access to good quality water is required (refer to drought feeding guidelines in the further information section).
- Preferably close to handling facilities.
- Consider any risks of contamination to ground or surface water from runoff. The containment area should be located at least 200 m from watercourses or water storages. Runoff should be managed to prevent contamination of downslope areas or excessive nutrient build-up.

Size, construction and design

- Allow an area of 5-7 square metres per head of sheep and 15-25 square meters per head of cattle. Normal fencing is required.
- The maximum number of animals per yard / mob should be limited to 500 sheep or 100 cattle. Smaller mob sizes can assist in reducing shy feeders (however adequate feeder space per head is most important). If you are considering containing more than one group, ensure appropriate subdivision / number of yards to enable the separation of different classes of stock, including shy feeders or sick animals.
- Feeding equipment or machinery should allow feed to be provided without entering the pens.
- Protect trees with guards if they are inside the yards.
- Feed areas should be located well away from water troughs (such as the opposite end of the yard) to reduce contamination of the water supply and to reduce stock density.
- Shade and shelter should be provided to reduce animal stress and assist in maintaining animal condition.
- Use existing (protected) trees or ensure provision is made for establishing shelter belts. Shade cloth or other artificial structures can also be used.
- It is beneficial to have a shelter belt (trees / shrubs) between and or around yards, which assist with wind protection and dust movement.
- Adequate firefighting equipment should be available to control a fire within the area.

Protect trees with guards if they are inside the yards.

Water supply

Stock containment areas need a constant supply of cool water by trough. Plan for an average of six litres per day per head of sheep, and 50 litres per day per head of cattle.

This can increase to nine and 90 litres, respectively, for very hot days.

Three days of water requirements should be available in reserve in case of water supply issues.

Trough length: ensure 15 metres of trough edge is available per 500 sheep, while 100 cattle require five metres of trough edge.

However, flow rates are often more important than trough length. A good rule of thumb is that the flow rate should pump enough water for the mob in 2-3 hours. Troughs need to be checked daily and cleaned regularly.

Stabilise soils around troughs using stone, gravel or concrete.

And check water for salinity and algae levels. As a general guide, salinity should be less than 4000 ppm for sheep and 3000 ppm for cattle. Shandying poor quality water with good quality water may be useful.

Feeding

It is preferable to avoid feeding directly onto the ground on sandy or loamy soils.

When feeding grain 15-20 metres of double sided trough for 100 sheep is ideal, while for cattle it is 4-6 metres for each animal.

Conveyor belts or corrugated iron formed to create a trough have been used on farms. Roof capping, guttering and suspended shade cloth are other options.

Self-feeders have been improved in recent years to give greater control over minimum daily intake and are now a good option – although they are greater initial investment, they can reduce wastage and labour costs in many circumstances.

Remember – animals in containment need to be provided with 100 per cent of their diet, including roughage, energy, protein and minerals / vitamins. It is critical that nutritional and roughage requirements are met for each class of stock.

Animals need to be visually monitored daily and hands-on condition scoring done fortnightly starting when they are put into the SCA. Shy feeders or poor performers should be removed and run extensively. For more information on condition scoring refer to the further information section.

Energy values of feeds differ, as does the relative cost of the energy they contain. Feed values (energy and protein) can be highly variable. Having the feed tested by a registered laboratory is the best way of being confident about the quality of purchased or home grown feed when formulating rations.

For more detailed information on what to feed refer to the drought feeding books listed in the further information section.

Sheep in a stock containment area; note trees for shelter around pens

Self-feeders may be used in stock containment areas, however the feeder design should allow control over feed intake by animals

Induction to an SCA

If feeding a high grain ration, stock need to be trained onto the ration gradually to reduce the risk of acidosis. This is ideally done before stock enter the containment area. Regular monitoring for shy feeders and sick animals is important. Sheep and lambs should be vaccinated against pulpy kidney and drenched upon entry into the SCA.

Animal health

Stock need to monitored daily and sick animals removed.

When stock are confined to small areas diseases can spread very quickly. Establish a plan for cleaning pens to prevent effluent build up.

Problems have been experienced with changes in batches of processed feeds and new sources of grain. Therefore some caution should be taken when changing to a new batch of feed, such as mixing the new and old over a number of feeds.

When to put animals into an SCA

Act early before damage is caused to the soil and pastures, and before stock lose too much condition / weight. Maintaining ground cover and residual paddock feed will greatly assist in a rapid recovery of pasture when the conditions improve.

Releasing animals from an SCA

Feed

Prior to releasing animals from containment, ensure that there is sufficient pasture available in the paddocks to protect the soil, and provide feed. Stock should have access to good quality roughage for 12 hours prior to release. Stock will often require supplementary feed to be continued to assist in the diet transition and to encourage pasture growth.

Timing

Release stock late in the day and ensure animals are not hungry. This will reduce gorging on lush pastures.

Sheep

For sheep, the sudden change in diet when released from containment can increase the chance of a break in the staple / fleece and significantly reduce the end value. Feeding management and time of shearing should be considered.

Key points / checklist

Design and siting

- ❒ Planning permits required? Consult your relevant Local Government Authority
- ❒ Land should be gently sloping and preferably with compacted and stable soils
- ❒ Allow 5 square metres per head of sheep and 15-25 square meters per head of cattle
- ❒ Reliable fencing – keep in mind stock will push up against the fencing or run into it
- ❒ Have enough yards to separate difference classes of stock, including shy feeders
- ❒ Trees should be guarded if they are within the yards
- ❒ Adequate shade and shelter should be provided
- ❒ Allow vehicle access for feeding, watering, monitoring and stock movement in all weather
- ❒ Mob sizes should be a maximum of 500 sheep or 100 cattle
- ❒ Consider the location for proximity to the house and shedding, whilst minimising odour and noise for you and the neighbours
- ❒ Runoff from the site is contained and does not contaminate waterways. Site is located at least 200 m from watercourses / water storages

Water supply

- ❒ Sufficient access to water is provided
- ❒ Watering troughs with a reliable reticulated supply of good quality water
- ❒ Water quality is monitored
- ❒ Stabilisation of soils around troughs using stone, gravel or concrete where necessary
- ❒ Locate troughs well away from feed areas

Feeding

- ❒ Test quality of all feeds
- ❒ Sufficient access to feed via troughs or feeders is provided
- ❒ Change diets gradually

Entering and releasing

- ❒ Vaccinate and drench on entry
- ❒ Ensure gradual introduction to grain based rations
- ❒ Only release when sufficient pasture growth has occurred
- ❒ Manage diet transition to ensure good animal health

Issues to be aware of

Dust can be an issue in stock containment areas. Besides being a nuisance, it can increase the incidence of pink eye.

Dust can be minimised by ensuring the SCA is constructed on an appropriate and compacted soil type (such as clay or clay loam, however still trafficable in wet conditions); stocking is at a density to increase soil compaction in the pens; and having treed buffer strips, or other options like shade cloth on fences, between and around pens can reduce dust from wind movement.

Mud can become a problem if heavy rain occurs whilst stock are in containment. If feasible, release the animals until the area has dried and the weather has improved.

Lambing or calving in containment is not recommended as it can increase the risk of disease and also result in mismothering. If seasonal conditions require this it is recommended that specific advice is sought to manage these issues.

Although there are significant benefits in reduced labour when feeding animals in a SCA versus the paddock, regular monitoring is still a time commitment. This can be somewhat alleviated by locating the yards in an accessible spot.

It may be possible to release stock if livestock managers are away for an extended period of time, providing appropriate care is taken.

Other considerations

It is important to consider your own circumstances when deciding to utilise stock containment areas, particularly whether you can access the appropriate feed, the cost of feed in relation to the cost of production for the class of stock, and whether you can regularly check on the animals during their time in containment.

Other management options such as seeking agistment or sale of stock may be a better option.

Planning approval / permits

Some local government areas in South Australia require planning permits to be issued prior to installing SCAs. Please consult your local government or Landscape Board for advice.

Acknowledgements

This resource has been adapted from the Victorian State Government information leaflet Stock containment areas – more than a drought measure, August 2015.

Further information

More information is available through Landscapes Hills and Fleurieu.

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