

Mineral licks

Manage cattle feed and water

- Restrict badger access to feed stores, troughs and mineral licks

For more information see Five Actions on the TB Hub website: <http://www.tbhub.co.uk/biosecurity/protect-your-herd-from-tb/>



Fig.1: Example of mineral bucket stand. Other products are available.

How does this measure work?

Preventing badgers from gaining direct access to cattle mineral licks may reduce TB transmission risks. Badgers are very capable at climbing and will attempt to investigate food raised off the ground. Elevated mineral lick holders with features such as smooth outward sloping surfaces, and stands to raise buckets to a safe height can prevent badgers from gaining access and are available commercially. These feeders could potentially benefit farmers who feed stock at pasture with mineral licks or smaller quantities of cake/concentrates in buckets.

How has this measure been tested?

The South West TB Farm Advisory Service (SWTBFAS) together with the students of Bicton College tested whether badgers could gain access to feed placed in various devices designed to exclude badgers. The video of trials showed that badgers could not access feed; see case study A (p.2) and details on the TB Hub website.

The Royal Agricultural University (RAU), Cirencester, assessed the effectiveness of a bucket stand in preventing badger access to mineral lick buckets. The RAU concluded that during a 3 month period, the device was successful in preventing badgers from accessing the contents of the mineral lick bucket, and is practical and durable to use with cattle. See case study B (p.2).

Product examples (Other products are available)	Approximate Guide Price (£*)
Mineral Lick Holder (See Case Study A), Adaptable unit which can accommodate both 22.5 kg and 80 kg mineral lick formats.	£100 each
Badger Proof Bucket Stand (See Case Study B), 700 mm tall, screwed into the ground & designed to hold buckets 15 – 35 kg.	£130 each
* Prices listed exclude VAT and cost of fitting (as of January 2017)	

Examples of biosecurity measures: Mineral licks

Case study A:

A beef cattle feeder, specifically designed to thwart access by badgers, was purchased and tested by the South West TB Farm Advisory Service (SWTBFAS) at Bicton College in 2013. The feeder is designed to hold feed blocks, and buckets a metre above ground. This feed holder resisted persistent attempts by badgers to reach the cattle feed during a three week field trial. On the first night infra-red cameras recorded over 30 unsuccessful attempts by badgers to reach the food. Badger activity trailed off during the study, presumably as a result of repeated failed attempts to access the feed.

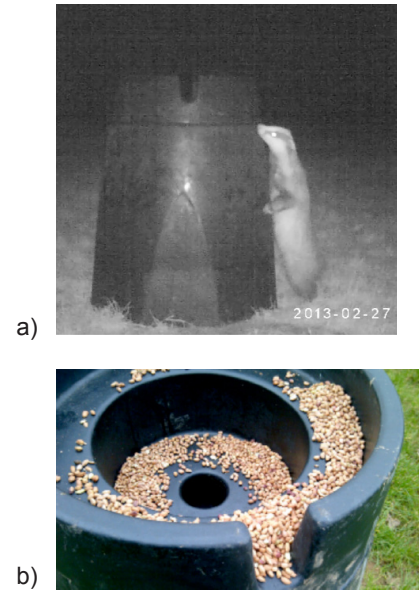


Fig. 2: Example of a mineral lick holder, b) view from above.

Case study B:

The Royal Agricultural University assessed the effectiveness of a purchased bucket stand in preventing badger access to mineral lick buckets. Motion sensing cameras were used to monitor badger and cattle activity around the 70 cm tall device which is screwed into the ground. Throughout the 3 month trial badgers were unable to access the mineral lick holder, whereas previously they regularly accessed a conventional mineral lick buckets on the ground. The trial also found that the device could withstand substantial interaction from cattle, including leaning and scratching. The RAU concluded that the device was successful in preventing badgers from accessing the contents of the mineral lick bucket, and is practical and durable to use with cattle.

Measure recommendations

Stands and holders to keep mineral licks and buckets off of the ground (for products tested and verified as practical biosecurity measure):

- Raised off the ground (preferably >90 cm) and/or constructed so badgers cannot climb up to feed level (specified height from product testing).
- Ability to hold feed buckets/items required.
- Robust, with ability to withstand cattle interactions. Products available as required for pasture (screwed/fixed into the ground) or hard standing (stable, balanced footing).
- Placed where badgers cannot climb adjacent structures to gain access.