

Restrict contact between badgers and cattle

- Introduce barriers to prevent badgers accessing cattle

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/>

Adjustable gate sections



Fig.1: Adjustable flap on gate across cattle shed

How does this measure work?

Existing gates can be fitted with adjustable sections (flaps, bars, panels) at the bottom to prevent badgers from gaining access beneath them. These are adaptable and relatively inexpensive solutions which can be applied to a wide variety of situations. Flaps should be mounted such that they reduce the gap to the ground to less than 7.5 cm. If the flaps are adjustable then they can be raised to allow gates to open over uneven ground. Moveable, temporary panels can also be constructed and placed to block off small gaps or access points over night, or used in places where permanent gate fixings are not practical.

How has this measure been tested?

Tested by APHA during a 2-year Defra funded project (SE3119) which found that gates with adjustable panels, flaps and bars prevented access to buildings and yards. These exclusion measures successfully reduced overall numbers of visits by badgers to buildings and yards when deployed correctly.

Product examples	Approximate Guide Price (£*)
Bespoke fixings (made to measure, including hinges, latch and locking systems)	Cost of fitting, cutting and fixing will need to be arranged with local contractors.
Galvanised sheet panels (Available to order in various sizes)	£24.80 / metre ²
Lengths of Steel rails (6-metre lengths box section): 50 mm x 50 mm x 3 mm Mild Steel Box - 6 metre length	£50.80 /per 6 metre
* Prices listed exclude VAT and cost of fitting (as of January 2017)	

Examples of biosecurity measures: Adjustable gate sections

Case study A (Before):

This farm had cattle yards with wide 5-bar gates that were required to open fully for cattle movement and machinery access (Fig 2.). The yard floor is sloping and uneven so solid gates mounted 7.5 cm from the ground would catch on the ground and not open fully.



Fig.2: Gates to yards and fields with barred gates

Case study A (After):

To prevent badger access sheeted panels were fitted to existing 5-bar gates. Box section metal bars were also fitted to the bottoms of the existing gates with hinges (Fig 3.). This enabled the metal bars to be lifted up by a chain and fastened to allow gates to open (inset, Fig 3). Once the gates are closed, the metal bars are locked in the lowered position with a pin.



Fig.3: Replacement gate with adjustable bars (raised in inset)

Case study B:

This farmyard has an uneven concrete floor at the entrance to the cattle shed (Fig. 4). Solid sheet gates would need 20 cm clearance off the ground to open fully. To reduce the gap to 7.5 cm to prevent badger access, sliding panels in runners were mounted on the existing 5-bar gates (Fig. 5). The sliding panels could be removed during the day or could be held in a raised position with j-hooks over the top bar to allow the gate to be opened.



Fig.4: Cattle Shed (Before) Fig. 5: Cattle Shed (After)

Measure recommendations

Bespoke solutions for entrances to buildings/yards with uneven ground, where a sheeted gate would catch the ground and prevent the gate from opening. Options include panels mounted in runners or adjustable flaps/bars attached on hinges to the bottom of existing gates:

- Maximum gap from bottom of the gate to the ground of 7.5 cm
- Minimum height preferably greater than 120 cm
- Gaps between mounting post/structures should also be kept to less than 7.5 cm
- Requires hard ground, preferably concrete hard standing, under the gate/door
- Should have a locking mechanism to prevent badgers lifting or pushing movable sections.