H2OK? Think Water

Biobeds at work

The Voluntary Initiative
Promoting responsible pesticide use

For the environmental peace of mind that a biobed can bring, its cost is relatively small, and there are signs that farms are increasingly accepting that view.

Farmers have been encouraged to install biobeds and improve pesticide handling areas by Catchment Sensitive Farming (CSF) grants. These grants are targeted in CSF catchments where drinking water sources can be affected by pesticides.

The CSF Capital Grant Scheme, a competitive annual scheme, open for applications annually in the spring and pays 50% costs, up to £10,000, for capital works for a range of items that reduce water pollution: www.naturalengland.org.uk/csf

So says independent consultant Bill Basford. "A couple of years ago I thought that there were, at most, about 100 biobeds in the country. But having talked to lots of people in the industry I believe there could now be nearer 300."

On-farm biobeds, which capture and degrade pesticide wastes from spraying operations, are not obligatory; but they can provide extra reassurance that spills and sprayer washings will not contaminate nearby watercourses, says Mr Basford.

"Where they're really useful is on farms where such risks are particularly critical. And when you compare the cost with that of a new sprayer and the amount of chemicals which go through it in just one season, a biobed isn't expensive."

Somerset-based Catchment Sensitive Farming Officer Roy Hayes says biobeds have increasingly caught farmers' attention over the past two years. "I know of 10 in my area, and there are quite a few more going in. People want to keep one step ahead."

An unusual above ground biobed was recently installed, with the help of a CSF grant, at the 230ha Downhead Manor Farm at West Camel, in Somerset which Tim Clark runs with his parents.

"With the aids of Roy Hayes, the CSF grant and limited detailed guidance available at the time, we designed and built our own biobed, with the main objective of containing and treating any spills, drips, leaks and tanks washings from our Bateman RB15 sprayer," says Mr Clark.

Biobed construction underway at Church Farm Halesworth

The biofilter is an alternative suitable for smaller farms and covered filling areas

Newly installed above ground Biobed at Downhead Manor farm Somerset

"While every effort is made to prevent such incidents, one can never be too safe, and both 'point' and 'diffuse' source pollution controls are of paramount importance when considering the local flora and fauna. "We are in HLS and keen on our wildlife which includes some Great Crested Newts in a stream not far from the yard. The main reason we put the biobed in was to reduce the risks when I'm in a hurry spraying."

He explains it is especially reassuring to have a bunded concrete pad that feeds the biobed and catches the inevitable drips when changing nozzles.

Mr Clark says that he usually returns the first three rinses to the field. "That has to be best practice. But I do occasionally put the third rinse through the biobed."

The biobed itself, now in its third season, cost about £4000, most of which was grant-aided. Having it above ground means that it is easier to check for any potential leaks, he adds.

Michael and Gail Sprake have a conventional below-ground biobed on their 232ha farm in Suffolk. It was recently installed as a demonstration unit by Essex & Suffolk Water (E&SW) at Church Farm, St Nicholas, South Elmham, near Halesworth.

Mr Sprake says he had not considered having a biobed until encouraged to do so by his agronomist Brian Ross of Frontier, but welcomes its presence.

"All our ditches eventually run into the River Waveney, and it gives me peace of mind when I'm working with our Sands 3000 litre self-propelled sprayer. It means I can mix up and wash down on the concrete pad, and if I have a spill on the pad I don't have to worry."

The fact that it was funded as part of catchment programme was clearly a help, he admits.

"It's a bit like buying machinery. I never buy the first model of anything. I prefer to wait to see if it becomes popular." Mr Sprake is considering applying to do other farm improvements through the CSF capital grant scheme this year.

However, E&SW's River Waveney Catchment Advisor Robert Holland points out that the cost of this biobed was higher than normal as the pilot biobed will be monitored by the water company and included inlet and outlet sampling pumps and because all of the work was done by contractor. "A basic biobed can cost less than £6000 where farm labour is used."

Protecting water courses from pesticides is important. Water companies face the costs of treating water to meet the EU Drinking Water Standard of under 0.1ppb pesticides in water at the tap as well as possible effects on aquatic biodiversity. Biobeds can help farmers reduce the risk of pesticides getting into water and safeguard pesticide products for the future.

This article was first published in Farmers Guardian in April 2013.

Demonstration biobed and bunded filling area at Tinsley Farm in West Hanningfield, Essex funded by Essex and Suffolk Water

For more information visit:
www.biobeds.info

A clear solution for farmers
CATCHMENT SENSITIVE FARMING

Crop Protection Association

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