SHOO, FLY!

Fly eggs laid in livestock bedding, feed debris, and manure can mature in as little as seven days, creating huge pest populations that are hard to control. On farms, flies cause damage and control costs that reach over $2 billion each year in the U.S. Painful fly bites can reduce livestock productivity and can spread diseases. Flies can also transmit pathogens such as *E. coli* and *Salmonella* to animals and humans through water and food they have contaminated. Concerns about flies have led to lawsuits, zoning limitations, and animosity between farmers and nearby communities. Traditional control methods are not well suited for certain agricultural practices, facilities, or climates. The evolution of insecticide-resistant fly populations has increased the need for new fly management technologies.

New Data Keep Flies of Our Farms & Food

In 2007, a group of researchers came together to develop economically feasible and environmentally friendly technology and practices for controlling flies in animal agriculture systems. Effective fly management results in increased profits, a higher quality of life for animals, a safer food supply, and improved quality of life in residential and recreational areas near animal facilities. Adoption of new non-chemical control methods significantly reduces the use of expensive insecticides, cutting costs for livestock producers and reducing harm to the environment.

no-fly zones

Compost bedding produces about **50 times** fewer stable flies than straw.

Dealing immediately with egg sites can reduce stable fly populations by **up to 50%** leading to cattle weight gain valued at **$100 per cow**

Disposing of feed debris can reduce fly populations.

all the buzz

Newsletters, training guides, and webinars give producers the information and tools to improve fly control.

National surveys of insecticide resistance help producers select the most appropriate management tools.

Knowing what kinds of weather events and landscape features support fly population growth helps farmers apply control methods in a timely manner.

fly swatters

A new fly trap removed **2.5 million horn flies** from a herd of 150 pastured dairy cows.

The trap doesn't use insecticide and costs **$1.50 less per cow** than traditional chemical-based treatments.

When exposed to pyriproxyen, female flies can carry it back to egg-laying sites where the pyriproxyfen prevents fly growth and kills developing eggs.

Want to know more?

Multistate Research Project S-1060 (2013-2018) is supported, in part, through USDA's National Institute of Food and Agriculture by the Multistate Research Fund established in 1998 by the Agricultural Research, Extension, and Education Reform Act to encourage and enhance multistate, multidisciplinary research on critical national or regional issues. Over $9 million in additional funds have been provided by contracts and grants to S-1060 members. S-1060 members are located at 21 land-grant universities and several Hispanic-serving universities and Canadian institutions as well as five USDA-ARS labs. Representatives from private industry are involved as supporters or participants in field research. For more information on the S-1060 project, visit *http://nimss.org/projects/view/mrp/outline/14976*. For more information on the Multistate Research Program or the Impact Writing Initiative that produced this document, visit *www.multistateresearchimpacts.org*.