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Get A Handle On Flies

(Continued from Page A1) lation was an experiment that worked well.

"This was a trial situation." said Clyde Myers, Berks extension agent. "We wanted to find out if it would work."

"We found out that it did work," said Shea.

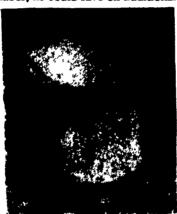
Researchers thought that heat could have been a factor. But it wasn't.

What killed the flies was the ammonia produced from the manure.

"We think that's what actually is killing the fly larvae and pupae," said Dr. Charles Pitts, Penn State fly expert. "It kills practically everything in there."

Pitts indicated that Penn State research is under way to investigate different concentrations of ammonia in the laboratory to see just how much it takes to kill flies.

Shea was happy with the results of the experiment. His concern was that the manure he tried to sell could pose a problem after it was spread on the field. Shea is convinced that, with a little extra labor, he could save on traditional



Flies swarm around a calf hutch bucket. Files continue to be a problem for producers, but Penn State has some effective ways to control them at this year's expo.

chemical fly control costs and produce an environmentally friendly product.

"Environmentally friendly" can translate into better neighbor relations, important for farm survivability.

But Pitts cautioned that these concerns are prevalent for any producer that handles any type of manure.

"There's more than poultry manure that's causing the prob-

lem," he said. "It's not just poultry. I don't think we can give it all to the poultry people."

the best system would be some type of accessible concrete manure storage platform that could serve as a treatment fly control center. The finished product could then be a valuable nutrient resource.

"This is just another tool," said Pitts. "All of this has to come within some sort of framework of a

for them to emerge after they pupate," said Ressler.

Ressler said that studies this past Shea said that ideally, for him, summer, including extremely hot days in July and August, showed that the heat itself may have done as much to reduce fly populations without any kind of plowing.

Several farms in Berks County are participating in a Penn Statesponsored study that is examining the use of 55-gallon barrels and 5-gallon plastic jugs to act as fly management decision. (A produc- traps. Those farms include Roy



According to Clyde Myers, Berks extension agent, right, the barrels are placed near calf hutches. A balt (using a variety of material, including spoiled milk, dead birds, feed, or commercially available fly trap lure) is placed under a funnel screen. The files enter the screen and are trapped.

er) can't just stop everything and Hetrick, dairy farmer in Bernville; do what we want him to do and then lose money on top of it."

Producers may want to consider, if they have a "hot" house (that may have lots of fly larvae and pupae), that before spreading in spring and fall, they would cover the manure for two weeks first to handle the fly problem.

Another study, conducted on Lancaster County fields, is examining ways in which plowing impacts survival of the eggs, larvac, and pupae in the field.

A big problem is field hatch of flies. When the manure is spread on the field, unless it is buried, fly populations have the potential to 'explode." The study has found that moldboard plowing is the best way to control flies, because the fly material is buried.

Other tillage methods, such as chiseling or discing, are ineffective and may actually help boost field hatch because the material isn't sufficiently buried.

"If you can bury them deep enough, then the more difficult it is

Paul Moyer; and the Teen Challenge Dairy Farms.

According to Clyde Myers, Berks extension agent, the barrels are placed near calf hutches. A bait (using a variety of material, including spoiled milk, dead birds. feed, or commercially available fly trap lure) is placed under a funnel screen. The flies enter the screen and are trapped.

What works best is a milk and yeast combination that has proven successful, according to Myers. New work involves 5-gallon buckets, which have proven effective. A bait can be colostrum milk in the fermentation stage (the sweet/sour

Another Penn State study examines ways in which "photoactivated" dyes are spread on the fly larvae. When exposed to sunlight, the dyes create a chemical reaction which kills the flies. The challenge is being able to sufficiently cover the larvae with the dye material.

'There's still a lot of work to be

(Turn to Page A26)



Pat Shea, who manages 216,000 layers for Wenger's Feed in Shartlesville, recently participated in a Penn State-sponsored fly control study on his farm. In June this year, after collecting 200 tons of layer manure from his houses, the manure (at a moisture level of 60 percent) was moved to a distant part of his farm, dumped in a row at the edge of a field and covered with 6-mil black plastic, measuring 100 feet by 25 feet, and sealed over with dirt.