## Agency helps farmers save energy, money

LEESPORT - Want to find out mendations to farmers on how to where you can save energy and money on the farm?

The Pennsylvania Energy Centers, located in 10 regions throughout the state, are "gearing up" to provide this free advisory service to farmers under a federally-funded program.

According to Ed Mazur, a member of the Region 2 Energy Efficiency team, this type of energy-saving advice has been available for small businesses in Pennsylvania since last June. He pointed out, however, that the agricultural portion is "just swinging into gear."

Of all the regions within Pennsylvania, Mazur claums the Berks region has "done the most" in the agricultural energy-saving area." To date, they have provided assistance on 5 farms - 3 dairy and 2 swine operations.

What does the Energy Efficiency team look for in making recomsave energy and money?

According to Mazur, the team "looks for places where energy can be saved through proper maintenance, ventilation, lighting, water heating, grain drying, and milk cooling.'

"We may suggest new procedures to the farmer, like using well water to cool milk," explains Mazur, pointing out that farm visits usually last about 1 hour and consist of a walking tour of the farm.

After the trip around the farm, each farmer is provided with a personalized analysis on where and how energy can be saved, says Mazur. Farmers receive percentages on how much energy can be saved rather than monetary figures as is done with other small businesses.

Recalling the advice he shared with one dairy farmer, Mazur says he suggested a small change in farmer 15 percent on his electric bill.

"I advised him to preheat the cold water before running it into the water heater by circulating it through a copper coil in the milk vat," he recounts. "The cold water not only will be preheated, but it will help to lower the milk's temperature in the tank by a couple degrees.'

The cost of this energy-saving idea, notes Mazur, would be about \$35 to \$40. The expense, he says, would be incurred for the pipe needed to reroute the water. In this case, the farmer already had a copper coll, avoiding that additional cost.

During the farm visit, Mazur suggested this same farmer insulate his water heater and also lower the temperature of the water to the minimum for a dairy operation. For a cost of about \$15 for the insulation, the farmer could

operation that could save the realize a savings of about 5 percent, Mazur claims.

Another area where energy can be easily saved, adds Mazur, is ventilation. He recalls how one particular dairy farmer was losing cooled area through the space around the fans.

"In the summer time, cool air would escape back through the spaces instead of flowing into the barn," he explained. "We suggested the farmer seal the space around the fan and also make better use of natural ventilation, thereby reducing energy costs.'

Other energy-saving tips the efficiency team might suggest maintaining include: farm machinery with regular tune-ups and lubrication to help save gas; using wheel weights only when necessary and removing them from tractors at other times; and regular cleaning of belts, fans and radiators.

"I saw one tractor that had about a foot of dirt on the radiator," observed Mazur.

Although most of their work is done with existing facilities, Mazur said the Energy Team can put farmers in touch with contractors and sale personnel who have technical specifications on energy efficient buildings. "We make sure the farmer isn't getting a burn steer," he said.

The nicest part about all this advice is that it's all free of charge. Unfortunately, not all the regional offices are staffed with farm experts and are not as experienced in making on-farm visits as the Berks office.

According to Bradley Smith who heads the Region 6 office of the Pennsylvania Energy Center, covering Perry, Dauphin, Lebanon, Lancaster, Cumberland, Adams, and York counties, his office has not been visiting farms because of the lack of expertuse.

"I've recommended to our state office that energy saving information should be given out through workshops and training sessions rather than trying to get into every aspect of the farm operation," he says. "We haven't done anything on individual farms because it's just too complicated and we can't find qualified people to do the job for the money we could pay them. Basically, our staff is made up of engineering students.'

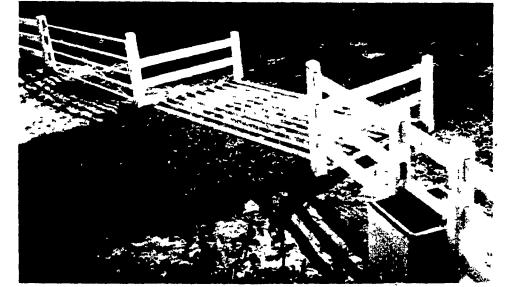
To emphasize his "too complicated" sentiments, Smith explains that his staff can complete 10 small business surveys in the time it would take to do one farm. "To give you an idea, the small business survey contains two worksheets, whereas the farm survey has 40."

Smith tells how the complexity of

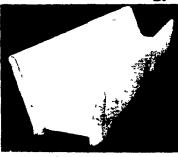
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