

## Bovine Welfare Forum

(Continued from Page A21)

deaths in feedlot can be attributed to dust pneumonia," Dr. Morrow-Tesch said. "The level of dust on feedlots can be high, which springs the cattle's immune system into action and keeps it running on a constant basis."

Her research found that dust levels can be reduced by a simple change in feeding time. By nature, cattle want to eat at sunset. When the sun goes down and their feed bunk is empty, cattle find other methods of entertainment. In other words, they frolic in the pens and kick up dirt and manure. For practical reasons, nature and feedlot practices have not always coincided.

The alarm rings early for feed callers, with the first feeding done well before sunrise. When the clock strikes two in the afternoon, the workers have distributed the final ration and are ready to go home. Dr. Morrow-Tesch experimented with feeding times during her three-year-long study, taking away one mid-day feeding and adding one at the day's end. "If feed remained in their bunk at sunset, cattle ate and then rested," she noted. "Not only did their behavior change, but dust levels were also reduced."

In a second study in Lubbock, Texas, Dr. Morrow-Tesch used PVC pipe and cloth to give cattle access to shade, an unusual feature for most feedlots. The cattle reached their target weights 20 days sooner than did cattle without shade — a substantial savings to the producer, and a definite improvement in animal welfare.

"The cattle with shade showed fewer signs of stress. Their body temperature and respiratory rates were lower," Dr. Morrow-Tesch said. "When cattle are hot, they pant and drool; they go off feed. They're expending a lot of unnecessary energy."

More scientific research is needed to develop improved animal welfare guidelines. And some research efforts have surprisingly disproven popular theories. For instance, in a study by ARS, calves exhibited signs of pain after tail docking, while adults showed little response. An animal's mind, Dr. Morrow-Tesch says, is like a big black box. We have to try to understand

stand how an animal responds, what creates a fearful situation, and how their environment might be perceived.

"The most important issue in animal welfare today is human-animal interaction," Dr. Morrow-Tesch explained. "How we treat our animals can make all the difference in the world to them. Cattle, like most animals, seem to remember good as well as unfavorable incidents and act accordingly." As Dr. Smith sees it, "Cattle serve all of us and deserve humane treatment. We need to put our best foot forward."

STATE COLLEGE (Centre Co.) — The Pennsylvania Holstein Association is accepting the 2003 Keystone Holstein 3-Year-Old Futurity entries. The Keystone Holstein Futurity is a project to stimulate interest in breeding and developing outstanding registered Holsteins for production and type regardless of individual herd size. Three nominations are required for each animal that competes. The first payment for the 2003 Futurity is due Dec. 15, 2000. Any breeder may nominate as many heifer calves as they wish. There is a guaranteed purse of \$500 to the winner.

Any registered Holstein female of 87 percent or higher bred and born in Pennsylvania between Sept. 1, 1999 and Aug. 31, 2000 is eligible for the Keystone Holstein Futurity.

First payment of \$3 per head with nomination paid by Dec. 15, 2000, second payment of \$11 per head paid by Sept. 15, 2001, third payment of \$20 per head paid by Sept. 15, 2002.

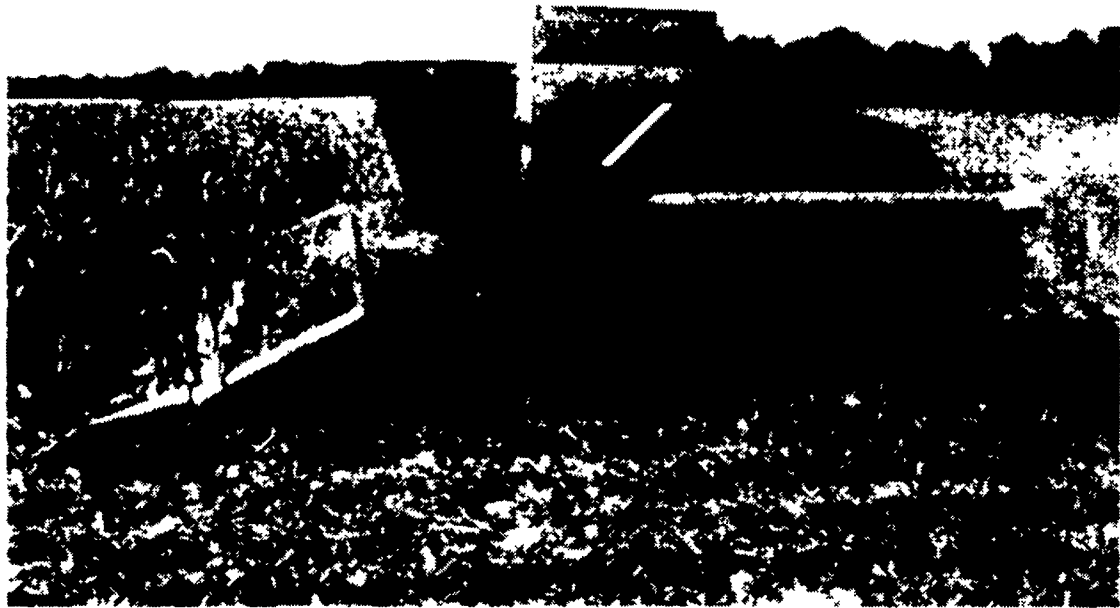
All futurity monies shall be used only for futurity purposes. The purse in this event will be divided with 50 percent or at least \$500 awarded to the first place animal. The remainder will be divided among those

competitors who show in the 2003 Futurity Class.

All nomination fees are committed to the purse. No refunds will be made whether an animal competes or eligibility is discontinued.

Entries are due for the 2003 Keystone Futurity by Dec. 15, 2000.

Send entries and payment to the Pennsylvania Holstein Association, 839 Benner Pike, State College, Pennsylvania 16801.



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