## Dairy Day II

## (Continued from Page Ey)

Dairy producers who suspect that their herds are being fed excessive degradable protein can test the blood for levels of urea nitrogen, though it is extremely important when blood samples are taken.

O'Conner said he recommends not taking blood for these tests for at least four hours after the cow has received its major meal for the day.

In other areas of dietary concerns to reproduction, the role of beta carotene seems shaky.

While O'Conner said that the corpus luteum is rich in beta carotene, and beta carotene is broken down into the necessary Vitamin A, he said he could find no conclusive evidence to support feeding beta carotene as a dietary supplement.

O'Conner said that as long as the forages were of adequate quality, there should not be a lack of
beta carotene in a cow's diet. However, he said there may be some farms where levels are not adequate and supplemental feeding may help.
(He said it did increase hog health when fed as a supplement.)
A blood test is available to determine whether beta carotene levels are adequate.
Selenium is a trace mineral important to the proper physiological function of a cow, O'Conner said. It is involved in the formation of antibodies and improves the ability of white blood cells to fight disease and helps increase the smooth muscle contractions, especially in the uterus.

The levels of selenium are set by regulation, though O'Conner said it would takes ingestion of 10 times the recommended levels to cause toxicity.

New Thoughts
O'Conner also gave a talk on
new and basic conepts in reproductive management, focusing on new findings that strongly suggest that the estrous cycle of a cow is not as simple as once thought.

O'Conner showed a slide of a growing follice and a corpus luteum both at the same time, which isn't supposed to occur under the old theory of a 21-day cycle.

He said a range of 18 to 24 days has been recorded and is now explainable.

What has become apparant is that while the corpus luteum may cycle regularly, there are subcycles of follicle growth occuring simultaneously.

He said this discovery goes a long way to explaining some of the discrepencies in activity which occur in studies concerning the
effects of prostaglandin and others aspects of reproduction, such as determining stage of cycle by palpating.

What it means is that efforts are going to be put foward on further studying this subcycling in an attempt to increase reproduction of cattle.

In the meantime, it helps allow for understanding some of the delays in getting cows to respond.

## Tri-County Agronomy School

DAUPHIN (Dauphin Co.) - The cooperative extension offices of Dauphin, Northumberland, and Schuylkill counties will present an Agronomy School for field crop producers on Wednesday, March 18 from 9 a.m. until 3 p.m., at the Gratz Fire House in Gratz.

Topics of interest include an update on a proposed nutrient management bill by Paul Craig, extension agent; weed control strategies following the drought of

1991, by Bill Curran; com rootworm control strategies, by Dennis Caivin; cropping strategies for hedging periods of environmental stress, by Allan Shoener; soil fertility and corn diseases, by Norman Conrad.
This meeting qualifies for pesticide training credits.

There is a $\$ 5$ lunch/registration fee. To register contact the Dauphin County Cooperative Extension Office at (717) 921-8803 before Thursday, March 12, 1992.

The Pennsylvania State Univer-
sity is committed to the policy that all persons shall have equal access to programs, facilities, admission, and employment without regard to personal characteristics not related to ability, performance, or qualifications as determined by University Policy or by state or federal authorities.

Direct all affirmative actior inquiries to the Affirmative Action Office, The Pennsylvania State University, 201 Willard Building, University Park, PA 16802-2801.


