

Fred Weaver's white-faced steer, right, was named grand champlon steer at the Ephrata Fair. The 1,290-pound steer went to Aaron Groff, right, of Ephrata National Bank. Nichole High, center, sold her reserve grand champion to Blue Lake Bullders, represented at right front by Matthew and Danny Martin, and Reinhold Lumber, represented by Terry Kauffman, right rear. photo by preston whitcraft

## Ephrata Steer Championship Goes To Hometown Exhibitor

EPHRATA (Lancaster Co.) The bald-faced steer led out by Fred Weaver at the Ephrata Fair topped all others to be named the grand champion. The 1,290 -pound middleweight steer's champion title was yet another to add to the

Ephrata man's long list of per pound or $\$ 1,935$ winnings.
Weaver, the son of Carol and Roy Weaver, sold his Angus/ Chianina/Simmental crossbred to Ephrata National Bank, represented by Aaron Groff, for $\$ 1.50$

The reserve champion rosette went to the 1,320 -pound Angus xhibited by Nichole High. High, who showed last year's supreme champion at the Ephrata Fair, is the daughter of Larry and Mae

High of Lititz and Shirley Burris of Elizabethtown.
Top bidders for the steer were Reinhold Lumber and Blue Lake Builders, who purchased the animal for $\$ 1.30$ per pound.

A partial list of the winners follows.

| PREMEW SHOW Lightweight |  |  |
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| 1 Jodie Weaver, 2 Jason Kinie |  |  |
| 1. Heather Yoder, 2. Nicke Hight |  |  |
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| 1. Heather Yoder. 2. Nickie High |  |  |
| Casey Hlah, 2. Frod Weaver |  |  |
| SALE SHOWLightwelght |  |  |
| Keth Zirmmerman, 2. Jason |  |  |
| Mediumwaight |  |  |
| 1 Fred Weaver. 2 Joodie Weaver, Krista Martin |  |  |
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| Heather Yoder |  |  |
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## Fish Conference To Explore Local Production

ALLENTOWN (Lehigh Co.) - A familiar animal may be making a new splash on Pennsylvania farms in the ' 90 s. If they flourish as hoped, they'll have a ripple effect throughout the farm and food industry in this region.
Penn State Cooperative Extension announces its first conference for those interested in raising fish commercially, either indoors in tanks or outside in ponds or raceways. The conference is set for Wednesday, November 15 , from 9 a.m. to 3:30 p.m. at the Berks Ag Center near Reading. A trade show of suppliers and a fish buffet are included in the day's events.

We've found the experts and producers who know our area and climate, and who can give interested growers the basics of how to make a profit raising freshwater fish," said Jeff Patton, Extension agent-marketing and a conference organizer. "Our goal is to help producers make sound, informed decisions on whether and how to start up in this business.'
Although Pennsylvania's climate doesn't match that of the "catfish bell" of the south, other species and methods show prom(Tum to Page D3)


Beef Briefs by John Comerford

Penn State Beef Speciallst

PLANNING FOR THE NEXT BREEDING SEASON

It may seem a little premature, but the time to begin planning for the 1990 breeding season in the beef herd is right now. There are'a couple of very good reasons for this. First, the forage supply for the winter is limited in some cases and of poor quality in most places. Secondly, there is nothing a producer can do to influence profitability more than getting cows bred on time.

The single most important economic factor in the cow-calf enterprise is weaning a live calf. The factors that contribute to successfully selling a calf from every cow are the percentage of cows that cycle during the breeding season, the percentage of those cycles that are fertile, and the percentage of successful matings from a fertile bull. These factors are multiplicative; that is, we would not add the values for each one together and get an average. Rather we would multiply each one by the next to determine reproductive efficiency. For example, if 90 percent of the cows have a fertile cycle during the breeding season and 90 percent of the matings produce a pregnancy, this results in 81 percent of the cows actually geting bred.
While fertility of the bull is something that can be measured and, given the bull remains health$y$, is somewhat consistent, the number of cows that cycle during the breeding season is not measured until it is too late. Nutrition is of vital importance with this trait, and that is why now is the time to start planning for this part of a successful breeding season.

A study in 1978 by Bellows and Short showed why nutrition is so important to reproduction, particularly in the young cow. They compared heifers and cows for birth weight, calving difficulty and rebreeding performance by feeding one group about 120 percent of "book" requirements and another group about 90 percent of suggested requirements beginning about 90 days before expected calving dates. All of them got the same feed atter calving. They found those receiving more precalving feed had calves that were heavier at birth, but experienced no increase in calving difficulty. Further, those that got more feed came back in heat more quickly and were bred earlier in the breeding season. This is important because it shows that pre-calving nutrition is of greater importance than how cows are fed during lactation on breeding efficiency and while there were no differences in weaning weight in the current year, there will be a difference in weights the next year with a calf born two weeks earlier in the season. In addition the pre-calving nutrition study shows that 90 percent of requirements is not too far off and may reflect the kind of forage we may have for this winter.

How to stretch feed
Here are some of the things you can do to stretch and effectively
use the forage you have available to get cows cycling on time next year:
-Forage Analysis. There is so much variation in forages this year it is important to know what the feed value really is. Some of the hay was cut very late in the year, some was rained on repeatedly, and some was made on stands of questionable composition. All of these things will contribute to the feed value of the hay. A laboratory analysis will tell you how much will need to be fed and what supplements will be necessary.
-Crop Residues. There is a wealth of feed value in stalk fields that could help save some hay. A good estimate is that a month of grazing a stalk field will save a big bale of hay per cow. Grazing, usually using portable fences, is the desired method of feeding it because the cows will have access to feed that may not get into a baler. The optimum use of a stalk field is made by grazing $1 / 4$ acre per cow and moving the fence as they clean it up. Allowing access to the entire field at once will reduce the grazing time available in half because they will eat the "best first and leave the rest". For most cow herds, no supplemental feeds will be needed because the feed requirements of the cow are at their lowest during this time of the year.
-Pregnancy Palpation. One of the most cost-effective management tips is palpation of the breeding herd. This will locate the open cows and allow the producer to spend his money only on cows that have the potential to return something. In years like this one, nobody wants to throw hay and feed down an empty hole.
Separation of the Herd. It may be helpful to separate the herd into a couple of different groups to winter them. Not everybody has the facilities to do this, but young and thin cows will benefit greatly. The young cow has a particularly different nutritional requirement. She needs about double the daily protein as the older cow, and will often be dominated by the older cow at feeding time. Feeding to the "average" protein needs of the herd is costly for these older cows. The condition of the cow at calving has been shown to be very important in the ability of that cow to cycle on time. Thin cows have some "catching-up" to do, and they can keep calves coming another year by getting a litule extra feed during gestation.
-Proper Supplementation. For most cow herds the most deficient nutrient is energy, not protein. In fact there is probably more overfeeding of protein in the beef herd than anywhere else. A full-feed of most grass and grass-legume hays will provide all the protein a beef cow needs until she calves. Even then, unless they are very heavymilking cows, the protein needs are met with this kind of forage. The most cost-effective source of energy is plain shelled corn. The exceptions are with young cows and those on com silage-based rations. Again, the only way to really know what is needed is to get an analysis of the forage.

