## Cattle cycle

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drought in 1975 put more of a crunch on feed supplies and prices. Producers had expanded the\_U.S. cow and cattle herd to a record 132 million head by then, and the only way to go was to slaughter."

Rebuilding Underway Cattle numers remained about even throughout 1979, after declining 16 percent from 1975's record high. Expansion was encouraged in the spring of 1979, however, by excellent grazing conditions and record prices. By

Jan. 1, 1981, the U.S inventory had increased about 4 percent to 115 million head, because more heifers had calved during the preceding year.

However, current record interest rates, poor returns, and the severe drought in 1980 have likely slowed expansion in 1981. The inventory on January 1, 1982 is expected to show an increase of only about 3 percent. Nevertheless, weather conditions and, consequently, forage supplies this year will greatly affect the new figures. Producers must have a

supplies of other meats), and the and the industry now sees beef production turning up slowly from 1979's low point.

For producers, this slow growth could be good news. Since the beef industry isn't rushing to overexpand, profits could again be in the

USDA economists currently sometime after 1985, perhaps as late as 1987. At the peak, the top cattle numbers are projected at 124 million head, with cow numbers approaching 55 million — well below 1975's record — including

When liquidation begins, its extent and depth will depend on the combination of internal influences such as market prices, and outside influences such as inflation, supplies of competing meats, weather, and exports. Unless the outside pressures all push in the same direction, projections indicate a modest liquidation over a 2-year period, probably in 1987 and

#### An Industry Ideal

Answers to these questions are just what industry and USDA economists are working toward.

Imagine a situation where production meets consumer demand at a price that gives producers a "break-even" return Economists call this a "steadystate meat sector," one based on estimates of per capita demand for

To maintain a "steady-state," a 1980 per capita beef consumption of 81 pounds retail weight and an inventory of 37.6 million head of beef cows would have been necessary on Jan. 1 last year. But, according to Crom, we actually consumed only about 78.3 pounds of beef per person, and the Jan. 1 inventory of beef cows was 37.0 million head.

The discrepancy between 1980 steady-state consumption and actual 1980 consumption shows how difficult controlling the cattle cycle is. In 1980, slaughter was reduced because the inventory was lower and producers were holding more heifers for herd expansion

But consider the difficulty of predicting consumer demand in 1990. Currently, for 1990, per capita demand for beef is estimated to increase to 89 pounds.

## **PUBLIC SALE**

**OF PRODUCE & CANTALOUPE FARMING EQUIPMENT, HOUSEHOLD** GOODS, GUNS & ANTIQUES **SATURDAY, NOVEMBER 21** 

9:30 A.M. Located along Rt. 322, 4 miles east of

Ephrata, Lanc. Co., Penna.

Farm Equipment

John Deere 40 Tractor (W.F.E.) with 3 point; Ferguson 35 Tractor with Roll Bar, 3 point, 4-Way Highway Flashers, and New Rear Rubber; 3 pt. Holland Spade Pot Planter, plants through plastic; 3 pt. Mechanical Vegetable and Strawberry Planter; 3 pt. Plastic Mulch Layer; 200 gal., Central Tractor Field or Tree Sprayer; 3 pt. 2 Bottom 14 in. Trip Plow; 3 pt. 1 Bottom 16 in. Plow; 3 pt. 5 ft. Bush Hog Rotary Mower; 3 Section Harrow; 3 Section Rotary Hoe: 2 Row Oliver Corn Planter; Small Cultipacker; 600 gal. Water Tank on Trailer; 2 Wheel Farm Trailer; 3 Flatbed Rubber Tire Farm Wagons; 3 pt. Carrier Box: Livestock Feeder Wagon; 3 pt. One Row Cultivator; 2 Sears 12 HP Tractors with 3 pt. Cultivators and Mowers; 1 Sears 10 H.P. Tractor with 3 pt. and Cultivators; Bush Hog 3 pt. Grader Blade; Mighty Mac Sprayer; 150 gal. per min. Homelite Water Pump; 220 Volt, 1½ H.P. Submersible Pump, like new; Large Shop Furnace; Produce Roof 10'x13'; Lincoln 225 amp. Electric Welder; Welding Table; Drill Press; 600 lb. Platform Scale; Echo Weed Eater; Small Gilson Tiller; Car Roof Carrier; 220 Volt Generator; Electric Sander; 275 gal. Oil Tank, like new; Jig Saw; Battery Charger; Portable Air Tank; 100 - 8 in. Concrete Blocks; 1775 lb. Med. Nut Coal; Cantaloupe, Tomato and Strawberry Boxes for Shipping; Wire Bound Cabbage Crates; Tongue and Groove Flooring Boards and more Lumber; 50 Strawberry Carriers; Plastic Pipe; Picnic Table; Bicycles; 30 Bags Compost Mushroom Mulch, and many more items.

1976 Chevy Silverado

20 Series Suburban, 4 Wheel Drive, Lock Out Hubs; Automatic; Tinted Glass, Front and Rear Air Conditioning, Low Mileage.

#### 1979 Queen Owens 4,000 lb. Trailer with Racks **Household Goods**

Frost-Free 25 cu. ft. Amana Avocado Refrigerator; Revco Freezer; Beds, Spring and Mattresses; Love Seat; Hide-a-Bed; Sofas; Singer Model 503A Electric Sewing Machine; Large Buffet; Estate Coal Heatrola; Chairs; Stands; Porch Furniture; New Coffee Maker; Juicer; Deep Fryer; Electric Pan; Lamps; Musical Cuckoo Clock and more Clocks, 3 Large Fire Extinguishers: Currier & Ives Picture in Frame; Freezer Boxes, and much more.

**Antiques** 

Steam Engine Whistle; Metal Toy Truck; 1927 Book of Locomotives & Encyclopedia over 1300 pages & 3,000 pictures & illustrations; Silver Certificate Dollar Bills; Silver Coins; Wheat Penies

#### Guns

Winchester Model 88 Lever Action 308 Caliber; Remington Model 760 Game-Master 243 Caliber; Savage Model 24V 3030 & 20 ga. with Weaver 4 Power Scope; Weaver 25 High Power Scope; Stevens 22 Single Shot Rifle; 22 Semi Automatic with Scope; 12 ga. Shot Gun without Stock, Quartz Haligan Spot Light

Terms by:

### **MARVIN L. & SUSIE L. HABEGGER**

Auctioneers:

Lamar Z. Sensenig, 354-8116 Paul W. Horst, 445-5119

No out of State Checks will be accepted Lunch stand proceeds will go to kidney machine patient. Baked goods and food donations accepted. Excess will be put up for auction at end of sale.

Reason for selling: Moving out of state Not Responsible for Accidents

good grazing year and replenish depleted forage stocks to continue expansion.

Originally, some economists had figured on a strong early rebuilding phase in the current cycle. But high interest rates, lower returns (in the face of ample drought curbed that rebuilding,

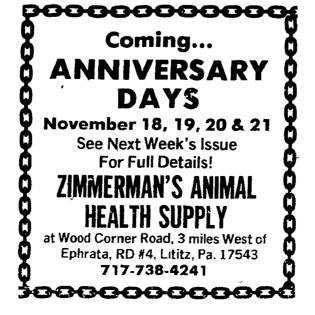
picture.

expect the expansion phase to peak about 10 million dairy cows.

1988.

Fluctuations in supplies and prices could be reduced considerably if production were geared to consumer demand. But, this achievement depends on obtaining answers to several questions. What is future demand? How can cattle inventory be limited or increased to meet the demand for beef plus supplies of competing meats? Even if supply is matched to demand, can such a production level be maintained over-time?

beef and other meats



# Dogs attack sheep

(Continued from Page A38)

attacks happened some time ago, however "I just didn't expect it to happen again," sighs Virginia, as she latches the pasture gate

What can sheep producers do to protect their sheep from attacks by dogs?

According to a Pennsylvania Department of Agriculture spokesperson, new fencing solutions might be the answer.

Some producers have turned to the New Zealand high tensile fencing rather than the standard American wire sheep fencing. Others have strung a trip wire, a strand of wire located 8 inches on the outside of the 6-inch box wire fence and several inches above the ground. This is supposed to prevent the dogs from digging under the fence. Still other shepherds have adapted 3-strand electric wire not more than 3 feet off the ground to meet their needs.

Other solutions might include: strapping brass bells around the necks of several sheep (the noise scares some dogs away and alerts the owner of trouble); running goats with sheep (they tend to be more defensive); having a good sheep dog; and educating dog owners of their responsibilities.

Pennsylvania's acting dog law director Dan Martin comments that "the best way to keep sheep protected is by a shepherd's constant surveillance and by bringing the sheep in at night.'

He adds that some management practices of sheep producers actually invite trouble, such as allowing loose sheep to wander.

since January, Pennsylvania has paid out \$39,000 to reimburse sheep producers for losses to dogs. Altogether, the state has awarded \$46,000 in damages to farmers for all livestock killed by dogs, which included one horse, calves, and

During that 10-month period. there were 758 sheep killed by dogs in this "education" process.

across the state, primarily in southwestern Pennsylvania where the popultion density of sheep is greater. Of that total, the state paid for 632 sheep under an animal indemnity grant, giving fair market value for commercial sheep and a slightly higher price for registered stock. The other sheep were killed on farms where the owners' dogs weren't licensed - one of the qualifications for reimbursement.

The state legislature has allocated \$50,000 for this rembursement to farmers, the same amount as last year when funds ran out at the end of April This amount, however, can vary - one year it was set at \$66,000.

These funds are used to cover the cost of livestock and poultry killed by dogs, along with reimbursement for expenses to injured animals (up to the price of the animal). And, these funds are used only when the dogs' owners cannot be located or determined; otherwise, the dog owner pays all damages.

Martin explains that according to the Dog Law, Act 437 (1965), all dogs must be licensed and under the direct control of their owners at all times. He points out that any dog can be killed, regardless of license status, if a farmer catches it in the act of attacking livestock.

"If a farmer sees a dog attacking his livestock, he can shoot it or kill it by some other means — even if ıt's Rin Tin Tın," stresses Martın.

Last year, Pennsylvania's dog The dog law official reports that law enforcement officials prosecuted 5,600 people for violations. "People don't understand they have a responsibility when they own a dog. Some people only learn by being fined.'

Until pet owners are shown how much damage "man's best friend" is capable of, farmers' livestock will continue to be the main course

## NPPC grants

(Continued from Page A27)

density of DNA in the cell, and to the rates of muscle synthesis and breakdown.

-Feeding Animal Fat to Sows and the Effect on Baby Pig Body Energy Storage and MIlk Yield of Sows; Dr. R.W. Seerley, University of Georgia; to determine the role of fat in the sow's diet to fetal development and milk yield and to determine a practical method of increasing the baby pigs energy storage during late fetal development.

Reproduction Improvement

-Improving Rebreeding Performance in First-Litter Sows; Dr. J.H. Britt, N.C. State University; to evaluate the effects of adding fat to lactation rations, of weaning the heaviest pigs in the litter early, and of treating with hormones oi. the rebreeding performance of first-litter sows.

- Does Sow Management (Individual Crate vs Group Pen) from Weaning to Day-30 Gestation Affect Reproductive Performance?; Dr J.S Stevenson, Kansas State University; to determine the effects of housing sows in individual stalls or group pens at weaning on weaning-toestrus interval, percent sows bred by 15 days, pecent sows open 18-to-25 days, and percent sows farrowing

- Correlation of Semen Quality Evaluation and Boar Fertility in Commercial Swine Herds; Dr B J Thacker, University of Minnesota, to determine whether semen quality evaluation is correlated with the fertility level of boars in commercial swine herds.

- Seroepidemiology of Porcine Parvovirus in Boars Upon Entry into the Breeding Herd and at Slaughter; Dr. B.J. Thacker, University of Minnesota; to determine the serostatus of boars entering the breeding herd and whether seronegative boars seroconvert following entry into the herd.

- Causes of Delayed Puberty in Gilts Due to Confinement Housing; Dr. G.B. Rampacek, University of Georgia; to compare ovarian response to hormone treatment, gland response to ovariectomy, and gland response to hormone treatment in confined and nonconfined gilts.

- Evaluation of Daylength (Photoperiod) and Light Intensity (Photointensity) as Causes of Delayed Puberty and Behavioral Anestrus in Confinement-reared Gilts; Dr DR. Zimmerman, University of Nebraska; to determine the influence and inaction of photoperiod and photointensity on age at puberty and regularity of cyclic activity following puberty

Special Project

Establishment of Prediction Equations to Evaluate the Composition and Efficient Growth of Market Swine, Dr RG Kauffman, University of Wisconsin, Dr L L Christian, Iowa State University, Dr. H R Cross, USDA/USMARC, to develop a formula to predict the composition of market hogs based upon objective live animal or carcass measurements