

• Shorter Day
(Continued from Page 13)
24-hour schedule.

ARS poultry scientists use an artificial lighting system — part of a larger network of environmental controls — to change light into darkness inside an experimental henhouse every 18 hours. They expose a genetically selected flock to four short days, instead of three conventional days, during every 72-hour period.

Commercial poultrymen began lighting houses artificially many years ago, after noting that hens lay extra eggs in spring and summer when days become longer. But they normally keep total day length at 24 hours and vary only the ratio of light to darkness.

Behind the ARS effort to shorten the chicken day lies the fact that today it takes a good hen about 24 hours to produce an egg. And so, like many body processes, egg production appears tied to the rhythm of day and night.

ARS poultry geneticist H. L. Marks, in charge of the short-day project, reasons that a more rapid day-night rhythm might allow chickens to accelerate their production. In other words, some chickens with the proper genetic potential might be conditioned to lay an egg in an average of about 18 instead of 24 hours.

To see if this theory works, ARS farm electrification engineers helped poultry scientists in equipping an experimental henhouse. For lighting control, they installed time clocks which provide 12 hours of light alternating with 6 hours of darkness, thus paralleling the 21 ratio of 16 hours light to 8 hours darkness that many poultrymen use. Also, they devised an air-conditioning unit that keeps the chickens warmer (10 to 15 degrees F) when it is light than when it is dark. This equals the difference in outside temperatures between day and night.

Several generations of chickens — from parent stock that varied considerably in genetic makeup — have been selected for improved egg production on 18-hour days, and compared with a similar flock working regular 24-hour days. So far, both groups have improved from generation to generation at about the same rate.

Selection for high lay generally improves egg production up to a point, after which it levels off. Since both the short-day chickens and the controls are still improving, it is too early to say whether the experiment will produce the hoped-for results. The true test of the

MYER SALE REPORTED

Diller and Kreider, Auctioneers, reported the following prices at the Donald Myer Farm Dispersal sale, Bainbridge, Thursday, February 24: John Deere 3020 tractor, \$4405; N.H. 268 baler, \$1,560; N.H. 404 crimper, \$470; Brady Spreader # MS 141, \$435; N.H. 56 rake, \$410; Farmec elevator, \$430; blower, \$400.

John Deere corn planter, \$260; Hay \$35 a ton, and straw \$21 a ton; Milker pump \$305, and stainless steel strainers, \$15 and \$16.

It takes about 65,000 blue corduroy jackets each year to satisfy the demands of FFA members throughout the nation.

18-hour day, in other words, is in the question: Will hens on short days keep on improving their egg production after those working regular days level off.

If the answer is yes, and strains that produce well on short days can be established, poultrymen may have to keep them in windowless

houses operated by time-clocks similar to those used by ARS researchers. It is possible, however, that these strains will continue to lay at a high level, even when exposed to conventional lighting. Several more years of research will be necessary before scientists can say whether either method will help the commercial egg producer.

PRIVATE SALE

— of —

FARM IMPLEMENTS and DAIRY EQUIPMENT

Located 1½ miles south of Route 30 midway between Mountville and Columbia. Turn south at Catholic Convent on Prospect road.

5 Tractors — Cockshutt 40, Cockshutt 30 diesel with loader, Cockshutt 30 diesel for parts, International 350 with plow, mower and 3 point adapter, IHC with plow, cultivator and 2 man tobacco hoer, garden tractor, IH 46 baler used 3 years, IH crimper, used 2 years. New Idea manure spreader, New Ideal 2 row corn picker, mounted, transport disk, 3 wagons with beds, 6 tobacco wagons, tobacco planter, and a complete line of farming and tobacco equipment.

Dairy Equipment — Barn cleaner used two years for 26 cows, 5 and 6 can cooler, 30 milk cans, 2 unit Surge milker, late style with narrow bore and complete line of Dairy equipment.

Terms by

MELVIN SAGER

Columbia R. D. #2
Phone 684-8895

PUBLIC SALE

— of —

Farm Equipment

In Pequea Township, 2 Miles South of New Danville, turn East at Buckwalter's Shop, second place on the right or in Willow Street at Hildebrand's Crossing, turn off Route 272, travel 3 Miles West to farm, Lancaster County, Penna.

Saturday, March 19, 1966

12:00 NOON

3 TRACTORS

OLIVER 88 DIESEL, COCKSHUTT 30 WITH 3 PT. AND CULTIVATORS, JOHN DEERE M WITH PLOW, CULTIVATORS AND TOBACCO HOERS

New Idea Hay Conditioner (like new), Allis Chalmers 3 pt. Mower (2 years old), Gehl Mix-All Grinder and Mixer (like new), 2 Rubber Tired Wagons, McCormick 3-Bottom Trip Plow on Rubber, Cockshutt 2 Bottom on Rubber (trip bottom), Massey Harris Heavy Duty Offset Disc, Graham Plow with Cylinder, Cockshutt Disc Harrow, Dunham Cultipacker, Spring Tooth Harrow, 32 ft. Cardinal Bale Elevator with 1½ H.P. Motor, 12 ft. Cardinal Grain Elevator, Smoker Grain Bin with Running Gear, One Row Corn Picker, 3 Tobacco Wagons, 16 ft., 18 ft. and 20 ft., 3 pt. Hitch Field Sprayer (Nylon Roller Pump), McCormick Corn Planter, Water Tank (approximately 750 gal.), Coop Grain Drill, Tobacco Press, 40 ft. Belt, Air Compressor, Platform Scales.

Lincoln 225 Amp. Welder, Electric Drill, Bench Grinder with Motor, ¾ H.P. Electric Motor, Extension Ladder, Bag Wagon.

1955 STUDEBAKER ¾ TON TRUCK

POULTRY EQUIPMENT

2 Mechanical Buckeye Feeders with Trough and Chain, Hand Feeders, Water Fountains, 4 Gas Brooders, 25 Poultry Crates, Keenco Egg Washer, Keenco Egg Grader, Egg Nests and Baskets.

Knapsack Sprayers, 2 Lawn Mowers, 3 - 21" Gang Pennsylvania Mower and 22" Rotary Mower, Tobacco Clippers, Bushel Crates, Insulated Cooler, Market Display Case, Computing Scales, Celery Tile, Sink, Wash Bowl, Chunk Stove, Skid Tank and Rotary Fuel Pump Fuel Tank with hand Pump.

HOUSEHOLD GOODS

Butter Churn (electric), Tappan Gas Range, 2 Metal Folding Cots, Plank Bottom Chairs, Rocking Chairs, Desk, Floor Lamps, Pressure Canner, Dishes, Jars and Crocks.

TOOLS:—Forks, Shovels, Hoes, Wrenches, Hammers, Garden Hose and many other articles.

TERMS BY

MARK S. HESS

Kreider and Diller, Auctioneers.
REFRESHMENTS BY NEW DANVILLE FIRE COMPANY

PUBLIC SALE

— of —

Farm Equipment

4 mi. west of Millersville, 1 mi. south of Rt. 999 on Prospect Rd., 1 mi. east of Washington Boro, Manor Twp. on Henry Hostetter farm.

SATURDAY, MARCH 12, 1966

CO-OP E4 TRACTOR; WD-ALLIS CHALMERS with 45 KIT - 2-way hydraulic system; C-ALLIS CHALMERS TRACTOR with 2 ROW CULTIVATOR; W.C. CASE with SNOW BLADE; New Idea - Semi Mounted mower; No. 30R Allis Chalmers mower; Allis Chalmers Scraper Blade; Allis Chalmers 60 Series Two Way Plow, 16" bottoms; Allis Chalmers Rake; Allis Chalmers Forage Blower with Wisconsin motor and pipe for 50' silo; Brady Hay Crimper; 2 Grove 5 ton wagons, 6 ply tires, 16 ft. beds, silage sides; Grove unloading unit and false front; Cockshutt 262 Wheel mounted Disc Harrow; G.I. Cultipacker; 3 section spring harrow; 7-tooth Graham Plow; Superior — 16 disc — 7 Grain Drill; MC Fertilizer Drill; Badger forage Harvester with windrow pick up and corn head (used 2 seasons); 2 12A New Idea Manure Spreaders; 10' Weeder; 2 Grain Augers, 8' and 16' with ¾ horsepower motors; 24' Smoker Elevator with 50' x 6" belt; 12 KW Generator.

POULTRY EQUIPMENT

Keenco egg grader; Chore time egg washer; egg baskets; chicken crates; Range Shelters; Nests; Feeders.

DAIRY EQUIPMENT

20 qt. milk pail; Dairy scales; Stewart electric Clippers; Electric Calf Dehorner; Log chains; Ropes; Forks, Shovels.

STRAW BY THE TON

HOUSEHOLD GOODS

Columbian Coal Range; Butcher Furnace and Iron Kettle; Double Bed; Bureau; Library Table; 2 Wash Stands; Twin Laundry Tubs; Jars; Dishes; Crocks; other items.

SALE STARTS AT 12:30 P.M.

by **JOHN S. HESS**

R#1 Washington Boro, Pa.

Aucts.

Carl Diller 392-5235

J. Everett Kreider 284-4517

Refreshment stand by Farm Women #23

PUBLIC SALE

Complete Dispersal of Dairy and Farm Equipment

LOCATION:—Take Route 999, 1 Mile West of Millersville, bear right and follow signs ¾ Mile, Manor Township, Lancaster County, Penna.

THURSDAY, MARCH 10, 1966

12:00 NOON

42 HEAD OF AYRSHIRE AND GUERNSEY

DAIRY CATTLE

30 AYRSHIRE COWS, 3 BRED AYRSHIRE HEIFERS, 3 OPEN AYRSHIRE HEIFERS, 2 AYRSHIRE YEARLINGS, 3 GUERNSEY COWS, 1 GUERNSEY HEIFER

Bangs and T.B. Certified, Vaccinated and Artificially Bred. Mostly Fall and Winter Freshenings. Charts furnished.

Farmall H Tractor, Farmall C Tractor with Cultivators,

New Holland 66 Baler, New Holland Side Delivery Rake, 14 in. Two-Bottom Little Genius Plow, 24 I.H.C. Disc Harrow, 1 Spring Harrow, Cultipacker, Case Combine, Rosenthal Corn Husker and Shredder, Ensilage Cutter, 2 Manure Spreaders, New Idea and John Deere; Case Rubber Tired Wagon & Flats, 1 Steel I.H.C. Wagon, I.H.C. 13-Disc Grain Drill, 30 ft. Case Elevator, I.H.C. Cornplanter, Cornbinder, Lime Drill, Hammermill, Corn Sheller, ½ Ton Feed Mixer and Motor, Tractor Seeder, Butchering Tools, 2 Platform Scales, Iron Kettle and Furnace.

MILKING EQUIPMENT

DeLaval Milker; Pump and 2 Units, I.H.C. 6-Can Cooler, 16 Milk Cans; Buckets, Strainer, Water Heater; Corn, Hand-made Brooms, Forks, Shovels, Chains, and other articles.

TERMS BY

CLARENCE J. HUBER

Kreider and Diller, Auctioneers.

LUNCH BY THE MENNONITE YOUTH
NOT RESPONSIBLE FOR ACCIDENTS