



PENN STATE

POULTRY ♦ POINTERSPOULTRY SCIENCE • CAPITAL REGION • VETERINARY SCIENCE
FOOD SCIENCE • AGRICULTURAL ECONOMICS • AGRICULTURAL
& BIOLOGICAL ENGINEERING • ENTOMOLOGY**What Is Embryology?
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Embryology is the study of growth and development of embryos from fertilization to hatching. It is also the most popular 4-H youth program in the state of Pennsylvania and in

may other states. One of the reasons for this interest is the satisfaction and understanding that youth can gain from observation and the study of life.

The bird egg is ideal for this study because the development takes place outside the animal and can be easily observed and studied during the three week

incubation period (important for youth). The level of difficulty can be varied according to capabilities of the students involved.

Knowledge of embryology can also be used by hobby and commercial poultry producers to evaluate hatchery management. By breaking out the hatch residue one can determine when the embryo died, possibly why they died, and how a change in management of the equipment or handling of the eggs could improve reproductive efficiency.

While many are able to study this process in school with a teacher or a 4-H youth agent providing training and instruc-

tion, small groups or family 4-H groups could also accomplish this process by contacting their local extension agents. The agents and offices have resource material that can guide a study of embryology at many levels.

The first question is "where can I get the eggs and equipment?" The information is included in the manual "Beginning of Life." What's required is an incubator that can maintain 99.5 to 101.5 degrees F, fertile eggs, and time to manage and study the developing chicks.

Fore thought in deciding what to do with the chicks that hatch is important prior to setting the eggs in the incubator. Placement of the birds in a good home and humane disposal of all remaining embryos is essential and is discussed in the manual. After obtaining fertile eggs from a reliable source (eggs from the

grocery store are not normally fertilized), the eggs should be maintained in a manner to protect them from conditions that would cause early embryonic mortality.

Hatching eggs should be held at temperatures between 55 and 65 degrees F at 70 to 80 percent relative humidity (RH). Temperatures greater than 68 and lower than 40 degrees F can cause some embryonic death. Storage of hatching eggs for less than 10 days is advisable - optimal storage time is three days.

After storage, eggs are warmed to room temperature for 2 to 3 hours before placing in the incubator. Incubation is the process of maintaining environmental conditions favorable for development and hatching of eggs. The most critical incubation factors are temperature, humidity, ventilation and turn-

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Conservancy Celebrates Accomplishments

LANCASTER (Lancaster Co.)

The Lancaster County Conservancy, established in 1969 as a non-profit, private, membership-supported land trust dedicated to the conservation of Lancaster County's natural open space resources, will gather for its 30th Annual Meeting and Banquet on Saturday, March 6, 1999, in the Lehr Dining Room of Millersville University's Gordinier Hall. The evening will begin at 6:00 p.m. with a reception during which Mr. John Jarvis, former headmaster of Lancaster Country Day School and amateur cartographer of wide renown will sign and number prints of his historical rendering of a map of the Pequea Valley.

Following dinner, a brief meeting will follow at which time The Conservancy's

Volunteer of the Year Award will be presented to Fred Kyper, a land steward for the Tuquan Glen Nature Preserve; the Robert K. Mowrer Board Service Award will be presented to two retiring members of the board of directors, Valerie A Moul and Philip L. Taylor; and Land Conservator Awards will be presented to the Donald E. Rannels' family for their recent gift of 91 acres, the largest ever to be donated to The Conservancy.

The speaker for the evening will be Dr. W. Fred Kinsey, III, whose subject will be "Shenk's Ferry and Susquehannock Indian History." For over 40 years Dr. Kinsey has conducted research on the prehistory of eastern Pennsylvania and especially the Lower Susquehanna Valley. From 1955-1960, Dr. Kinsey was state archaeologist

and from 1960-1963 chief curator of the State Museum of Pennsylvania, Pennsylvania Historical and Museum Commission. Dr. Kinsey was a member of the anthropology department of Franklin and Marshall College which he chaired for five years, and director of the North Museum.

The public as well as members of The Conservancy are welcome to attend this event. The per person price is \$19.00 and reservations must be received by no later than February 26. For further details or to place a reservation, contact The Conservancy office either by phone at 392-7891; or by fax at 392-8220; or by email at conserv@redrose.net.

**Pa. Tobacco Market Report**

1-29-99	lbs. Sold 105,858	Avg. 53¢	High 64¢	Low 35¢
2-1-99	lbs. Sold 126,850	Avg. 51¢	High 67¢	Low 35¢
2-3-99	lbs. Sold 81,830	Avg. 56¢	High 67¢	Low 40¢

3 day total 314,538 Avg. 53¢

**We are still accepting Membership Application
To sign up Call the Warehouse 355-5336**

**Attn: Auction starting time will be
9:00 A.M. Mon., Wed. & Fri.**



Presents the Twenty First

**KEYSTONE
PORK EXPO****Wednesday, February 10, 1999 - 8 AM to 4 PM****at the Lebanon Valley Expo Center****Lebanon Fairgrounds, Cornwall & Rocherty Roads, Lebanon, PA****FREE ADMISSION****Silent Auction - Bids Submitted by 1:00 PM****A Sampling of Silent Auction Items:**

★ Longaberger Baskets ★ Winross Trucks ★ Ertl Trucks

★ Framed Limited Edition Prints ★ Farm Related Items

★ Quilts ★ Novelty Items ★ Plus Much More

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