

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

Nebraska 4-H Clubs: Historical Materials and Publications

4-H Youth Development

1928

Poultry Club Demonstration Problem XIII : Extension Circular 14-13-2

Follow this and additional works at: <https://digitalcommons.unl.edu/a4hhistory>

"Poultry Club Demonstration Problem XIII : Extension Circular 14-13-2" (1928). *Nebraska 4-H Clubs: Historical Materials and Publications*. 290.

<https://digitalcommons.unl.edu/a4hhistory/290>

This Article is brought to you for free and open access by the 4-H Youth Development at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Nebraska 4-H Clubs: Historical Materials and Publications by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

E.C. 14-13-2
Revised
1928

Nebraska
COOPERATIVE EXTENSION WORK
IN AGRICULTURE AND HOME ECONOMICS
U. of N. Agr. College & U. S. Dept. of Agr. Cooperating
W. H. Brokaw, Director, Lincoln

Extension
Circular
14-13-2

POULTRY CLUB DEMONSTRATION
Problem XIII

POULTRY PARASITES AND ENEMIES

Large numbers of people now live in congested areas. City governments find it necessary to safe-guard the health of the people by enforcement of sanitary regulations. When poultrymen bring together large numbers of chickens and force them to live in limited areas a great necessity develops for similar practices of sanitary regulations. The manager of a large poultry flock must assume the duties of a health officer. Such an officer must understand the methods by which poultry diseases are spread and how parasites develop and multiply. Some of the things a good poultryman should know about the parasites which endanger his flock are listed in the following outline.

- I. External parasites are those found on the body of poultry.
Lice and mites will be discussed.
- A. Lice of several species affect poultry.
1. Lice have gnawing mouth parts.
 2. Lice live on the skin and on the feathers.
 3. Lice deposit their eggs on the feathers of their host.
 4. Lice do not live long off of their hosts.
 5. To kill lice we must treat each bird.
 6. Contact with either dust or grease kills lice.
 7. Sodium fluoride is the powder and blue ointment is the grease recommended to kill lice.
- B. Two kinds of mites will be considered.
1. The red mite is a good blood sucking insect.
Scaly-legmite is a burrowing mite.
 2. Red mites hide in cracks of wood, under roosts, in nests, during the day and suck blood from the birds at night.
 3. Scaly-leg mites live under the horny coverings on chickens' shanks.
 4. To kill red mites the entire building should be cleaned, then all infested lumber should be sprayed or painted with an oil such as kerosene, crank case oil, or wood preservative.
 5. To prevent red mites from infecting a chicken house the roosts and drop boards should be so constructed as to prevent easy traveling, and be kept painted or sprayed with wood preservatives.

6. To kill scaly-leg mites, the scales are first softened for a few days by applications of soft soap or grease. After crusts are removed, the feet are washed with a disinfectant, then greased with kerosene and lard or benzine 1 part, olive oil 10 parts.
7. To prevent spread of scaly-leg mites infested fowls should be either removed from the flock or treated until cured. The roosts should be oiled as suggested for control of the red mite.

II. Internal parasites are those found within the chicken's body. Tape worms and round worms will be discussed.

A. Tape worms are flat ribbon-shaped and have segmented bodies. Several species are commonly found in poultry in Nebraska.

1. Tape worms live in the small intestine of chickens and other fowls.
2. Most tape worms found in chickens bury their heads in the intestinal walls to anchor themselves in place by means of hooks.
3. Tape worms absorb the food which the chickens have digested thus robbing the fowls. Tape worms give off poisonous substances which injure the health of the hosts.
4. Infested fowls remain hungry but become thin in flesh. (See Chart A-1).
5. Eggs of tape worms pass out of the fowl's body with the droppings. (Chart A-2).
6. Flies eat the eggs of the tape worms and the eggs develop to the larval stage within the fly. (Chart A-3, 4 & 5.)
7. Chickens eat the infested flies. The chickens then become the host of the tape worms which mature in about 60 days. (Chart A-6, & 7)
8. Tape worm injury is more noticeable during the last part of the fly season.
9. To break the life cycle of the tape worms, prevent chicks from eating flies by:
 - a. Destroying fly breeding places.
 - b. Keeping chicks on clean ground; away from old stock.
 - c. Keeping drop boards, houses, and feed vessels cleaned.
 - d. Providing chicks with a complete and balanced ration in self feeders.
10. For treatment of infested flocks see Nebraska bulletin 195, page 66.

B. Round worms are long, smooth, cylindrical, and thread like. Four species have been observed in Nebraska infesting common fowls.

1. Round worms live in the small intestine of their hosts. (See Chart B-1.)
2. Round worms affect chickens very much like the tape worms.
3. Eggs of round worms pass out of the chicken's body with the droppings. (Chart B-2)
4. Eggs of round worms undergo stages of development while they are in the filth of the poultry yard. (Chart B-3 & 4)

5. Eggs gain access to the chicks by becoming mixed with the feed or in the drinking water. (Chart B-5 & 6).
6. The worms hatch and mature in the intestine in 50 to 60 days. (Chart B-6 & 7).
7. Round worm injury is more noticeable where young stock are fed on infested ground and where young chicks are forced to eat what older stock refuse.
8. To prevent chicks from picking up eggs of round worms, keep:
 - a. Young stock away from older stock.
 - b. Young stock away from infested ground.
 - c. A full and complete ration before growing chicks.
 - d. All feed and water clean by providing protected feeders and waterers. (See Extension Circular 1441).
9. For treatment of flocks infested with round worms see Nebraska bulletin 195, page 68.
10. For plans of laying out poultry yards, see Extension Circular 1441, page 35.

POULTRY ENEMIES

Besides being a health officer for the flock, a good poultryman must also accept certain police duties if he is to prevent losses by such enemies as rats, skunks, weasels, coyotes, hawks, and crows.

I. Losses from rats are prevented by:

- A. Using rat proof floors.
- B. Eliminate hiding places under floors, in feed bins, and around older buildings.
- C. Well trained cats and rat hunting dogs.

II. Losses from skunks and weasels are prevented when roosting spaces are protected.

- A. By closing brooder houses when chicks roost on the floor.
- B. By providing enough elevated roosts when chicks are older.
- C. By trapping and hunting.

III. Losses from coyotes are prevented by:

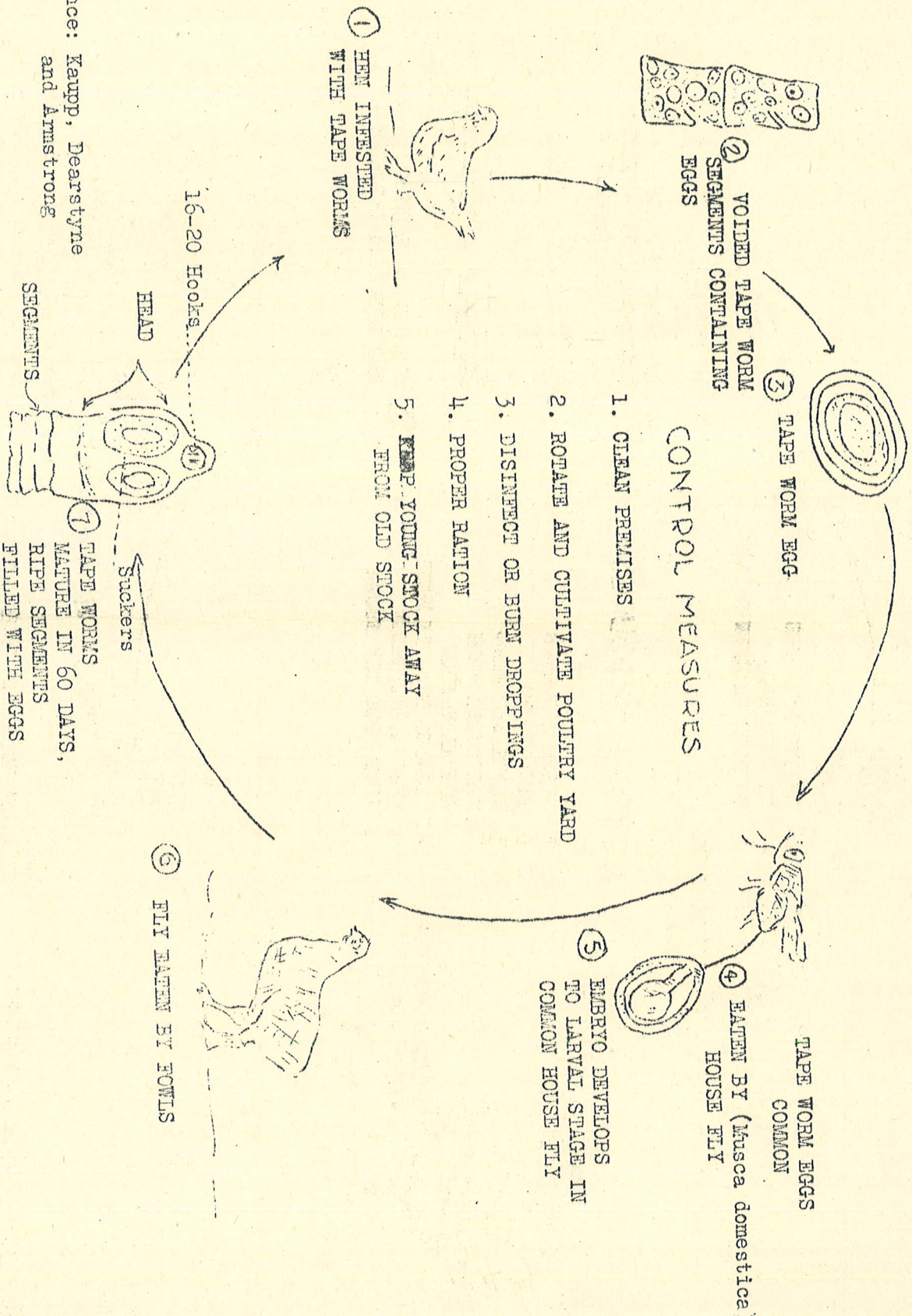
- A. Fencing and yarding.
- B. Hunting and shooting.
- C. Well trained dogs.

IV. Losses from birds of prey are prevented by:

- A. Birds that sound alarms such as guineas and geese.
- B. Well trained dogs.
- C. Hunting and shooting.

Note: In the preparation of this circular current literature on poultry diseases and subjects related thereto has been freely consulted, especially the charts on poultry parasites and diseases prepared by B. F. Kaupp, R. S. Dearstyne and W. F. Armstrong of the North Carolina State College. Other bibliographic references have been omitted. Prepared by Dr. L. V. Skidmore, Animal Pathology, and J. H. Claybaugh, Poultry Husbandry.

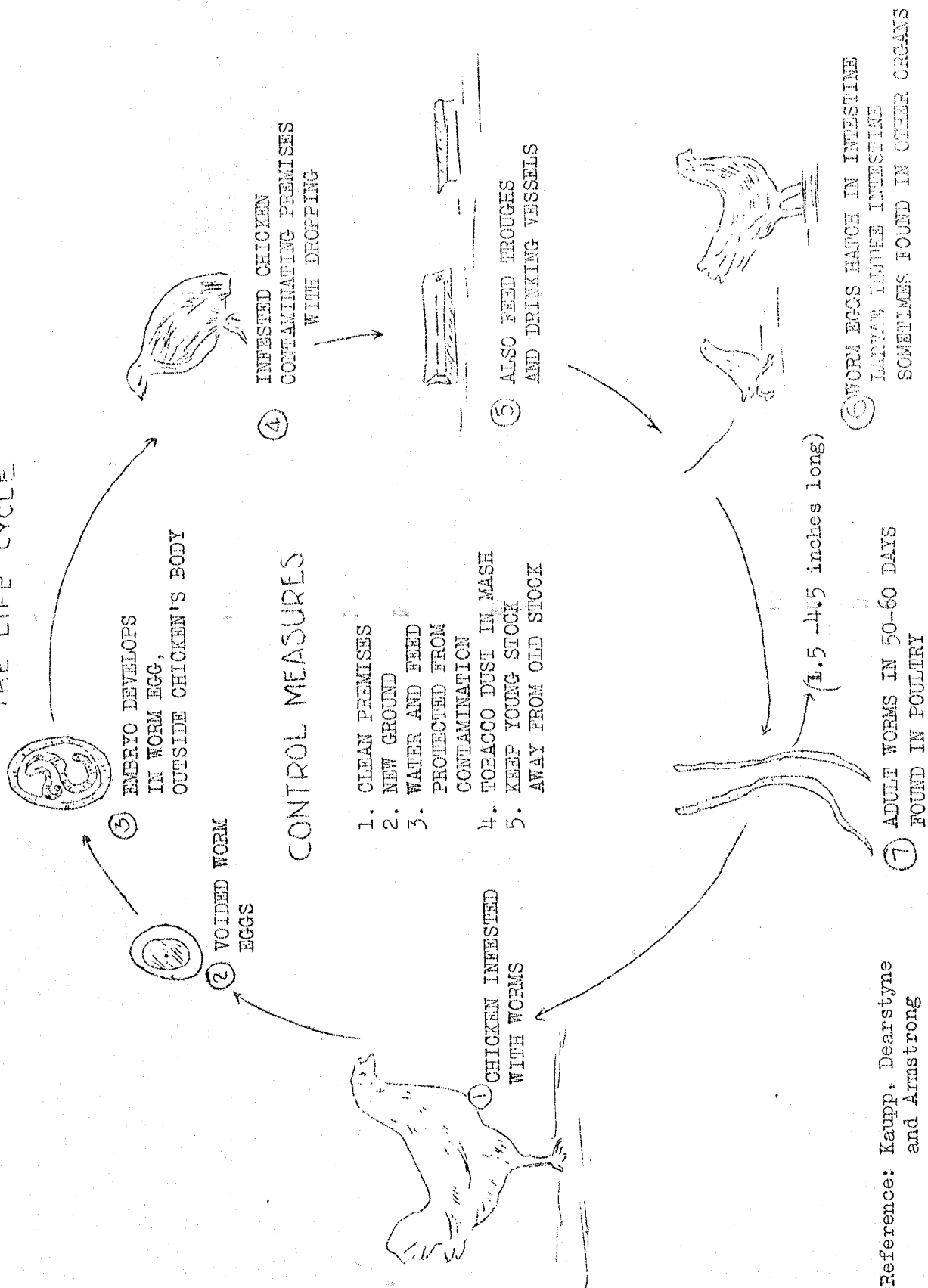
CHART 71 A COMMON POULTRY TAPEWORM ($\frac{3}{4}$ - $9\frac{1}{2}$ inches long) "CHAONOTAENIA INFUNDIBULIFORMIS" LIFE CYCLE



Reference: Kaupp, Dearstyne and Armstrong

CHART B

THE COMMON ROUNDWORM OF POULTRY (ASCARIDIA PERSPICILLUM) THE LIFE CYCLE



Reference: Kaupp, Dearstyne and Armstrong