

LIVESTOCK

UNIVERSITY OF MINNESOTA



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CONTROL



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Hogs

Round Worms

Sanitation Prevents Worms

1. Scrub the farrowing pen with boiling water and lye. (1 pound lye to 30 gallons boiling water)
2. Wash the sides and udders of the sow with warm soapy water before she is put into the clean pen.
3. Haul the sow and pigs from the central house to clean ground not pastured the previous year, or farrow in huts on clean pasture.
4. Keep the pigs on clean pasture until 4 months old.

Sodium Flouride Controls Large Round Worms

When round worms are present, treat the hogs with sodium flouride. Remember to follow directions carefully; sodium flouride is very poisonous!

1. Mix 1 pound sodium flouride with 100 pounds of dry ground feed. Slightly reduce the regular daily feed the day before treatment. Do not starve.
2. Give the amount of flouride-treated feed the pigs will eat in one day.
3. Mix left-over feed with the feed for the next day, with **no** addition of the drug.

Remember—Self-feed the mixture dry—never as a slop.

Hog Mange

Mangy hogs are down graded and won't bring top prices. In severe cases desired gains will not be made.

Benzene hexachloride is the best treatment.

1. Spray with a mixture of 3¼ pounds benzene hexachloride (6 per cent gamma isomer) and 10 gallons of water.

Control Those Flies

1. Eliminate breeding centers, such as manure piles, strawstack bottoms, etc.
2. Before spraying, remove all hay or other feed and cover mangers, troughs, and watering cups.
3. Spray the inside of all livestock housing structures **EXCEPT DAIRY BARNS**, with 2½ per cent DDT suspension. Prepare by mixing 2 pounds DDT 50 per cent wettable power with 5 gallons water.

Spray walls, ceilings, upright supports, stanchions, and all surfaces above 3 feet from the floor. Spray both the inside and outside of doors. Spraying at the start of fly season can solve fly problems for the season.

2. Crowd hogs in close quarters.
 3. Spray, being sure to cover all parts including the face and inside of the ears.
- One treatment is usually enough. This treatment will also kill lice.

Hog Lice

Heavy infestation with hog lice causes irritation and reduces the thrift of the animal.

In summer, spray thoroughly with 2½ per cent DDT suspension. 1 pound DDT 50 per cent wettable powder mixed with 2½ gallons of water makes a 2½ per cent spray.

In winter, dust hogs and straw bedding with a 10 per cent DDT powder. This is less effective than spraying.

Sheep

Internal Parasites

Internal parasites can cause heavy death loss. Affected lambs that live can be so unthrifty that they can never be fattened or finished satisfactorily.

Treat Twice for Control

To control parasites, treat the flock twice during winter—first, when they go on winter feed, and second, before turning to pasture in spring.

1. Mix 1 pound drench grade phenothiazine powder with 4 pints of water.
2. Use 4 ounces by measure of this mixture for each adult sheep and 2 ounces for lambs, administered with a dose syringe or a pop bottle.
3. Treat pregnant ewes no closer than 1 month to lambing.
4. In the late winter and early spring do not allow sheep to run on the land to be used as pasture in the spring.

Phenothiazine Helps Prevent Parasites

To help prevent parasites, keep the phenothiazine salt mixture, 1 pound phenothiazine to 9 or 10 pounds salt, before the sheep during the pasture season.

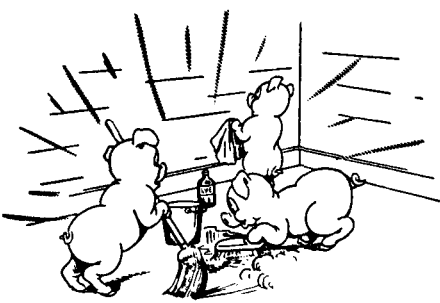
1. Feed the salt mixture in a covered trough to protect it from rain and sun.
 2. Rotate pasture when possible.
- Phenothiazine is not effective on tapeworms.

Tapeworms

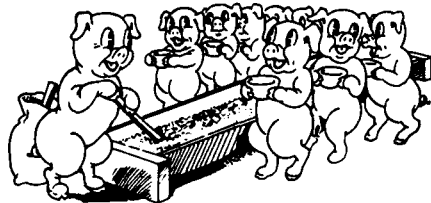
Treat affected sheep with copper sulphate and nicotine sulphate solutions.

1. Dissolve 4 ounces copper sulphate in one quart of hot water.
2. Add additional water to make 3 gallons of the solution.
3. Use only glass or porcelain containers.

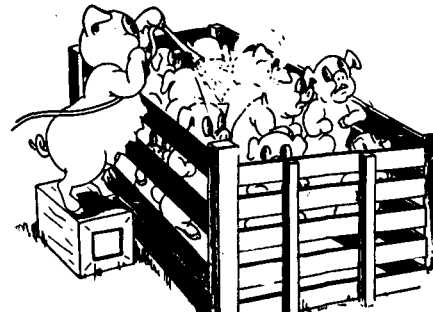
CLEAN PENS BEFORE FARROWING



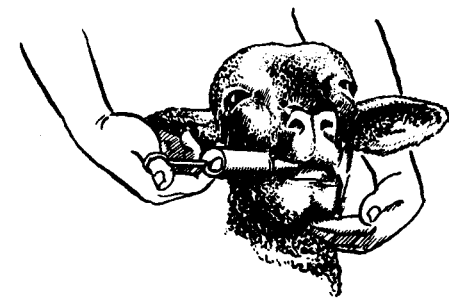
FOR WORMS, USE SODIUM FLOURIDE IN FEED



SPRAY FOR MANGE AND LICE



TREAT SHEEP FOR PARASITES



**Dilution Table for Mixing Varying Percentages of
Chlordane, DDT, and Methoxychlor Emulsions
or Suspensions**

Desired per cent	Amount of Concentrate to Mix with Sufficient Water to Make a Solution of 100 Gallons		Number of Pounds of Wettable Powder to Mix with 100 Gallons of Water	
	24%-25% Emulsifiable	45%-47% Concentrate	40% Wettable Powder	50% Wettable Powder
by weight	gallons	gallons	pounds	pounds
0.25	1	2	5	4
0.5	2	1	10	8
0.75	3	1½	15	12
1.00	4	2	20	16
1.25	5	2½	25	20
1.50	6	3	30	24
1.75	7	3½	35	28
2.00	8	4	40	32

4. Add 3 ounces of nicotine sulphate to the 3 gallons of copper sulphate solution.

For lambs up to 40 pounds, give ¾ ounce of this mixture; lambs 40 to 60 pounds, 1 ounce; lambs 60 to 80 pounds, 2 ounces; yearlings and older, 4 ounces.

Treat again in 3 weeks.

Sheep Ticks

In the past various products have proved satisfactory as dips to control sheep ticks. Now many prefer the more convenient methods of spraying and dusting affected animals. Two new drugs can be used with these methods. A single application of these drugs results in a complete kill and possible eradication. Fall treatment is desirable for both dusting and spraying.

DDT—Use as a spray or dip at 2½ per cent strength, made by mixing 4 pounds 50 per cent DDT wettable powder in 10 gallons of water.

ROTENONE—For a dip or spray, mix ½ pound derris powder, containing 5 per cent rotenone, in 100 gallons of water. Use 0.5 per cent rotenone powder for dusting.

Cattle

Cattle Lice

The rotenone dust mixture recommended for grub control will also control lice and may be used on milking cows during winter months.

SPRAY for summer—Treat same as for flies.

DUST for winter—Use 5 per cent DDT powder, prepared by mixing 1 teacup 50 per cent DDT wettable powder with 10 teacups of filler, such as

Do not use DDT for lice or fly control on cows producing milk for human use or for spraying the inside of dairy barns and buildings. Use instead 1 pound 50 per cent wettable methoxychlor powder to 5 gallons of water. In winter use a 5 per cent dust.

flowers of sulfur. Apply dust around head and neck, along back, and between legs. Repeat in two weeks.

Grubs, Flies, Maggots

Treat cattle with rotenone, by one of three methods, when grubs first appear (usually January) and every 30 days until grubs are eliminated. DDT will not control cattle grubs.

POWDER—Use 1½ per cent strength rotenone. This powder can be purchased ready-mixed or prepared by mixing 1 pound of derris (containing 5 per cent rotenone) powder with 2 pounds of dusting sulfur, flour, or fullers earth.

Apply powder with a shaker made by punching 15 to 20 holes in the top of the container. Sprinkle over the infected area and rub in with a stiff brush to contact the grub.

WASH—Dissolve ½ cup soap powder in 1 gallon warm water. Add 2 teacups (1 pound) derris powder (5 per cent rotenone) to this solution.

SPRAY—For power spraying, mix 7½ pounds of 5 per cent rotenone powder with 100 gallons of water. Apply 3 to 4 quarts per animal.

Treat horn flies with 2½ per cent DDT spray, prepared by mixing 2 pounds wettable 50 per cent DDT powder with 5 gallons water. This quantity will treat 10 animals. Treatment will last 4 or 5 weeks; repeat when flies bother again. This will also eliminate lice. **Do not use on dairy cows.**

For maggots, apply smear "62" or "82" on infested wounds twice a week until healed.

Livestock pest control depends on correct diagnosis and medication. When in doubt, consult your veterinarian.

THE AUTHORS

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