

FARM STOCK

TO PREVENT STOMACH WORMS

Shepherd Who Feeds Well, Drenches His Flock and Rotates Pastures Avoids Trouble.

(Prepared by the United States Department of Agriculture.)
"The stomach worm need not be a serious trouble for a good shepherd who has his lambs come early, feeds well, drenches the flock as a measure of prevention and provides a rotation of pastures or pasture crops."

That is the judgment of the United States department of agriculture on one of the most serious problems for owners of farm sheep. Definite information concerning the essential things is embodied in Circular No. 47, "Stomach Worms in Sheep—Prevention and Treatment," prepared in the bureau of animal industry. The whole subject is summarized in five questions and answers to them. Condensed, it is this:

How can one tell when sheep have stomach worms?
Dullness and lack of thrift are among the first indications. Scouring is often noticeable. These conditions might result from other causes, but when due to stomach worms, are accompanied by a pale, bloodless appearance of the skin and the mucous membranes of eyes and mouth. Sometimes there is a watery swelling under the jaws.

How do the worms injure sheep?
These very small worms live in the alimentary tract, principally in the "fourth stomach," and injure sheep by consuming blood, and by secreting a poisonous fluid which destroys red blood corpuscles. The injury is often fatal to lambs. Adult sheep are better able to withstand it.

How should infested sheep or lambs be treated?
Make a drench by dissolving one-fourth pound of powdered bluestone in a pint of boiling water, and add sufficient cold water to make a total of three gallons of solution. The dose for an adult sheep is three and a half fluid ounces, for lambs under a year old, one and three-quarters fluid ounces of this solution. It is better to use this early before serious trouble develops than to wait until the lambs begin to die.

Care, however, is necessary in drenching, and improper dosing may cause serious damage. While the lambs are with the ewes, change pasture every two weeks if possible and



Grass in an Apple Orchard Being Pastured Down by Sheep.

do not return the flock to the old pastures until the lambs are sold.

How do sheep become infested by stomach worms?

The stomach worm lays its eggs in the stomach of the sheep. They are passed out with the feces and hatch on the ground. In the last larval or infectious stage, the young worms climb up on grass blades and are taken into the stomach of the sheep and lambs with their food. They will live for a long time in the pasture. For all practical purposes it may be considered that a pasture will not remain infested longer than a year, in the absence of sheep or other ruminants.

Another way of freeing a pasture of its infection is to plow it up. It is not of much consequence whether every larval stomach worm in the pasture is dead or not. The object is to keep the number so reduced that they are not likely to prove injurious to sheep.

What methods can be employed to prevent loss from stomach worms?
Prevention when it is possible to take the necessary precautions is more satisfactory and economical than treatment. The most effective measures of prevention are:

Have the lambs dropped early, and feed to develop them as much as possible before they go on pasture. Rotate pastures. Where feasible, plow up infested land and put it in forage crops that will make good grazing for sheep. Where sufficient changes of pasture cannot be provided, drench with bluestone as a preventive and curative measure. Many successful shepherds dose all the ewes before turning them on pastures with the lambs, and after weaning time, dose all the lambs that

SUMMONS					
E-448	Imperial Townsite Co.	1, 2, 3, 4	41	Imperial	4.62
E-448	J. M. Culbertson and E. A. Baker	5	41	Imperial	1.22
E-448	J. M. Culbertson and E. A. Baker	6, 7, 8, 9, 10	41	Imperial	5.86
E-449	Stephen R. Lamb	1, 2, 3, 4	42	Imperial	4.65
E-449	Imperial Townsite Co.	5, 6	42	Imperial	2.34
E-449	S. F. Johnson	7, 8, 9, 10	42	Imperial	4.65
E-450	W. P. Rhorn	1	43	Imperial	1.34
E-450	S. F. Johnson	2, 3, 4, 5, 6, 7, 8, 9, 10	43	Imperial	10.30
E-425	Imperial Townsite Co.	9, 10, 11, 12, 13, 14, 15, 16	30	Imperial	9.20
E-451	Mrs. J. W. Snyder	7, 8	3	Laidlaw	1.92
E-452	Laidlaw Townsite Co.	2	7	Laidlaw	1.05
E-455	Laidlaw Townsite Co.	1	9	Laidlaw	1.05
E-456	Gertrude M. Woodcock	4	9	Laidlaw	1.05
E-457	Laidlaw Townsite Co.	22	11	Laidlaw	1.05
E-458	Lloyd J. Carbin	8	13	Laidlaw	1.70
E-459	Laidlaw Townsite Co.	15	14	Laidlaw	1.70
E-460	J. H. Davidson	23, 24	14	Laidlaw	9.85
E-461	Geo. W. Brown	1	17	Laidlaw	1.05
E-462	L. A. Leavengood	4	17	Laidlaw	2.12
E-463	D. M. Collingwood	20	19	Laidlaw	1.70
E-465	James Kierman	1	26	Laidlaw	1.05
E-466	Laidlaw Townsite Co.	2	26	Laidlaw	1.05
E-468	Mary Gerking	12	29	Laidlaw	1.05
E-469	Walter Spires	1	37	Laidlaw	.96
E-469	Ethel Spires	2	37	Laidlaw	.96
E-470	Nora Bothwell	1	38	Laidlaw	1.05
E-471	F. A. Boettinger	5, 11	45	Laidlaw	.53
E-471	R. O. Dedwell and E. B. Neiman	5, 11	45	Laidlaw	.53
E-472	Margaret Mera	2	46	Laidlaw	1.05
E-473	Laidlaw Townsite Co.	3	46	Laidlaw	1.05
E-474	Olive M. Eberwine	5	47	Laidlaw	1.05
E-475	Laidlaw Townsite Co.	5	56	Laidlaw	1.05
E-476	Serene Sellman	1	57	Laidlaw	1.05
E-477	Chas. F. Chafon	6	57	Laidlaw	1.05
E-478	Laidlaw Townsite Co.	2	58	Laidlaw	1.05
E-479	Otis Buck	3	68	Laidlaw	1.05
E-480	Laidlaw Townsite Co.	4, 5	68	Laidlaw	1.92
E-482	F. W. McCaffery et al.	7	3	Sisters	1.10
E-486	F. W. McCaffery et al.	2	6	Sisters	1.10
E-487	J. P. Duckett	9, 10, 11, 12	6	Sisters	4.07
E-490	William M. Berry	1, 2	12	Davidson's Add to Sisters	2.25
E-491	Carl J. Carlson	3	14	Davidson's Add to Sisters	1.10
E-529	R. E. Eaton	5	16	La Pine	1.09
E-531	Fred LaFollette	33, 34	27	La Pine	1.80
E-532	C. R. Murphy	23	32	La Pine	1.06
E-533	Loyal Brown	5	7	La Pine	1.06
E-534	John W. Gingerich	10	15	1st Add to La Pine	1.06
E-548	Elvira B. Leighthead	N 1/2, 2	9	Pine	1.06
E-555	Hunter & Staats	1, 2	10	Bend	27.02
E-559	C. W. Beaman	14	10	Deachutes	2.63
E-561	J. W. McKay	16	11	Bend	1.85
E-562	O'Neil Brothers	8	14	Lytle Add to Bend	1.85
E-566	Win. N. Roberts	11	17	Lytle Add to Bend	1.85
E-573	Kenwood Promotion Co	3	24	Kenwood Add to Bend	1.22
E-574	Kenwood Promotion Co	4	24	Kenwood Add to Bend	2.75
E-577	Newton & Koller	12	6	Wiestoria	1.85
E-579	W. D. Newlon	5	10	Wiestoria	1.85
E-581	Nellie B. Markel	8	11	Wiestoria	1.85
E-581	W. D. Newlon	10	19	Wiestoria	1.22
E-592	U. C. Coe Tr.	7	20	Wiestoria	1.22
E-594	Geo. S. Classon	1	25	Wiestoria	1.22
E-595	Newton & Koller	2	25	Wiestoria	1.22
E-598	Lee Dorby and C. A. Chandler	15	38	Riverside Add to Bend	1.85
E-601	N. S. Leithead	7	14	Center Add to Bend	6.35
E-602	N. S. Leithead	8	14	Center Add to Bend	12.57
E-603	LeRoy A. McComber	9, 10	14	Center Add to Bend	4.32
E-604	R. G. and Gertrude McCann	6	18	Center Add to Bend	1.23
E-608	A. and W. G. Weigel	3	3	Grandview Add to Bend	1.23
E-609	Oregon Trunk Development Co.	5	4	Grandview Add to Bend	1.22
E-611	C. S. Cox	10	5	Bend Park Add to Bend	1.22
E-612	C. L. Cox	5	11	Bend Park Add to Bend	1.22
E-616	Erickson and Nels Frederickson	7	101	1st Add to Bend Park	1.22
E-617	Olaf J. Falkenstrom	9	101	1st Add to Bend Park	1.22
E-618	E. W. Shuster	19	102	1st Add to Bend Park	1.22

(Balance of Summons on Page 6)

ALL BOWED BEFORE PATTI

Famous Cantatrice Adored as Probably No Other Singer of Any Generation Has Been.

The death of Patti, the adored diva of our grandparents, would have been a calamity if it had taken place to their time. She was not only an exquisite singer, but a woman unique for beauty, charm and loveliness. I knew her well. And how interesting it was to hear her talk of her youth. She vowed that she sang as the birds sing, from babyhood. An acquaintance tells me that he was at Ascot races on the day of Patti's debut, and came to hear her, and how, when, tiny, black-eyed and sweet, she came onto the stage at Covent Garden, not a hand was raised to greet her. But she sang, "And then it was as if the house had been of straw and had caught fire. People went mad over her."

Later Patti went to St. Petersburg. They strewed the stage with roses and camellias for her to walk on, and gave her diamonds and pearls in caskets. I remember her showing me a little Russian ring. It was a stone of gold, and on it were the notes in diamonds, in, do, re—"L'Adoree." A charming idea.

Not enough has been said of Patti's warm heart. She never forgot an old friend, and never neglected one; even when poor William Ganz was past playing accompaniments the diva let him play to her own despite. Ganz wore a wig—wigs, in fact—to deceive his best friends—wigs which he changed from week to week to suggest that his hair was growing. Patti knew all about it, and with "Maitre, your hair wants cutting," would send him off to the barber—the wig cabinet—for the shortest-haired one. And the round of deception would begin again.—London Mail.

Four chairs at your service at the

MEANT TO HOUSE NAPOLEON

Historic New Orleans Building, Long the Mecca of Governors of the State, is for Sale.

The Gem cafe, famous in New Orleans history as the rendezvous where the rescue of Napoleon from Saint Helena was plotted, where the first Mardi Gras parade was planned, where the state legislature met and worked out a campaign against the carpet-bag rule, where the exclusive Pickwick club was formed and where governors of Louisiana for years have held their discussions over coffee cups and wine glasses, is for sale.

Originally the home of a Spanish nobleman, the landmark of Rue Royal, which was a coffee house just across Rue Royal in the days when the "Senate," America's Monte Carlo, was running, is said to antedate the old "Absinthe house," which has been a mecca for New Orleans tourists. In late years despite the development of modern restaurants, the Gem cafe has been the political eating house of leaders in state affairs and has been visited by every governor since Louisiana has been a state.

LIVE STOCK NOTES

Keep more sheep.
Hogs and alfalfa seem to have been made for each other.
For the best bacon types of hogs, the Yorkshire and Berkshire are the most desirable.
Of all meats, it may be that of the hog will eventually prove to be the most indispensable.
Breeders of heavy horses have a great outlook, if they breed the kind



LIVE STOCK

LESS HOG LOSS BY CHOLERA

Lowest Number of Animals Lost in History of Live Stock Industry of Country.

(Prepared by the United States Department of Agriculture.)
According to records of the United States department of agriculture for the 13 months from April 1, 1918, to April 30, 1919, hog cholera killed 2,815,004 hogs, valued at \$62,042,688.16, in the United States. This is the lowest loss by numbers for a similar period in the live stock history of the United States, but on account of the high price of hogs the monetary loss was heavy. For example, during the year ending March 31, 1913, hogs numbering 6,064,470 and worth \$58,833,653 died from cholera, while the next year the disease took 6,304,320 hogs worth \$67,697,461.
Department experiments show that timeliness in vaccinating hogs against cholera is all-important. When ex-



Cholera Control Means an Increased Pork Production.

posed hogs were vaccinated, while still apparently healthy, losses amounted to only 4 per cent, but when vaccination was deferred until the animals showed external signs of sickness losses averaged nearly 20 per cent. This shows that the man who puts off the preventive treatment until his hogs are sick with cholera stands only about one chance in seven of preventing fatal results. It is important, also, to maintain hog yards and barns in clean and sanitary condition.

FEED FOR BEEF PRODUCTION

Silage Has Proven Profitable in Tests Recently Made by a Few Experiment Stations.

R. W. Clark, Colorado Agricultural College, Fort Collins, Colo.
Tests recently made by a few experiment stations proved silage a profitable feed in beef production.

Wisconsin fed one lot of steers per head per day as follows: Shelled corn 12.4 pounds, cotton seed meal 2.7 pounds, corn silage 32.8 pounds, and mixed hay 2.2 pounds. The cost of 100 pounds of gain was \$22.64 and the profit per steer was \$19.80. Another lot of steers was fed per head per day as follows: Cotton seed meal 3.5 pounds, corn silage 66.4 pounds, and mixed hay 2.6 pounds. The cost of 100 pounds gain was \$16.03 and the profit per steer was \$25.33.
The day of heavy grain feeding is over and to offset it the farmers are building silos and feeding silage.

Make Bells.
The science of bell casting has been practiced in one English foundry for nearly 350 years.

LOSS BY HOG TUBERCULOSIS

Raisers Should Be Posted as to Nature and Prevalence of Disease and Prevent It.

(Prepared by the United States Department of Agriculture.)
Hog raisers, says the United States department of agriculture, should be well posted as to the nature and prevalence of hog tuberculosis and how to prevent and get rid of it, so that financial losses may be avoided. Farmers' Bulletin 781 is devoted to a discussion of the subject.

LIVE STOCK NOTES

The big draft horse is self-repairing.

Prepare warm, dry, but well-ventilated quarters for the brood sows.

Early gains are the cheapest gains in feeding any kind of live stock.

In fattening hogs for market, they should be fed a balanced ration regularly.

There should be more hogs on many farms, enough at least for the meat supply of the manager.

Sleeping quarters should be provided that will keep the hogs comfortable and keep them from squealing and piling upon each other on cold nights.

Put it in The Bulletin.

New Ideas in Adding Machine.

At least two novel features are embodied in the construction of a new adding machine described in the Popular Mechanics Magazine. Most remarkable, perhaps, is the facility and safety with which it may be taken apart, in spite of its complex nature, a pair of pliers and a penknife being the only tools necessary. The operation of greatest value, however, is the machine's ability to subtract as easily as it adds. This is made possible by a simple reversing lever which causes the adding wheels to run backward.

Put it in The Bulletin.

RANCHER SHAKEN BY MEMORY LAPSE

S. N. Hill Has no Recollection of Occurrences, and Weeps When Interrogated.

Accompanied by his wife, and his father-in-law, W. H. Mayfield, of Wamic, S. N. Hill, Fort Rock rancher, who was recently missing for more than two weeks, while suffering from a lapse of memory, arrived in Bend late yesterday afternoon, and left this morning. He is being taken to The Dalles for medical treatment.

Hill has apparently no recollection of any occurrences from the time he left his home on the morning of January 3, until he came to himself Monday morning of this week, herding sheep on Wagontire mountain. He had been worrying constantly over financial matters for weeks previous to his disappearance. When asked concerning his experiences, he burst into tears.

RECEIVE INSURANCE FOR WOODS VICTIM

The Brooks-Scanlon Lumber Co., Tuesday received a check for \$1,259 in payment of the insurance policy of the late G. Van Marep, who was killed December 8, at the logging camp by a falling limb. The check will be forwarded to the beneficiary, Mrs. C. A. Mahan, of Hillsboro.

Dolls Long Popular

There is ample evidence that the use of dolls as an assistance to the operations of the young mind dates from the most remote times. Among the native tribes of Africa it was the custom of married women to carry a doll with them until they had a child, when the doll was discarded.

The Compleat Domestic Angler.
Advertisement: "For Sale—Elegant home, all improvements, fish pond and running water in house."—Boston Transcript.

The Best Paint for Vehicles

Has the Acme Quality trademark on the can. The finish is tough and elastic and withstands snow, ice, mud, dust, rain and shine. The color stays bright and the finish remains brilliant.

ACME QUALITY
Carriage and Automobile Paint
(Neal's)

is the right kind, not only for vehicles, but is best for lawn seats, porch furniture, boats screens, garden tools, and any outside surface requiring a durable varnish-gloss finish in handsome colors. Prepared for immediate use. Call or send for free copy of the Acme Quality Painting Guide Book.

ASK
BEND HARDWARE COMPANY
BEND, OREGON