

FARM ANIMALS

BLACK COLOR IS HEREDITARY

Feeding and Management of Sheep Have Nothing to Do With Appearance of Black Lambs.

(Prepared by the United States Department of Agriculture.)
The appearance of black lambs in a flock made up entirely of white sheep has been for years, and is still, a cause for wonder and the basis of superstitions. But the study of the laws of breeding and heredity has explained the reasons for the sporadic appearance of these inferior specimens. In a letter to a farmer who reported 25 black lambs from a flock of 175 purebred Shropshire ewes, all white, and who considered certain feeds the cause, the United States Department of Agriculture gives a clear statement of the principles involved.

Feeding and management of sheep, says Dr. Sewall Wright, specialist in animal genetics, have nothing to do with the appearance of black lambs. The black color is hereditary even though it may be transmitted by ordinary white sheep. The black color in such cases is called a recessive character. White sheep transmit this character at all transmit black in 50 per cent of their reproductive cells (ovules in the case of ewes) and spermatozoa in the case of rams) and white in the remaining 50 per cent. Thus, such white sheep mated with blacks, which can only transmit black, produce 50 per cent black lambs and 50 per cent white. All of these white lambs can transmit black.

White sheep which transmit only white, mated with blacks, produce only white lambs, but all of these white lambs can transmit black. When only one parent transmits black, the remaining 25 per cent are true blacks.

A Shropshire Sheep.
Breeding whites. In this case it is an even chance that a given ovum will transmit black and an even chance that it will be fertilized by a fertile cell which transmits black, making one chance in four that both transmit black, which is necessary for the production of a black lamb.

With 25 black lambs appearing in the flock, it is indicated that about 100 of the 175 ewes transmit black, assuming that all of the rams used are white. In this condition it is probable that an even larger number of ewes transmit it.

Department of Agriculture Bulletin 605, Principles of Live Stock Breeding, contains a detailed discussion of this problem. It may be obtained from the superintendent of publications, government printing office, Washington, D. C., for 15 cents.

DRY BRAN GOOD FOR HORSES

Better for Animals Easily Purged Than Warm Mash—Easy on Digestive Apparatus.

In cases of horses that are easily purged, it is better to give dry bran than a warm mash, and good clean bran may, with benefit, always form a portion of the dry feed of all sorts of young horses, as the mineral constituents will be available as bone-forming material. In most cases of illness a bran mash may with safety and benefit be given, as it does not overtax the digestive apparatus, but when there is evident irritability of the bowels, as in diarrhoea, etc., it is better to give bran in a dry state than in the form of a mash.

A warm bran mash is, however, of great service to horses that are suffering hard and receiving a large amount of grain. It should be given on the Saturday night, or any other time when the horses are resting the following day, as it has a decidedly laxative effect on the bowels. Bran in a dry state is an excellent, but in the form of a mash it is a laxative. If given once a week it will counteract the feverish symptoms which are supposed to result from high feeding; this should not follow if a proper system of feeding is adopted.

EXCELLENT FOR YOUNG PIGS

Pasture Supplemented by Limited Grain Allowance Is Fine—Animals Kept Thrifty.

Good pasture supplemented by a limited grain allowance is the excellent ration for young pigs, the pigs pasture not only make cheaper gains, but the succulent feed also certifies they obtain all in keeping their thrifty.

Avoid Tomato Wilt

If you are troubled with wilt or root rot of tomatoes, set plants in sand that has not been planted in tomatoes before.

Feed for Poultry

Feed the pullets nothing for the first 45 hours after hatching unless it is a little finely cut dandelion.

Fowl for Breeding Pen

When mating the breeding pens, do not use any fowl which is in anything but the best of health.

DAMAGE DONE TO FARMERS

Insects Can Be Destroyed by Use of Heat or by Fumigation With Poisonous Gases.

CARBON DISULPHID IS BEST

By Exercising Proper Precautions Infestations in Field Can Be Reduced—Thoroughly Clean Oil Bins and Granaries.

(Prepared by the United States Department of Agriculture.)
Most of the damage done by insects to the storage and shipment is due to two species, the granary weevil, the rice or black weevil, the lesser grain borer or Australian weevil, and the red Farmers' Bulletin 1200, "Common Grain Pests," prepared by E. A. Back and R. T. Combs, United States Department of Agriculture, Others of the 40 species or groups of species described in the bulletin can cause great damage if storage conditions are unusually favorable for their increase.

Recessed measures are mentioned only briefly in the bulletin. The insects, it is said, can be destroyed by the use of heat, or by fumigation with poisonous gases. A temperature of 120 degrees to 130 degrees, maintained for a short time, will kill all stages of grain-infesting insects, without injury to the germinating qualities of the grain. Carbon disulphid, carbon tetrachlorid and hydrocyanic acid are the fumigants in most common use today in treating infested grain. Of these, carbon disulphid is the best for treating grain in the bulk. It is said, information on this subject is contained in other publications of the department.

Prevent Infestation

Infestation of grain in the field cannot be entirely prevented, but by proper precautions, it can be reduced to a minimum, the bulletin points out. The first generation of insects in the maturing grain is usually small, and the grain is cut as soon as ripe, and then placed in clean, deep bins, the damage from this source will be slight. It is when the grain is left in the field longer after it is ripe that serious infestation results, for the insects increase in number in two generations in enormous numbers. In the case of corn in the field, only ears damaged through carelessness in shucking, so

POCKET GOPHERS ARE MENACE TO FARMERS

Neighborhood Party Plan Successful in Nebraska.

Eradication of Pests Difficult Unless All Farms in the Community Are Cleared Up in One Campaign—Plan Outlined.

(Prepared by the United States Department of Agriculture.)
The neighborhood party idea has been successfully applied to gopher extermination in Furness county, Nebraska, under the direction of a specialist of the biological survey and the extension agent in cooperative work of the United States Department of Agriculture and the State College of Agriculture.

The eradication of pocket gophers is very difficult unless all the farms in a district are cleaned up in one campaign. A district two or three miles long is selected by the county agent, and farmers in this district are invited to a gopher poisoning party. A full attendance is usually secured.

The meeting session is given to a demonstration in cutting the bait and applying the poison. Sufficient bait is prepared to supply the party for the day. In the afternoon, the party is divided into parties, one party carrying the bait and placing it in the runways while the other person uses a prod to locate and open the runways. The county agent or specialist spends some time with each party, giving instructions. All the infested areas represented by the farmers attending the party are covered and poisoned with bait. In many cases a second day is required to complete the work, but all members of the party invariably stay with the job until it is finished.

Gopher Exterminators and a Few Victims.

In Furness county the work has been limited to the alfalfa fields in the valley lands along three important streams, the Republican river, and the Beaver and the Sappa creeks. All last summer the farmers were constantly reminded of the importance of the work, and the agents were obtained from the community field parties in the fall. In the campaign 2,500 acres were covered. Figuring the cost of the material, the average farmer pocket gopher as well as a ton of alfalfa per acre, this area would mean 1,250 tons, or \$10,000 saved.

GIVE YOUR BEES NEEDED AIR

Reversible Bottom Board Furnishes Either Narrow or Wide Entrance as May Be Desired.

It is too much to ask of a hard-working bee flying outside the hive during its hours of rest, because the interior of the hive is too hot and poorly ventilated. "One remedy is to give the bees the needed air by cutting from the base board, using a tapering splitter or wedge under each side," says A. C. Burrell, extension entomologist of the Missouri College of Agriculture. "Or buy a reversible bottom board, which furnishes either narrow or wide entrance as desired. We do not advise setting the supers back a half-inch as this artificial ventilation interferes with the fanning bees. Keep your bees in a good shady location for the hot summer months."

SEVERAL DISEASES OF SOIL

Only Way to Overcome Fungus and Bacterial Ailments is Let Land Remain Idle.

There are several diseases of vegetables which live over in the garden soil from one year to the next, and if the same crop is planted in the same soil year after year it will be but a short time before the crop will be ruined. These are mostly fungous and bacterial diseases and the only practical way to overcome them is to allow the land to be idle for two or three years or to plant a crop which is immune to the disease.

SCATTER MANURE ON FIELDS

Not Advisable to Plant Escape of Gases and "Yam" Fodder—Haul Away Often.

Different farmers have different ways and means of caring for their manure, but suffice it to say, do not let it become exposed to the rain nor the sun. If possible, keep it piled up in order to prevent the escape of gases which are rich in plant food; as often a practice, haul the manure to the fields, scatter and immediately plow it under.

BEST DEPTH OF CULTIVATION

When Corn Is Eighteen Inches High Roots Will Be in Frangible Soil.

When the stalks of corn are 18 inches high the roots have not yet reached a 3½-foot row in light, friable soils. Deep cultivation at this time will cut many of the roots and check the growth of the plants. A good rule is to follow is to cultivate deeply in the season, and shallow later when the plants are larger.

IMPROVED ROADS

WAR MATERIAL DISTRIBUTED

Steady Surplus Supply Being Sent to Various States by Bureau of Public Roads.

(Prepared by the United States Department of Agriculture.)

A steady supply of surplus war material suitable for highway construction is being distributed to the states by the bureau of public roads, United States Department of Agriculture, which acts as a clearing house. A force of about 275 persons is kept in the field taking inventories and preparing material for shipment.

Lists of material available are sent to each state highway department, and a period of 30 days allowed for the submission of requisitions. The material is allotted to the state on the same basis as monetary federal aid for road construction, a value being placed on each item and a record kept of the total value received by each state. Up to February 1 of this year the value of the material thus distributed amounted to \$120,000,000, of which \$20,000,000 represented the value of motor vehicles and parts.

Recently an inventory was taken of about \$100,000,000 worth of material at Camp Grant, Woodford, Va., part of which will be retained by the War Department and the remainder, suitable for road work, soon will be available for distribution. The work is being rushed, so that the material may be used for road work early in the season and the camp cleaned up by August.

Other surplus war materials recently received for distribution and included at Schenectady, N. Y.: Water-tight boxes, and, in quantity, 200 cartons of brick, about half

A Federal-Aid Concrete Road in Minnesota

Which is suitable for highway paving; 5,000,000 pounds of nails; 1,000,000 pounds of staples; 1,000,000 square feet of concrete reinforcing mesh; 200,000 bundles of wire and 125 cartons of picks and pick handles.

Fred Knew Johnny

Fred Smith was badly crippled, physically, but his indomitable spirit kept him on a par with other lads of his age. He joined the pig club, and took care of his pig with great skill and enthusiasm.

MUD AS A DEFECT

A West Virginia educator at the National Education association conference was asked what he regarded as the greatest defect in American education, and he said in his district it was mud. Bad roads can be the greatest defect in any community.

GRAVEL ROADS ARE HELPFUL

Farmers of Massac County, Illinois, Are Not Bothered Much by Muddy Weather.

Muddy weather doesn't bother the farmers in Massac county, Illinois, very much, because there are over 200 miles of gravel roads in the county. These roads are made of gravel, coarse lumber. The cost of graveling roads in Massac county is just very great because the gravel is taken right out of the hills about the creek river. The same waste is used for road-making. In other cases the farmers have a good road to market.

Builders Attend School

In Wisconsin highway builders attended school where construction plans are discussed with a view of obtaining better understanding of the road problem and its solution. Among the students are: State, city, town, village and city road officials, contractors, foremen, patrolmen, roller operators and other road workers.

Many Good Road Advocates

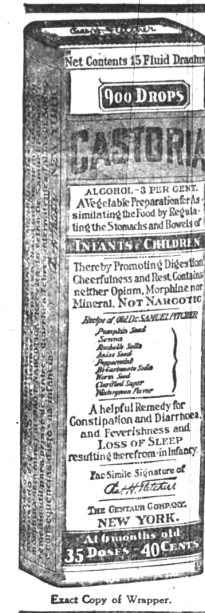
Throughout the United States there are no fewer than 30,000,000 people who are advocates of good roads.

Poor Way for Seeding

To scatter sweet clover seed on the surface of old roads and ditches, without proper preparation of the soil is like throwing money into the fire. Many have tried; few, or none, have had success.

Harm Done by Weeds

Weeds not only cause fertility from the soil but they also pump out an immense amount of moisture and thereby prevent what stand of grass there may be in the pasture from making a normal growth.



Children Cry For Fletcher's CASTORIA

Special Care of Baby.

That Baby should have a bed of its own all agreed. Yet it is more reasonable for an infant to sleep with grown-ups than to make a man's medicine in an attempt to regulate the delicate organism of that same infant. Either practice is to be shunned. Neither would be tolerated by specialists in children's diseases.

Your Physician will tell you that Baby's medicine must be prepared with even greater care than Baby's food.

A Baby's stomach when in good health is too often disarranged by improper food. Could you for a moment, then, think of giving to your ailing child anything but a medicine especially prepared for Infants and Children? Don't be deceived.

You should remember that it is important, Mothers, that your Baby must receive special care. No Baby is so abnormal that the desired results may be had from the use of medicines primarily prepared for grown-ups.

MOTHERS SHOULD READ THE BOOKLET THAT IS AROUND EVERY BOTTLE OF FLETCHER'S CASTORIA

GENUINE CASTORIA ALWAYS Bears the Signature of

Fletcher's

THE CENTRAL COMPANY, NEW YORK CITY.

10 Cents

OBJECTED TO SHOW PILLOWS

Usually Amiable Bachelor Had Reason for Returning From Week-End Visit With Grösch.

"Did you have a nice week-end?" Inquired the sweet young girl brightly of the popular bachelor.

"What was the matter?"

"O, the usual thing—the guest pillow. How many times have I had a good night in an uncomfortable and comfortable room ruined by an elephantine pillow. If you lay just your head on it you break your neck; if you try to move the thing it moves it down under your shoulders you might as well be sitting up."

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"What was the matter?"

10 Cents

PUTNAM FADELESS DYES—dyes or tints as you wish

KNOW NO LOSS BY THAT NAME

But Young Man Finally Figured Out Just Whom His Acquaintance Might Have Meant.

Other parties are not unknown even in the government bureau. Indeed—though perhaps this should be whispered—maybe "I'd better know there than anywhere else."

A bright young man holds down a very responsible job in one government unit and holds it down very snugly. His normal superior is generally recognized as merely a figure-head. Relations between the two are a bit strained.

The other day a Washingtonian, talking of the bright young man, remarked: "I nearly ran down your boss the other day in State circle," and he mentioned the boss by name.

The young man looked blank. "Have I a boss by that name?" he asked. "Oh, yes—I know whom you mean. We have a dead man up at the shop by that name."—Washington Post.

Not Custodians.

At the town meeting of a small place "at country" a citizen made a motion that was seconded in an astonishing way.

"Mr. Moderator," he said, "I move that the town set aside money for horse combators to be stationed at proper places."

At that an old fellow in the rear of the hall who was hard of hearing rose abruptly. "Oh, yes—I know whom you mean. We have a dead man up at the shop by that name."—Washington Post.

Not in the Ongoing Business.

"I see where it's been discovered how to hurt thunderbolts," said the garrulous stranger.

"Well, did, if he hasn't a dollar he can't get a license."

New Versions.

Jug and you'll not be Jugged.—Wayside Tales.

There never was a rich man who didn't do more kindly deeds than he was given credit for.

Disbelieve sometimes gets human society along as fast as belief.

Most good fellows are that way only away from home.

A Threatened Strike.

Bobble—Pop, you gave me nickel to keep quiet an hour and the hour's up.

Pop—Here's a nickel for another hour. Don't bother me.

Big Spruce.

"Another sensational druggist." "What's he featuring?" "Drugs."—Louisville Courier-Journal.

The best way to cure a bad habit is never to acquire it.

Optimism is glorified, intrepid, hopeful common sense.

Supernatural Honor of the White-town schools took some figs, which his mother intended for cooking, without her knowledge. The following conversation ensued:

"Did you get some of the figs, Philip?"

"Yes."

"What did you do with them?"

"I threw them away."

"What did you do that for?"

"I hit into one and it had bug's eggs in it, and I wasn't going to eat bug's eggs, was I?"—Indianapolis News.

Doctors Declare Music Healing.

Music, as a powerful healing agency for physical as well as mental malady, was one of the principal topics of discussion at the annual meeting of the Tri-State Medical association at Memphis recently. Approximately 450 physicians and surgeons from Missouri, Arkansas and Tennessee heard this subject discussed. The physicians were enthusiastic in boosting music as a healer and claimed it, in certain circumstances, as almost as effective as drugs.

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