

THE FACTS ABOUT HAY

Information Relative to the Nutritive Substances of Varieties

PROPER CARE FOR BEST RESULT

The Bulletin from U. S. Department of Agriculture Contains Some Very Valuable Facts About Care of Hay—Much Depends Upon Time it is Cut and Method of Curing the Hay.

The following is taken from the Bulletin 362, U. S. Department of Agriculture, and contains some very valuable facts about hay and curing:

The nutritive substances in feed may be divided into three classes—flesh formers and energy producing substances. When the proper proportion of these two classes is fed the ration is balanced. If an unbalanced ration is fed, as one giving more fuel or energy producing substances than are needed for flesh-forming, the ration is partially unbalanced, and such unwise feeding will bring as good results as feeding of the same amount of balanced ration. Each class of substances has different offices to perform in the body. If not in proper proportion, the body suffers, because it is absolutely necessary to keep the body in good condition. Thousands of horses are fed all the year, yet are poorly conditioned because the food contains too much of the wrong kind of substance.

There is another factor which is very important in determining the feeding value of hay; that is palatability. A hay may be high in nutrients, but if it lacks palatability it is not as valuable a feed as a hay that is poorer in nutrients but is very palatable. Timothy is a very palatable hay, and this is one of the chief reasons why it is a standard in most markets. In addition to this, a horse can be fed a large quantity of it and will suffer no ill effects if given a hard drive immediately after having eaten the hay.

Palatability may depend largely on the time the hay is cut and on the method of curing. Red top may be cited as an example. It is quite generally true that in most markets feeders discriminate severely against redtop whenever it is found mixed with any other kind of hay. They claim that red top has no feeding value and that horses will not eat it. The point that the feeder overlooks is that when redtop is cut too late it has a bitter taste, is not palatable, and horses do not relish it, but if cut early it has a sweet taste, is very palatable, and is more nutritious than timothy hay. When buying timothy that contains red top, feeders should examine it carefully in order to see if the redtop was cut early and properly cured. If it is properly cut and cured it does not lower the quality or feeding value of the timothy, but if found to be cut late then the bid should be lowered accordingly. It is very seldom that red top is cut at the proper time, and it is safe to say that not over one half of the crop is cut early enough.

Again, there are kinds of hay that when first fed appear to lack palatability, but after the horse has acquired a taste for the hay he does very well on it. On the other hand, some kinds are eaten greedily when first fed, but later, will furnish two and four times as much energy as the same quantity of hay. In fact for horses palatability may be an objection in some cases. Many horse feeders have tried alfalfa and are of the opinion that it is of no value for horses.

Upon careful inquiry it has been found that a large percentage of the cases where serious results were experienced from feeding alfalfa it was on account of ignorance as to the nutritive value of the hay. Unwise use such as feeding in two large quantities, has led many to become prejudiced against it. If alfalfa hay is properly fed it will be found one of the most valuable feeds, especially for heavy draft horses.

The digestibility of the nutrients of hay is another factor that is important in determining its value. If only a small part of the nutrients is digestible, or if a part has been lost by faulty methods of haymaking, then the feeding value is lowered correspondingly. The digestibility may be lowered and the total amounts of nutrients lessened by improper curing and handling of the hay.

Plants like alfalfa and clover which have a large amount of nutritious leaves often lose a considerable portion of them on account of poor methods of curing. Alfalfa hay cured under ordinary conditions will lose from 15 to 20 per cent of its leaves. The loss may amount to from 50 to 60 per cent. Alfalfa hay which has lost the greater part of its leaves and consists mostly of stems is often found in the market; consequently, it is only about half as valuable for feeding purposes as when the greater percentage of the leaves is saved.

The Colorado Agriculture Experiment Station found that when alfalfa hay was exposed in the field for fifteen days, during which time it was subjected to three rains, amounting to 1.76 inches, the damaged hay contained but 11 per cent of protein, as compared with 18.7 percent originally.

In an experiment to determine the loss during the rain, part of a field of grass hay was left in the cock and part in the swath during a rainy spell of 18 days duration. At the end of this time the hay in the swath lost 38.8 per cent of its digestible protein, while that in the cock lost only 19.8 per cent. The total nutrients lost in the swath were twice as great as those in the cock. This experiment shows that the value of hay cured during unfavorable weather depends a great deal upon the manner or system used in curing hay. Such things as these are of the utmost importance to the feeder. So far as it is possible to determine from an examination of the hay, the price paid should depend on its value for feeding purposes. If this were so it would stimulate the producer to make every effort to cure his hay so as to get the best quality. If he received more for the better grades it would tend to discourage the production of low-grade hay.

Although there is no way of determining aroma, this quality of hay adds greatly to its feeding value, or rather its palatability. The writer knows one hay grower who has made quite a reputation on account of the aroma of his hay, and for this reason it out sells that of his neighbors every year. There is a good reason why hay should not lie too long in the swath. When hay lies too long in the sunlight the bleaching which takes place indicates that chemical changes are going on and these are not of advantage to the hay. Hay that is cured with the least possible exposure to the sun and to dew and rain will have the best aroma.

Everybody knows what a real country editor is. But for fear there may be some who doubt their own judgement we will say that the country editor is a man, sometimes a woman, who never does anything right, who knows nothing about anything worth while, is the target for all of the abuse of the neighborhood, who can say all manner of nice things without praise, can mention all sorts of people without thanks, but let a word appear that does not quite tally with the views of "old subscriber," who is likely three years behind with his subscription, and he'll stop at once.

The country editor is the free horse, the deserter of all adverse criticism and the only one in the community who does not know how to run a newspaper.—Irrigator.

Any and all persons owing the firm of Hagey, Fenwick & Jackson, either on account or note, are hereby notified that all such accounts and notes are now in the hands of C. H. Leonard for collection. Such persons are hereby requested to make immediate settlement of the same.

Dated Aug. 6th, 1909.
HAGEY, FENWICK & JACKSON.

HILL BEHIND RAILROAD

J. F. Stevens Announces Connection With Deschutes Road

LINE IS TO BE PUSHED RAPIDLY

Stevens Owns Controlling Interest and Hill, as an Individual, Interested to Any Extent Necessary to Carry the Road Through to Successful Completion—Outlet to Central Oregon.

The Oregon Trunk line, which is contesting the route up the Deschutes canyon into central Oregon with the Harriman system, is controlled by John F. Stevens, former chief engineer of the Panama canal. James J. Hill, as an individual, is financially interested in the Oregon Trunk line to any extent necessary to carry the road through to a successful completion.

This was the voluntary announcement of Mr. Stevens last Sunday afternoon at Portland and finally settles the disputed question as to who has been behind Porter Bros., contractors and owners of record of the Oregon Trunk line, who have been making a spectacular fight recently for advantage in the Deschutes canyon.

It is the presumption in local railroad circles that the railroad will be the beginning of a line that will eventually terminate at San Francisco. Stevens' statement in full follows:

"On being asked several days ago if I had any interest in this proposition, or if I represented any railroads that were interested, I said 'No,' and the latter statement still holds good. "Since that time, however, I have acquired a controlling interest in the project, have all necessary financial arrangements completed, and the road will be built as fast as it can be reasonably done with men and money. The matter is a personal one, and I have no objection to saying that Mr. James J. Hill as an individual is financially interested to any extent necessary to carry the road through to successful completion.

"Plans in detail are not fully developed, but will become apparent from time to time as conditions may seem to require. It may be said, however, that the Oregon Trunk railroad proposes to provide as quickly as practicable a northern outlet for central Oregon, regardless of the designs of any one transportation company."

NEW IRRIGATION ORGANIZATION.

"The National Irrigation congress is still dominated by the reclamation service and forest service to such an extent as to threaten its usefulness and now there is a movement on foot to organize a body for taking up irrigation matters on an independent and more scientific basis," declared S. H. Hays, to the Capital News upon his return from Spokane where he has been in attendance at the seventeenth annual session as a member of the Idaho delegation. Owing to much dissatisfaction over the arbitrary repulsive manner in which the reclamation and forest services together with the Great Northern railroad interests act, it is probable that arrangements will be completed for a meeting of representatives of irrigated states to be held in Chicago this fall when a separate and distinct organization from that maintained in the past with the National Irrigation congress will be formed.

Instances of the domination of forest service, reclamation service and Great Northern over the annual session of the congress held in Spokane were manifest in practically every session of the congress, according to Mr. Hays. The program which contained 49 subjects that were discussed at the congress disclosed only 21 relating to irrigation and only six practical subjects on irrigation in that number. Then also the presence of Costello, traffic manager of the Great Northern railroad, which is assiduously

endeavoring to secure the expenditure of thousands of dollars by the forest service for improvements along the railroad right of way was considered distasteful to delegates desirous of considering irrigation problems. The position assumed by the forest reserve with respect to the operation of power plants was still another cause for dissatisfaction and raised a strong protest from the delegates of irrigated states.

Gives to Klamath Indians 4000 Cows.

A press dispatch from Pendleton says: Dr. S. W. McClure, chief of the Bureau of Animal Industry in the Northwest, has just returned from a six weeks' stay on the Klamath reservation, where he went to receive for the Government 4000 head of young cows for distribution among the Indians of the reservation. The animals were about half Herefords and half Shorthorns, and were 2 and 3 years of age. The contract for furnishing this large number of heifers of high grade was awarded to William Hanley, of Burns, and Dr. McClure says the stock furnished was exceptionally good.

The cattle were given to the Indians by the government in lieu of several thousand dollars due them from the sale of Indian lands, one of the famous Southern Oregon road grants having extended across the reservation. The heads of the Department of Indian Affairs reasoned that the cattle would do the Indian more good than the money, so the change was made. Four head of cattle were given to each Indian on the reservation, except to the youngest members of each family, who received three. By this arrangement some of the families got as high as 35 head of cattle. The cattle cannot be sold for at least two years, and while the head of each family has complete control of those apportioned to his minor children, he must accustom them to the situation here, having studied it in connection with his forestry work.

Since the commission was organized, much has been accomplished in protecting natural resources. Water power, timber and land have been saved to the state. It is expected that much good will result in furthering this work by the forthcoming convention. Citizens from the whole state are invited to attend. German residents of the state are to take part in large numbers in the celebration of German Day at Seattle August 19. German-Americans of the city will make the trip in two divisions, leaving on August 17 and 18. Preparations have been made at Seattle on a large scale to receive the visitors. The exercises will be held at the fair grounds and the exposition management is taking steps to make the affair one long to be remembered.

Work has been started in Portland on what will be the biggest and most complete cereal mill on the coast. The mill is being built by Albers Bros. and will be located on the river front, where additional property for the purpose was recently purchased. When complete, the plant will represent an outlay of \$1,000,000. It is expected the plant will be ready for operation this winter.

Joy riders have been put under the ban by the Portland Automobile Club and steps were taken at a meeting held this week to do away with reckless motorists. Recent killings by autos on speedways about the city by the class of drivers known as joy riders have caused the Automobile

Outlook for Poisonous Weeds.

Forest Supervisor Ireland has had several complaints lately from cattle and sheepmen who have lost stock from poisonous weeds and plants upon ranges that have been heretofore free from such noxious pests, says the Prineville Journal. Ed Laughlin of Beaver creek, lost three head, Bob Williams and others report losses. John McLennan lost some sheep that fed upon the injurious plants. Mr. Ireland wants every body who has lost stock of any

kind from the effects of poison to notify him so that his department can take the matter up at once.

He says that for several years the forest service, in co-operation with the Bureau of Plant Industry, has been making poisonous plant investigations on the national forests, which have been of distinct value to stockmen. While the number of such investigations is of necessity limited, every effort is made to give prompt attention to localities where great or unusual losses of stock have occurred.

The annual loss from poisonous plants in many localities is quite heavy and some ranges are becoming practically useless on account of these plants, or if used, the losses by death are so heavy as to materially cut into the profits of the business.

While no general plan of riding the range of these plants has yet been devised, it has been possible by close study of a particular species of plant responsible for the trouble. Many times an exhaustive study of the plant has proved that it occurs only on small areas which could easily be avoided. Other poisonous plants like the lupines or wild pea have been found to be almost harmless at certain times of the year, and at such times may be eaten by all kinds of stock with little danger.

Areas where poisonous plants are particularly plentiful are "flagged" by the forest rangers so that the herders may have warning of their condition, and where the area involved is not too great in extent, fences are built around them so that stock like horses and cattle could not reach them. It is believed that some of these poisonous plants can be choked out by planting certain aggressive grasses which in time will take full possession of the ranges. Other plants like the wild parsnip which is so fatal to cattle, grow to such a height as to be easily seen and are not so numerous but that they can be completely eradicated from a range by pulling them up by the roots.

INDUSTRIAL NOTES.

(Portland Correspondence).

The conservation of Oregon's resources will be discussed fully at Portland by the Oregon Conservation Commission, which will hold its convention on August 30. Gifford Pinchot, head of the forestry service, will be the principal speaker and will discuss the various phases of conservation in Oregon. He is thoroughly familiar with the situation here, having studied it in connection with his forestry work.

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Great Carnival of Bargains

This is the semi-annual cleaning up time, when we dispose of all short and surplus lines of stock in order to make room for our new fall merchandise shortly to arrive.

Bargains in all summer dress goods, white goods, embroideries, corsets, laces, novelties, etc.

Everything we have for sale is as bright and fresh as the day we received them, and reduced prices will prevail until all our summer lines are sold.

N. BROWN & SONS
BROWN'S SATISFACTORY STORE SINCE 1864
Patrons will receive Trading Stamps, during this sale.

The Harney Valley Brewing Co.
Manufacturers of
PURE BEER
and
Pure Soda Water
Family Trade Solicited—Free Delivery
T. E. JENKINS, Manager

THE CAPITAL SALOON,
CHAS. BEDELL, Proprietor.
Burns, Oregon.
Make This Headquarters.
Wines, Liquors and Cigars.
Billiard and Pool Tables.
Club Rooms in Connection.

M. L. LEWIS
Will be glad to furnish
PARTICULARS
and PRICES
To anyone desiring
INFORMATION.
See his Handsome
DESIGNS.

The OVERLAND HOTEL
Burns, Oregon
Afford the Best Accommodations
to be had in Harney County
CLEAN ROOMS, CLEAN LINEN, PALATABLE VICTUALS
The patronage of all guests under the old management especially solicited.
Rates \$1 a day, \$6 a week, \$24 a month
H. Anderson Elliott, Propt.

Intense Colicky Pains Relieved.
"For some years I suffered from intense colicky pains which would come on at times and from which I could find no relief," says I. S. Mason, of Beaver Dam, Ky. "Chamberlain's Colic, Cholera and Diarrhoea Remedy was recommended to me by a friend. After taking a few doses of the remedy I was entirely relieved. That was four years ago and there has been no return of the symptoms since that time." This remedy is for sale by all good dealers.
H. J. Hansen of the Burns Meat Market is prepared to furnish bacon, hams and lard to sheepmen and ranchers in any quantity. Special prices for big orders.