

ALFALFA ON DRY LAND

Three Conditions Under Which Farmers May Try Crop.

First, Where Sufficient Moisture Can Be Secured, in Locations Where Pumping Plant is Handy and on Deep Soil.

(By PHILIP K. BLINN, Alfalfa Specialist, Colorado Agricultural College.)

Alfalfa under dry farming conditions can not be expected to grow with the same measure of success that it does under irrigation, nor should the dry farmer expect success when alfalfa is sown in the same manner that is usually sown under irrigation; a different system of cultivation must be employed.

Alfalfa is a very drought enduring plant when it is once well established, if its roots can reach some deep sub-soil moisture, but it is a mistaken idea that the roots of alfalfa will penetrate through dry soil to reach moisture; it is impossible. It is essential at the very start, in seeding alfalfa, that there should be moisture in the sub-soil. It is useless to attempt to seed alfalfa on dry land, that has not been previously deeply plowed for several years, so that moisture has penetrated to considerable depth. If one contemplates seeding alfalfa, the best plan is to summer till the previous season with clean cultivation.

There are at least three conditions under which farmers could be advised to try alfalfa in the dry farming districts.

1. Along creek beds or water courses, where water or moisture from the underflow would supply the plants sufficiently to produce a fair crop.

2. In locations that might be watered with a pumping plant, or where the run-off from storms could be diverted onto fields, which were adequately ditched and furrowed to receive the water that might be available after heavy storms from land lying above. There are doubtless many such spots through the dry farming sections that could be well devoted to alfalfa.

3. On deep soil that has good moisture retention, and that has been deeply tilled to establish sub-soil moisture, alfalfa could be sown with a view to producing seed by seeding in wide rows, 36 to 40 inches apart, and sown very thinly in the rows. This has been a success in an experimental way at several points in the United States, and when the conditions are understood, there is doubtless a great field for some men situated to engage in alfalfa seed growing.

Under all dry farming conditions it is advisable to sow alfalfa in rows for intertillage, to conserve the moisture and to control the weeds, the width of the rows depending somewhat upon the probable moisture supply. Under conditions almost equal to irrigation, rows 18 to 20 inches apart have been successful, but on dry land which receives only the actual precipitation of 12 to 15 inches, rows 40 inches apart are necessary, the stand of plants in the rows must be very thin, for the overplanting of the limited moisture supply will be just as disastrous as overcrowding a limited water supply with a great herd of cattle.

Cultivation is absolutely essential to all dry farming crops, and especially alfalfa, to hold the moisture and to keep clean of weeds. A thin stand of alfalfa if neglected will become a useless weed patch.

There are several difficulties to be met in growing alfalfa in rows. First, securing a stand of plants, and fighting weeds, which can only be met by thorough preparation of the soil and good careful cultivation. Second, blowing and washing of the cultivated soil between the rows by wind and rains. Selecting the fields not subject to these troubles is a wise precaution, and it is advisable to sow the rows in the opposite way to the direction of the prevailing winds, but in the same direction that the water will run best. This is sometimes impossible to do, then one has to cater to the most probable danger.

GOOD BREEDING BIRDS HIGH

Eggs From Fowls May Be Secured at Quite Reasonable Figures at Season When Most Needed.

Good breeding birds in the spring of the year are scarce and hard to get. Such as have been kept through the winter being held at a high price and frequently can not be bought at all. It is certain that birds which have been selected and mated up for the use of the owner will not be readily disposed of at such prices as would make them a profitable investment for the buyer. Though eggs from these birds may be bought at quite reasonable figures, and the buyer will thus be enabled to secure the best of stock at a season when most needed and at prices which will permit of their profitable use.

Alfalfa Leaves Rich.

Alfalfa leaves are richer in body and egg-making material than oil meal. Alfalfa is palatable; it keeps the bowels in just the right condition for promoting good digestion and health. It is rich in both protein and mineral matter, the two essential materials for growth and for eggs.

Dry Farm Idea.

The dry farming idea is built on moisture conservation, and it is

ADVANTAGE OF DEEP TILLAGE

Drouth of 1911 Stirred Up Interest Among Farmers on Problem of Moisture Conservation.

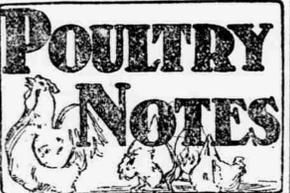
The great drouth of 1911 caused a crop shrinkage of hundreds of millions of bushels. But it wrought a benefit that cannot be calculated. It stirred up an interest in deep tilling, and the conservation of moisture that will spread until every farmer knows how to protect his crops against the drouth season. You hear deep tillage discussed at the farming congresses, says the Farm, Stock and Home. You read about it in every leading farm paper. It is the talk at the institutes and granges. It will not be many years until we are getting out of our poor soil all that it is capable of producing—and that, too, without "soil mining" or "soil robbing."

The introduction of deep tillage tools is another reason for the widespread determination to go deeper into the soil, at this time. Heretofore it has been exceedingly difficult for the farmer to till as deeply as recommended with the ordinary plows at his command. But such tools have proved that they not only till soil deeply but that they make a pulverized seed bed—all in one operation. The seed bed prepared by such tools is thus an ample reservoir to hold the early spring rains. It will absorb three times as much moisture as a shallow tilled field. The farther down the moisture goes the less the evaporation. The farther down the soil is pulverized the roots will go, thus getting all the drink they need even when no rain falls. We have plenty of moisture now. Heavy rains everywhere. We will have oceans of water all winter and next spring. It may make thoughtless people tired to think about water now—but the long-headed farmer knows that he will need water just as much next July and August as he did in 1911—and he will prepare to save it.

PLAN FOR SAVING RAINFALL

Plow the Field as Soon as Crop Has Been Harvested and Follow This Up With Drag.

Moisture conservation is not a sure cure for crop failure. Every farmer, though, knows what three or four inches of additional rain during a dry season will do, and when it is realized that it is possible and feasible to conserve moisture to that extent it begins to look as though the saving of moisture from one year to another would help some in case of short rainfall. Three or four inches of rain carried over from one season to the next means three or four hundred tons of water an acre in the subsoil—water enough to carry a growing crop through any ordinary dry weather. It is possible to carry even more than this from one year to another, says A. H. Leidigh, assistant professor of crops at the Kansas agricultural college. How can the rainfall be saved? Plow the field as soon as the crop has been harvested. If it is spring or summer, follow the plow with a drag. The rains will soak into the soil instead of running off the surface or evaporating. Fall plowing should not be dragged, as there is danger of the soil either packing or becoming dry and blowing. The extra expense of following such a plan ought not to cost more than a dollar an acre at most. Many places it could be done at a much smaller cost. It pays big interest on the investment even at the higher figure.



These bright days make work in the poultry yard a real pleasure. Plucking of the fowls begins immediately after killing and should be rapidly done.

The success of turkey raising depends upon the kind of care given for the first five or six weeks.

Geese fattened wholly on pasture or with the addition of a little corn make a tender, juicy article of flesh not to be equalled.

Chickens will not scratch when they are overfed nor when there is no feed in the litter. The idea is to keep them scratching.

The successful feeding of poultry depends largely on the ability of the feeder to notice the condition of the chickens on feed.

The material from which eggshells are made is carbonate of lime, and there are many forms in which this may be furnished.

Vigor and health are necessary if a hen is to lay right, and the only way these can be gained is through proper care and feed.

Hens that are not laying these days can be coaxed sometimes by feeding them a small amount of cut bone or fresh meat in some form.

A shed of poles covered with straw and open to the south will winter the geese nicely if provided with clean, fresh bedding from time to time.

A small flock of healthy hens, given the best of care and attention, will give a yearly profit of \$1 per hen after paying for the food consumed.

There are several signs that indicate good health—a bright red comb, activity, readiness for food, and a glossy and smooth appearance of the feathers.

IS THE PAIN THERE?

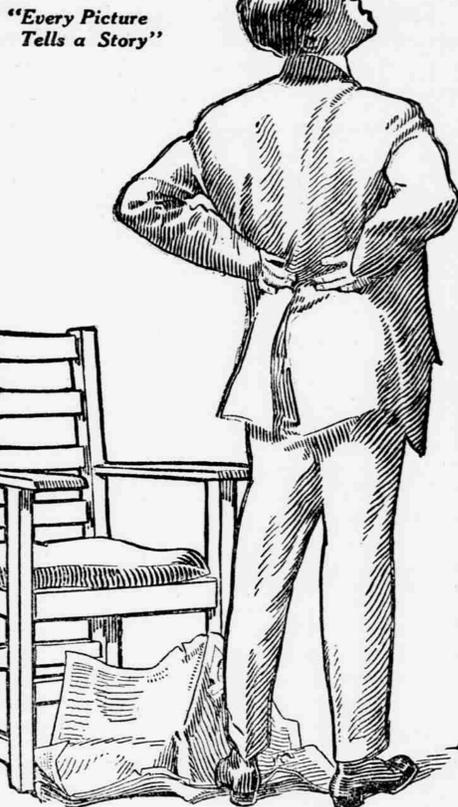
Then Your Kidneys May Be Weak and in Need of Quick Attention

Backache is enough cause to suspect the kidneys. The kidneys are in the small of the back. Congested kidneys swell and throb. The back naturally aches. It hurts to bend or stoop or to sit down.

Kidney trouble may come on all unnoticed. A cold, a chill, a fever, a strain or irregular habits may start it. While sick kidneys can be cured in the beginning, it is a serious matter when dropsy, gravel or Bright's disease sets in.

Doan's Kidney Pills have made a reputation in the cure of backache, and kidney and bladder ills. The best proof is the testimony of the users. Here are two typical testimonials. Thirty thousand others are being published in the newspapers. A postage stamp will bring you reports of cases nearer home.

If you suspect your kidneys, get the best-recommended kidney remedy



DOAN'S KIDNEY PILLS

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MRS. MARY I. REMINGTON.

A Resident of Gilroy, Cal.

Cured of Serious Case at a Critical Period.

"I suffered so severely from pain and soreness over my kidneys," says Mrs. Remington, "that it was a task for me to turn in bed. My kidneys acted very freely but secretions were retarded and scalded in passage. I was weak and much run down.

"After taking other remedies without benefit, I began using Doan's Kidney Pills and was completely cured. I was going through the critical period of a woman's life at the time, and after using Doan's Kidney Pills there was a miraculous change for the better in my health."



SHELDON SMITH.

Prop. Arlington House, Woodland, Cal.

Cured of Serious Case and Feels Like a Boy, Despite His 76 Years.

"Three years ago I was almost helpless," said Mr. Smith, "Kidney secretions scalded terribly and obliged me to arise ten to twelve times a night. My left limb became so stiff and sore I could hardly walk—just hobbled around with a cane. I had almost every complaint that diseased kidneys produce and Doan's Kidney Pills cured them all. At the age of 76 I feel like a boy, and enjoy health and comfort. Can anyone wonder at my gratitude?"



SUCH A POOR INHERITANCE

Tears of a Rival Attorney Were Explained, Not in Too Friendly a Fashion.

At the trial of Horne Tooke, Lord Eldon, speaking of his own reputation, said:

"It is the little inheritance I have to leave my children, and by God's help, I will leave it unimpaired."

Here he shed tears, and to the astonishment of those present, Mitford, the attorney general, began to weep. "Just look at Mitford," said a bystander to Horne Tooke, "what on earth is he crying for?"

Tooke replied: "He is crying to think what a small inheritance Eldon's children are like to get."

Important to Mothers Examine carefully every bottle of CASTORIA, a safe and sure remedy for INFANTS and children, and see that it bears the Signature of *Chas. H. Fletcher* in Use For Over 30 Years. Children Cry for Fletcher's Castoria.

A Poor Guesser. Wedmore—Before I married, I learned to live on half my income. Singleton—And found that it was a wise step, eh?

Wedmore—Yes, only a half was the wrong proportion—I should have made it an eighth.

Use Allen's Foot-Ease The antiseptic powder to be shaken into the shoes for tired, tender, smarting, aching, swollen feet. It makes your feet feel easy and makes walking a Delight. Sold everywhere, 25c. For free trial package, address Allen S. Olmsted, Le Roy, N. Y.

A Bad Beginning. "Whenever Jiggers starts to tell anything he prefaces his remarks by saying, 'Believe me.'" "That's why I never do."

The Paxton Toilet Co. of Boston, Mass., will send a large trial box of Paxtine Antiseptic, a delightful cleansing and germicidal toilet preparation, to any woman, free, upon request.

A Hint From Shakespeare. "Why do you call your dog Hamlet?" "Can't you see why? He's a Great Dane."

Cheerfulness keeps up a kind of sunshine in the soul, and fills it with a steady and perpetual serenity.—Addison.

ONLY ONE "BROMO QUININE." That is LAXATIVE BROMO QUININE. Look for the signature of E. W. GROVE. Used the World over to Cure a Cold in One Day. 25c.

Occasionally we meet a man whose train of thought reminds us of a row of flat cars.

The Remedy that revolutionizes and regenerates the victim of constipation is Garfield Tea, a herb combination.

Many a girl repents at leisure because she didn't marry in haste.

FARMS FOR RENT OR SALE ON CROP PAYMENTS. J. MULHALL, Sioux City, Ia.

When a man does things he hasn't much time to talk about them.

COMMON FORM OF CRUELTY.



Bessie—Yes, he claimed his wife pinched him severely whenever she asked him for money.

Bert—Well, he needn't flatter himself that he is the only man who has been pinched for money.

Belated Information. Albert Morris Bagley was being congratulated at the Waldorf-Astoria in New York on the success of his "musical mornings."

"I impute my success," he said, "to the fact that I engage no talent that I don't know thoroughly. In entertainment, as in matrimony, knowledge is most important."

Then Mr. Bagley smiled and said: "Two ladies were talking the other day about the Chinese revolution. The younger lady said:

"Isn't it dreadful in China? A woman doesn't know her husband till she marries him."

"The other lady, a divorcee, answered bitterly: "I didn't know my husband till I married him, either."—St. Louis Globe-Democrat.

Evidence. "What makes you think our great public men don't work as hard as they used to?"

"By the photographs," replied Farmer Cornstossel. "When I was a young feller the big men in politics didn't take near as much time to get shaved and have their hair cut."

When Your Eyes Need Care Try Murine Eye Remedy. No Smarting—Feels Fine—Acts Quickly. Try it for Red, Weak, Watery Eyes and Granulated Eyelids. Illustrated Book in each Package. Murine is compounded by our oculists—not a "Patent Medicine"—but used in successful Physicians' Practice for many years. Now dedicated to the Public and sold by Druggists at 5c and 10c per Bottle. Murine Eye Salve in Aseptic Tubes, 25c and 50c. Murine Eye Remedy Co., Chicago

Fairy Story. "They married and lived happily ever after."

"You forget that you are talking about two people on the stage."

Mrs. Winslow's Soothing Syrup for Children teething, softens the gums, reduces inflammation, allays pain, cures wind colic, 25c a bottle.

Perhaps a rolling stone gathers no moss because it isn't on the level.

Natural Avoidance.

Mayor Gaynor of New York was defending his anti-suffrage views: "Woman has her place and man has his," he said, "and when I think of the confusion that would come from intermingling their places, I am reminded of an anecdote about Lady Holland. Lady Holland once said to Lord John Russell: 'Why hasn't Lord Holland got a post in the cabinet?'"

"Well, if you must know," Lord John answered, "it is because nobody would work in a cabinet with a man whose wife opens all his letters."

An Alarmist. "Jibwock is a very disquieting individual."

"Indeed he is. Jibwock seems to have been born with no other purpose in life than to yell 'Fire!'"

FILES CURED IN 8 TO 14 DAYS. Your druggist will refund money if PAZO OINTMENT fails to cure any case of Itching, Blisters, Bleeding or Pruritic Piles in 6 to 14 days. 50c.

It isn't difficult for a man to see his affinity in a woman with an obese bank account.

Garfield Tea, taken regularly, will correct both liver and kidney disorders.

An oculist can do nothing for a man who is blind to his own interests.

Out of Date.

"Every time he opens his mouth he puts his foot in it."

"That's a great pity. Contortionists are no longer in demand as vaudeville attractions."

The longing of the moment always seems the great essential. We are apt to forget the long eternity of regret.—Corelli.

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I want every person who is bilious, constipated or has any stomach or liver ailment to send for a free package of my Paw-Paw Pills. I want to prove that they positively cure indigestion, sour stomach, belching, wind, headache, nervousness, sleeplessness and are an infallible cure for constipation. To be sent for free package address, Prof. Munyon, 53rd & Jefferson Sts., Philadelphia, Pa.

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Do you feel all tired out? Do you sometimes think you just can't work away at your profession or trade any longer? Do you have a poor appetite, and lay awake at nights unable to sleep? Are your nerves all gone, and your stomach too? Has ambition to forge ahead in the world left you? If so, you might as well put a stop to your misery. You can do it if you will. Dr. Pierce's Golden Medical Discovery will make you a different individual. It will set your lazy liver to work. It will set things right in your stomach, and your appetite will come back. It will purify your blood. If there is any tendency in your family toward consumption, it will keep that dread destroyer away. Even after consumption has almost gained a foothold in the form of a lingering cough, bronchitis, or bleeding at the lungs, it will bring about a cure in 98 per cent. of all cases. It is a remedy prepared by Dr. R. V. Pierce, of Buffalo, N. Y., whose advice is given free to all who wish to write him. His great success has come from his wide experience and varied practice.

Don't be wheedled by a penny-grabbing dealer into taking inferior substitutes for Dr. Pierce's medicines, recommended to be "just as good." Dr. Pierce's medicines are of known composition. Their every ingredient printed on their wrappers. Made from roots without alcohol. Contain no habit-forming drugs. World's Dispensary Medical Association, Buffalo, N. Y.

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