

The Democrat's Farm and Garden Department

Special Articles by the Best Known Practical Agricultural Experts in the United States.

POULTRY

BEST FOWLS FOR BACK YARD
American Breeds, Such as Plymouth Rocks, Wyandottes and Orpingtons, Are Recommended.

(Prepared by the United States Department of Agriculture.)
Hens of the medium-sized breeds—Plymouth Rocks, Wyandottes, Rhode Island Reds and Orpingtons—are best suited to back-yard conditions. Large hens kept in close confinement are likely to get too fat to lay well. Small, nervous hens are apt to develop such vices as egg eating and feather eating. The bad tendencies mentioned do not prohibit the keeping of large and small breeds in small back yards, but make it necessary for the keeper to use extraordinary care to keep them in good condition and productive. White and light-colored varieties are not desirable for small back yards, because their plumage soils too easily.

As a rule it is most satisfactory to buy hens of a local poultry keeper or dealer in live poultry. Desirable small flocks are frequently offered by people who are obliged by change of work or of residence to sell their poultry. Dealers in live poultry everywhere sort out from their general receipts the hens that show good breeding and quality to sell to back-yard poultry keepers. When satisfactory stock cannot be obtained locally, the advertising columns of poultry papers, agricultural papers or newspapers that carry poultry advertising should be consulted, and the hens bought from the nearest breeder who can supply what is wanted at a reasonable price.

For the back-yard flock kept to produce eggs only it is not necessary to have hens of extra good standard quality. What breeders of standard poultry call choice utility hens are as good as any for egg production and cost but little more than ordinary mongrels. Hens of this grade in the medium-sized breeds are usually a little under standard weights and have superficial faults—such as unsoundness of color, or irregularity of markings, or of the shape of the comb—which in no way affect their laying capacity, but make them



Purpose Hens Are Best Suited for Back Yard Conditions.

unsuited for exhibition and undesirable for breeding purposes.

When buying hens in person, particular attention should be given to general condition—whether the bird seems vigorous and lively—and to the appearance of the comb and the condition of the feet. Healthy hens have bright red combs and bright eyes, say poultry specialists of the United States Department of Agriculture. A slight paleness of the comb is simply an indication that the hen is not laying at the time; but a bird whose comb has either a yellowish or a bluish cast should be rejected, for these are symptoms of internal disorders. The skin and scales of legs and toes should be smooth and the soles of the feet soft and free from corns.

BETTER SIRES FOR BANTAMS

Culpeper County (Virginia) Farmer Raises Purebred From Chickens to Dairy Cattle.

From bantam chickens to Holstein cattle is the range of live stock on the farm of Sam Sullivan & Sons, who recently enrolled in the "Better Sires—Better Stock" movement that is being directed by the United States Department of Agriculture. This farm, which is located in Culpeper county, Virginia, raises Holsteins, Duroc Jersey swine, Rhode Island White chickens, White Holland turkeys, white guinea fowls, Cochins bantams, and Muscovy ducks.

Purebred horses also are kept on this farm, but no stallion is maintained. In accordance with the requirements of the better-sires movement, which is aimed to improve the average quality of farm live stock, all of the stock listed is bred to purebred sires.

EGGS FROM GESE IN WINTER

Good Plan to Arrange So That Goings Will Be Hatched by Time There is Good Pasture.

Geese are fed a ration to produce eggs during the latter part of the winter, so that the goings will be hatched by either hens or geese. Some breeders prefer to raise all the goings under hens, as geese sometimes become difficult to manage when allowed to hatch and rear their young. The period of incubation of geese eggs varies from 28 to 35 days.

ESSENTIAL THAT CROPS FIT SOIL

Red Clover and Timothy Should Not Be Depended On Entirely for Maximum Crops.

REDTOP FAVORS MOIST GROUND

No Perennial Hay Plants Will Produce Well on Poor, Sandy Soil—Most Grass Seeds Are Small and Require Good Seedbed.

(Prepared by the United States Department of Agriculture.)

While timothy and red clover undoubtedly are the best hay crops on good soils in the northeastern quarter of the United States, they should by no means be depended on to produce maximum yields of soils. Other hay crops are better suited and are more dependable in some cases and under particular soil conditions. Alsike clover, for example, is better adapted to sour and moist soils than common red clover, and the two mixed together and seeded on some uplands often insures a crop where the latter seeded alone would fail. Redtop is the best wet-land grass and on such land a mixture of red-top meadow fescue, and alsike clover usually gives good returns. While no hay grasses can be depended upon to make a commercial crop on poor land, redtop, orchard grass, and tall oats-grass are better than any others. These are facts discussed in detail in Farmers' Bulletin No. 1170, Meadows for the Northern States, just issued and ready for distribution by the United States Department of Agriculture.

Has Bulk of Tame Hay Acreage.
In that section of the United States, north of and including Tennessee, and east of central Nebraska, Kansas and the Dakotas, is found 83 per cent of the tame hay acreage of the nation. Eighty-eight per cent of this acreage is seeded to timothy and clover. While these two plants undoubtedly will continue to hold the popularity they now possess, there are a number of other plants which, though not so well known, are more desirable for certain purposes and for certain conditions of soil and climate. The latter are given special attention in the bulletin.



Field of Bur Clover.

There is little difference of opinion as to the plants to be seeded on rich well-drained land. Timothy is seeded alone if the hay is to be sold on the market, and timothy and clover, often mixed with redtop, where part or all of the hay is utilized on the farm. Some of the advantages of these plants are that they have good seed habits, especially timothy and redtop. Red clover is a deep-rooted legume, and has a beneficial effect on succeeding crops.

Timothy is considered by feeders the best hay for horses, and clover, or clover and timothy mixed produce better yields and are excellent for cattle and sheep. The comparatively long period during which these plants may be left standing without serious deterioration before cutting, together with the fact that the time of their maturity interferes little with the harvesting of the cereals and other farm work, have much to do with their popularity.

The most serious objection to the red clover and timothy mixture is due to the difference in time of their maturity, the former usually being ready to cut two weeks before the latter. For this reason mammoth clover, a variety of the common red, which is somewhat later in maturing, is sometimes substituted for red clover in the seed mixture.

There are many soils along the southern border of the area under discussion which will give a larger hay yield if seeded to orchard grass, tall oats-grass, and alsike clover than if seeded to timothy, redtop and red clover. These soils are usually poor in organic matter and are inclined to be sour. It is important that this mixture be cut when the plants first head out, for if harvesting is delayed they will make a tough, less palatable hay. This is especially true of orchard grass. If cut early, however, this hay will be relished by all classes of live stock. A general use in the localities referred to in the bulletin recommends the following mixture: Orchard grass, 14 pounds; tall oats-grass, 12 pounds; alsike clover, 6 pounds per acre.

Gives Best Results. Raising hay on poor land is not sat-

isfactory, but when it is necessary this mixture gives best results. In some places in the Middle West sweet clover has given good results under unpromising soil conditions. According to the bulletin, no perennial hay plants will produce well on poor, sandy soil. Under such soil conditions, however, some temporary crop, such as rye or oats and peas, and, along the Atlantic coast, early sorghum and cowpeas, are preferable to perennial hay crops.

The best temporary hay plants are the small grains seeded either alone or in mixture with some legume, such as peas, vetch or crimson clover. Millets are sometimes used for this purpose, as are sudan grass and coarse forage, such as corn and sorghum. In the northern states a combination of oats and Canada field peas makes a very good hay crop. Excellent results have been obtained in eastern Maryland and Virginia with the following mixture: Oats, 1 bushel; hairy vetch, 30 pounds; white-blooming crimson clover, 10 pounds per acre.

In order to avoid losing the use of land for an entire season, and to permit late-summer and early-fall seeding, grass crops usually follow small grains. The seedbed should be prepared as soon as possible after the grain is harvested. As a three-inch mellow seedbed with firm soil beneath will give better results for summer seeding than one that is deeper, the disk harrow is usually used in place of the plow for preparing land for grass. Most grass seeds are very small and must have a fine, mellow, well pulverized surface soil in order that the seedling may become established. A good seedbed may mean the difference between the success and failure of the hay crop.

Use Too Little Seed.
Most farmers use too little grass seed for best results, according to the bulletin. Rich land with a well-prepared seedbed does not require as much seed as thin land or land poorly fitted. From 20 to 30 pounds of seed per acre are generally sufficient, and this rate is usually more profitable than lighter seedings of mixtures. Small-seeded grasses, such as red-top and timothy, do not require so heavy a seeding as orchard grass or rye grass. Usually 10 pounds of timothy or 6 pounds of redtop are sufficient when these are seeded alone.

In order that the seed may get a good start, it is frequently advisable to apply some readily available fertilizer. Formerly the grain crop received the fertilizer, but experiments have demonstrated that when it is applied to the grass it will not only increase the yield of this crop but frequently show beneficial effects on succeeding crops for two or three years. Top dressings of suitable manure will increase the yield of hay, and there is probably no better crop than grass on which to apply it. A great deal of grass and clover seed is wasted every year from seeding on sour or acid soils. Applications of lime correct this condition, and should be made particularly where legumes are to be grown.

LITTLE TIME NEEDED TO KEEP LABOR DATA

Records Often Are Means of Saving Working Costs.

Farmer Enabled to Determine Number of Days of Man and Horse Power Necessary to Produce an Acre of Any Crop.

A record kept of farm labor does not require much time, yet it is often the means of saving labor costs. The labor records show just how much labor and team work is required on each crop and the time in the season when it is used. They should show what proportion of the labor is devoted to work that produces an income and the amount that is consumed on odd jobs of unproductive tasks. This will enable the farmer to determine the number of days of man and horse labor necessary to produce an acre of any crop, or the care of any class of animals for a year says the United States Department of Agriculture. Thus he may be able to rearrange his system of management so that he can get along with less labor and at the same time maintain production.

A year's labor records show also just how much man power and horse power is necessary to run the entire farm at different seasons, and point out accurately just when the rush seasons occur. With such records before him, the farmer knows approximately what his labor requirements will be in advance of the rush season. He is able to increase or decrease the different farm enterprises and fit them together until he has outlined a complete year's work with an even load of labor for the entire season.

GIVE GAS ENGINE ATTENTION

Vibration Tends to Loosen Bolts, Nuts and Various Connections Which Need Tightening.

All screws and nuts on gas engines should be kept tight. The engine should be gone over every day or so when it is used, and all connections tightened and all oil and dirt wiped off. Such practice will go far toward preventing operating troubles, since all gas engines vibrate to some extent and this vibration tends to loosen bolts, nuts and other parts.

Farm Live Stock

CAN RID SHEEP OF INSECTS

Irritation Causes Animals to Pull Their Wool and Thus Injure Fleece—Use Any Dip.

Dipping is the only practical way to rid sheep of ticks and lice, say experienced sheep men, who further point out that lice cause sheep to pull their wool and thus injure the fleece.

Bad as ticks are, lice are said to be even more dreaded. Sometimes it is even difficult to find them. If a sheep has pulled its wool badly, however, and the farmer looks closely at the skin over the spots where the wool is most disturbed, he will likely find small black specks which at first he may take for timothy seeds or chaff. As he watches them closely, however, he will see that they move.

After the sheep has been shorn it should be dipped. The lambs also, as



A Flock of Purebred Sheep.

soon as they are of any size, may be given the same treatment. In order that the sheep may go into winter quarters in good condition and free from ticks, it is well to dip again in the fall.

Any of the well-known dips are satisfactory, say the sheep men at the New York state college of agriculture, but whatever one is selected it is important to follow directions closely, they point out. Dips are of two kinds, the powder dips and the so-called coal-tar dips.

TUBERCULOSIS CASES FOUND

Cattle on Indiana Farm Discovered With Disease in Advanced Stage—All Purebreds.

Following the tuberculin testing of 37 cattle on an Indiana farm, 14 animals which reacted to the test, when slaughtered in an establishment under federal supervision, showed lesions of the disease not only on the organs, but even in some of the meat. In reporting the incident to the United States Department of Agriculture, Inspector R. R. Newman explained that the demonstration was of unusual interest because all the cattle were purebred.

One of the cows, which had supplied milk for local use, showed extensive lesions of tuberculosis in the mammary glands, a condition associated with probable infection of the milk. Several stock raisers, who saw the tuberculous carcass, have signified their desire to have their herds qualify for a place on the accredited-herd list. Herds on this list are officially recognized as free from tuberculosis.

EQUIPMENT TO BREED SWINE

Up-to-Date Devices Save Time and Labor and Add Much Pleasure to Management of Hogs.

It is not true that one needs the most expensive equipment to breed swine successfully, but an up-to-date equipment saves labor and adds much to the pleasure of business. Where possible, all buildings should be so constructed that they can be easily cleaned and disinfected. Concrete makes possibly the best floors and feeding yards.

START FLOCK OF SHEEP NOW

Best Time to Begin With Animals Is When Prices for Breeding Ewes Is at Low Mark.

The best time for the farmer to begin raising sheep is when the price is low, as it is at the present time. In addition to the reasonable figure at which breeding ewes can be secured, the fact that there is plenty of hay and other roughage and short grain and much waste in the stubble due to rust, makes this a fine year for the farmer to get started with a small farm flock.

HEAVY BEDDING IS FAVORED

Tends to Cleanliness and Comfort of Animals and Saves Much of Fertilizing Elements.

There are several good reasons for bedding stock heavily in the winter. The comfort of the animals and the cleanliness; the saving of valuable fertilizing elements; and protection of the feet from the troubles resulting from either wet manure under foot or the hard concrete floors where this material is used.

Counting Newberry and Ford Ballots



Here is the little group of men upon whom rests the responsibility of recounting the ballots cast in the Michigan senatorial contest between Senator Newberry and Henry Ford. The picture was made at the capitol, Washington, as Senator Selden P. Spencer of Missouri, chairman of the senate elections committee, was giving instructions to the force of tellers, attorneys and supervisors. The five men, left to right, are: George B. Webster of St. Louis, supervisor; Senator Spencer, James O. Murfin and Stewart Hanley, (Newberry counsel), and Fred R. Schmalzriedt, (Ford counsel).

APPROPRIATION IS RAISED BY SENATE

\$8,000,000 EXPENDITURE ON MISSISSIPPI RIVER FORCED BY SENATOR REED.

AN AMENDMENT BY SPENCER

Amount Boosted From \$6,670,000 in Passing Bill for \$412,350,000, of Which \$250,000,000 Is for Veteran's Relief.

Washington.—The sundry civil appropriation bill was passed by the Senate carrying a total of \$412,350,000, of which about \$250,000,000 is for veterans of the World War.

Before passage Senator Reed of Missouri forced through an amendment which increased the amount appropriated for flood control on the Mississippi River \$1,330,000, raising the total carried in the bill from \$6,670,000, as it passed the House, to \$8,000,000.

Reed's amendment carried by a vote of 31 to 28, with only five Republicans voting for it, whereas the Democrats rallied to its support.

Reed spoke briefly in support of the amendment. He said: "I thought possibly some Senators who voted against the \$10,000,000 appropriation in the amendment last night might conclude to vote for \$8,000,000. The case has been presented by Senator Ransdell and by the letter from the Mississippi River Commission, which was read here. The present appropriation is exhausted and if \$10,000,000 is not appropriated great damage and loss is likely to accrue to the river work and to the United States. Every once in a while the Senate gets an economical fit, and in a few days forgets it and appropriates money recklessly. We are having an economical spell today."

"Senators are voting against the Mississippi River project who three months ago voted for an army of over 300,000. The same gentlemen recently reduced their demands 175,000. "Such expenditures as this proposed in my amendment are investments. They bring money back. I appeal to the Senate not to jeopardize the work already done on the river."

SENATE HEARS OF COAL PUBLICITY CAMPAIGN

One Wounded and Three Russian Officers Are Arrested in Vladivostok.

Tokio.—Five American bluejackets were fired at by unknown persons in Vladivostok, one of them being wounded, says the Asahi Shimbun's Vladivostok correspondent.

The Americans, reinforced by Russian policemen, arrested three Russian officers formerly under the late Gen. Kappel, once commander of the western armies of the Omsk government, the correspondent adds.

Attack Not Reported.

Washington.—The attack on five American bluejackets at Vladivostok as announced by the Asahi Shimbun of Tokio has not been reported to the navy department. In the absence of an official report, department officials refused comment.

Magnolia Crude \$1.75 Per Barrel.

Dallas, Tex.—The Magnolia Petroleum Company, the Oriental Oil Company and the Eastland Oil and Refining Company posted 25-cent reductions in the price of crude oil. That brought announced by the Sinclair and Prairie companies.

Former Bandit Robbed.

New York.—A bandit held up Al Jennings, former train robber, while Jennings was on his way to Manhattan from Brooklyn, and took \$82 and a stick pin.

Wilson Furniture in New Home.

Washington.—The moving of President Wilson's furniture and personal effects from his former home at Princeton, N. J., to the home he is to occupy here after March 4, was completed.

Ball Players' Trial March 14.

Chicago.—Trial of the Chicago American League players indicted for alleged complicity in "throwing" the 1919 world's series to the Cincinnati National League team, was set for March 14.

\$135,000 Worth of Narcotics Seized.

New York.—In a series of raids in and about Chinatown, police and federal officers seized narcotics valued at \$135,000, destroyed a moonshine still found in operation, and arrested 17 men.

PAYS THE PENALTY FOR HIS CRIME

ILLINOIS MAN ADMITS MURDER FOR WHICH ANOTHER WAS LYNCHED BY A MOB.

SOUGHT TO GET MINE FOREMAN

Settino De Santis, Hanged at Marion, Ill., Shot Father-in-law of Mine Foreman Six Years Ago at Johnston City, Ill.

Marion, Ill.—The story of how an innocent man went to his death at the hands of a mob for another man's crime came to light after Settino De Santis, an Italian miner, was hanged here for the murder of Amel Calcestrera and Tony Tomplini, two boys.

Before he was led to the gallows, De Santis confessed to the murder of Edward Chapman, in Johnston City, Ill., six years ago, for which crime another Italian, Joe Bing, was lynched by a mob at the time.

Bingo, De Santis and another Italian, Frank Blanco, had been working together in a coal mine at Johnston City shortly before the Chapman murder and, upon being discharged by Ben Schull, the mine foreman, they made a threat to "get him."

Several nights later a bullet crashed through a window at the Schull home, where Schull, his wife and father-in-law, Chapman, were sitting. It missed Schull and killed Chapman. De Santis and Blanco disappeared the same night but Bingo was caught by a mob and lynched.

Several months ago Blanco, who also was implicated in the murders for which De Santis was hanged, made a confession in which he charged De Santis fired the shot and killed Chapman, and a few days later he committed suicide in jail while his trial was in progress. De Santis then confessed to another Italian, Tony Maroni, who was one of the interpreters at his trial, that he had accidentally shot Chapman while "trying to kill Schull."

De Santis was hanged in the yard of the Williamson county (Ill.) jail. He showed no evidence of fear as he was led to the gallows. Father Senese, a Catholic priest of Herrin, who had administered the last rites of the church to De Santis earlier, accompanied him to the gallows and read prayers just before the trap was sprung. De Santis responded to the prayers in Italian.

ATTEMPT MADE TO KILL FIVE U. S. BLUEJACKETS

Fund Proposed to Induce the Public to Buy the Product at the High Prices.

Washington.—Appearing before the Senate committee considering the coal regulation bill, Representative Huddleston (Dem.) of Alabama read what purported to be a transcript of the proceedings at a meeting of the directors of the National Coal Association, held in June, 1919, at which the motions were said to have been made to appropriate money for publicity to get consumers to buy coal while the operators "stood pat" on prices.

J. D. A. Morrow, vice-president of the association, told the committee that the transcript "might or might not" be an authentic record.

Huddleston said he was informed that "prices were discussed at a secret meeting previous to this," but Morrow denied that such a meeting was held. Senator Reed (Dem.) of Missouri objected to Representative Huddleston's statement going into the record, but Chairman La Follette allowed it to stand.

T. T. Brewster of St. Louis was alleged to have suggested \$380,000 for the publicity campaign, but the total was left for future decision, though some money was made immediately available.

Alfred M. Ogle, of Terre Haute, Ind., was quoted as advocating particularly paid advertising about the danger of a coal shortage because, he said, "it changes the attitude of newspapers."

M. W. Griffiths, a Washington coal dealer, was called to the stand at his own request to answer charges that a combination in restraint of trade existed in the local trade. He waived immunity claim to tell his story, began upon it, but almost immediately asked to be excused, saying: that his attorney advised him that coal dealers were "going to be prosecuted."

Ordinance Against "Home Brew."

Brawley, Cal.—If a promised ordinance passed by the Brawley City Council on first reading is finally adopted, having in one's possession in Brawley a recipe for making "home brew" will be an offense punishable by a jail sentence of not more than six months or by a fine of \$100 or both.

Rent Zone Plan in Chicago.

Chicago.—Maps of rent zones in the city will be drawn up by a committee of the Chicago Real Estate Board, according to plans announced in the joint war of the board and various tenants' protective associations upon increasing rents.

Treason Defendant to Be Deported.

San Francisco.—Immigration officials were authorized by the United States District Attorney to deport Oscar von Windshagen, arrested on a charge of treason.

U. S. Navy Officers Killed.

Washington.—Lieuts. John Henry Heitz Kenken and John Frederick Wolfer, United States navy, were killed near Guantanamo, Cuba, by the wrecking of their airplane while on a practice flight for radio instruction.

Married Men Given Preference.

Detroit, Mich.—A plan of alternating shifts that will enable virtually all married employes of the Ford Motor Company to work part time until the plant resumes normal operations is announced.