

USING PERPENDICULAR PIPE TO FILL SILO.

(Clemson College Bulletin.) Good slinge can be had only by uni-Distributing and packing slinge to form packing and uniform distribu-the silo is frequently neglected. Un-tion of the corn. The entire surface. ess the blower has a distributor atmeven distribution of grain and stalk and a consequent uneven quality of Uneven distribution is frequently the cause of soft places and alr pockets, which later result in may result in a waste of the storage spoiled silege. When the lighter por- capacity of the sile. If the sile is tions are blown to the outside they filled rapidly the corn has little time do not pack well and the silage spoils to settle. Slow filling allows the corn

Packing to Important, Packing the stinge is equally as imortant as distribution. Thorough packing requires persistent work, can settle.

especially the outer edge, she ent there is a tendency for the packed firmly. The best help obtain cut corn to fall in one place in the able should be stationed in the silo. If the stalks are frequently That is where the slage is ultimately blown to the outside and the heavier made, and success depends on the abi-parts, ears and butts of stalks, are ity of the men to distribute and pack deposited in the center, this causes an the corn properly. Large Cutter Saves Money.

The large cutter with the corre sponding large capacity frequently saves money in filling the sile, but it near the wall. Such spollage, which to settle as it is stored, with the re-really results from careless filling, is suit that more corn can be placed in often attributed to the silo. To overcome the disadvantage of rapid filling woven wire may be extended above the top of the silo, thus increusing its enpacity until it

Possibilities of Beef Production Fr

The money-making possibilities

total cost of wintering was only \$4.88

per steer. For the second year 26 steers were used. The average initial

weight was 705 pounds, and the gain during 131 winter days was 17 pounds

The cost of wintering each animal

was \$5.75. In the third year 16 ani-

mals made an average gain of 28 pounds in 119 winter days; the cost

When we take into consideration the fact that wintering animals in this

way, in addition to giving them gains,

puts them in such condition that they will readily take on fiesh in the spring

and summer, it is a strong indication that this plan of handling them is a

good one, as there is nothing to lose.

PIG RAISED WITH EACH COW

With Exceptionally Good Cows the

Increased Somewhat.

what increased. This is, of course,

where the cream is sold, but the skim

MAKING MONEY WITH MULES

and Feed Them Over Winter-Let Them Run Loose.

Any farmer who has an abundance

They should be allowed to run loose in roomy barns or sheds and never con-

SAVE EGGS FROM BEST STOCK

Evidence of Good Qualities When Fowl

Reaches 200-Egg Mark-Should

Be Perpetuated.

perpetuated. Eggs from this kind of

good way to make a job for a horse

can pass and eat grain by themselves,

will encourage them to eat grain much

Buying Forage Crop Seed.

Buy labeled field and forage crop seed—know the man who put it up, its kind, its germination, and, if origin

To Destroy Billbugs.
Billbugs affecting corn canot live on octon, therefore follow corn with cot-

natters, where it was grown.

stock should go into the incubator.

Eggs from the best hens should not

fined in stalls, as horses.

Number of Hogs May Be

Figure on raising one pig to market-

wintering being \$5.30.

Winter Grazing Shown at North Carolina Station

# LAMBS BORN IN FALL MAKING MONEY WITH CATTLE

Such Animals When Ready for Market Bring Fancy Prices.

Dorset, Ramboulliets and Merinos Will Breed at Almost Any Season Open Shed Will Furnish Sufficient Shelter.

The term "winter lamb" has refernce to lambs that are born in the fall or early winter and grown during the winter. Such lambs when ready for the market usually sell at fancy prices because they reach the market at a time of the year when choice, fat youn says D. A. Spencer, sheep expert for the department of snimal husbandry of Oblahoma A. and M. college, Stillwa-

To produce winter lambs it is neces sary to have the ewes bred in late spring or early summer, says Mr. Spen-cer. If the ewes are in good, thrifty condition and have access to p'enty of good pasture, they will not need any rain until lambing time.

Not a very large percentage of the wes of the most desirable mutton type will breed early enough for winter lambs. The Dorset breed is an exception to this, however, for the Dorset ewes will breed at almost any senson of the year. Only a small percentage of the tidy, popular Shropshire ewes will breed before cool weather in the foli. Merinos and Rambouillets, like Dorsets, will breed at almost any season. If one has grade Merino or Ram-bouillet ewes that he does not care to mate with fine-wool rams, they may be bred to mutton type rams and the able age for each dairy cow and pos-

bs will be excellent for mutton. Nevertheless, during the hot weather house stops. With exceptionally good that usually prevails in July and Aucows the number of pigs may be somethat usually prevails in July and August, only a small percentage of the swes of any breed will come in heat. It is, therefore, wise to turn the rams milk kept on the farm. with the ewes in Mny, or at least as early as June, in order to get the ewes to breed before extreme hot weather The period of gestation in the ewe will average about one week less than five months, so that ewes bred in May or June will lamb in October and November, just when the weather is getting cool and almost ideal for lambing.

The mild winters of Oklahoma afford by buying up stock mules in the large markets and feeding them over whiter. the farmers of this state splendid opportunities for winter lamb production A shed placed on well-drained land, opening to the south to admit smallght, so built as to break direct drafts of wind, and with a good roof, will furnish sufficient shelter.

#### CONCRETE FLOORS ARE BEST

Corncribe, Granaries, Poultry House and Chicken Coops Should Be Made Rat-proof. be caten. When a fowl reaches the 200-egg mark in a season, it is evi-dence of qualities which ought to be

corncribs and granaries and small mesh wire netting can be placed in the walls. Old cribs and granaries, chicken coops and poultry houses should also be made rat-proof. One of the food conservation suggestions made by the Missouri College of Agriculture is morning fo last all day. That is a coop way in make a lob for a horse. rat-proofing: corneribs and granaries. A few years ago it was estimated that every rat on the farm cost the farme \$1.82 s year. With the present high prices of feed, seed and grain the cost will amount to much more than that. In most of the grain-growing states a fair estimate of the rat population a farm would be about 25 and 50. ation of

First Duty of Community.

The first undertaking of every agricultural community is to determine the breeds and varieties of crops adapted to the district. The experiadapted to the district. The experi-ence of leading successful farmers and the stafe agricultural experiment sta-tions are valuable guides to follow.

Gains on Feeders.

The profitable gains on a bunch of feeders are those which increase the gains are due more to intelligent buying than to feeding and bandling. Seeds Are Bearce. Seed of all kinds are going to be scarce next year. Better order your amply early.

# LIVE STOCK-FRUIT-DAIRYING-B. RDENING-FIELD CROPS-SILOS - PIGS

New Wrinkles Progressive Agriculture

AND

Making the Business Profitable

TOLD IN AN INTERESTING MANNER EXPRISSLY FOR OUR READERS

Difficult to Estimate Cost of Contagious Abortion Each Year-Breeders Are Secretive.

Tuberculosis is a dread disease, and its ravages are a heavy burden on the live stock industry. The loss that it entails, however, is not so much to be dreaded by the live stock men as the losses caused by contagious abortion. It is difficult to estimate just what abortion costs the dairy industry each year; breeders are very secretive about its presence in their herds; losses are taken quietly and nothing said. Many, too, have contagious abortion to deal with and are not aware of it. It is not necessary that a cow actually abort to prove that the disease exists, Stertlity, Irregular heat and retained afterbirth, are all symtoms of contagious abortion. Too often, too, an abortion is explained as the result of an accident or strain, and the dairy farmer lulls himself into a feeling of false security. The first essential toward eliminating the discase from the herd is that we be nest with ourselves and recognize that the disease exists.

Eternal vigilance is the price of free-

dom from this disease,

#### BLANKET FOR LITTLE LAMBS

When Animal First Comes Into World He Is Weak and Puny and Needs Some Protection.

The poor little lamb is up against it en he first comes into the world He is weak and puny, and the chances are he feels chilly and he may take a cold that will end fatally and result in a lors to you. Be on the safe side by wrapping him up in one of the blankets shown in the accompanying



drawing. It is attached by straps which pass under his belly and also by one which fastens around his neck, The lamb will be grateful and so will you when he develops into a big rascal worth quite a few dollars on the mar- SPRAY FOR SAN JOSE SCALE

# FEEDING PIGS FORAGE CROPS

Greater Returns Made Than From Animals Fed in Dry Lots-Alfaifa Given Highest Rank.

Pigs fed on good forage crops will make many times as much profit as

those fed in dry lots, The accredited gain in pork to an acre of forage varies, depending upon the crop, the age of the hog, and amount of grain fed. An acre of sweet clover, with corn at \$1.50 and hogs at \$15 a hundred, netted \$42.07; rape, \$37.50; alfalfa, \$65.90, and a ation, of outs, peas and rape,

\$64,00. Of all forage crops, alfalfa is the great permanent crop, while rape is the emerge cy crop, and green rye fall and early spring crop. The ideal forage crop should show adap-tability to soil and climate, permanency, palatibility, reasonable cost of planting, and good pasture at any time during the growing season. Alfalfa, clover and rape have most of APPLES FOR FAMILY TABLE these qualities.

#### Profitable to Buy Up Stock Animals MANY FARMERS HORSE POOR

Four Animals Are All That Is Needed to Work Quarter Section Should Be Brood Mare.

Too many farmers are borse poor. They have not only too many horses but horses which are not good. In farming a quarter-section of laid there is no need for more than four horses. Three of these should be heavy horses and one should be an animal heavy enough to do considerable work yet light enough to do the family driving. Of these heavy horses at least one should be a good brood mare. While practicing economy in other respects, it is well to study the economical use

#### PASTURE SHEEP IN ORCHARD

If Turned in Early in Season They Gradually Accustom Themselves to Fallen Apples.

Sheep, if suddenly fed an unlimited quantity of apples, would quite likely choke then selves, or everent to such A small pen built close to the sow's sults would follow. But, if turned in pen, with a hote through which the pigs to the orchard early in the season, they will gradually acc stom then-selves to the small apples as they gradunily fall from the trees, and no harm-ful results follow. Cows and hogs are equally useful, provided the trees are in such a condition, and of such a shape that the animals will not

> Protein and Minerals. While corn is the chief feed for fatand mineral matter necessary for growing animals. A feed rich in profein and minerals when fed with orn is therefore highly benedicial

# MENACE TO DAIRY INDUSTRY HEADING BACK FRUIT TREES

Necessity of Cutting Out Diseased and Useless Branches Recognized by Fruit Grower.

Trees are better with a little pruning annually than with an occasional severe printing. Some people head back their trees quite freely each year, while others v ho believe in unrestricted growth do not. Everyone recognizes the necessity of cutting out dead, diseased and useless branches and those which rub or interfere with each

pruning tends to produce wood. Old trees are rejuvenated by severe cutting back. Weak-growing



trees should be pruned more closely than strong growers. If a tree's energies are largely devoted to growing wood the quality and quantity of fruit must suffer. Winter pruning stimulates wood growth, and summ ing diverts the energies to fruit bearing. Do the winter pruning while the tree is dormant and the summer pruning in June.

Sest Material for Insect Is Lime-Sulphur and May Be Applied in November or Dec

Orchards known to be infested with San Jose scale should be sprayed as soon as the trees are defoliated by trosts. The sooner this is done the better it will be for the trees as scale nsects will soon weaken the trees so no marketable fruit may be expected. The best spray material for scale Insects is lime-sulphur.

A good spray pump will be essential. It is highly desirable that the liquid be under high pressure and that it be well distributed. A power sprayer is best as no hand power can be expected to equal the original. But if only a few trees are to be sprayed a hand-power sprayer swer the purpose.

Spraying may be done in November or December. Then if a second spraying seems desirable it may be given in the spring or late winter before the follage is out.

### One-Half Acre Could Be Made One o the Most Satisfactory Pieces of

Ground on Farm.

Broadly speaking, there are two kinds of apple orchards, one run for profit and one for the family.

The mmercial orchard is a specialty requiring skill, experience, and above all, a peculiar mental bent. As to the small family orchard, there

seems but one possible conclusion namely this: Every farmer should have at least twenty-five bearing trees mixed varieties for his own use. That would require just one-half an acre and by doing the right thing at the right time it could be made one of the most satisfactory pieces of ground on the whole farm.

# BERRIES GOOD FOR ORCHARD

Place Is Not Complete Without Generous Selection—No Other Fruit to Replace.

An orchard is not complete without a generous selection as to kind and varieties of berries. Without the berry patch the orchard will hardly come up to your expectations in supplying during the fruit-bearing season. In fact you will miss the berries and there will be no other fruit to take their place.

Leaf Crop Fertilizers. Hen manure, pitrate of soda or other DETERMINE PROFIT ON DUCKS nitrogenous fertilizer may be put on onlone and leaf crops if they do not pounds per scre is used.

Breeding Place for Pests. Do not leave cull fruit, dead branches and other refuse in the orchard. It makes a breeding place for

Satisfaction of Gustomer, It is a whole lot of satisfaction to the consumer to know he can depend upon a farmer. Cash sales and small profits are best.

# RATIONS GIVEN TO HASTEN NEW FEATHERS



PRIZE WINNING COLUMBIAN PLYMOUTH ROCK COCK.

cold weather starts or they will not suit of the rapid growth if new fenth-lay in the winter months. Because of this fact a special combination of feed ed in the oil meal," should be given to hasten the growth of the new feathers, according to Ross

The following ration is recommended.

M. Sherwood of the department of cd for the molting season; 60 pounds

"Sour milk and beef scraps are useful at all seasons," says Mr. Sherwood, "but linseed oil meal is especially good at this time. There are certain food materials in oil meal which are needed in feather building.

After the fowls have completed the moit and are well feathered, this mush may be given: 60 pounds of corn and which are not found in the other chop. 60 pounds of wheat bran. 30 feeds mentioned. Practical feeders of pounds of wheat shorts, and 20 pounds ten point out that oil men! loosens of ment scraps, and the

PREPARE FOR HENS' COMFORT

All Immature Pullets Should Be Sepa-

rated and Forced for Development

or Fattening-Make General

Cleaning Up.

from March until October, but winter

far as the profit she will pay is con-

cerned. The careful farmer or poultry

selected in the spring until the snow

readily to good care than the hen and

Begin Culling Now.

ing should begin now. All immature

pullets should be placed to themselves

and forced for development or fatten

ed for market and all extremely old

hens had best be prepared for the pot.

Cockerels intended for next sesson's

breeders should be separated from the

others and a general clean up made of all surplus stock. It is possible that

it will be more profitable to hold some

or all of the surplus for a better mar-

the latter placed in permanent quar-

It is remarkable how well a little flock of 50 or 100 heas and pullets will

pay if well attended. The housing need not be elaborate or expensive.

The feed is all at hand on the average

grain farm and no one need worry

ance and she will do the work for

Make Needed Repairs

tegin now in your spare time to repair it. Patch the roof if it leaks. There

are usually enough odds and ende

ground the farm to fix it. If it has

wide cracks between the boards of the

wall, set fodder around three sides of it, leave a part of the south or east

side open and make a frame covered

winter eggs when these things are ac

Twelve Weeks Old Required

3.18 Pounds of Feed.

local market at from ten to twelve weeks old, 3.18 pounds of feed per

pound of gain were required, the aver-

nge weight at the end of ten weeks being four pounds, 11,2 ounces per

complished.

If your house is in need of repair,

about proteids or ash or balanced ra-

ket but they should at least

the cow.

ters early.

Hens must finish molting before the old feathers. This may be the re-

Ration for Molting Season. poultry hashandry in the Kansas State of corn chop, 00 pounds of wheat bran, Agricultural college. 20 pounds of ment scraps, and 15 pounds of old process oil ment. This

# WHAT KILLS FARM CHICKENS

Character of Animal May Be Pretty Well Determined by Condition of Fowl When Found. Make Profit From Flock During Extremely Cold Weather.

We may prefty well determine the character of the animal that visited our hen house by the condition of the fowls as found.

A mink will slaughter a dozen or more birds in a night, biting them in the neck and sucking the blood Both the mink and the opossum leave the carcasses in the coop or house where they found them. Rats drag their prey into the holes

or runways. Bats, however, very sel-dom attack a half-grown chicken or a fowl. Their appetite is more for the youngsters, so the front of each The showing that the hens make during the severity of winter, is a good index of the person handling them. Spring is the natural laying coop should be closed with a wire-cov-ered frame, which keeps out the rats and permits ventilation.

season. Nature usually lends and for the hatching and rearing of chicks Cats and foxes carry their victims away with them; the cat, like the rat, cares only for the baby chicks, and late fall finds the hen en-tirely dependent upon her owner so seldom doing damage to birds that weigh more than a pound.

The skunk seems to select poultry man makes a profit from the flock during the cold weather and prepares for his diet only as a last resort. prefers refuse ment or scrap. If any the way from the time the eggs are of the latter is found he will fill up with it and then retire to his den. The next night he will return, and in begins to fly by selecting eggs from tested winter layers, keeping as wincase the refuse ment or scrap is insuf-ficient to satisfy his appetite, he will er producers only well developed pullets and healthy, energetic young hens top off on poultry.

by preparing for their comfort in the The weasel crawls on the roost, sefall before the rigors of winter set in. Granted that one has these well malects his victim, taps a vein and sucks tured pullets or hens that are young enough to be profitable if held over the blood. The wensel is a regular contortionist, and is able to so contract his body that he can wedge for another year, the problem of winthrough the smallest opening. ter eggs is not so difficult. No producer on the farm responds more

#### EGGS PURCHASED BY WEIGHT

Custom is Growing and Seems to Be In order to get into winter quarters Only Fair Way-Light Brahmas with the best possible prospect, cull-Lay Largest Eggs.

> of eggs. As a general rule a dozen eggs may mean very little as to the amount of food contained.

> The custom of buying eggs by weight rather than by the dozen is growing. Really this is the only fair way to sell

There is considerable variation in the size and weight of eggs. This variation is more among individuals than separated from the winter flock and among breeds, yet there is a reintive standard for the breeds, Light Brahmas lay the largest eggs, the relative average being 28 ounces per dozen. Eggs of Black Langshangs and Barred Plymouth Rock hens weigh a little ver 26 ounces per dozen. The weight of eggs laid by Single Comb Brown Leghorns, inte-hatched Plymouth Rocks, White Wyandottes and Buff Give the hen something to bal-Cochin hens ranges from 21.7 to ounces per dozen. The eggs of Peking ducks are beavier than those taid by hens, the weight of duck eggs being 35.6 ounces per dozen.

#### PLOW UP SOIL IN HEN YARDS

It Is Good Management to Plant Crop of Rye Before Pullets Are Put

with cheese cloth or some other light material for extremely cold and stormy When hens are confined in yards days. Fill in a dirt floor four or five the soil will become unclean and it is yard. Clean out the old nest boxes good management to plow it up and plant rye before using it for the puland spray the wall and perchea. You will have made a nice start toward lets brought in from the colony hor Some poultrymen have used air-slaked lime to top dress sour soil before plow ing. Others use two yards for flocks which are confined. While the birds are harvesting the green crop in one yard the other is developing a thick Experiment Found That Fowle growth of some other kind of green food. All things of that kind require work and time but they are part of the price that must be puld for success In an experiment to determine the with poultry. profit on ducks hatched in incubators, reared in brooders, and sold on the

Market, Laying and Table Ducka. For market, Pekin ducks are grown for laying. Runner ducks are one of the best, and for home table ducks there is only one superlative duck, the



### DEMAND FOR DAIRY ANIMALS

Time Has Never Existed When Greater Profit From Dairying Was at Hand Than Now.

While it is useless to preach "save your cows and helfer calves" when it impossible to do so, yet the ti has never existed when greater profit from dairying was at hand than now and the owners of profitable pr ing cows must reap a reward.
is an unprecedented demand for



cattle in many sections of our country right now, so that wisdom and fore-sight would suggest a close scanning of the herd with a view to the use of sires of record that profitable producers may be obtained even from nary producers.

Regardless of price that may be ob tainable for grain and hay, the soil must not be robbed for temporary gain. We must believe in the eternity of things and keep up the productive power of the soil, else starvation may stalk the earth. There is no question of the inevitability of dairying in the scheme of profitable agriculture.—W. E. Skinner, Secretary of National Dairy Council.

#### BUTTER WITH CHEESY TASTE

Trouble Usually Due to Decomposition of Curd-Develops Frequently Where Sait Is Low.

Cheese taste in butter is usually due to a decomposition of curd. It is mess likely to appear in butter made from cream which has become too sour or it may also be due to failure to wash the buttermilk and curd from the butter after churning. It seems to velop more frequently in butter which

If it has been the practice to allow the cream to become quite sour be-fore churning, churning before so much acid has developed may help to remedy the trouble. When churning has en completed, draw off all of buttermilk then add to the butter in the churn an amount of water equa to that of the butteruffik. The temperature of the water should be about two degrees less than that of the butter milk. Give the churn several resoluoughly and then draw off the water, This removes the surplus buttermilk and curd in the Sutter. It is also a good practice to sanin the cream as it is poured into the churn. Some curd will be removed 5, this way.

### ROOTS GOOD FOR DAIRY COW

Owing to High Percentage of Water In Them Large Quantity Must Be Fed Every Day,

Roots are good feed for dairy cattle, but owing to the high percentage cent-a large quartity must be fed daily if these are to take the place The consumer of eggs knows that of the grain ration. Roots may be there is considerable difference in size fed in almost unlimited quantity without danger to the animals. These are like grass in summer, but in feeding economy must be considered. In general from 6 to 8 pounds of roots should be fed for every three pounds of milk. But, where roots bring a high price on the market, it may often be profit able to sell these and to buy grain.

As a rule two feeds a day are sufficient. For the very highest possible production, it may be advisable to feed oftener but, if the cows are given all that they can clean up twice a day, they will usually be contented tween meals.

## **GRAIN MIXTURE FOR WINTER**

Ground Barley, Oats, Brah and Oil Meal Should Be Furnished in Addition to Alfalfa.

For cows on winter feed a grain mixture consisting of 35 pounds of ground barley, 35 pounds of ground onts, 20 pounds of bran, and ten pounds of oil meal fed at the rate of one pound to each cow for each three or four pounds of milk she produces daily in addition to all the clover and alfalfa hay she will clean up without any waste will prove a good one. Feed grain and hay each twice daily, morning and evening, and at noon let the cows have access to such amounts of barley or out straw as they may desire for extra filler. The plan of feeding each cow grain according to the amount of milk she produces is the proper one to follow,

For the Fed Calf.

Two pounds of grain when fed with skim milk or buttermilk will take the place of one pound of butterfat for raising caives. A pound of butterfat will sell for 80 cents and two pounds of grain will cost about 8 or 4 cents.

Calves Nibble Hay.

When only a few days of age calens will begin to nibble hay if it is within reach. It is preferable to feed timothy for the first fwo or three mouths after which alfalfa or clover hay will give better satisfaction.