

Helping the Meat and Milk Supply

(Special Information Service, United States Department of Agriculture.)

SHEEP NEED WINTER CARE.



Dryness, Light and Ventilation Are More Essential Than Warmth in the Winter Sheep Quarters.

WOOL AND MEAT ARE WAR NEEDS

Principal Sheep Requirements Are Dryness, Good Ventilation, and Sunlight.

WET COATS FOSTER DISEASE

Protection From Winter Rainfalls and Heavy Snowfalls is Desirable—Freedom From Drafts is Most Important.

Sheep supply two very essential war needs—meat and wool. During the winter they need special care. Their heavy coat will keep them warm provided it is dry, but if it becomes wet the animals will suffer from chills and sickness.

In any part of the United States the main essentials of sheep barns are dryness and freedom from drafts. Unless lambs are to be dropped in cold weather, no expense to provide warmth is necessary, as the buildings should seldom be closed. Protection from winter rains and heavy snowfalls is desirable, but the best results may be expected when ewes are allowed access to a dry bed in the open.

Warmth, Dryness and Light. Since sheep do not require quarters that are especially warm, a single wall will ordinarily insure sufficient warmth. If lambs are dropped in very cold weather, a temporary covering over the lambing panels will provide warmth, or a small space can be partitioned off in which to keep a few ewes until their lambs become strong.

Even in winter it is well to plan ahead, and to keep in mind that next summer shade and protection from heat are peculiarly necessary for sheep. Shade cannot always be furnished in pastures, and buildings that are well located and constructed so as to render them cool in summer will often provide greater comfort to the sheep during hot days than would be possible for them out of doors.

Dryness and freedom from draft are most important. Sheep cannot possibly thrive in quarters that are damp or dark. In fact, the flock should be shut in only during storms. Abundance of light in all parts of the building and at all times is necessary not only for the health of the sheep but for convenience of the shepherd in caring for them. One square foot of window for each 20 square feet of floor space is necessary. Windows should be placed at a height to insure a good distribution of light, and particularly to receive direct sunlight for the lambing pens during the period the ewes are lambing.

Ventilation is Essential. Close confinement in poorly ventilated pens is very injurious to breeding ewes. While they should seldom be shut indoors, a part of the flock will usually lie inside at night. At lambing and during storms, doors should be closed. For such times it is necessary to provide means of securing fresh air without creating drafts. In a very large building with numerous doors and windows it is often advisable to build one or two partitions from floor to ceiling to prevent drafts. Fresh air can be admitted through muslin-screened windows opened on the side opposite to that from which the wind is blowing without causing drafts if all other sides of the buildings are tightly closed.

In very cold sections, or where lambs are to arrive in the winter months, specially arranged outlets for foul air and inlets for fresh air will be necessary. Foul air must extend from the ceiling with as few bends as possible to the roof. They should be of sufficient size and number to give 8 to 10 square inches for each sheep in the building. Fresh air may be admitted through arranged inlets near the floor line. Some attention is required to adjust such inlets to the variations in wind and temperature, and the same is true where windows are

depended upon. There is no efficient automatic system of ventilating sheep buildings, though some of the "wind baffles" which have been devised for poultry houses might be adapted:

Well-Drained Floors. Level and well-drained clay-surfaced floors are satisfactory and economical. Sheep pack the surface very firmly, and if there is proper drainage the only objection to this floor is that it does not exclude rats. Concrete floors for alleys and feed rooms are necessary, but will seldom be called for in the pens.

Arrangement of Building. The main features to be provided in the floor plan are minimum of waste space, convenience and ease in feeding and in cleaning the pens, and elimination of the need of moving or disturbing the sheep. Pen partitions should be movable. By using feed racks to make divisions in the pen space the size of the pens can be varied as needed, and in special cases the racks can be removed to permit the use of the space for other stock.

Locating Sheep Buildings. The site for permanent buildings for sheep should first of all be dry and well drained. Ample yard space that is dry and sheltered should be available adjacent to the main barn or shed. A southern slope with sandy soil is especially satisfactory for this purpose.

On most farms it will be advantageous to have the buildings and yards easily reached from the regular pastures or from fields used to grow forage crops for summer pasture. As the flock requires attention many times daily during part of the year, convenience of location in relation to the farm dwelling and to other buildings will effect an economy of time in the performance of routine labor.

BUY EWES IN FALL

Many farmers make a practice of buying ewes in the fall, breeding them and selling the lambs the following summer. Such ewes can be carried through the winter on wheat and rye fields if not pastured too closely, or on clover hay with some roots and a little linseed meal. If the clover hay is not available, corn fodder may be used as roughage, in which case it should always be supplemented with bran or linseed meal. Lambs should come early and should be taught to eat as soon as they are old enough. Give lambs access to corn by providing a creep through which they can go without allowing the ewes to follow.

Feed Cows Legume Hay. In cooperation with the extension department of Purdue university the United States department of agriculture last year made an investigation of the cost of producing milk in 16 dairy herds in Porter county, Ind. In that study it was found that when other conditions were the same the dairymen who fed the largest quantity of clover, alfalfa, and other legume hays used 38 per cent less grain without lessening the production of their cows. That is, the dairymen who fed legume hay obtained as much milk from 62 pounds of grain as the others obtained from 100 pounds of grain.

Such a saving is certainly worth while. Patriotism demands increased production; the high cost of living demands economical production; both those demands are met when all our good cows are kept, and when their milk flow is maintained at low cost.

Feeding Racks for Sheep. Combination hay and grain racks are probably the most convenient for feeding small lots of sheep. The open-end rack is suitable for use in barns where feeding can be done by passing directly from the feed alley to the rack, thus obviating the difficulties which follow from entering pens filled with sheep. Some shepherds prefer a rack with closed sides instead of slats; such a rack requires that the hay be eaten through an opening at the bottom.

OUT-OF-ORDINARY PEOPLE

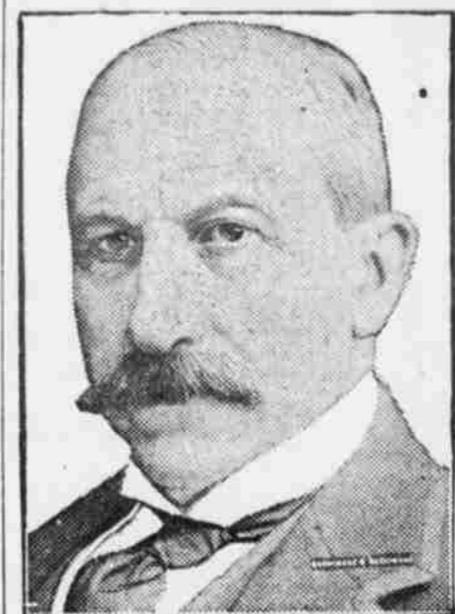
HERO OF REMARKABLE ESCAPE

Sergt. Pilot E. T. Buckley of Chicago whose parents live in Kilbourne, Ill., is back in America after some 20 months of service in the great war, topped off with capture by the Huns and a remarkable escape from their prison camps.

It was on January 2, 1916, that Buckley, then fresh from the University of Illinois, joined the Foreign Legion of France with the intention of qualifying as a flyer. After a thorough course in a French aviation school he was assigned to Nungesser's traveling squadron, known as Escadrille Spad, which corresponded to the German traveling circus headed by the late Baron Richthofen. He and his French comrades, while attached to the Lafayette flying corps, had a roving commission which took them along the western front, but it was in the Verdun region that the American volunteer was to meet the biggest experience of his life. On September 6 last year he was brought down in a fight with three German planes, one of which he crashed. He was taken to a German prison camp wounded. He was fed badly and treated with studied cruelty because he was an American volunteer in the French army. He made three efforts to escape, but each time was caught on the Swiss frontier or before he reached it. On the fourth occasion he also was stopped by a German sentry, but he gave battle with a pocket knife which a German had given him in the prison camp, laid out the sentry, and made his way back to his squadron in France.



LORD MILNER, WORKER



worker, although his own tastes are indicated by the fact that at Oxford he was pre-eminently the first scholar of his class, despite the fact that brilliant men, including Mr. Asquith, were in opposition.

The passion of his life is to see the British empire knit in true democracy, coherent, unalterably cohesive, so equipped with governmental power and individual impulse that all great natural resources will be developed for the public good. The public good! Those three words are his creed. Now they mean defeat of Germany, the rights of all the allies.

On the one occasion—it was but a few weeks ago—when Lord Milner was submitted to an interview, I had gone to him greatly impressed by the high privilege granted me, and, somehow, expected something rather formidable, Edward Marshall writes in London Answers. I found nothing of the sort, but a tall man, very approachable, very human, ready to answer "leading questions" if he thought replies to them would further international understanding.

That is the impression which he makes—that of the very highest type of public servant. In the best sense of the word, his governmental work all has been service—that of a man caring very little, if anything at all, for place and power, but above all things to be of value to the empire. He never has conceded anything to ease; his close associates declare he never thinks about himself. His heart is with the

NEW AMBASSADOR TO BRITAIN

When President Wilson selected John W. Davis of West Virginia to succeed Walter Hines Page as ambassador to Great Britain there was considerable surprise but not a single adverse criticism of the appointment. The announcement was made just as Mr. Davis, who was then solicitor general of the United States, arrived in Switzerland to serve as the head of the American delegation at the Berne conference between American and German missions on the treatment and exchange of prisoners of war.

Since he went to Washington seven years ago as a member of congress from the First West Virginia district, Mr. Davis has been an active figure in the capital. He was elected to succeed himself in the house, but hardly had begun his second term when President Wilson appointed him solicitor general in August, 1913.

Mr. Davis is forty-five years old. Beginning life as a lawyer in his home town of Clarksburg, W. Va., after graduating at the Washington and Lee university and the University of Virginia, he became prominent in Democratic politics and served in the West Virginia legislature before going to congress and was a delegate to the Democratic national convention of 1904.



ITALY'S WARRIOR PRINCE



down in submarines, spered warships, sailed boats, shot at wild boars and ridden cavalry horses. But the things he is proudest of are his trips at the front, for he has been there not once, but many times.

At the front young Umberto went practically everywhere, made friends with the soldiers, was petted by them in return and all in all had a fine time.

The youngest boy officially fighting at the front with the allies is the fourteen-year-old Prince Umberto of Italy.

As long ago as 1916, when he was only twelve, the prince di Piedmont was a familiar figure at the Italian army headquarters, but he was there then only as a privileged visitor. When Italy was invaded, however, the desire of the heir to the throne to join the colors could no longer be refused.

While he has not been permitted to run into great danger, he is seeing actual military service and is experiencing many phases of the war at first hand.

Humbert Nicholas Thomas Jean Marie—to give him his full name in English—is the only son of King Victor Emmanuel. He is head of the Young Explorers of Italy, a body that corresponds to the boy scouts in America. He has gone up in airplanes,

The Housewife and the War

(Special Information Service, United States Department of Agriculture.)

GREEN TOMATO PICKLES WHICH ARE DIFFERENT.



Making Appetizers for Restricted Diets.

GREEN TOMATOES MAY BE PICKLED

Relishes, Pickles or Chowchow Give Zest to Otherwise Flat-Tasting Meal.

MAKE MEAL APPETIZING ONE

Play an Important Part Right Now When Americans Are Endeavoring to Use Various Meat Substitutes—Some Recipes.

Pickles have their own peculiar place in the menu, although they possess little food value. They stimulate the appetite and especially now, when Americans are endeavoring to use and like the various meat substitute dishes in place of the steaks and roasts of other days, play an important part in making the meal an appetizing one.

The following recipes are offered for the benefit of those who have an abundance of green tomatoes from garden or market in the late fall when they must be saved from destruction by frost. In all cases an effort has been made to use corn sirups instead of sugar as far as possible in pickles. The darker and less expensive sirups may be liked equally well.

Green Tomato Pickles.
1 peck green tomatoes 2 pounds sugar
1/2 cup vinegar 1/2 cup salt
1/2 cup mustard 1/2 cup turmeric
1/2 cup ground cinnamom 1/2 cup ground allspice
1/2 cup ground cloves 1/2 cup ground nutmeg
1/2 cup ground ginger 1/2 cup ground cardamom

Chop and slice the tomatoes and onions and sprinkle with the salt and let them stand overnight. In the morning drain off the liquid and put the tomatoes and onions in a preserving kettle with a quart of the vinegar and a quart of water. Let the mixture boil for five minutes and then drain. To the drained tomatoes and onion add the spices, sugar and two quarts of vinegar and then boil for 15 minutes counting from the time they begin to bubble. Put in jars which have been thoroughly scalded in hot water and seal.

One peck of tomatoes should make between three and four quarts of pickles. If smaller amounts are desired, use 2 pounds tomatoes, 2 ounces (4 table- 2 onions (1/2 pound)) spoonfuls) sugar, 1/2 ounce salt (1 table- spoonful), 1/2 pint vinegar, 1/2 teaspoonful ground cinnamom, 1/2 teaspoonful cur- 1/2 teaspoonful ry powder, 1/2 teaspoonful ground allspice, 1/2 teaspoonful turmeric, 1/2 teaspoonful mustard.

This should make one pint of pickle when cooked. The spices used must be of good quality; buy only the best, especially with mustard and curry, for an inferior grade of either may easily cause the recipe to be pronounced worthless. Cardamom may be used instead of curry, for it is one of the common ingredients of curry. Corn sirup is a fair substitute for sugar. Brown sugar is usually liked even better than white.

Piccalilli or Green Tomato Relish.
2 quarts green to- 3 large cucumbers
matos 1/2 ounce black mus-
1/2 cup sliced cab- 1/2 ounce black mus-
bage 1/2 ounce celery seed
4 large or 8 small 1/2 ounce whole
onions 1/2 ounce whole
2 red peppers 1/2 teaspoonful
1 green pepper 1/2 teaspoonful
1/2 cup dill pickles 1/2 cupful salt
1/2 cup white mus- 1/2 cupful sugar or
tard seed vinegar to
cover

Chop the vegetables fine; add the cloves, tied in a small piece of cloth, and other spices; cover with one-fourth cupful of salt and let stand overnight in bowl or other earthenware dish. Drain off the salt in the morning, and add sugar and enough vinegar to cover. (Mix the vinegar with one-third or one-fourth its own measure of water if the harshness of a strong vinegar is objectionable.) Cook the mixture until tender, stirring occasionally to keep from burning. If the brown sugar is not procurable, imitate its flavor by

using granulated sugar or corn sirup, and one teaspoonful (or more) of caramel.

To make a caramel sirup which may be bottled and kept for future use: Brown one-fourth cupful granulated sugar in a smooth iron skillet, stirring constantly until it begins to turn black. Add one-fourth cupful boiling water, stir until all the sugar is dissolved and a smooth, dark, thin sirup is obtained, with a somewhat bitter taste.

Chowchow.
2 quarts chopped 1/2 teaspoonful white
green tomatoes mustard seed
3 pints chopped cab- 1 cupful grated
bage horseradish
1 pint chopped (very 1 cupful sugar and 1
fine) onions and 1/2 cupful sirup
green peppers 1/2 cupful celery
1/2 teaspoonful dry seed

Add one cup of salt to each gallon of tomatoes and cabbage and let stand overnight. In the morning squeeze dry, stir in all the other ingredients, and cover with cold vinegar. One cup of olive or other oil may be added to one quart of chowchow if desired. Spices may be varied according to pleasure and convenience.

Boiled Chowchow. Make the chowchow according to the above recipe and boil for 35 minutes. Green Tomato and Artichoke Chowchow.

Follow the above recipe using equal parts of tomatoes and Jerusalem artichoke tubers (not cooked), cut into small dice.

Sweet Spiced Green Tomato Relish.
2 pounds green to- 1/2 teaspoonful cloves
matos (scant) 1/2 teaspoonful mus-
2 oranges 1/2 teaspoonful mus-
1 quart water 1/2 teaspoonful mustard seed
1 cupful sirup and 3 small Chili pep-
1 cupful vinegar 1/2 teaspoonful black
1/2 cupful vinegar 1/2 teaspoonful black
1 lemon 1/2 teaspoonful white
1/2 teaspoonful turmeric 1/2 teaspoonful
1/2 teaspoonful curry 1/2 teaspoonful car-
dammom seed
1/2 teaspoonful cin- 1/2 teaspoonful pap-
rika
1/2 teaspoonful salt

Cut tomatoes into small pieces, grid finely the orange peel, add one quart of water and cook until tomatoes are tender. Add pulp of two oranges, and finely shredded peel of one-fourth orange, and other ingredients. Cook for about one hour. If desired, spices may be varied—turmeric, curry powder and cardamom may be omitted and one-half teaspoonful ginger used instead, or a little grated horse-radish may be substituted. (Yield of recipe, 8 1/2 glasses, holding one-third pint each.)

Note—It is desirable to make tomato jelly and this relish on the same day, as the pulp left from the jelly may be used in the relish instead of buying additional tomatoes and orange peel. Particularly is this the case if the bag is not squeezed much in draining off the juice for jelly-making; the pulp which remains should not be wasted.

Food Value of Nuts. In connection with the campaign for gathering nut shells for gas masks, it should be borne in mind that nuts are among the richest and most wholesome of our foods. Wherever possible the kernels of the native nuts should be added to the home supply of foods.

The hard shells, not the husks, of black walnuts, butternuts, hickory nuts, Persian (English) walnuts, Japanese walnuts and the seeds of such fruits as peaches, plums, prunes, apricots and olives are exceedingly useful in the making of carbon for gas masks. The shells of pecans and almonds cannot be used.

Seven pounds of hard nut shells, of two hundred peach pits, will make enough carbon for one gas mask. Thousands of tons of coconut shells and shells of coihune nuts from tropical America, and carloads of fruit pits from the Pacific coast are being used. Still the supply is not sufficient.

Nuts which cannot readily be cracked, those which have become stale with age, or those which have failed to develop plump kernels should be turned over to the Red Cross. Black walnuts and butternuts which are not to be cracked may be sent in without removing the outer husk. Arrangements for gathering and shipping nuts, nut shells and fruit pits can be made through the local Red Cross.

In cleaning windows, first remove dirt with hot, soapy water, then wipe the panes with a paraffin cloth and polish with a piece of paper.