

DEPARTMENT OF AGRICULTURE

CARE AND MANAGEMENT OF BROODER CHICKS

Brooder chickens should not be given too much freedom or range until they are a month or six weeks of age.

Where they are given range too early, the mortality is apt to be greater than when they are confined in a comparatively small space.

When allowed range, the chicks become prey for cats, dogs and other animals; they frequently do not find their way back to the brooder, and are then often chilled before found by the attendant.

Small Runs Really Keep Clean. Where the chicks are confined in a comparatively small space for a month or more, they become accustomed to their quarters and will return to them without any difficulty.

Another advantage is that their food supply is always under control of the feeder. A limited space for runs can be kept sanitary at all times.

The temporary runs can be removed when the chicks are about six weeks of age, thus giving them free range, where they will develop much better than if in close confinement.

This, of course, is meant for chicks intended for layers or for brooding purposes. In the raising of chicks grown for broilers, where quick growth is desired, they would not be given this range.

Where the growing chicks are kept in portable colony houses, they can be given new ground frequently, thus lessening the danger of disease from contaminated soils, which are often found where houses cannot or are not moved.

It is also claimed that frequent moving of the chicks prevents too rapid development. Early laying fowls are often stunted or immature, and consequently make poor brooders later.

Separate Sexes as Soon as Possible. As soon as the sexes can be distinguished the cockerels and pullets should be separated. The pullets will develop better when housed and cared for alone.

The cockerels should be fattened and sold, or if they are to be kept for brooding, they should be housed away from the pullets, where they will mature much better.

The care and management of the growing chicks, after they are placed on range, is as important as when they were confined in the brooders. Neglect at any time during the growing period means a serious setback later.

Too often the chicks are allowed to rustle for themselves, after leaving the brooders, and as a result the number of fowls suitable for brooding is small.

Conditions That Influence Results. Because of the different conditions under which chicks are raised, it is difficult to give any specific directions that can be followed by all with equally good results.

There are, however, certain things that can be observed that will bring good results in the raising of the chicks to maturity.

Absolute cleanliness is most essential. Without such cleanliness, chicks cannot do well, even if all other conditions are ideal.

Clean food and water are important, if the chicks are to develop properly. Warmth in the brooder is necessary. Where it is lacking, chicks will not grow well; the foods eaten are required to supply warmth, rather than to make growth. Exercise is important.

Without it, digestion is impaired, often causing bowel trouble. Calling of the chicks must be done frequently or whenever it is noticed there are weak and strong ones together.

Constant observation and good judgment on the part of the attendant is necessary to insure success.

Call of the chicks must be done frequently or whenever it is noticed there are weak and strong ones together.

Constant observation and good judgment on the part of the attendant is necessary to insure success.

Poultry Questions

Clipping Wings. To the Editor—Is there any harm in cutting pullets' wings to keep them from flying over fences?

There is no harm in clipping the wings to prevent flying. Clipped wings on fowls in a show room are considered a defect and count for same.

Campines. To the Editor—I am going into the poultry business and have not decided what breed to get.

The Campines are not bred extensively in this territory and we know of no poultry raiser that has them.

Record Egg from Rhode Island Red. F. V. Grant of 1639 East Stark street brought into The Journal office an egg laid by a Rhode Island Red pullet which was hatched last May.

WHITE ORPINGTON eggs and stock, 37 ribbons, 23 seconds, 241 third, at 10 1912 shows. I challenge quality competition.

A FLOCK OF BEAUTIFUL WHITE ROCKS. U. R. Piel strain, one cock bird, 9 hens, 8 pullets. April hatch; 150 for lot.

SAVE your babies. Feldman's Lice Exterminator keeps chicks healthy and clean; 50c per bottle, prepaid, 450 Marguerite ave.

Do not neglect to secure a good supply of fine dust for the fowls during the coming winter.

Market your eggs promptly. Keep the nests clean. Gather the eggs often. If you must keep eggs a few days before marketing, be sure to keep them in a clean, cool place.

It does not pay to doctor a fowl that is hopelessly ill or suffering from a contagious disease.

Do not neglect to secure a good supply of fine dust for the fowls during the coming winter.

Do not neglect to secure a good supply of fine dust for the fowls during the coming winter.

Do not neglect to secure a good supply of fine dust for the fowls during the coming winter.

Do not neglect to secure a good supply of fine dust for the fowls during the coming winter.

Do not neglect to secure a good supply of fine dust for the fowls during the coming winter.

Do not neglect to secure a good supply of fine dust for the fowls during the coming winter.

Do not neglect to secure a good supply of fine dust for the fowls during the coming winter.

Do not neglect to secure a good supply of fine dust for the fowls during the coming winter.

Do not neglect to secure a good supply of fine dust for the fowls during the coming winter.

Do not neglect to secure a good supply of fine dust for the fowls during the coming winter.

Do not neglect to secure a good supply of fine dust for the fowls during the coming winter.

Pleased With Results. To the Editor—Regarding The Journal as the leading medium I will say I have had splendid results from my poultry ad run in the Saturday and Sunday Journal classified columns.

A Mammoth Egg. R. B. Youmans, of 3230 East Fifty-first street southeast, sends to this office an egg from a Black Minorca hen, weighing 4 1/2 ounces and measuring 3 1/2 by 3 1/2 inches.

Winter eggs do not come by chance. It takes planning and work to get them and it pays.

Keep the Chicks Comfortable. The main object to accomplish in brooding chicks is to keep them warm and comfortable.

Feed only clean grains. Dirty or smutty grains may cause serious troubles in the digestive organs of the fowl.

Buff Leghorns. Pullets and hens 75c and \$1.00; cockerels, \$1.50; 100 egg incubator, \$2.50.

PORTSMOUTH Poultry Yards, 880 Lombard st.—We are prepared to furnish eggs for hatching in large or small lots.

WHITE FACED BLACK SPANISH. Fancy and utility eggs, \$2.50 and \$1.50 per 100.

THOROUGHBRED White Leghorn eggs for hatching; farm raised, healthy and vigorous.

SAVE your babies. Feldman's Lice Exterminator keeps chicks healthy and clean; 50c per bottle, prepaid, 450 Marguerite ave.

Do not neglect to secure a good supply of fine dust for the fowls during the coming winter.

Market your eggs promptly. Keep the nests clean. Gather the eggs often.

It does not pay to doctor a fowl that is hopelessly ill or suffering from a contagious disease.

Do not neglect to secure a good supply of fine dust for the fowls during the coming winter.

Do not neglect to secure a good supply of fine dust for the fowls during the coming winter.

Do not neglect to secure a good supply of fine dust for the fowls during the coming winter.

Do not neglect to secure a good supply of fine dust for the fowls during the coming winter.

Do not neglect to secure a good supply of fine dust for the fowls during the coming winter.

Do not neglect to secure a good supply of fine dust for the fowls during the coming winter.

Do not neglect to secure a good supply of fine dust for the fowls during the coming winter.

Do not neglect to secure a good supply of fine dust for the fowls during the coming winter.

Do not neglect to secure a good supply of fine dust for the fowls during the coming winter.

Do not neglect to secure a good supply of fine dust for the fowls during the coming winter.

Do not neglect to secure a good supply of fine dust for the fowls during the coming winter.

Keep the Chicks Comfortable. The main object to accomplish in brooding chicks is to keep them warm and comfortable.

Feed only clean grains. Dirty or smutty grains may cause serious troubles in the digestive organs of the fowl.

Buff Leghorns. Pullets and hens 75c and \$1.00; cockerels, \$1.50; 100 egg incubator, \$2.50.

PORTSMOUTH Poultry Yards, 880 Lombard st.—We are prepared to furnish eggs for hatching in large or small lots.

WHITE FACED BLACK SPANISH. Fancy and utility eggs, \$2.50 and \$1.50 per 100.

THOROUGHBRED White Leghorn eggs for hatching; farm raised, healthy and vigorous.

SAVE your babies. Feldman's Lice Exterminator keeps chicks healthy and clean; 50c per bottle, prepaid, 450 Marguerite ave.

Do not neglect to secure a good supply of fine dust for the fowls during the coming winter.

Market your eggs promptly. Keep the nests clean. Gather the eggs often.

It does not pay to doctor a fowl that is hopelessly ill or suffering from a contagious disease.

Do not neglect to secure a good supply of fine dust for the fowls during the coming winter.

Market your eggs promptly. Keep the nests clean. Gather the eggs often.

It does not pay to doctor a fowl that is hopelessly ill or suffering from a contagious disease.

Do not neglect to secure a good supply of fine dust for the fowls during the coming winter.

Do not neglect to secure a good supply of fine dust for the fowls during the coming winter.

Do not neglect to secure a good supply of fine dust for the fowls during the coming winter.

Do not neglect to secure a good supply of fine dust for the fowls during the coming winter.

Do not neglect to secure a good supply of fine dust for the fowls during the coming winter.

Do not neglect to secure a good supply of fine dust for the fowls during the coming winter.

Do not neglect to secure a good supply of fine dust for the fowls during the coming winter.

Do not neglect to secure a good supply of fine dust for the fowls during the coming winter.

Do not neglect to secure a good supply of fine dust for the fowls during the coming winter.

Do not neglect to secure a good supply of fine dust for the fowls during the coming winter.

Do not neglect to secure a good supply of fine dust for the fowls during the coming winter.

MEETING NOTICES. R. N. A. Ore. Ross Camp meets Fri. eve. 8:30, Ross camp, 212 Front st.

BUSINESS CARDS. W. G. Smith & Co. Wedding and party cards, 404 1/2 Washington bldg.

DEATHS AND FUNERALS. DAMMACH—in this city, February 13, at the family residence, 1073 East York street.

YOUNG—the funeral of our late neighbor Henry W. Young will be held in our hall, 112 East Sixth street, Sunday, February 24, at 2 o'clock.

FUNERAL DESIGNS. FURNAL designs flowers, all occasions. C. Taub, 406 1/2 Mar. Mar. 6370.

FUNERAL DIRECTORS. NEW HOME OF J. P. PINLEY & SON, PUNYAL, Director of Funerals.

MR. EDWARD HOLMAN, the leading funeral director, 220 Third street, corner Salmon. Laid assistant, Phone A-1511.

Dunning & McEntee Undertakers in every detail of the funeral. Modern in equipment.

PEARSON Undertakers, E. 1060, 369 1/2 East Duane. Directors, 414 E. Alder.

ERICKSON UNDERTAKING CO., MAIN 613. A-2235. 409 ALDER. HEMSTOCK, 1687 E. 13th. St. 71, B-1122.

PORTLAND REALTY DEALERS. OREGON REAL ESTATE CO., 707 Grand and Meil. E. 67, C-1702.

FOR SALE—HOUSES. 4 ROOM bungalow, Rose City Park district, best of construction.

FOR SALE—HOUSES. 5 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen.

FOR SALE—HOUSES. 5 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen.

FOR SALE—HOUSES. 5 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen.

FOR SALE—HOUSES. 5 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen.

FOR SALE—HOUSES. 5 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen.

FOR SALE—HOUSES. 5 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen.

FOR SALE—HOUSES. 5 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen.

FOR SALE—HOUSES. 5 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen.

FOR SALE—HOUSES. 5 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen.

FOR SALE—HOUSES. 5 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen.

FOR SALE—HOUSES. 5 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen.

FOR SALE—HOUSES. 5 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen.

FOR SALE—HOUSES. 4 ROOM bungalow, Rose City Park district, best of construction.

FOR SALE—HOUSES. 5 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen.

FOR SALE—HOUSES. 5 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen.

FOR SALE—HOUSES. 5 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen.

FOR SALE—HOUSES. 5 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen.

FOR SALE—HOUSES. 5 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen.

FOR SALE—HOUSES. 5 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen.

FOR SALE—HOUSES. 5 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen.

FOR SALE—HOUSES. 5 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen.

FOR SALE—HOUSES. 5 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen.

FOR SALE—HOUSES. 5 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen.

FOR SALE—HOUSES. 5 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen.

FOR SALE—HOUSES. 5 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen.

FOR SALE—HOUSES. 5 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen.

FOR SALE—HOUSES. 5 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen.

FOR SALE—HOUSES. 5 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen.

FOR SALE—HOUSES. 5 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen.

FOR SALE—HOUSES. 5 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen.

FOR SALE—HOUSES. 5 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen.

FOR SALE—HOUSES. 5 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen.

FOR SALE—HOUSES. 5 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen.

FOR SALE—HOUSES. 5 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen.

FOR SALE—HOUSES. 5 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen.

FOR SALE—HOUSES. 5 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen.

ACREAGE ON Macadam Road. One mile from city limits, 3 blocks to good carline.

ACREAGE on West Side. Excellent soil, large area of bearing fruit trees.

5 Acres. 2 1/2 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen.

5 Acres. 2 1/2 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen.

5 Acres. 2 1/2 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen.

5 Acres. 2 1/2 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen.

5 Acres. 2 1/2 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen.

5 Acres. 2 1/2 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen.

5 Acres. 2 1/2 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen.

5 Acres. 2 1/2 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen.

5 Acres. 2 1/2 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen.

5 Acres. 2 1/2 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen.

5 Acres. 2 1/2 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen.

5 Acres. 2 1/2 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen.

5 Acres. 2 1/2 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen.

5 Acres. 2 1/2 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen.

5 Acres. 2 1/2 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen.

5 Acres. 2 1/2 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen.

5 Acres. 2 1/2 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen.

5 Acres. 2 1/2 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen.

5 Acres. 2 1/2 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen.

5 Acres. 2 1/2 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen.

5 Acres. 2 1/2 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen.

5 Acres. 2 1/2 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen.

WHY SEND EAST for an INCUBATOR? 120 Egg Size \$14.00. Why buy an Eastern incubator or brooder when you can buy a better one on the Pacific Coast...

Poultry Ranches. 5 and 10-acre tracts, specially adapted for poultry raising. Ruth Trust Co., 235 Stark St.

Mortgage Loans. REAL ESTATE LOANS. MONEY ON HAND for first mortgage loans on Portland residences and inside business property.

FOR SALE—HOUSES. 4 ROOM bungalow, Rose City Park district, best of construction, near fireproof school and carline.

FOR SALE—HOUSES. 5 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen, near carline.

ACREAGE. 1/2 Acre. 2 1/2 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen, near carline.

McClanahan Incubators and Spraying Machinery, Fence and Garden Tools.

Union Meat Co's BEEF SCRAPS (50 to 55% protein).

MEETING NOTICES. COLUMBIA LODGE No. 114 A. F. & A. M. Special communication this (Saturday) evening at 8 o'clock.

MEETING NOTICES. OREGON LODGE No. 191 A. F. & A. M. Special communication this (Saturday) evening at 8 o'clock.

ACREAGE. 1/2 Acre. 2 1/2 room bungalow, modern oak floors, buffet, bookcases, Dutch kitchen, near carline.

FOR RENT—FARMS. 14. FOR RENT—16 acres improved land, plenty of good pasture around old buildings.