

IMPROVED BACKYARD CHICKEN PRODUCTION



Be A "Good Farmer"

Agricultural Education Series

Second Book of Agricultural Education or Amazonian Ecuador

INSTRUCTIONS

This Training Pac has a text and a separate Workbook that contains the exercises for the text. Follow these steps.

1. Read through the entire text to obtain an overview of the text content.
2. Become familiar with the Objectives at the beginning of each section.
3. Then reread the text while completing the exercises in the Workbook.

Contents

| | Page |
|--|------|
| Objectives | 1 |
| Words to Know | 2 |
| Improved Backyard Chicken Production | 3 |
| Backyard Chicken Management | 4 |
| Local Breeds | 5 |
| Broody Hens | 6 |
| Natural Incubation | 7 |
| Feeding Hens & Chicks | 8 |
| General Care | 9 |
| Sale of Birds | 10 |
| Chicken Coop Construction | 11 |
| Basic Disease Control | 12 |
| Vaccination Against Newcastle Disease | 13 |
| Internal Parasite Control | 14 |
| Lice Control | 15 |
| Control of Chronic Respiratory Disease | 16 |
| Important Disease Control Practices | 17 |

Objectives

When you have successfully completed this Training Pac, you should be able:

To know that raising backyard chickens are economical and are good for family nutrition as well as an excellent source of improving family income.

To successfully make a choice in selecting local or hatchery chickens.

To know whether a hen is broody as well as know how to have successful natural incubation.

To properly care for your backyard chickens.

WORDS TO KNOW

Antibiotic: a medicine given to treat against disease.

Eliminate: to get rid of.

Hatchery: special chickens sold for the purpose of laying eggs or producing meat.

Incubation: the period of time it takes for chickens to hatch.

Infectious: the effect of disease producing germs causing an infection.

Management: to take charge or care for something.

Parasite: an animal that lives in or on a different kind of animal and gets its food from the animal, often injuring the animal.

Perch: a pole, bar or branch (usually lifted off the ground) that a bird may rest upon.

Predators: an animal or person that will take or harm the chickens or eggs.

Production: a product, such as eggs, chickens multiplying.

Susceptibility: sensitive, easily affected by.

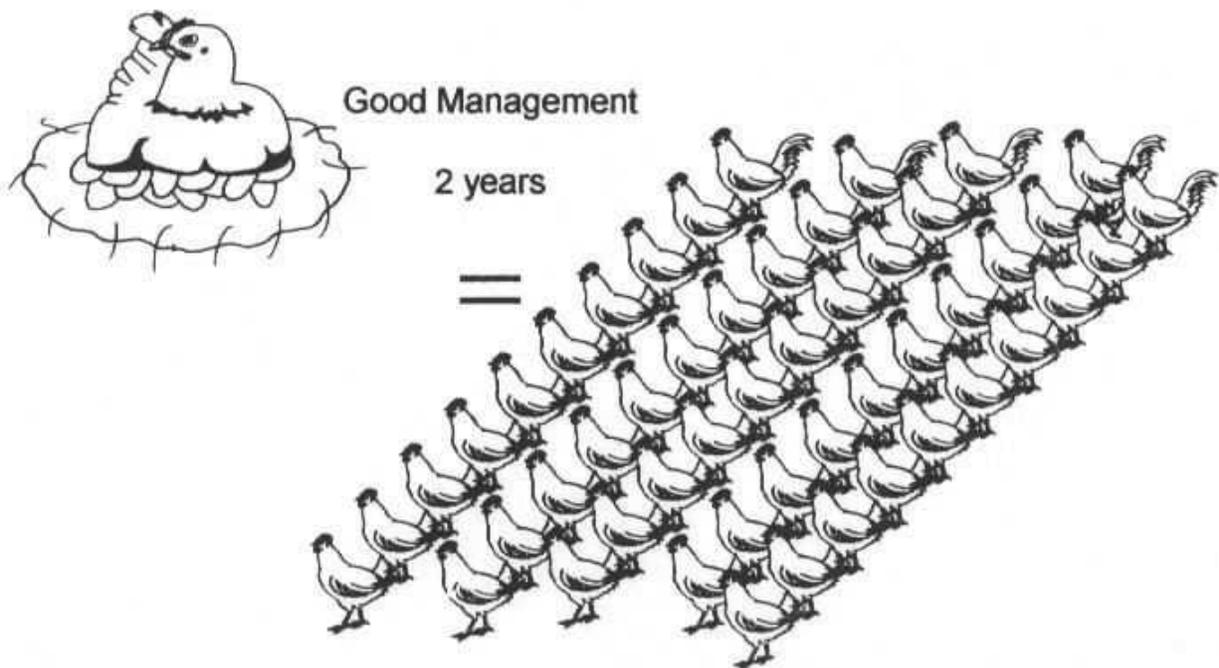
Vaccination: a medicine given to an animal that will protect them from getting a disease.

IMPROVED BACKYARD CHICKEN PRODUCTION

Everyone can raise backyard chickens. Starting with one broody hen and twelve eggs, a person can increase to 50 adult birds in less than two years.

With backyard chickens there will always be eggs which are important for improving family nutrition. Because eggs are rich in protein, it is good to serve an egg daily to children so that they will grow strong and healthy.

Chicken and eggs are highly regarded foods and therefore a good market always exists, thus providing a way to improve family income.



BACKYARD CHICKEN MANAGEMENT

A farm family can usually produce enough corn to feed up to 50 adult chickens.

To obtain good chicken and egg production, it is necessary to learn the following simple management practices.



LOCAL BREEDS

Local chickens and their eggs are better tasting and have a higher market value when compared with hatchery chickens.

Local hens are excellent for hatching eggs and raising chicks. With local hens, one does not need to buy chicks nor expensive feeds from the hatchery. Local chickens can be raised in the backyard without much care, as they feed themselves by scratching the ground for insects and weeds.

To keep these valuable characteristics, local birds should not be crossed with hatchery birds.

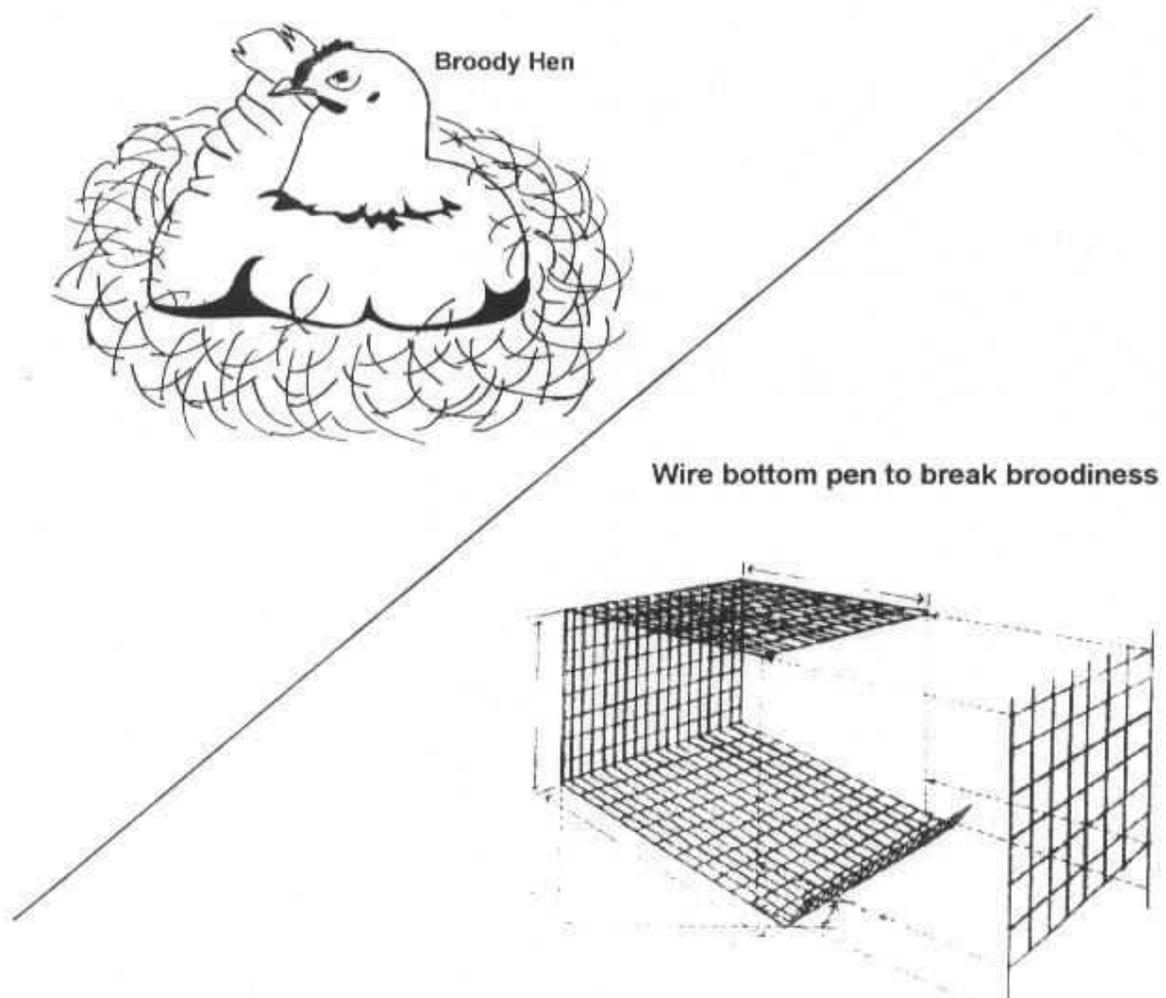
Comparison of local and hatchery breeds

| <u>Point of Comparison</u> | <u>Local Breeds</u> | <u>Hatchery Breeds</u> |
|----------------------------|---------------------|------------------------|
| Cost of chicks | Inexpensive | Expensive |
| Cost to feed | Inexpensive | Expensive |
| Death Rate | Low | High |
| Type of growth | Hardy | Delicate |
| Egg laying | Average | Very good |
| Natural Incubation | Excellent | Poor |
| Raise Chicks | Excellent | Poor |

BROODY HENS

A broody hen lifts its feathers, makes a warning sound and seldom leaves its nest. These signs should be observed for two or three days before setting the broody hen with eggs. The best broody hens completely cover 10 – 12 eggs in the nest.

To break the broodiness of poor mothers, it is necessary to build a wire bottomed pen adjoining the chicken coop where the broody hen can be enclosed for several days.



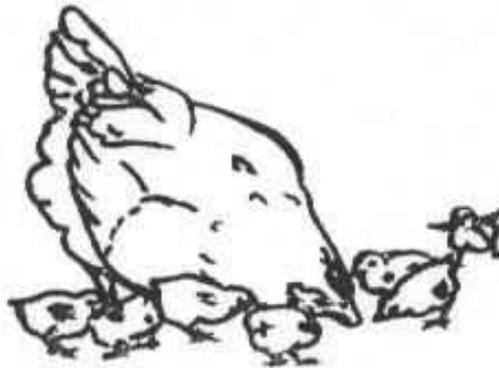
NATURAL INCUBATION

To have successful natural incubation, one should select well-formed, medium to large sized eggs. Small eggs produce weak chicks. It is better to use eggs less than ten days old. For fertile eggs, there should be one rooster per 15 hens.

One hen can incubate 10 to 12 eggs. Before sitting the hen, mark the date on each egg with a pencil to avoid confusion with freshly laid eggs.

After setting the broody hen, keep the hen enclosed for the first day so that she can become used to the nest. Beginning on the second day, turn the setting hen loose each morning so that she can eat and drink. In an hour, remove any unmarked eggs from the clutch and re-enclose the hen on the nest.

The chickens should then hatch in 21 days. Before turning them loose, it is good to keep the mother hen and her baby chicks in the nest with sufficient ground corn and fresh water for two days. After this, the baby chicks are sufficiently strong to go outside with the mother hen.



FEEDING HENS AND CHICKS

Corn is necessary feed for good egg production. Each morning one should give one pound of shelled corn for each ten adult hens. Also, it is good to feed tubers, bananas or spoiled fruit.

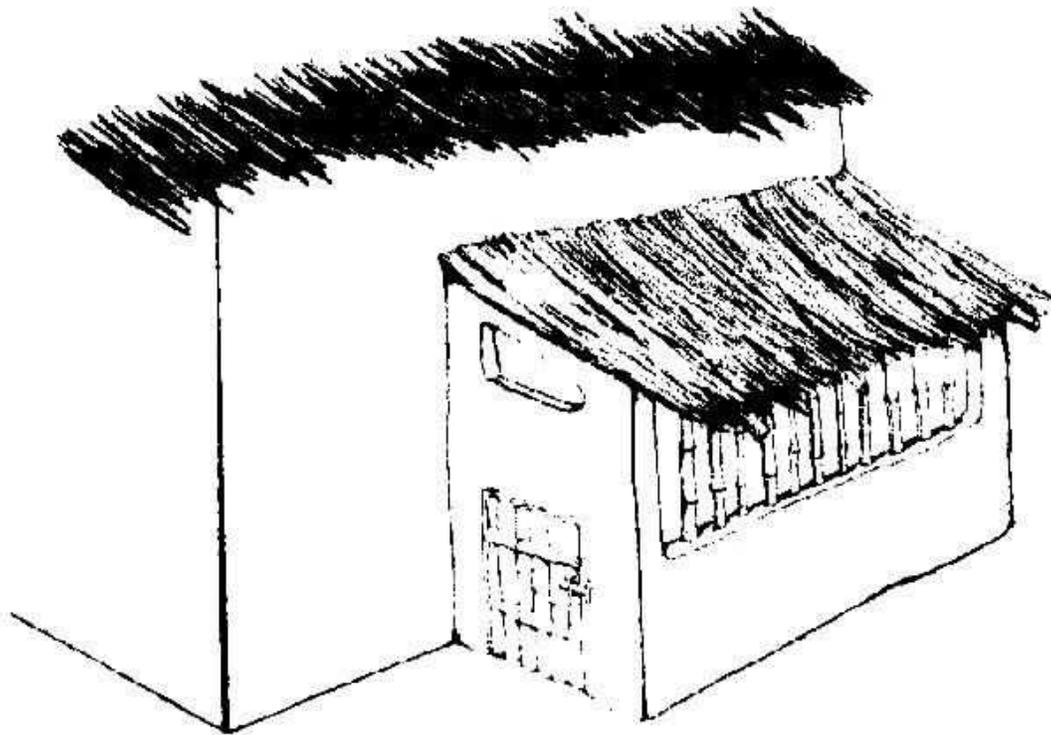
Give ground corn to baby chicks which can not eat whole grains. To give ground corn to baby chicks, it is good to build a slatted pen or creep feeder with spaces the width of two fingers. This creep feeder should be under the chicken coop roof to protect the feed and chicks. Sufficient ground corn for the whole day should be placed in the center of the slatted pen.



GENERAL CARE

The chicken coop should remain open all day so that the hens can enter and lay eggs. Eggs should be collected frequently and stored in a cool place to prevent from spoiling especially in hot weather. Hatching eggs require special care 7 to 10 days, 13°C (55°F).

The chicken coop should be closed each night to keep out dangerous animals. Before closing the door, check to see if all the mothers are with chicks, especially those that went outside for the first time, have returned.



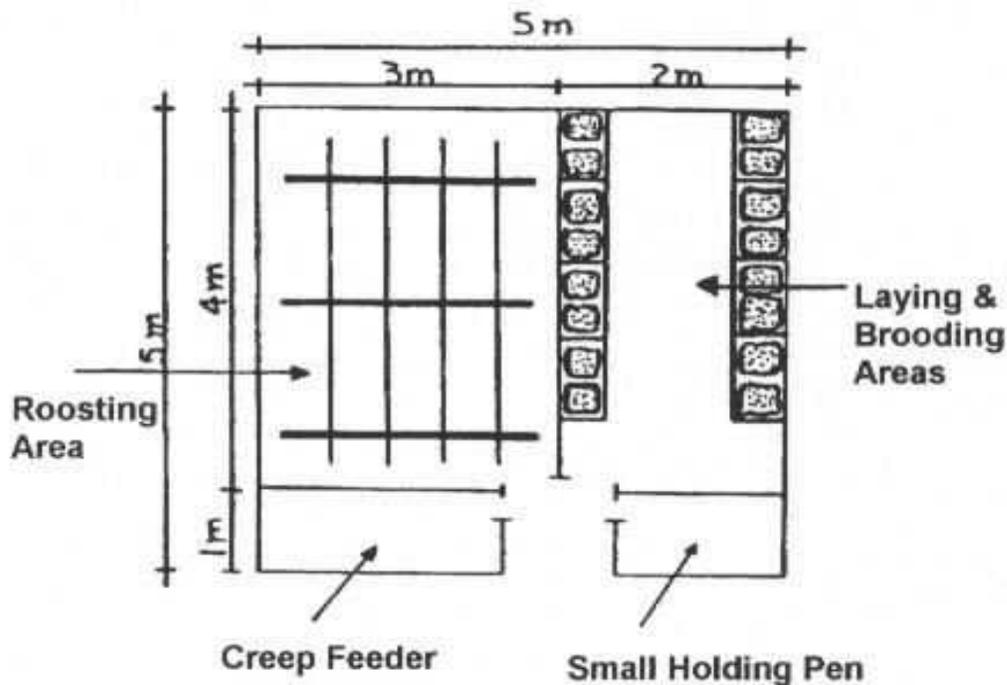
SALE OF BIRDS

Excess young roosters and older birds that are no longer desirable for breeding should be eliminated each month. Older birds can be identified by their fallen crests, destroyed feathers and rough feet.

It is only necessary to maintain one rooster per 15 hens. Hens suffer when many roosters mount them.

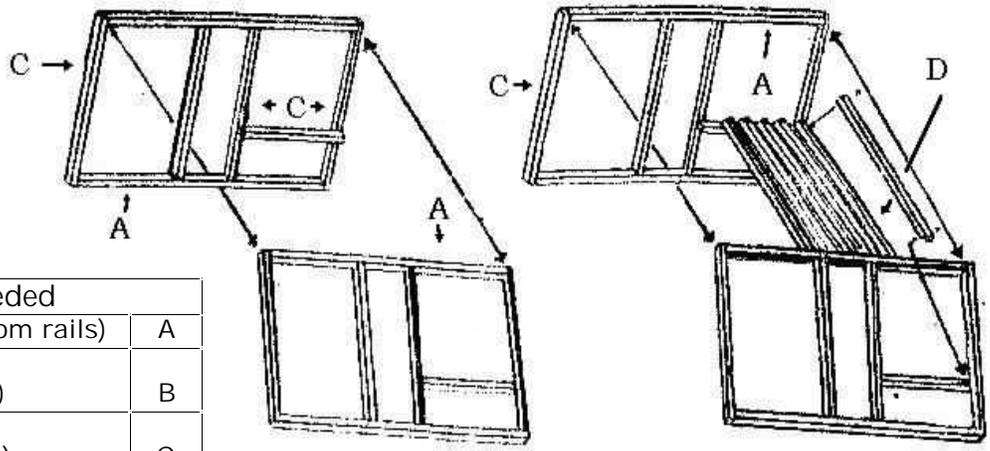


CHICKEN COOP CONSTRUCTION



The chicken coop should be strongly built so that night predators can not enter. One can build a chicken coop with boards from the trunk of palm trees, wooden poles and thatch material. A chicken coop of five meters is sufficient for 50 adult chickens.

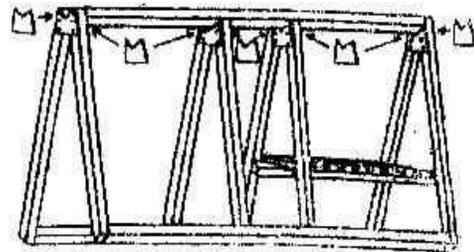
The chicken coop should have a large room with perches. It should also have a small room with laying boxes and nests for setting eggs. It is a good practice to fill the boxes and nests with chopped cornhusks. Change the litter often keeping the coop clean and dry. Nests for the natural incubation can be built-in under the laying boxes. Mothers with small chicks sleep in the small room during the first few weeks.



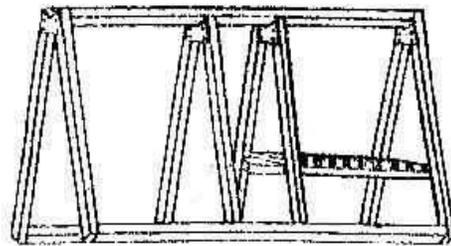
1. Build and connect side frames

2. Build roost

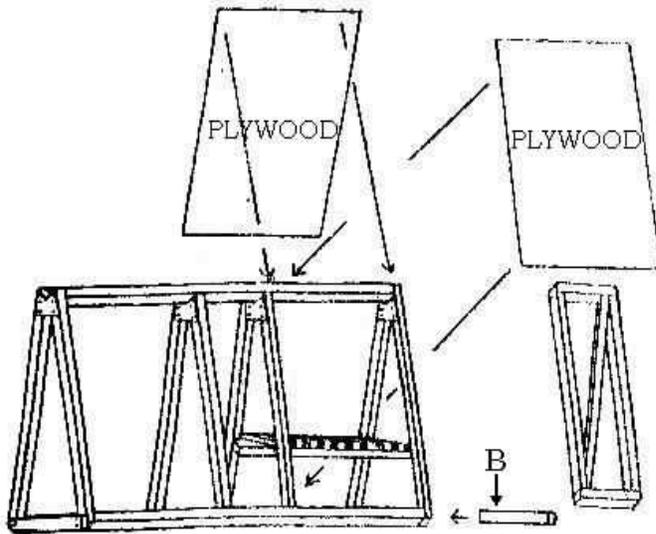
| Materials Needed | |
|---|---|
| 4 - 2" x 2" x 8' (top/bottom rails) | A |
| 2 - 2" x 2" x 6' (end rails) | B |
| 7 - 2" x 2" x 6' (side rails) | C |
| 8 - 2" x 2" x 4' (roost bars / braces) | D |
| Chicken wire (1" mesh) 6 x 20' roll | |
| Exterior plywood 4 x 8' x 1/2" | |
| Nest boxes, closed end, corner braces | |
| Corrugated materials: 2 - 6' x 4,5 sheets need to cover roof | |
| Water for up to 15 birds, Feeders | |



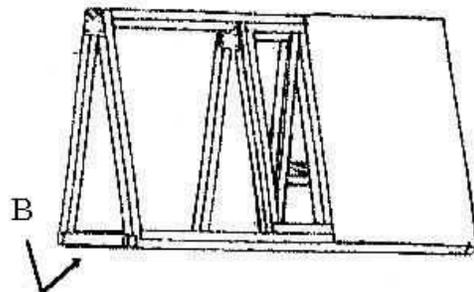
3. Attach corner braces



4. Finished frame



5. Attach closed ends, end rails and door



6. Add mesh to end and nest boxes

BASIC DISEASE CONTROL

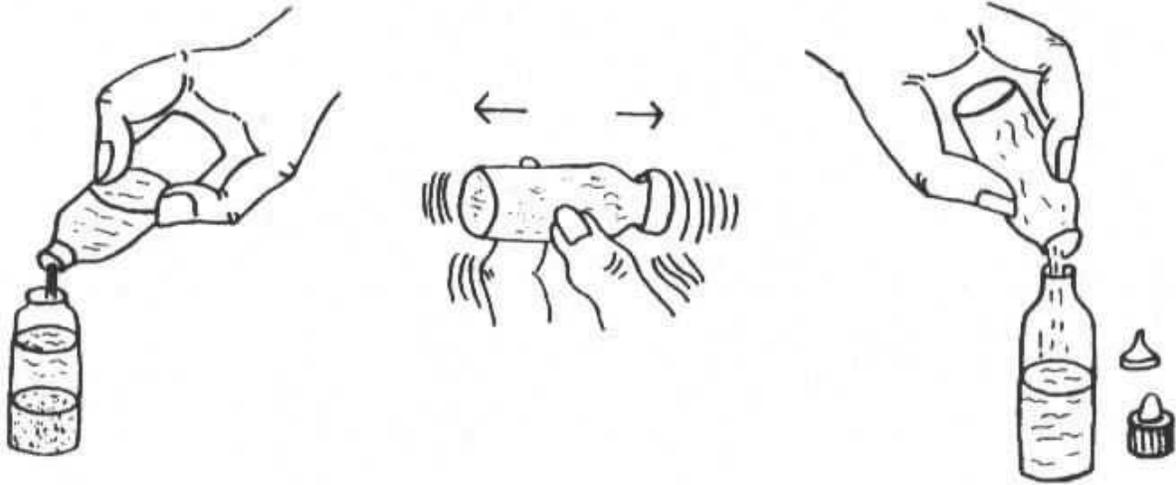
It is necessary to learn these simple practices of disease control to avoid the loss of chickens and time invested in them.

VACCINATION AGAINST NEWCASTLE DISEASE

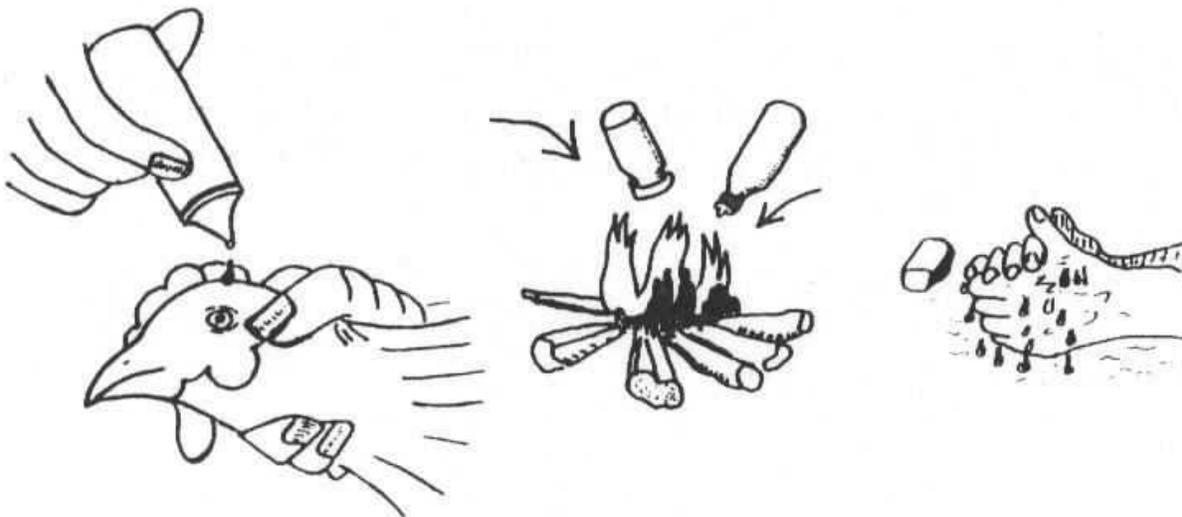
By vaccinating against Newcastle one avoids the great loss to death this disease causes. Signs include gasping, coughing, and drooping wings. Almost all birds die after two or three days.

The vaccination is for the whole flock and needs to be repeated every three months. The vaccination is done by placing one drop in the eye being careful not to touch the eye with the applicator. The vaccine can be bought under the name NEWCASTLE in a veterinary drug store. As the vaccine comes in powdered form it can be kept without refrigeration for one week, but once mixed with the liquid it should be used the same day.





When vaccinating, be careful not to place your hands near the face as the vaccine can infect human eyes. When finished with the vaccination, burn any remaining vaccine with the container and wash hands thoroughly.



INTERNAL PARASITE CONTROL

Chickens will be stronger and healthier when parasites are controlled. By not controlling internal parasites, chickens will not grow as well, lower egg production and increased susceptibility to other diseases. Small chickens are the most seriously affected by internal parasites and some may even die.

It is best to deworm the entire flock with pills according, to these sizes:

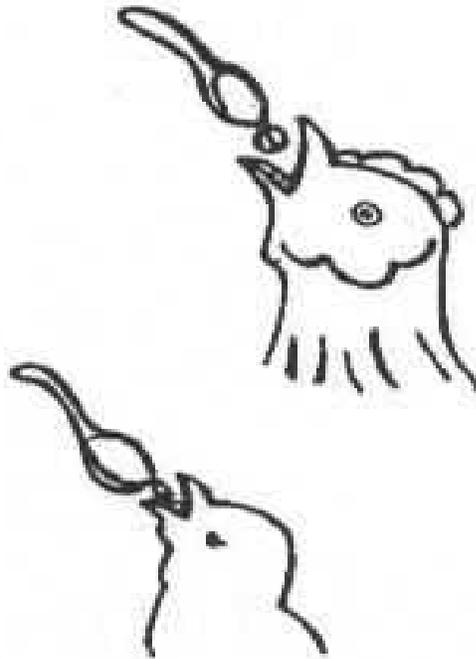
Chicks ½ pill



Adults 1 pill



Deworming pills can be purchased in veterinary drug stores under the name TRIPLE WORMER or WORMAL. The treatment should be repeated every three months. To save time, deworming can be done with the vaccination against Newcastle disease.



LICE CONTROL

A common chicken louse



Lice should be controlled as they cause weight loss and lower egg production. Lice are also a very common problem on setting hens. Lice can be controlled by mixing one part MALATHION powder with four parts of ashes.



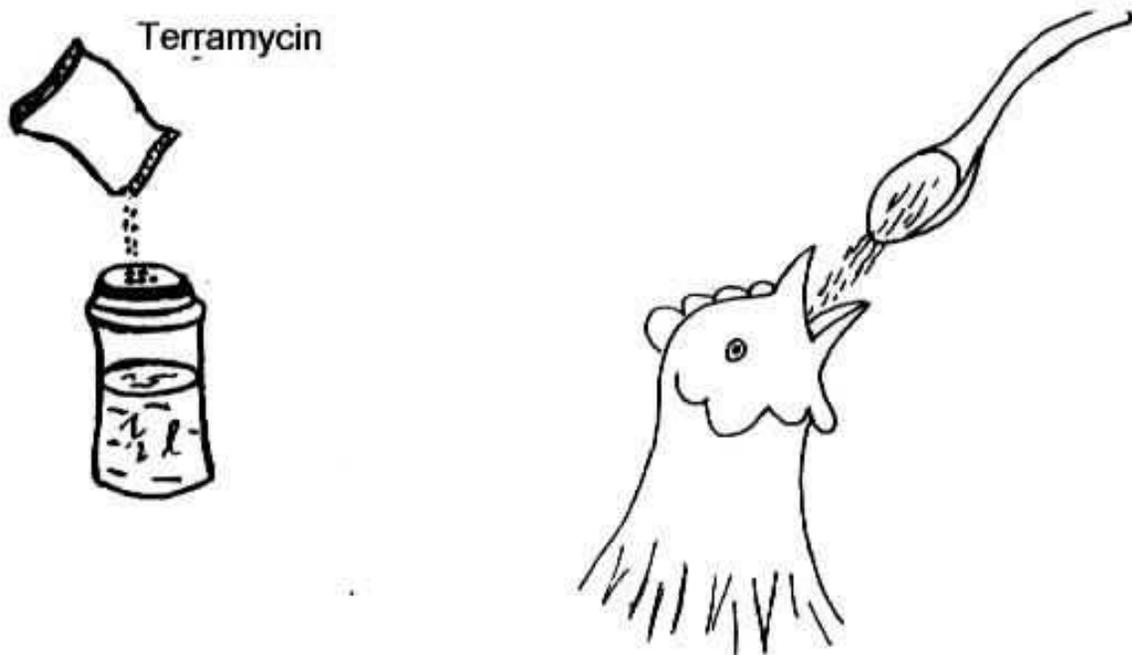
The mixture is easy to shake on using a jar with a top that has holes. The wings and legs of all birds should be dusted every three months, at the same time as the other control practices. In addition, hens and their nests should be dusted at the beginning of natural incubation.



CONTROL OF CHRONIC RESPIRATORY DISEASE

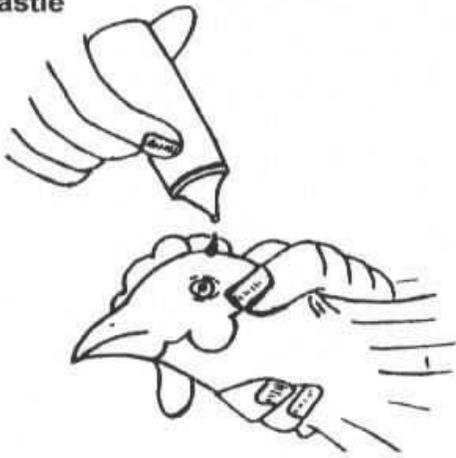
Chronic Respiratory Disease is a common long lasting infection characterized by nasal discharge. This nasal discharge causes difficulty in breathing producing a rattling or bubbling sound. Sick birds lose their appetite and do not lay many eggs. Small chicks are the most seriously affected and some may even die.

Chronic Respiratory Disease can be controlled with the antibiotic Terramycin. For administration, a four gram package can be mixed in two cups of water.



This quantity is sufficient to treat 100 birds. It is necessary to treat all sick and healthy birds, giving each a teaspoonful in the mouth. This treatment should be repeated every three months at the time as the other control practices.

Newcastle



Internal Parasites



Pill in the mouth

**IMPORTANT DISEASE CONTROL PRACTICES
TO BE DONE EVERY THREE MONTHS**

Chronic Respiratory
Disease



Antibiotic in the mouth

Lice



Dust under the wings

SUGGESTED RECOMMENDED SCHEDULE OF VACCINATION

BAI PHILIPPINES

Please check with local authorities.

| <u>Vaccination</u> | <u>Age of Bird</u> |
|--|-------------------------------|
| Avian Pest Vaccine (Intranasal method) | 1 day – 1 week old |
| Pigeon Pox Vaccine | one month old |
| Roup Vaccine | two months old |
| Avian Pest Vaccine (prick method) | three months old |
| Fowl Pox Vaccine | four months old |
| Avian Pest Vaccine | repeat after 1 year of laying |

AUTHORS

Walter Baquero A.

Wimper Baquero A.

COLLABORATORS

Jose Martinez O.

Henry Oniate R.

ILLUSTRATORS

Sheri L. Borman

Allyson J. Kramer

ADVISORS

John P. Bishop

Kay P. Bishop

Published by the
Summer Institute of Linguistics
Under contract with the
National Institute of Agricultural Research (INIAP)
Limoncocha
1982

(Reproduction is authorized)

Linguistics Press
Ecuador