

# IMPROVED BACKYARD CHICKEN PRODUCTION



# **IMPROVED BACKYARD CHICKEN PRODUCTION**

ALL NATIONS INTERNATIONAL





**Isaiah 58 Mobile Training Institute**

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# INTRODUCTION



**Objectives:** 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 and properly care for your backyard chickens.

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

### 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.

**1 HEN**

**+**



**12 FERTILE EGGS**

**+**

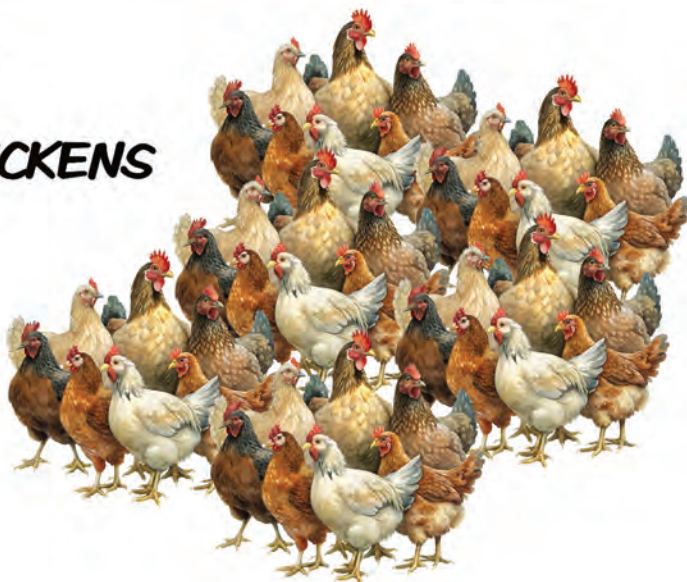


**2 YEARS**



**=**

**50 CHICKENS**





# IMPROVED BACKYARD CHICKEN PRODUCTION

Everyone can raise backyard chickens. Starting with **one broody hen and twelve fertile eggs** (produced by Rooster and a Hen), chickens 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

### **Point of Comparison - Local Breeds - Hatchery Breeds**

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 it feathers, makes a warning sound and seldom leaves it 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 enough 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.

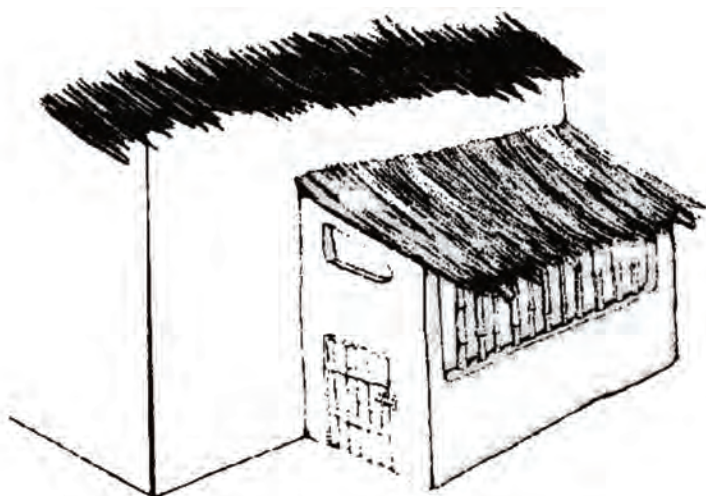


It is only necessary to keep one rooster per 15 hens. Hens suffer when many roosters mount them. 1 MALE to 15 FEMALES

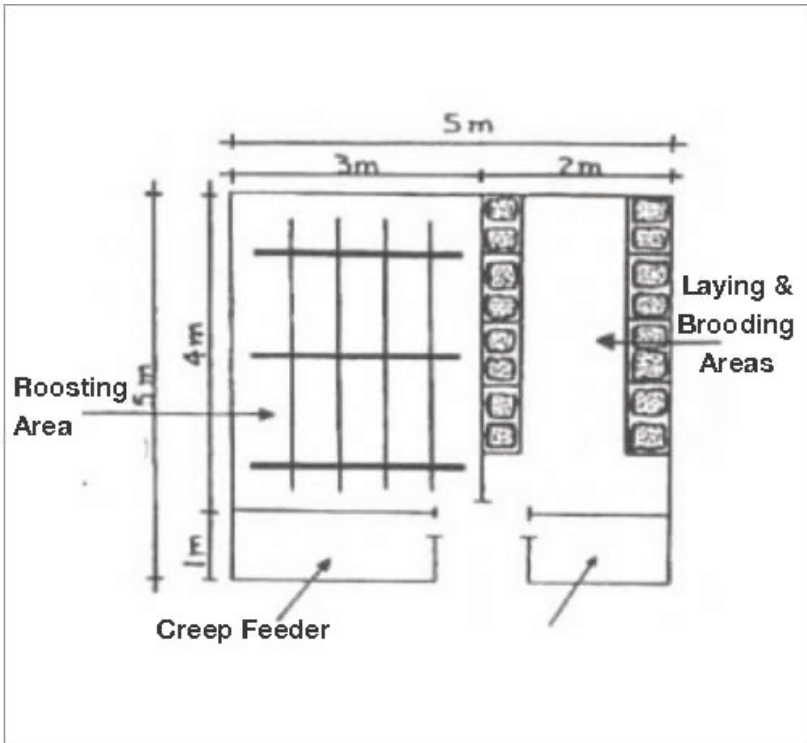
# CHICKEN COOP CONSTRUCTION

## 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.

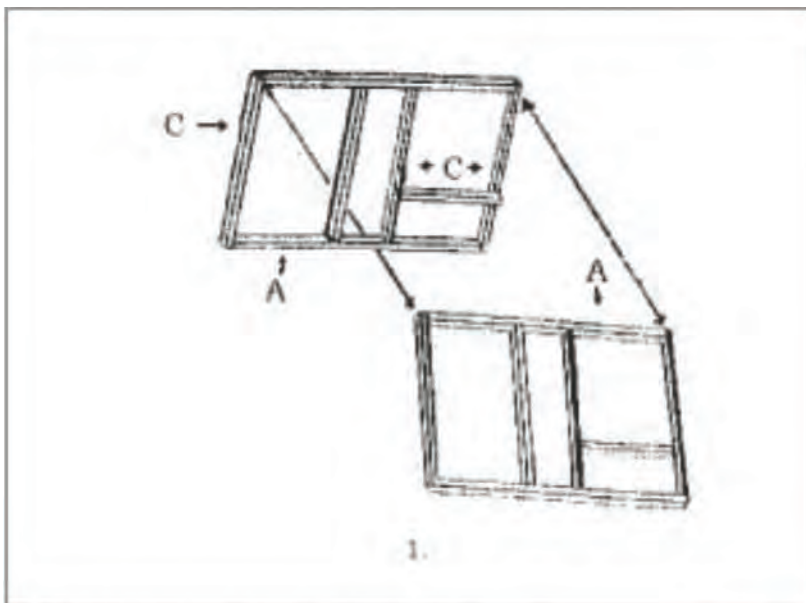


## HERE IS ANOTHER IDEA - CHICKEN TILLER

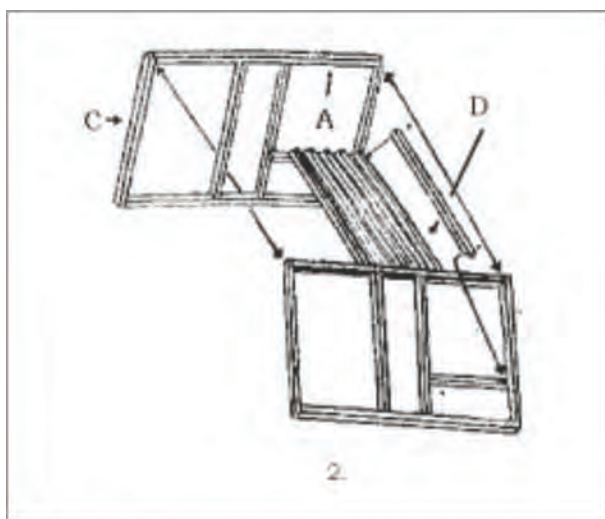
### Materials Needed:

- A - 4 – 2" x 2" x 8' (top/bottom rails)
- B - 2 – 2" x 2" x 6' (end rails)
- C - 7 – 2" x 2" x 6' (side rails)
- D - 8 – 2" x 2" x 4' (roost bars / braces)
- 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 needed to cover roof
- Water for up to 15 birds
- Bird feeders

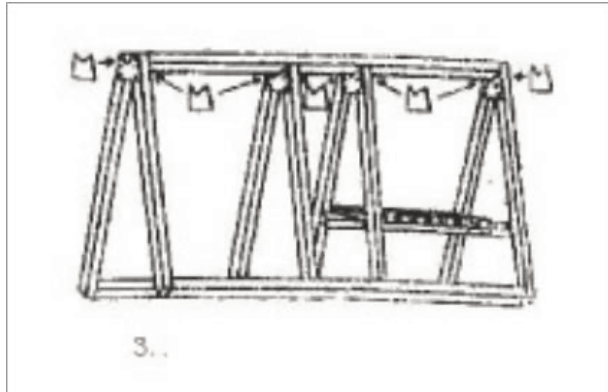




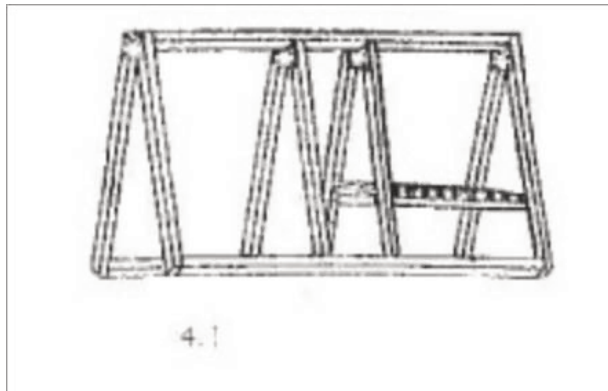
1. Build and connect side frames



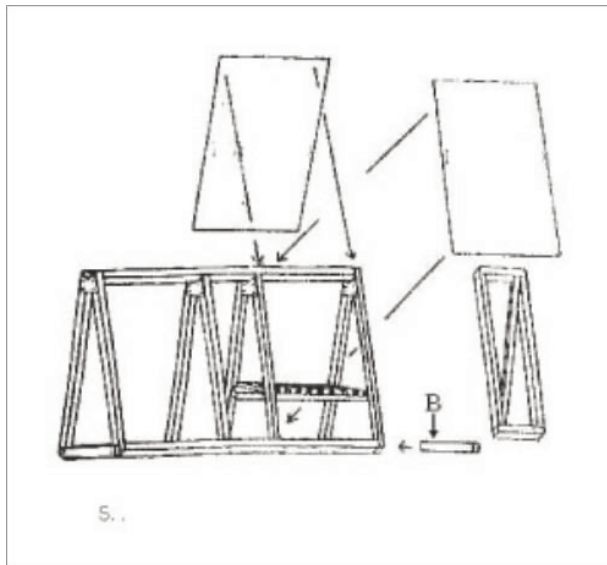
2. Build roost



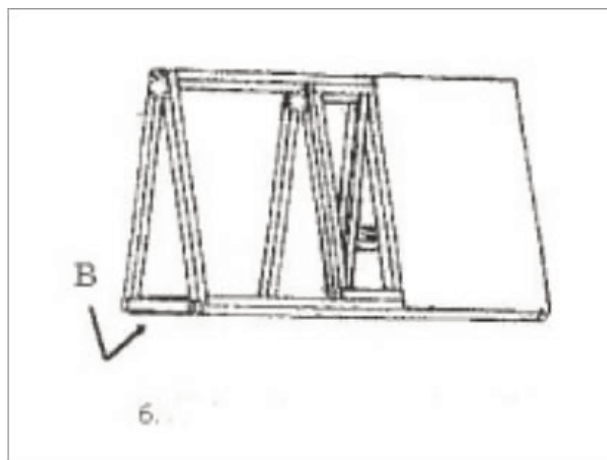
3. Attach corner braces



4. Finished frame



5. Attach closed ends, end rails and door, add mesh to end and next to boxes



# **BASIC DISEASE CONTROL**

## **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.

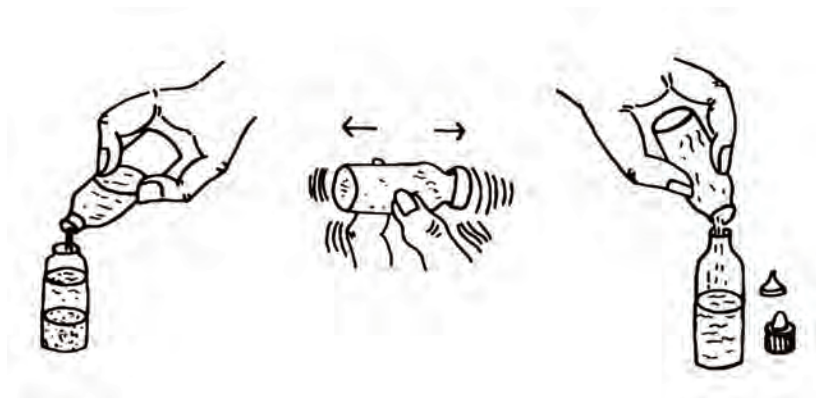
## **VACCINATION AGAINST NEWCASTLE DISEASE**

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.

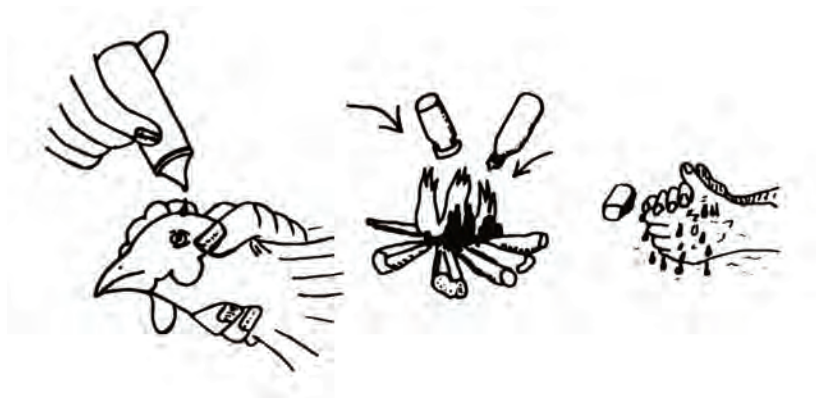
The vaccination is for the whole flock and needs to be repeated every three months. The vaccination is done by placing one drop in the eye being careful not to touch the eye with the applicator. The vaccine can be bought under the name NEWCASTLE in a veterinary drug store. As the vaccine comes in powdered 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.



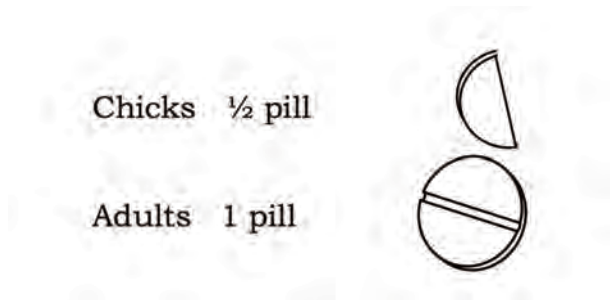
When finished with the vaccination, burn any remaining vaccine with the container and wash hands thoroughly.



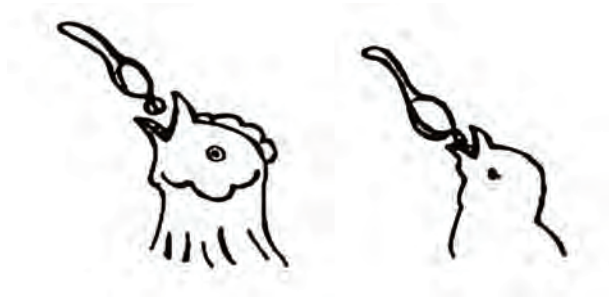
## INTERNAL PARASITE CONTROL

Chickens will be stronger and healthier when parasites are controlled. By not controlling internal parasites, chickens will not grow as well, they will have 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:



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





## LICE CONTROL

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.



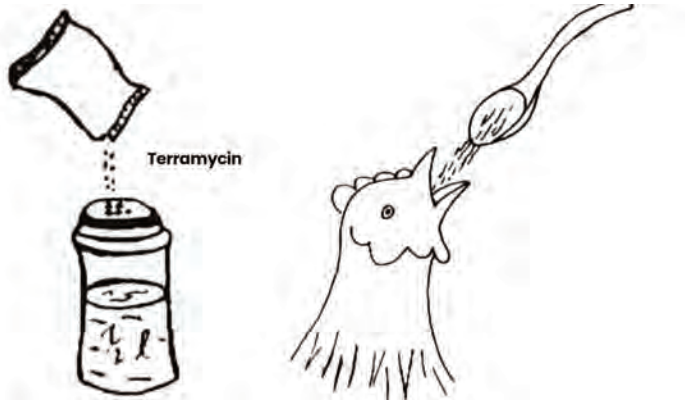
The mixture is easy to shake on using a jar with a top that has holes. The wings and legs of all birds should be dusted every three months, at the same time as the other control practices. In addition, hens and their nests should be dusted at the beginning of natural incubation.



## 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



**Newcastle**  
*Eyedrops in the eyes*

**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*

# **RECOMMENDED SCHEDULE OF VACCINATION**

BAI PHILIPPINES

## **Vaccination**

1. Avian Pest Vaccine (Intranasal method)
2. Pigeon Pox Vaccine
3. Roup Vaccine
4. Avian Pest Vaccine (prick method)
5. Fowl Pox Vaccine
6. Avian Pest Vaccine

## **Age of Bird**

1. 1 day – 1 week old
2. one month old
3. two months old
4. three months old
5. four months old
6. repeat after 1 year of laying

## LET'S REVIEW

### MATCH THE WORD BELOW WITH THE DEFINITION

1. \_\_\_ Antibiotic
2. \_\_\_ Hatchery
3. \_\_\_ Incubation
4. \_\_\_ Infectious
5. \_\_\_ Parasite
6. \_\_\_ Predators
7. \_\_\_ Susceptibility
8. \_\_\_ Vaccination
9. \_\_\_ Management
10. \_\_\_ Perch
11. \_\_\_ can raise backyard chickens.

### Definitions

- a. The period of time it takes for chickens to hatch
- b. An animal that lives in or on a different kind of animal and gets its food from the animal, often injuring the animal.
- c. Special chickens sold for the purpose of laying eggs or producing meat.

- d. An animal or person that will take or harm the chicken or eggs.
- e. A medicine given to an animal that will protect them from getting a disease.
- f. A medicine given to treat against disease.
- g. The effect of disease producing causing an infection.
- h. To take charge of caring for something.
- i. A pole, bar or branch that a bird may rest upon.
- j. Sensitive, easily affected by.

## FILL IN THE BLANKS

12. Starting with one \_\_\_\_\_ and \_\_\_\_\_ eggs, you can increase to 50 adult birds in less than two years.
13. Because eggs are rich in \_\_\_\_\_, it is good to serve an egg daily to children so that they will grow \_\_\_\_\_ and \_\_\_\_\_.
14. \_\_\_\_\_ and \_\_\_\_\_ are highly regarded foods and provides a way to improve \_\_\_\_\_.
15. A farm family can usually produce \_\_\_\_\_ to feed \_\_\_\_\_ adult chickens.
16. Local chickens and their eggs are better \_\_\_\_\_ and have a \_\_\_\_\_ market value when compared with \_\_\_\_\_ chickens.
17. Local hens are excellent for \_\_\_\_\_ eggs and \_\_\_\_\_ chicks.



18. Local chickens feed themselves by \_\_\_\_\_ the ground for \_\_\_\_\_ and \_\_\_\_\_.

19. \_\_\_\_\_ should not be crossed with hatchery birds.

### ANSWER THE FOLLOWING QUESTIONS

20-22. What are the signs of a broody hen:

- 20. \_\_\_\_\_
- 21. \_\_\_\_\_
- 22. \_\_\_\_\_

How many days should signs be observed before setting the hen with eggs?

23. \_\_\_\_\_

How many eggs can a best broody hen cover?

24. \_\_\_\_\_

What should one do to have a successful natural incubation?

25. \_\_\_\_\_

How many roosters and hens do you need for fertile eggs?

26. \_\_\_\_\_

. . .

How many eggs can one hen incubate?

27. \_\_\_\_\_

What should you do before sitting a hen?

28. \_\_\_\_\_

How many days do chickens hatch?

29. \_\_\_\_\_

When you keep a mother hen and her baby chicks in the nest what do they need for two days?

30. \_\_\_\_\_

### UNDERLINE THE CORRECT WORD

31. Give (ground, griled) corn to baby chicks which cannot eat whole grains.

32. The chicken coop should remain (open, close) all day so that the hens can enter and lay eggs.

33. Hatching eggs require special care (7 to 10 days, 3 to 5 days).

34. The chicken coop should be closed each night to (keep, keep out) dangerous animals.

35. Excess young roosters and other older birds that are no longer desirable for breeding should be (qualified, eliminated).

- 36.It is necessary to maintain one rooster per (10, 15) hens.
- 37.The chicken coop should be strongly built so that the night (predators, owls) can not enter.
- 38.A chicken coop of 5 meters is sufficient for (50, 100) adult chickens.
- 39.It is a good practice to fill the boxes and nests with chopped (coconut husk, cornhusks).

## REVIEW #1

### FILL IN THE BLANKS WITH THE CORRECT WORD

Antibiotic  
Hatchery  
Incubation  
Predators  
Vaccination

1. \_\_\_ is a medicine given to an animal that will protect them from getting a disease.
2. \_\_\_ is the period of time it takes for chickens to hatch
3. \_\_\_ special chickens sold for the purpose of laying eggs and producing meat.
4. \_\_\_ is a medicine given to treat against disease
5. \_\_\_ an animal or person that will take or harm the chickens or eggs.

**TRUE OR FALSE**

6. \_\_\_ Only farmers can raise backyard chickens.
7. \_\_\_ Starting with one broody hen and twelve eggs you can increase to 50 adult birds in less than two years.
8. \_\_\_ Because eggs are rich in protein, it is good to serve an egg every other day to children.
9. \_\_\_ A farm family cannot produce enough corn to feed up to 50 adult chickens.
10. \_\_\_ Local hens are excellent for hatching eggs and raising chicks.

11-13. What are the signs of a broody hen?

- 11. \_\_\_\_\_
- 12. \_\_\_\_\_
- 13. \_\_\_\_\_

How many eggs does a best broody hen can completely cover?

- 14. \_\_\_\_\_

How many roosters per 15 hens do you need to have fertile eggs?

- 15. \_\_\_\_\_

**UNDERLINE THE CORRECT WORD**

16. (Corn, Wheat) is necessary feed for good egg production.
17. Hatching eggs require special care (3 to 5 days, 7 to 10 days).
18. The chicken coop should be closed each night to (keep out, keep) dangerous animals.
19. Excess young roosters and other older birds that are no longer desirable for breeding should be (disqualified, eliminated).
20. The chicken coop of 5 meters is sufficient for (50, 100) adult chickens.

**FILL IN WITH THE CORRECT ANSWER**

1-3. What are the signs of Newcastle Disease?

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_
- 3. \_\_\_\_\_

4. The \_\_\_\_\_ is for the whole flock and needs to be repeated every \_\_\_\_\_ months.

5. The vaccine can be bought under the name \_\_\_\_\_ in a veterinary drug store.

6. When vaccinating, be careful not to place your hands near the face as the vaccine can infect \_\_\_\_\_.

7. \_\_\_\_\_ any remaining vaccine with the container and \_\_\_\_\_ thoroughly.

**FILL IN WITH THE CORRECT WORD**

8. Chickens will be \_\_\_\_\_ and \_\_\_\_\_ when parasites are controlled.
9. Small \_\_\_\_\_ are the most seriously affected by internal \_\_\_\_\_ and some may even die.
10. It is best to \_\_\_\_\_ the entire flock.
11. Deworming pills can be purchased in veterinary drug stores under the name \_\_\_\_\_.
12. Lice should be controlled as they cause \_\_\_\_\_ and \_\_\_\_\_.
13. Lice can be controlled by mixing one part \_\_\_\_\_ powder with four parts of ashes.
14. All treatments should be done every \_\_\_\_\_.

**FILL IN THE CORRECT WORD**

15. \_\_\_\_\_ is a common long lasting infection characterized by \_\_\_\_\_.
16. Sick birds lose their \_\_\_\_\_ and do not lay many eggs.
17. Chronic Respiratory Disease can be controlled with the antibiotic \_\_\_\_\_.
18. It is necessary to treat all sick and healthy birds, giving each a \_\_\_\_\_ in the mouth.

## REVIEW #2

### TRUE OR FALSE

1. \_\_\_ NEWCASTLE vaccine can be bought in any drug stores.
2. \_\_\_ Burn any remaining vaccine with the container and wash hands thoroughly.
3. \_\_\_ Chickens will be stronger and healthier when parasites are controlled.
4. \_\_\_ It is best to deworm one flock at a time.
5. \_\_\_ Lice should be controlled as they cause weight loss and higher egg production.
6. \_\_\_ All treatments should be done every three months.
7. \_\_\_ Chronic Respiratory Disease is a common long lasting infection characterized by nasal discharge.
8. \_\_\_ Sick birds has a lot of appetite and lays many eggs.
9. \_\_\_ Terramycin is an antibiotic that can control Chronic Respiratory Disease.
10. \_\_\_ Malathion powder controls lice.

### PRE-TEST

### UNDERLINE THE CORRECT ANSWER

1. Antibiotic a medicine given to treat against (disease, germs).
2. (Vaccination, Terramycin) a medicine given to an animal that will protect them from getting a disease.



3. (Contamination, Infectious) the effect of disease producing germs causing an infection.
4. (Everyone, A farmer) can raise backyard chickens.
5. Because eggs are rich in protein, it is good to serve an egg daily to children so that they will grow (strong and healthy, alert and active).
6. The best broody hen can cover (10 to 12, 13 to 15) eggs in the nest.
7. To have a successful natural incubation one should select well-formed, (medium to large, small to medium) sized eggs.
8. For fertile eggs there should be 1 rooster per (13, 15) hens.
9. The chickens should hatch (23, 21) days.
10. (Corn, Wheat) is necessary feed for good egg production.

### TRUE OR FALSE

11. \_\_\_ Give grilled corn to baby chicks which can eat whole grains.
12. \_\_\_ The chicken coop should remain open all day so that the hens can enter and lay eggs.
13. \_\_\_ The chicken coop should be closed each night to keep out dangerous animals.
14. \_\_\_ It is necessary to maintain 2 roosters per 12 hens.
15. \_\_\_ It is a good practice to fill the boxes and nests with chopped sticks.

**FILL IN THE CORRECT ANSWER**

16-18 What are the signs of Newcastle Disease?

- 16. \_\_\_\_\_
- 17. \_\_\_\_\_
- 18. \_\_\_\_\_

19. The vaccine can be bought under the name \_\_\_\_\_ in a veterinary drug store.

20. Chronic Respiratory Disease can be controlled with the antibiotic \_\_\_\_\_.

21. Sick birds lose their \_\_\_\_\_ and do not lay many eggs.

22. Burn any remaining vaccine with the container and \_\_\_\_\_ thoroughly.

23. All treatments should be done every \_\_\_\_\_ months.

24. Lice should be controlled as they cause weight loss and \_\_\_\_\_.

25. When vaccinating, be careful not to place your hands near the face as the vaccine can infect \_\_\_\_\_ eyes.

## FINAL TEST

### TRUE OR FALSE

1. \_\_\_ Everyone can raise backyard chickens.
2. \_\_\_ Chicken and eggs are highly regarded foods and provides a way to improve income.
3. \_\_\_ A farm family can usually produce enough corn to feed up to 50 adult chickens.
4. \_\_\_ Local hens are excellent for hatching eggs and raising chicks.
5. \_\_\_ The broody hen can barely cover 5 to 6 eggs in the nest.
6. \_\_\_ For fertile eggs, there should be 2 roosters per 20 hens.
7. \_\_\_ Five hens can incubate 10 to 12 eggs.
8. \_\_\_ The chickens should hatch 18 days.
9. \_\_\_ Corn is necessary feed for good egg production.
10. \_\_\_ Give grilled corn to baby chicks.

### UNDERLINE THE CORRECT ANSWER

11. The chicken coop should be closed each night to (keep in, keep out) dangerous animals.
12. Hatching eggs require special care ( 3 to 5 days, 7 to 10 days).
13. The chicken coop should be strongly built so that night (owls, predators) can not enter.

14. Excess young roosters and other older birds that are no longer desirable for breeding should be (disqualified, eliminated).

15. A chicken coop of 5 meters is sufficient for (50, 100) adult chickens.

### FILL IN WITH THE CORRECT ANSWER

16-18. What are the signs of Newcastle Disease?

- 16. \_\_\_\_\_
- 17. \_\_\_\_\_
- 18. \_\_\_\_\_

### FILL IN WITH THE CORRECT WORD

Malathion

Three

Appetite

Stronger

Healthier

Lower Egg Production

Terramycin

Wash Hands

19. Burn any remaining vaccine with the container and \_\_\_\_\_ thoroughly.

20. Chickens will be \_\_\_\_\_ and \_\_\_\_\_ when parasites are controlled.

21. All treatments should be done every \_\_\_\_\_ months.

22. Lice should be controlled as they cause weight loss and \_\_\_\_\_ .
23. Lice can be controlled by mixing one part \_\_\_\_\_ powder with four parts ashes.
24. Sick birds loose their \_\_\_\_\_ and do not lay many eggs.
25. Chronic Respiratory Disease can be controlled with the antibiotic \_\_\_\_\_ .

## ANSWERS: LET'S REVIEW

1. F
2. C
3. A
4. G
5. B
6. D
7. J
8. E
9. H
10. I
11. Everyone
12. broody, hen, twelve
13. protein, strong, healthy
14. Chicken, eggs, family, income
15. Corn, 50
16. tasting, higher, hatchery
17. hatching, raising
18. scratching, insects, weeds
19. Local birds
20. Lifts its feathers

21. Makes a warning sound
22. Seldom leaves its nest
23. two or three
24. 10 to 12 eggs
25. one should select well-formed, medium to large sized eggs
26. 1 rooster per 15 hens
27. 10 to 12 eggs
28. mark the date on each egg with a pencil to avoid confusion with freshly laid eggs
29. 21 days
30. with sufficient ground corn and fresh water
31. ground
32. open
33. 7 to 10 days
34. keep out
35. eliminated
36. 15
37. predators
38. 50
39. cornhusks

**REVIEW #1**

1. Vaccination
2. Incubation
3. Hatchery
4. Antibiotic
5. Predators
6. F
7. T
8. F
9. F
10. T
11. Lifts its feathers
12. Makes a warning sound
13. seldom leaves its nest
14. 10 to 12 eggs
15. 1 rooster
16. corn
17. 7 to 10 days
18. keep out
19. eliminated
20. 50

. . .



1. gasping
2. coughing
3. drooping wings
4. vaccination, three
5. Newcastle
6. human eyes
7. burn, wash hands
8. stronger, healthier
9. chickens, parasites
10. deworm
11. Triple wormer or wormal
12. weight loss, lower egg production
13. Malathion
14. three months
15. Chronic Respiratory Disease, nasal discharge
16. appetite
17. Terramycin
18. teaspoon

## REVIEW #2

1. F
2. T

3. T
4. F
5. F
6. T
7. T
8. F
9. T
10. T

### PRE-TEST

1. Disease
2. Vaccination
3. Infectious
4. Everyone
5. Strong and healthy
6. 10 to 12
7. Medium to large
8. 15
9. 21
10. Corn

1. F

2. T

3. T

4. F

5. F

6. gasping

7. coughing

8. drooping wings

9. NEWCASTLE

10. Terramycin

11. appetite

12. wash hands

13. three

14. lower egg production

15. human

## ANSWERS: FINAL TEST

1. T
2. T
3. T
4. T
5. F
6. F
7. F
8. F
9. T
10. F
11. Keep out
12. 7 to 10 days
13. Predators
14. Eliminated
15. 50
16. Gasping
17. Coughing
18. Drooping wings
19. Wash hands
20. Stronger, healthier
21. Three
22. Lower egg production
23. Malathion
24. Appetite
25. Terramycin

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