

# QUESTIONS and ANSWERS on -

# DUCK RAISING

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(Continued from Last Issue)

30. *How is the required temperature kept even?*—To insure an even temperature throughout the incubation period, the palay is heated every morning and afternoon in a *kawa* ( a native large hen vat or pan). The experienced touch of the caretaker is the only index used to determine the heat, which is usually around 40°C. to 42°C. Usually the procedure of testing is to apply one of the eggs against the cheek or back of the hand. From the tenth to the thirteenth day the eggs are candled; and the infertile ones, separated for sale. The eggs intended for hatching are separated on the twentieth day and placed on a table covered with paper, mats, and cloth placed over rice hulls of two or three centimeters deep. This table is called the "empolladora" or "cehohan." It is about one meter high, one and two-thirds meters wide, and several meters long. Such dimensions may change, depending on the capacity of the hatchery. The eggs are put side by side on the "empolladora" and are then covered with two or three cotton sheets according to the weather. A black or colored sheet is preferred by the operators for retaining the heat.

The hatcheries are kept dark and the hatching table is completely covered with a thick cotton or flannel sheet to keep the temperature constant. The floor of the hatcheries is also covered with a layer of rice hulls two to four inches deep.

31. *Are the eggs turned every day?*—Every day the eggs are turned until they are ready to hatch. Some caretakers turn them every four hours, others only two to three times a day. As soon as any sign of putrefaction is detected, the spoiled eggs should be immediately taken away. After 20 days of incubation no extra heat is applied to the eggs, because it is believed that the embryos generate enough heat to keep themselves alive, and if properly covered to prevent loss of heat, the eggs can be expected to hatch between the twentieth and the twenty-eight day.

32. *May Duck eggs be hatched successfully under hens and modern incubators?*—Setting hens and modern incubators may also be used for hatching duck eggs. When setting hens are used, precautions should be taken to free the hens and nests from lice and mites. Many claim that ducks raised by this method are the best for breeding

stock. In hatching in modern incubators the temperature should be kept at 101°F to 103°F (38°C to 39°C) and luke warm water should be sprinkled one a day during the first three weeks.

33. *Describe the care of ducklings in Pateros?*—In Pateros, the newly-hatched ducklings are not fed for 24 to 36 hours after hatching. After such time they are placed under the house of the caretaker or in a convenient room where a spacious place is prepared for them. Sometimes, the hatch consists of 1,000 or more ducklings. At first, they are fed five times a day with soft-boiled rice placed on a shallow pan or on a plate with clean smooth surface (clean *sawali* is ordinarily used). They are given water in another flat pan or in the same pan. When about three days old, they are divided into two groups, the males. Most of the males are either sold to people who visit the duckery or sent directly to the market.

The ducklings intended for breeding purposes are raised in groups of about five hundred, 10 per cent of which are usually males. They are fed with Gamogamo (flying termites) when-ever these are available, and, more often, they are also fed with small shrimps. Any of such feeds mixed with moistened boiled rice is given after the fifth day. The ducklings are placed in large shallow baskets containing 100 each and exposed in the sun for a short time every day. After about the fifteenth day they are allowed to swim for a short time. They should not be allowed to stay in the water long for they usually over-exercise and die. When about one month old, they are transferred to a larger enclosure, where they are fed with some boiled unhulled rice and *sambuelo*; and when these are not available other kinds of crushed snails are given. At the same age, they are also allowed to stay in the water as long as they like.

34. *How should the brooder house be built?*—A brooder house should be well-protected from drafts and should have spacious partitions, as one about 3 x 3 m, which can accommodate from fifty to one hundred ducklings up to the age of three weeks. In such partition, especially if it has accommodation space of fifty ducklings, these fowls will not trample upon one another and all may get their share of the food. If possible, the morning sunshine should reach each each pen to lighten the

task of handling. This will also materially reduce the percentage of deaths.

35. *How are the ducklings kept at night?*—The room is closed to prevent exposure to draft, and a light is provided not only to help keep the room warm, but also to help the caretaker see the birds as a means of protection against rats and ants, as the ducklings are fed several times at night when still a few days old. Their feed is reduced as they grow older.

36. *Can the feed of ducklings in Pateros be improved?*—The feed given to the ducklings in Pateros can be greatly improved if some fish meal or finely-chopped chrimps are added to the soft-boiled rice fed at the start.

The following baby chick feed may be given later in moist form with water or milk to raise ducklings to a safe age:

Tikitiki, first-class, well-dried . . . 3 parts
Corn, yellow, finely-ground . . . . . 2 parts
Mongo, finely-ground . . . . . 1 part
Binlid . . . . . 1 part
Fish, shrimps, or meat meal . . . . . 2 parts
Oyster shell powder . . . . . 2 per cent of above mixture.
Salt . . . . . ½ per cent of the above mixture.

Sand with some soil that had been formerly heated (to avoid infection) should be added to two per cent of the above mixture.

Finely-chopped tender green feed should be fed after the tenth day.

37. *At what age will native ducks begin to lay?*—In Pateros, at the age of four to four and one-half months, they are confined in permanent breeding pens. A few will lay as early as five to five and one-half months under favorable conditions if properly cared for and fed. Most of them, however, cannot be expected to begin laying until they are about seven months of age. The percentage of deaths of ducks in Pateros up to the age of four months is estimated to be 40. With better practices the percentage of deaths could be greatly reduced. Conservatively and approximately estimated a laying duck subject to favorable conditions and good care can be raised to laying age from out of every four eggs incubated.

38. *What is "balut"?*—"Balut" is a duck egg that has under-gone incubation of 14 to 18 days and is then hard boiled. It is of two kinds, depending upon the length of incubation of the egg. They are, as called in Pateros, *namamatong*, those incubated up

to the 14th day, and balut sa pute, those incubated up to the 18th day.

39. *What eggs are selected for "balut" production?*—Only fair-sized, fresh, thick-shelled eggs (not older than five days) are selected for balut making. The thickness of the shell is tested either by snapping it hard with the fingers or by candling. If the former is employed, the eggs are snapped hard enough to break the ones with thin shells. The general appearance helps greatly in the selection. The thin-shelled eggs are disposed of to bakeries.

40. *What eggs are called "penoy"?*—Eggs that have undergone incubation up to first test and have not developed a germ but are not spoiled, are hard boiled and sold as "penoy".

41. *How long are the ducks kept in Pateros for egg production?*—Usually for about three years of production. The first year of production is the best. In many places in the United States they are kept for one or two years only.

42. *Are ducks raised on a commercial scale in the United States?*—Yes, but not for egg production.

43. *What for, then?*—For meat. For in purpose, "green ducks," ducks from 9 to 13 weeks old and weighing four to six pounds, are used. It may be explained here that ducklings grow much faster than chicks.

44. *What breeds of ducks are raised in the United States for purposes of meat?*—They raise a number of breeds but the white Pekin ducks are the most popular. These are found in extra-ordinarily great numbers over a wide area in the southern shore of Long Island, New York.

45. *Do these market ducks grow heavier than six pounds when they grow older?*—After reaching six pounds they do not weigh very much more.

46. *How long are ducks kept in the United States?*—Usually one year only. Those that are kept longer are used to produce eggs for hatching.

47. *What is fed to these ducks?*—A growing mash to make them develop in a short time for the market. In 9 to 13 weeks, ducklings increase their weight by 50 times their weight at hatching time.

48. *How is the mash feed fed?*—As a wet mash in such amounts that it may clear in 15 to 20 minutes so that it will not be spoiled and do harm. It is fed every four hours, generally in the morning, noon, and evening.

49. *How is the improvement of duck eggs effected?*—Generally, there is no trapping, progeny testing, or individual pedigree in the commercial duckeries. Selection is more or less the same as in Pateros, but in some state stations some work has been done for the improvement of duck eggs. Recently, the kaki Campbell ducks were reported to produce as many as 365 eggs a year.

50. *How could egg production be improved in a short time?*—By using the sons of

the best producers, producing daughters that are good producers, as sires as long as they are strong and fertile.

51. *What is the ordinary way of selection?*—The selection from among the best, that is, those that are healthy, active, and with good length, width, and depth of body.

52. *Can the native ducks be mated with the Muscovies?*—Yes. When mated, they produce a hybrid that is bigger than the native and in conformation resembles more the native than the Muscovy. In the experiments made, the eggs laid by the few produced from this crossing did not hatch.

53. *Do the native ducks look like the Pekin ducks?*—They are very much like the Pekin ducks except that they are smaller and that they are colored while the Pekin ducks are white.

54. *To what species are they related?*—They seem to be related to the wild Mallard duck.

55. *Are ducks subject to disease?*—They are, but they seem to be less subject to it than other fowls.

56. *What is the reason why there are times when many ducks die?*—Usually, they die of botulinus, poisoning from eating dead or decomposing organisms. This happens when there are many dead snails during the hot season, when the so-called "lya" (Laguna de Bay algae) abound in Laguna lake.

57. *What is the weight of duck eggs?*—A native duck egg weighs about 70 grams; an Indian Runner duck egg, from 75 to 80 grams; and a Muscovy duck egg, from 65 to 70 grams.

58. *During what months do the ducks lay best?*—In the tests made at the Alabang Stock Farm, the months of June and July showed the highest production for both Indian Runner and native ducks.

59. *During what months do they lay the least?*—In the same test at the Alabang Stock Farm, January showed the lowest production.

60. *Is it possible to improve duck raising in Pateros and elsewhere in the Philippines?*—Yes, at least in four ways, namely, (1) by better sanitation, (2) by the use of a good thermometer in testing the temperature of the heated palay and by the use of a double door at the entrance of the hatchery, (3) by the use of heat in brooding the newly-hatched ducklings and by giving better protection against predatory animals, and (4) by better feeding of the young growing stock from the start.

61. *What sanitary measures should be observed?*—In the duck house, the litter should be deeply placed, and it should be sunned daily or as often as the weather permits, and changed as soon as a rack

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# Home and Woman's Corner

JES—BAR

## HOME AND WOMEN'S CORNER

This corner is dedicated to home and affairs of women who make the home. Home is a refreshing word full of memories for everyone. Its atmosphere therefore depends on the heart and spirit of the mothers who make it warm and happy, cozy and lovely, or cold and dreary.

In the Philippines as perhaps anywhere in the world, no matter how humble home maybe, home is sweet home.

This corner shall try to adapt itself to modern homes on the farm. Wherever women maybe, on the farm or the city, the homes they make often depend on their ages. To the young, perhaps dancing and

poetry and dresses would be important. So it's warm and happy. To the middle aged, perhaps cooking and furniture and linen. So it's cozy and lovely. To the old, perhaps music and serenity and security. So it's cold and dreary.

We dedicate the poem below to the serious, sensitive soul of the young home-maker.

Home is where one starts from. As we grow older

The world becomes stranger, the pattern more complicated

Of dead and living. Not the intense moment

Isolated with no before and after,  
But a lifetime burning in every mo-

ment....

Love is most nearly itself  
When here and now cease to matter.  
Old men ought to be explorers  
Here and there does not matter  
We must be still and still moving  
Into another intensity  
For a further union, a deeper communion  
Through the dark cold and the empty desolation,  
The wave cry, the wind cry, the vast waters  
Of the petrel and the porpoise. In  
my end is my beginning.

POEM

(Reprint from Reader's Digest)

## Questions . . .

odor is detected. In the brooding compartment, there should be a more frequent change of litter. In the yard, disinfection should be made now and then and new sand spread over the floor. In the swimming pool, cleaning and clearing should be made at least once a month.

62. *Why is the use of a thermometer necessary?*—Because it is more accurate than the most experienced operator, who is subject to colds and other ailments that may affect his efficiency.

63. *Why is a double door for the hatchery suggested?*—Because it makes it easier to keep a more even temperature. If there is only one door, every time a person enters the hatchery a draft cannot be avoided.

64. *Why is heating for newly-hatched duckling necessary?*—Because their vitality is easily affected by cold temperature.

65. *What is wrong with the feeding of ducklings in Pateros?*—The first feedings given lack the necessary protein, Vitamins, and minerals, and such lack is detrimental to the health of the ducklings.

66. *What kind of eggs intended for hatching should be selected?*—Only the eggs laid by a flock of ducks of at least one and a half years old during the high egg-production period. Eggs laid by young birds during the low production season should not be incubated, because the percentage of hatch will be low and the ducklings cannot be expected on the average to develop into very vigorous birds.

67. *Should ducklings of different ages be kept in one pen?*—Ducklings of different ages should be raised in separate pens. If this is not done many young ones will die, as the older birds are usually stronger and have a tendency to push the weak aside.

68. *Will ducks return to their own roosts if mixed with other flocks?*—As a rule, the native ducks have become so tame and domesticated that even if they happen

to get mixed with nearby flocks in separable pens, they always return to their respective places. This is especially so in cases where they have been kept in place for several months.

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## Soil Conservation . . .

be managed and their activities controlled in order to be able to control at will the various soil processes which will influence the growth of crops and of animals.

The soil must be conserved and its crop-producing power must be improved in order to maintain good-crop returns to support the ver-incrasing population of the country. This is responsibility of the present generation towards the future Filipino people.

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