Issue 308 March 2024

Poultrynz

Ian Selby Ph: 06 754 6262 www.poultrynz.com Email: poultrynz@xtra.co.nz

02 **POULTRYNZ**
OUR PRODUCT CATALOGUE

03 **RECIPE**
STIR-FRIED GINGER FISH WITH THIN SPAGHETTI

04 THE JAPANESE BANTAM

07 MACNAB THE WORLD'S MOST FAMOUS BIRD

08 WATER THE FORGOTTEN NUTRIENT

11 CONTROL OF TRANSMISSIBLE DISEASES

Poultrynz Editorial

March is the time of year where we are closing out the breeding season. Most of the bad ones are culled out and the cockerels are disposed of. There are those good enough to sell after taking out the ones we want to keep for next years matings. It is an interesting time especially when those young pullets look like they are ready to start laying. Now is the time of the year to look at replacements and a good time to cull out those older birds if they are not wanted. Don't be to hasty if you only have layers as Fowls do need time to moult and there are usually plenty of feathers on the ground at the moment. Good luck with your selections.

Until next issue.

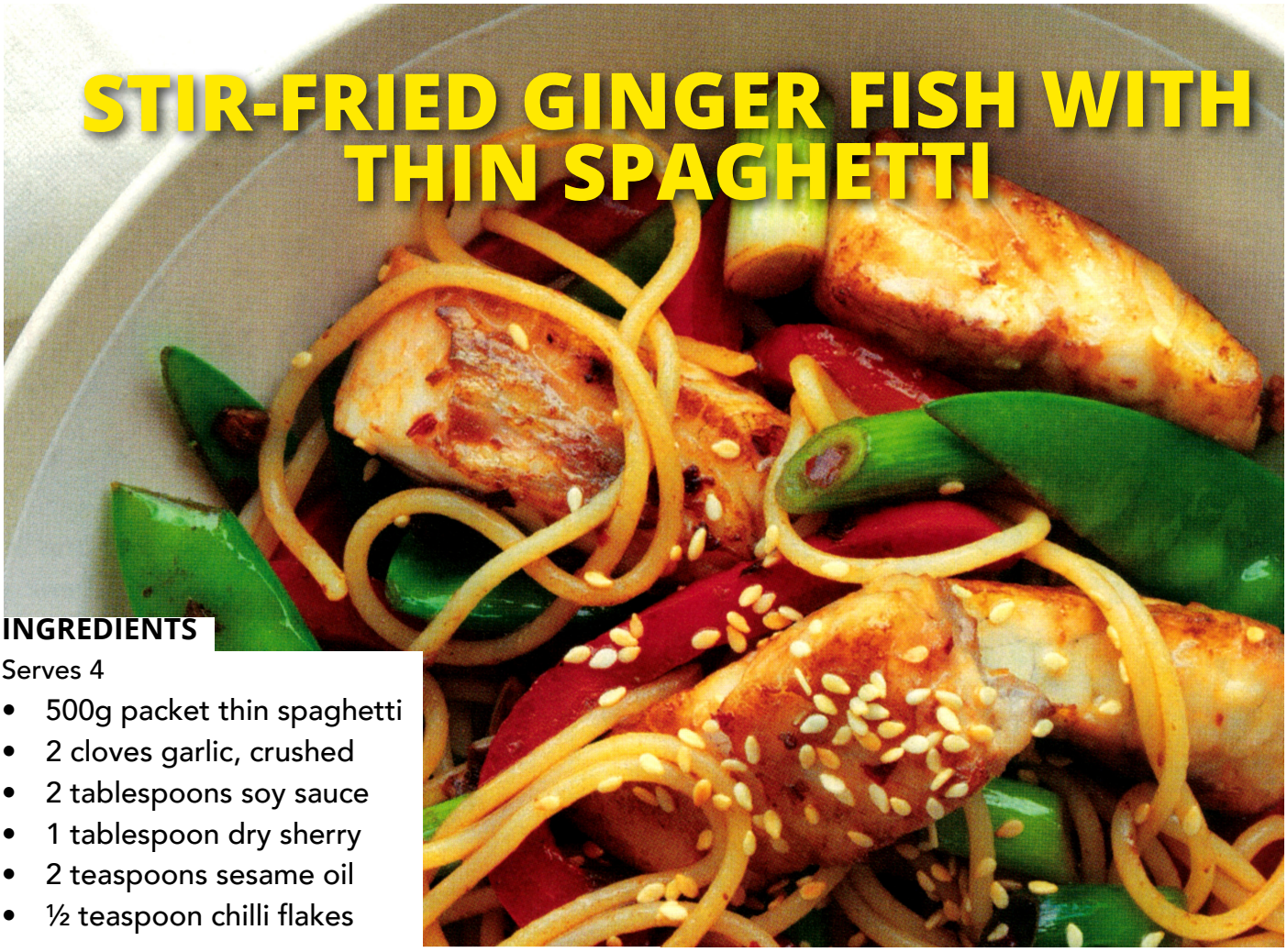
Regards,
Ian Selby.

It's live!

All the advertisements that have an underline under the email address or url are hyperlinks.

Clicking the link will open your email with the Poultrynz destination in the recipient box.

STIR-FRIED GINGER FISH WITH THIN SPAGHETTI



INGREDIENTS

Serves 4

- 500g packet thin spaghetti
- 2 cloves garlic, crushed
- 2 tablespoons soy sauce
- 1 tablespoon dry sherry
- 2 teaspoons sesame oil
- ½ teaspoon chilli flakes
- 500g firm fish, eg, snapper or tarakihi, cut Into 3cm pieces
- 1 tablespoon oil
- 1 tablespoon finely julienned fresh ginger
- 1 red capsicum, sliced
- 50g snow peas, cut in half diagonally
- 4 spring onions, cut into 2cm lengths
- toasted sesame seeds to garnish

METHOD

1. Cook the spaghetti according to the directions on the packet.
2. Meanwhile, combine the garlic, soy sauce, sherry, sesame oil and chilli flakes. Add the fish pieces and set aside to marinate for 5 minutes. Remove the fish and reserve the marinade.
3. Heat the oil in a frypan over a high heat. Add the ginger and fish and stir-fry for 1 minute. Add the red capsicum and stir-fry for 1 minute. Add the snow peas, spring onion and reserved marinade and simmer for a further 2 minutes, or until the fish is cooked and the sauce has thickened slightly. Toss with the drained spaghetti and garnish with the toasted sesame seeds.

THE JAPANESE BANTAM

A pair of Black-Tailed White Japanese Bantams

by Leonora Hering.
Courtesy of the American Bantam Association

In the 43 issues of our ABA Yearbook, from 1920 to 1962, there have been no less than 26 articles on the Japanese Bantam, some of them by world authorities like Col.Williams of England, Y.Mazashima of Japan, Chr.Scheiding of Germany and our own Frank Radford. Besides this, there are numerous articles in poultry books, with illustrations of ideal types by Sewall, Schilling, Graham and other artists. Above all, there is our Standard, which describes the breed and its recognized varieties down to the very smallest detail of anatomy and feather pattern.

What then is left to say? This writer has attempted to search out new material in areas that have not been so well covered, namely the history of the breed and the most modern scientific findings about the inheritance of short-leggedness. This latter, particularly, is something that breeders should know about, for the hobbyist Is not likely to be in touch with the researches that University geneticists are doing.

History Writers in English have been satisfied to say that "the origins of the breed (Chabo) are lost in obscurity or that "ancient screens and paintings show these Bantams in the same form as those of today." But Japanese books on this subject say definitely that the breed did not originate in Japan, but was imported from South China, especially from the area we called Indo-China before it became Vietnam, Thailand and Malaya. We have had parts of two such books translated, and we quote essentially from: *"The Chabo and its Breeding by Choken Inagaki, 291 pages, illus. Tokyo, 1951."* This author states that even today there exist in Indo-China small poultry similar to Chabo, in dark brown colour with black or white tail and leg colours from yellow to dark silver. He gives pictures of such birds from Bangkok and Singapore, and states that their tails are at angles of 70 to 80 degrees from the perpendicular.

He goes further, saying that the very name "Chabo" is derived from the word Chiyanpa, meaning South China, and that a book written in the Tokugawa period called this breed Ro poultry. Ro being the word meaning all China. Mr Inagaki who is an officer in the Japanese Chabo Association and has evidently studied the question for years, points out that at the beginning of the Tokugawa period, 1603. Japan had much trade with China, and that before that date there is no painting or written document mentioning the Chabo. Then, in

1636 a law was enacted that no Japanese vessel and no Japanese subject should go abroad under pain of death, and no ocean-going vessels could thereafter be constructed. This isolation lasted until 1867, when the Tokugawa period ended. Therefore the Chabo must have come to Japan between 1603 and 1636 from 'the China coast.

The earliest colour, Mr Inagaki believes, was red-brown, with blacks and whites appearing as sports from these. As the breed became popular, gradually many colour combinations were produced, and by the middle of the Tokugawa period 10 varieties existed, a fact well proven by the art of the time. All later varieties stem from these 10 and at the time of his writing (1951) there were 20 varieties in Japan. One further note from Mr Inagaki strikes a familiar chord: *"the breed is well fixed as to purity of strain, but to breed a Show winner is very difficult."* How well we know It!

Genetics Advice in print on mating the Japanese bantam has varied from expert to expert, but no one (to the best of this writer's knowledge) has suggested the basic principles that underline these rules. Embryologists and geneticists have been using Creepers and Japanese bantams in their experimental work for some time.

First of all they have found that there is a gene (Inheritance factor) which transmits short-leggedness and another that carries normal leg length. The former is dominant, the latter recessive. Each short legged Individual carries both genes. That is to say, each short legged bird shows the dominant, short-legged character, but carries within itself, unseen, the recessive gene for normal leg length. If two short legged birds are mated, each parent transmits both factors to the offspring. According to the principles discovered by Mendel long ago, the genes from both parents re-combine in the offspring in definite proportions. Scientists in our own time have gone much further, and have proven beyond doubt that an embryo which receives the short-leg gene from both parents cannot hatch, but dies in shell from the 18th to the 22nd day of incubation.

25% of the embryos will receive the gene for short-leggedness from both parents, and this pure short-legged condition is always lethal. Therefore, there is no such thing as a Japanese bantam that is "pure" short legged, such a thing cannot exist.

50% of the chicks will get both a short-legged and a normal legged gene, and as short is dominant, these will appear short legged.

The final 25% will get a gene for normal legs from each parent, and will have longer legs than the breeder wishes. These have lost the factor for short-leggedness, and if mated together can never produce another short

A Black Japanese Bantam Pullet

legged Japanese bantam. Some experts have advised to mate one of these longer legged to a short legged. The result of such a mating can only be 50% each of short and normal leg length, exactly the same percentage of short that would be produced by mating 2 short legged together.

It must be borne in mind, however, that these percentages can only be expected with fairly large hatches of chicks, or if records are kept of small hatches over a period of several years.

In conclusion, therefore, Japanese Bantam Breeders: do not blame yourselves, the weather, the hen or the rooster, the food or the phase of the moon for the 25% dead-In-shell. It is a law of nature. Second, do not mate 2 long-legged together hoping to get a "throw-back" to short, for this cannot happen. Third, mating short-legged together cannot be expected to yield a larger percentage of short-legged than mating 1 short to 1 normal leg type. The average over the years will work out precisely the same.

A lovely pen of Blue Mottle Japanese Bantams

A Black-Tailed Buff Japanese Bantam Cockerel

MACNAB
The World's Most Famous Bird

by Ian Selby

Soon after winning the Champion Bird of the 1924 National Show in Olympia, England, world renowned poultry photographer, Arthur Rice, captured the immortal Black Minorca Cockerel on film.

Owned by Lord Dewar of Sussex, Macnab was named after one of his racehorses, a name that could easily be "rolled off" the tongue and remembered.

The story of Macnab has been told many times. The rivals of Lord Dewar accepted that the Black Minorca Cockerel was the nearest any fowl had got to the Standard of Perfection.

The achievements of both Lord Dear and Macnab are interesting. From 1900 to 1906 Lord Dewar was an MP, being knighted in 1902. He became Baron of "Homestall", Sussex in 1919. Then he hired Walter Bradley, an astute and skilled man, as his poultry manager of the stud that contained Wyandottes, Orpingtons, Sussex, Brahmas, Cochins, Leghorns and of course Minorcas.

Their successes were many. Lord Dewar won all the major trophies at the important shows, some of the Poultry Club trophies being won outright. In 1927, The Jubilee Year, Lord Dewar became President of the Poultry Club and invited the council to his home on two occasions. He also bred goats, dogs, horses and racing pigeons.

But Macnab was Lord Dewar's greatest triumph. From a batch of Black Minorca chickens emerged a male chicken that was carefully nurtured by Walter Bradley and grew into a magnificent cockerel. In those days fanciers were professionals, living off the winnings from their poultry teams and sales. They travelled to shows or sent their teams by rail. Macnab travelled with Bradley around the show circuit and gained the reputation of being a "judge puller". Many of the professional teamsters would have liked to topple the unbeaten Macnab and they all knew that the 1924 National was a showdown. On that famous day in poultry history, Macnab won a long list of titles and special prizes including the Supreme Championship and the Gold Medal, and established himself as a true champion. To become Show Champion, Macnab beat a total of 6,523 entries.

"THE MACNAB."

Champion Black Minorca Cockerel, Bred and Exhibited by Lord Dewar.

Winner in 1924 at OLYMPIA of the Supreme Championship of the show (6523 entries); 30 Guinea Challenge Shield; "Sir James Blythe" Challenge Cup; The Poultry Club's 60 and 21 Guinea Challenge Cups and Club Cup and Medal; "The International" Minorca Trophy; the Minorca Club's Challenge Trophy and Cockerel Cup; also Gold Medal, first and many Specials. At the CRYSTAL PALACE, first and the Crystal Palace Medal for best Minorca. (Photograph by MR. A. RICE.)

After the National a large publicity campaign was undertaken and the name Macnab was kept alive for more than a decade, in the main attributed to the striking photography produced by Arthur Rice. The weekly poultry magazine *"Feathered World"* featured a glossy full page print of Macnab and the Year Book also displayed a full page photo of the Champion.

Lord Dewar, Walter Bradley and Macnab lived in the most exciting era of the Poultry Fancy. After Lord Dewar's death in 1930, "Homestall" was taken over by his nephew, John Dewar, who unfortunately abandoned the stud within a few short years.

WATER
THE FORGOTTEN NUTRIENT

by Dr. D.C. Snetsinger, Poultry Nutritionist, U.S.A. From the Australian Poultry World. October, 1965.

No other nutrient will reduce production faster than a shortage of water.

It sometimes is forgotten that water is probably the most important nutrient. The fact that the turkey egg is approximately 65 per cent. water and turkeys themselves are 55 to 75 per cent. water, depending on their age, makes it clear just how important water is.

Water plays many important roles besides just being a physical part of the cells and giving them a certain substance. It is important in lubrication of the joints, as a cushion for the embryo and body organs, as a transport means for nutrients and waste products and as an activator and reactant in many metabolic processes.

It also acts as the primary means of controlling body temperature in birds. This is true even though birds don't have sweat glands as do a number of mammals. The turkey loses much of its body heat by dissipation of water vapour from its lungs.

The predominating source of water for a turkey comes from what it drinks. A general rule of thumb indicates that it will consume about twice as many pounds of water as feed. However, there are two additional means by which body stores of water are supplied.

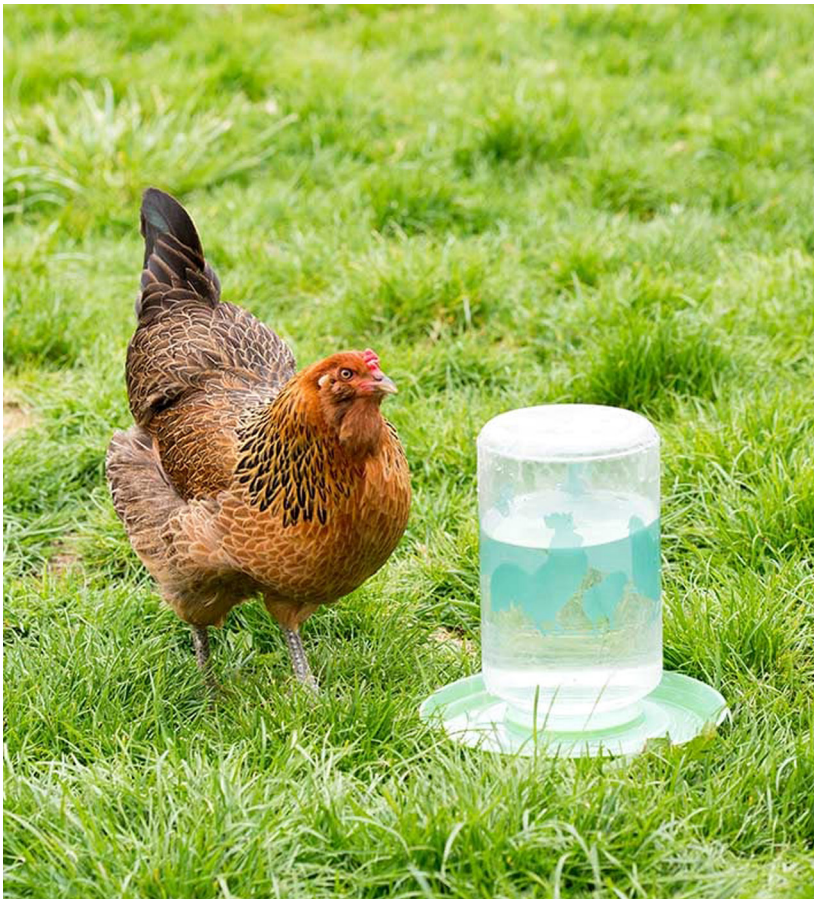
A second source is through the water contained in feed. Normally, even dry mashes contain 8 to 12 per

cent. water. The final major source of water is so-called metabolic water. This results from the chemical breakdown primarily of fat and carbohydrate. The last two sources do supply some water, but it is the first which permits the turkey to adjust its intake to its needs.

Many factors contribute to variations in the water needs of a group of turkeys:

Growth rate, rate of egg production, age, quantity of salts in the feed and physical composition of the feed are only a few. Environmental temperature effects require special attention, since an increase from 50 to 90 degrees F. almost doubles the quantity of water required.

Another factor that is known to contribute to variations in water consumption is the genetic strain of birds. Texas A. & M. Poultry specialists reported that different strains of chickens varied in the per cent. water found in their eggs, droppings and even in expired air. Similar differences could also be expected with turkeys.



Water in the field is a must for free-range Fowls

Certainly anything that inhibits or alters production rate, such as a disease, will bring about a characteristic alteration of water consumption. In this regard, water consumption has long been used as a barometer of how well a flock is performing. A sudden drop in water consumption gives an indication of a disease or poor management condition long before other symptoms are noticeable.

What constitutes a good water supply is a question on which there is little argument, mainly because of the lack of studies devoted to water and its purity as it affects growth and production in turkeys or chickens. There are very few guidelines by which a person can judge for himself the suitability of a water supply for poultry. Generally, what rules are employed are those adapted from standards used for human consumption, which may be completely afield from the poultry values when they are established.

As evidence of the above, what is unpalatable water for humans may not affect poultry, since the avian species demonstrate different taste patterns than man. However, as indicated previously, no other guidelines are available, so that presence of hydrogen sulphide and selenite gases dissolved in water which man finds objectionable is also considered objectionable for poultry.

Palatability of water is also decreased by the mineral salts dissolved in the water. Salts which are primarily responsible for loss of palatability are the carbonates, bicarbonates, sulphates and chlorides of calcium,fmagnesium, sodium and potassium. These salts are generally measured in parts per million or grains per gallon. (Seventeen parts per million, one grain per gallon or 17 mg. per litre are all equivalent.)

Individual and combination tests on the effects of the above salts have not been thoroughly conducted. However, it appears the sulphates and chlorides of potassium and magnesium may be more unpalatable than the others. Animals have indicated a tolerance of more than 5,000 p.p.m. of certain salt combinations. However, levels in excess of 1,000 p.p.m. may be suspect as to causing problems. One saving factor is that frequently animals can adapt to high mineral levels and eventually build a tolerance to highly mineralised water.

Toxic Minerals

Although individual minerals can be harmful, very rarely do we find high levels of such elements as lead, arsenic, chromium, selenium and fluoride at high enough levels to be toxic. The minerals mentioned are highly toxic cumulative poisons, but, as indicated, rarely present any practical problems.

The presence of nitrites and ammonia in water indicates that the water supply is contaminated by decaying organic material. Drainage from manure piles, barns and home septic tanks should be suspect. Not only are nitrites harmful themselves, but their presence also indicates the high probability of

pathogenic micro-organisms in the water supply.

Salinity of water is a problem in several areas of the country. While birds, in general, tolerate high amounts of salt, the high quantity of water excreted in the droppings produces the management problem of removing this moisture from the building in which birds are housed.

The problem of high levels of moisture in the droppings of laying hens has caused the chicken egg producer to examine whether hens need to have a constant supply of water. Of interest is the result indicating that hens can have the total water supply restricted considerably. This is usually done by cutting down the time hens have water available to them.

In one case, hens were permitted to drink only 28 minutes per day (14 times for two minutes) and still maintained good production. Whether water restriction of turkey breeders would be useful and whether it would work cannot be fully determined at this time.

A few guidelines seem in order to ensure an adequate and safe water supply:

1. Provide clean water. This means the water should be clean to begin with and clean when it reaches the birds.
2. Dirty water fountains are a real hazard which allow the build-up of pathogenic bacteria and moulds.
3. The water supply should be sanitary and low in mineral content. The grains of hardness and presence of nitrite will give some indication of the above.
4. The birds should be provided with cool water in Summer and warm in Winter. This will permit turkeys to adjust more readily to, their environmental temperature.
5. If types of waters or water location is changed, this should be done gradually so birds will always know where to go for water.
6. Use a well designed and easily cleaned water fountain. In order to be able to consume water, birds must be able to tilt their heads back above the horizontal. Any water fountain which does not permit this will limit water intake by the birds.
7. If the water supply appears at all questionable from the standpoint of palatability or purity, have it analysed at an appropriate laboratory.

Remember that no other nutrient will reduce production faster than a shortage of water the nutrient most forgotten.

CONTROL OF TRANSMISSIBLE DISEASES

From the Australian Poultry World

Sparrows can carry parasites and other diseases into your Poultry Flock

The transmissible diseases, also often referred to as infectious or contagious diseases, are the ones which are, above all, of economic importance. Those diseases menace entire flocks. The so called sporadic diseases, which effect or kill a bird now and then, are of no special interest to the average flock owner and their consideration can serve no practical purpose.

It is not always an easy matter to determine how a given disease has been introduced into a flock. The transmissible diseases are always dependent on some germ as the primary cause. Such germs are true parasites, which cannot propagate themselves in any other place but the animals body, so it can be readily understood that somewhere back of an outbreak is an infected bird which served as the incubator for the germs responsible for disease.

INFECTED STOCK

Such a germ-incubating bird may carry the infection directly into a healthy flock; or the moveable part of a contaminated environment, in which disease germs can remain alive for certain lengths of time, may in some manner become transported. It is by no means known how such transmission may come about, but certain it is that newly purchased birds, for instance, should always be looked upon with suspicion. As a matter of fact the function of adult birds as carriers and distributors of infection is so well known that preference must always be given either to hatching eggs or to very young chicks if new stock is to be introduced in a poultry yard. Even then one is not always safe, largely on account of bacillary white diarrhoea but this disease need not become a menace to a flock, as it is not long in declaring itself and can be readily localised.

The offal of birds killed for the table quite readily becomes the means of introducing infection and therefore such material should always be disposed of by burning. Birds killed or dead as a result of sickness should be dealt with in a similar manner. In the killing of sick birds only such a method of procedure should be chosen as precludes the spilling of any blood, because in certain diseases, the latter is likely to contain the causative germs in great numbers.

FLYING BIRDS

While such flying birds as pigeons and sparrows are not easily convicted of carrying disease from farm yards, it is quite conceivable that on occasion this actually does take place. Many wild birds are susceptible to the same diseases as domesticated ones

and must always be regarded with suspicion and dealt with accordingly.

SOIL

The soil upon which a poultry population is being maintained always constitutes a most active factor in the propagation of disease as well as in the duration of hazards associated with the latter. Such disorders as tuberculosis, fowl typhus, blackhead, coccidiosis and possibly others as well as truly soil or other filth borne because their causative germs are thrown off the body wastes and enters the bodies of other birds by means of food or drinking water contaminated with the droppings. In this transmission, the soil is the most important vehicle and the greater part of the task of poultry hygiene is concerned with dealing with the soil of poultry yards in such a manner that it's disease-carrying functions may be reduced to the smallest possible proportions. When the soil has once become infected it may remain so for a considerable length of time in accordance with the nature of the infection introduced and the character of the soil itself. Left unpopulated, the infected area will eventually free itself of the disease-producing elements. The latter are apt to succumb gradually in the surrounding furnished by the soil, because they are dependent for their maintenance and propagation on the animal body. They are destroyed by soil organisms which prey upon them, or they the because of lack of the type of food which they require.

Thus the soil tends to rid itself of all organic material and germs which do not strictly belong to it, and this process is known as biological purification, because the living matter of the soil is almost entirely responsible for this cleansing process. This process, however, is not continuous during the year; throughout the winter months it is practically at a standstill, while during the warm and moist weather of summer it is most active and the soil needs treatment.

FEEDING HABITS

The feeding habits of poultry have much to do with the fact that the soil of poultry yards plays such a prominent part in the transmission of certain diseases. Fowls pick up a considerable part of their food directly from the ground and as a consequence no small amount of soil is swallowed with the food.