

Poultrynz

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Poultrynz Editorial

Maybe March-April is the funny time of year for our Fowls. Moulting time is among us and a double dose of Feathers everywhere. First from the youngsters growing and shedding their feathers and then the adults going into the full moulting process. It doesn't last and soon those moulting

hens will start laying and the youngster will be getting their adult feathers too. Nevertheless these feathers make the place look untidy. Now is the time for a clean-up I think before we get into the winter months. Until next issue. Regards, Ian Selby.

If you have friends or colleagues who might appreciate the Poultrynz newsletter please feel free to pass it on. Your friends can also be added to the distribution list. Send their email and the word "subscribe" to poultrynz@xtra.co.nz

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Avoid inhalation of dust. Wear a suitable dust mask when using or operating in confined spaces.

CORN AND SPINACH CRUMBLE TART

INGREDIENTS

Serves 6

50g butter

1 clove garlic, peeled and crushed

2 medium courgettes, cut into small dice

50g flour

350ml milk, heated

410g can whole kernel corn, drained

½ cup liquid reserved

½ cup grated tasty cheddar

1 bag spinach, wilted (in microwave or by steaming)

1 sheet savoury short pastry

METHOD

Heat butter in a large saucepan and saute garlic and courgettes for 2-3 minutes. Add flour and cook 2 minutes. Gradually add hot milk and reserved corn liquid, stirring constantly until smooth. Simmer 10 minutes. Add cheese, spinach, corn and seasoning. Cool.

Preheat oven to 180°C. Line a 20cm cake tin with baking paper. Trim and patch pastry to fit. Add corn filling.

Crumble: Process bread, garlic, chilli and sage in a food processor. Add oil and pulse to combine. Sprinkle over pie. Bake 30 minutes or until crumble is golden.

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THE EVOLUTION OF THE AUSTRALORP – AUSTRALIA'S NATIONAL BREED



by W. Scott, Australia. 1930's.

A trio of Black Australorp Fowls

Bred to close-feathered type and shape, they combine beauty with usefulness in egg production and table qualities.

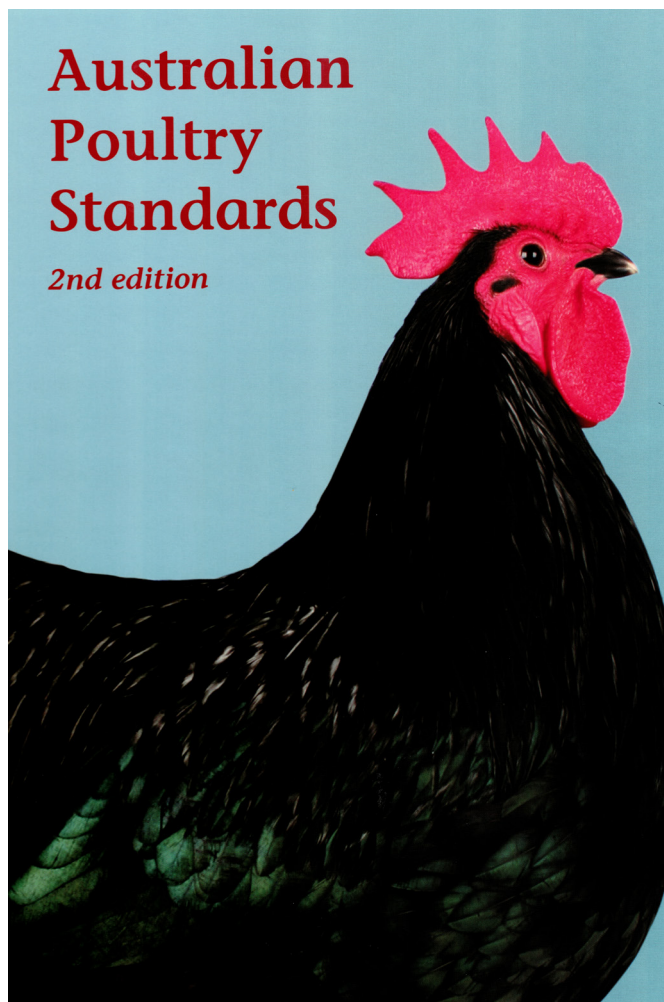
Constant requests, written and personal, for details of the evolution of the Australorp in Australia, cause me to pen the following history of Australia's national breed of fowl. To do so means going back many years from a common type of very close feathered black fowl, which today is bred to a high state of perfection, which, strange to say, is the exact replica of the breed originated by William Cook, Snr, of "Orpington House", St. Marys, Cray, Kent, England, adjoining the village of Orpington, in 1886, which he exhibited and named Black Orpingtons, claiming them to be the ideal dual-purpose breed.

Frequently these were crossed with the original Chinese Langshans imported by Major Croad, causing much confusion, and also with Black Cochins.

The position became intolerable to show societies, many of which pronounced only one class for

Langshans or Orpingtons (or the converse) for the two breeds.

A Black Orpington strain of practically new blood came on the scene, exhibited by Joseph Partington at the Dairy Show. October 1891. Winning first and second in cockerel and pullet classes, the four birds immediately sold at 30 pounds each (just imagine this at today's money value). At the Crystal Palace Show in November he brought out fresh birds of each sex that beat the previous winners. These birds were of immense size, such as had never been seen before, creating quite a sensation and considerable curiosity. Several New South Wales, Victorian and Tasmanian fanciers had secured some birds of both strains – the Cook strain. Very compact, alert, close feathered, very well balanced body, with thighs clearly showing, shanks in proportion and fine scaled, not too heavy in bone, beetle green black



Australorp on the cover of the Australian Standard

plumage, neat head points of medium coral texture, black or hazel eyes – a truly lovely combination of beauty with abundant evidence of productivity - this I well know and remember.

The Partington blood certainly looked big, but a good deal of this appearance was caused by the bird's much more loose, more woolly type and texture of plumage (as in the Black Orpington of today).

The late Jimmy Bain of Trevallyn and Mr Littler, of Littleton Street, Launceston, had both strains and they both gave me birds when I was a young lad. Later, Mr Tom Dean, of the Richmond Poultry Farm, Penquite, near Newstead, Launceston, imported several trios from Mr W.M.Bell, of St. Leonards, England, paying 60 pounds per trio. He also gave me birds and on this foundation of really good stock, Tasmanian breeders for many years were hard nuts to crack in the show pen.

The above leads up to the utility Black Orpington period of dual-classification, which possibly has done more towards deterioration in many useful breeds and varieties – some of which have entirely disappeared or got down to a very low grade compared with late decades of last century and early decades of this century.

Before World War I, judging quite a few shows, these so-called utility Black Orpingtons - the high speed, big score laying competition period – had caused much interest throughout the world. As Superintendent of Melbourne Royal and other leading shows, I suggested: Why should Australia not have like other nations a National breed of fowl? Why not improve the utility Black Orpington back to the very high quality, good laying, large egg, table quality, grand appearance of the fairly close feathered Cook stamp of Black Orpington and name it Australorp, a name I had drummed for years into the ears of anyone who would stop, look and listen. Opposition came from all quarters in all States, from civilians of all grades including Government officials. Quite a few had an axe to grind with the birds into which they had introduced Minorca, White Leghorn, Langshan, etc. Oh, what a fight! Yes, the band certainly played Annie Rooney – until I became rather unpopular – in fact, detested by even quite high officials in their ostrich-like attitude against improvement in quality of these peanut-sized body and egg size layers – tight as drums in feather (from the Mediterranean crosses) - often a brown black in plumage.

In the midst of this I enlisted in World War I and

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Black Australorp Cockerel

returned on June 19, 1919; right in the midst of the winter poultry shows. I was grabbed to adjudicate several events. The Victorian Poultry and Kennel Club had very big entries and quality real hot throughout the show. Lo behold! I received a great shock – shaved faces in the utility Black Orpington classes. A broken pelvic bone (width of pelvis was a must with these utility exhibiting cranks). Result an enquiry – two exhibitors “out” for quite a period. Later I refused to judge these black fowls as utility Black Orpingtons and set full sail to have an improved version named “Australorp” against strong opposition from all quarters as before the war.

World records were being established at laying competitions: Billy Cullen, of Werribee, scored at Burnley Government competition with a team of six birds laying 1,611 eggs in 365 days. Three of the birds laying in zero winter test of three months – 101, 100, 102 – I bought this team of six birds in their third year for £45. Right on top of this, Billy won the single test with a pullet laying 338 eggs in 365 days. I secured him an offer from Mr Genat, of Box Hill, of £50 for the pullet, but advised him “not” to sell. He has never looked back since then.

Being on top of this, Herbert Brothers (originators of the Red Rome apple), of Diamond Creek, Victoria,

eclipsed the Cullen record for a team of six with a higher score. This team I also purchased for £60 in their third year they had a remarkable winter zero period. The winter zero period is always my guide on ability to reproduce top hole layers. I am not alone in this idea. The most skilled men abroad – Oscar Smart, Tom Barron, Richard Rodwell (of Black Leghorn fame) and others followed this idea with remarkable success.

The climax of these egg laying tests came at Bendigo, Victoria, official laying test when a team of birds entered as standard Black Orpingtons put up a remarkable record in 1922 of 1,857 eggs in 365 days.

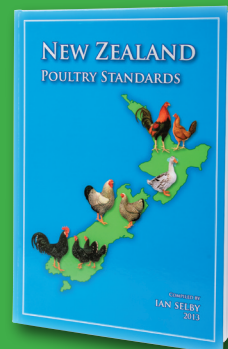
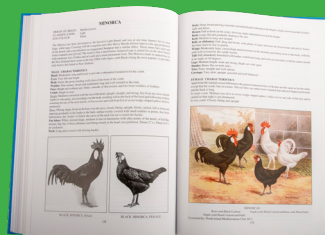
I have a photo of these birds and full record of details of their high score.

In the early twenties of this century, Mrs. Audrey Pape, a daughter of George Chirnside, of “Werribee Park”, Werribee, Victoria, became interested in the Australorp problem. On her return to England, she became Secretary of the Welsummer Club and through her interest, together with W.Powell-Owen, a noted poultry advisor and judge, some hundreds were sent from Australia and the name Australorp adopted in England and later a standard (quite good) was formed. America and

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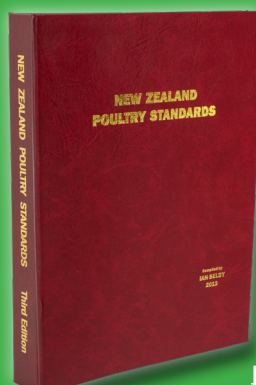
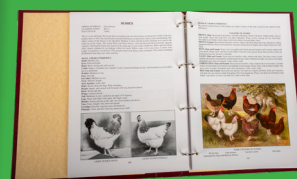
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Mexico followed suit, yet we in Australia were in a fog. Victoria moved first in the effort to have an ideal drawn for a standard to be compiled under the name of Utility Black Orpington, then New South Wales and South Australia, with Queensland lagging and Tasmania dragging well behind. Interest was now up to fever heat in N.S.W. and Victoria. The first Victorian Poultry Control Council had been formed. As leading delegate representing several clubs and agricultural societies, I moved a notice of motion on January 8, 1930, that the name Australorp be adopted in the State of Victoria. This was finally settled at a meeting attended by 96 delegates in the Royal Agricultural Society Council Room, Melbourne, on March 25, 1930. The change of name received unanimous approval.

The Poultry Club of New South Wales, supported by the Royal Agricultural Society of N.S.W., quickly got to work and at a meeting during its Easter Show in the Dudgeon Arnold Hall, under the Chairmanship of Mr R.R.Brown, of Orpington fame, and Mr Edwin Hadlington, Chief Government Poultry Officer for N.S.W. (delegates attending from various States), the final ideal drawing of a pair of Australorps was approved of, also the excellent (as it still stands today) standard was approved of and adopted as a guide for all States in breeding and adjudicating.

Representing *The Age* and *The Leader*, Melbourne, I had the details and full-sized drawings on the plane very quickly. *The Leader* at once published the photos and full details regarding same and sent me 100 copies, which I distributed within an hour opposition ceased.

Thus we have this magnificent looking, really useful dual-purpose fowl recognised as Australia's National Fowl. Also, the World's Scientific Poultry Congress, held in Sydney on August 10 to 18, 1962, adopted the head of an Australorp male on its stamps, emblems, badges, etc. and I understand the gold, silver and bronze medallions for first, second and third awards at the huge live bird exhibition held in conjunction with the Congress had the Australorp head featured upon them; also on a postage stamp.

What a victory for dogged persistence over a very long period. Yes, even excelling the bitter prolonged controversy over the first genuine Chinese Langshans, which occurred in the middle of last century.



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FASCINATING HISTORY OF THE ARAUCANA

by T.W.Hogarth from "The Scottish Stockkeeper 1931."

Mr. James Garrow, whose interest in and knowledge of a wide range of the smaller pedigreed animals which are of such great benefit to our country, asked me sometime ago to provide information on the remarkable green egg producing fowls which I introduced into Scotland last year.

It is just over seven years since I first became interested in the Araucana fowl. At that time I learned from a friend in the U.S.A. of the occurrence of blue eggs in shipments of ordinary hen eggs arriving from South America. However, this news of blue specimens naturally attracted my attention, and I set about trying to locate their origin. I wrote to the zoological gardens in Buenos Aires and I was very fortunate in doing so, for the then director, Professor Clemente Onelli, was deeply interested in the Araucana.

Although, as I will show later, the variety had been discovered earlier, Professor Onelli claimed to have discovered them independently. He was in the habit of making journeys into little known parts of the Republic of Argentina and the neighbouring republics, and it was while in Chile that he discovered these birds. Araucana is the name of a race of Indians inhabiting certain parts of that country, and it was amongst them that Professor Onelli obtained his best specimens. It is noteworthy that in 1924 he wrote me saying that the Araucana Indians had allowed their birds to be neglected so much that they had become crossed with European fowls, and a number of the racial characteristics had been lost and that not all of them produced blue eggs.

His task, therefore, at that time was to regain the characteristics, which, in addition to the blue egg, included ear muffs and taillessness, and this he was doing by selection.

But here we must leave Professor Onelli and turn our attention to the man who introduced them to Europe.

Professor San Salvador Castello, director of the Royal School of Poultry Culture in Barcelona, Spain, had



A pen of Lavender Araucanas

been travelling during 1914 in Patagonia, the most southerly state of Argentina, and in Punta Arenas, one of the most southerly inhabited towns in the world, which, by the way, is in Chile, not Argentina, where he noticed blue eggs amongst the hen eggs in the market. On making further enquiries he found that they were produced by fowls having some, or all, of the external characteristics. However I was much grieved to learn that Professor Onelli had died two years previously, but on being escorted to the Zoo by some of my much amused friends, the tables were turned as the keepers there knew of Professor Onelli's hens and were able to confirm my statement. Unfortunately Mrs. Onelli had left the zoo and had taken with her, her late husband's Araucanas, and for a number of reasons I was unable

to get in touch with her.

Later, however, I met one of the leading poultry experts in the country and told him of my anxiety to obtain some specimens of these fowls, and he told me of a gentleman who was evolving a new race. This gentleman owned the famous Estancia, Juan Geronimo, and had obtained, during a hunting trip in the Cordillera, some of the blue egg producing fowls. From these he had been breeding, not for the blue egg, but for a black colour of feather and a small crest not unlike that of the Houdan, as well as a buttercup comb.

He had some dozens of these fowls running wild and unhoused on an island in the middle of a lake in front of his house, and invited me to go over and inspect them. This I did, and I found that some produced blue eggs, some green, some blue at the ends, and some all white. With the generosity of his people, he presented me with a trio, as I noted in Our Dogs Christmas edition, and sent them to the ship.

One of the hens produced a white egg, but she died as a result of an accident, and



Rumpless and Tufted Araucana Pullet



Rumpless Araucana Cockerel

the other produced a green one. This latter laid with great regularity all the voyage home right to Liverpool, which is very note-worthy as an index to the persistency of this particular hen, as the weather was subject to great changes from extreme heat to the biting cold and storms of the Bay of Biscay. She even laid in the crate en route from Liverpool to Scotland. After arrival she went into a moult, as did the male. The male, I might mention, was very game, for when I released him here (1200 feet above sea level) amongst snow which he had probably never experienced before, he fought and mastered five brown Leghorn males, even though he was rather weak in leg from five weeks confinement.

After the moult was over, the female commenced to lay, and is remarkably prolific, having produced steadily all the time and is still doing so. I set several sittings and the fertility was practically 100%, but unfortunately the abnormally wet spring has resulted in great losses, and I now have only five chickens left.

THE SOCIAL ORDER IN POULTRY



Hens fighting over positions on a perch

A social rank would be unnoticed in the traditional barnyard system of poultry keeping. Here hens were confined only at night, if at all, and were permitted to forage over wide areas, deriving their nourishment from pasture, occasional scatterings of grain, and from faeces of other farm animals.

There was little chance of despotism due to the small numbers of birds which comprised the society.

Since the Second World War, it became acceptable to run larger numbers of birds on smaller areas of land, or in intensive houses and laying cages. Upwards of 400 birds are sometimes run together and even in semi-intensive houses flock units are often about 200 layers, where there is ample opportunity for bullying.

A clear illustration of how social rank is established can be seen when a number of hens from different pens are put together. There is an immediate sorting out by the hens. Where domination of one bird over another is questioned, a fight to settle the issue often ensues. Superiority may be acknowledged without a struggle, in which case the second bird submits passively. The victory is either physical or psychological, and from that point on

the victor pecks the vanquished whenever they chance to meet, but the vanquished does not peck back.

Not always is the social order so simply established. Complexities arise, probably in the following way. Bird A has proved her right to peck Bird B, and B pecks C, but C also pecks A: a sort of triangle pecking arrangement therefore exists.

Revolts are rare and successful revolts rarer, except where the physical condition of the top bird is impaired by disease. However, revenge is seldom taken, the sick hen is simply ignored and a new order is created.

THE "PECK ORDER"

Birds high in the social order usually peck their immediate inferiors, rather than those lower down the scale, although these are, indeed, pecked by all.

The position is complicated when birds are housed in big intensive units. There is a tendency for hens to sort themselves into units, each of about fifty birds. Social status is rigidly enforced within the group. By the efforts of low-class birds to escape the dominant birds' attention they are often exposed to physical danger from birds low-



er down the scale, and perhaps belonging to some other group.

Intermediate birds which stray into another group are at a disadvantage in that they must fight on their opponent's home ground. This is evidently as much a psychological handicap in the fowl shed as on the football field.

A bird low on the social scale, with only a few birds beneath her, handles those few more viciously than one which rules over many. However, if the former is taken to a new community and is established higher in the social scale, her despotism becomes much milder.

CAUSE OF SOCIAL RANK

Scientific study indicates that the sex hormone balance in each bird decides its social standing. No individual is 100% male or female - each possesses a quantity of both sex hormones (complex chemical substances) and the degree of male sex hormone content in the hen decides her degree of aggressiveness.

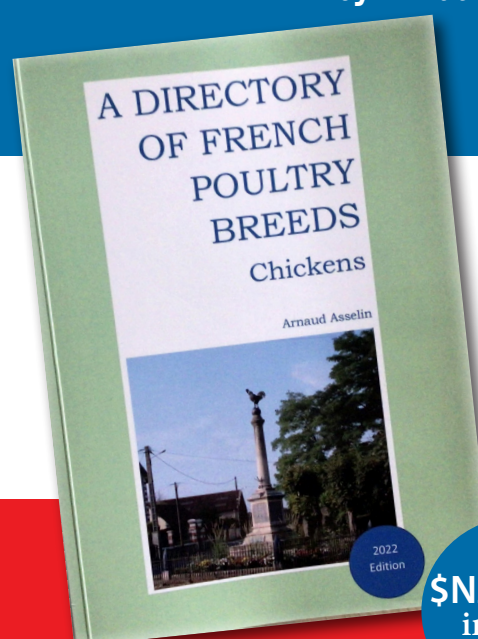
The male bird is the acknowledged leader of the flock because of his display of secondary sex characteristics. The females readily identify the male by reason of his aggression, comb development, and plumage type.

It will be observed that when two hens first meet,

Over-crowding is one of the major causes of bullying in Poultry Keeping

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Poor conditions and overcrowding are causes of feather-pecking

the one with the larger comb usually dominates the other. Size of comb is an indication of the amount of male hormone in the body, and is usually associated with greater body size and vigour.

The theory of a correlation between sex hormone balance and social status has been tested by experiment. Injections of the male hormone, testosterone, have brought about interesting responses in hens, particularly those low in social rank. It was possible to lift the lowest ranking birds to positions at the top of the scale, not only in a single community, but in any community existing within the flock.

At the same time there was increased comb growth, depressed egg production, an attempt to crow, and sometimes a courtship with other hens, accompanied by the usual male antics of dropping the wings and sidling up to the prospective mate.

Similar injections with the female hormones, hexoestrol and stilboestrol, had no effect.

PRACTICAL IMPORTANCE

High social rank means greater freedom of action,

easy access to food and water, and stress-free living. It is understandable that such an environment is conducive to higher egg production, quicker growth and more economic meat production.

As mentioned before, hens seem to arrange themselves in units of about 50 birds, creating a social balance within their number. Despotism within the group may not be a serious matter, but strays are severely dealt with.

Wounds on the comb and face, loss of weight and a disinclination to make further attempts to obtain food and water are ample evidences of the harsh treatment handed out to lowly placed birds in flocks of big numbers.

It seems that the economic importance of social rank is influenced by:

- (1) The number of birds in a unit.
- (2) The feed and water space provided.
- (3) The available floor space per bird.
- (4) The ratio of hens to nests.

Success of small unit flock systems on commercial farms is largely due to a diminution of "peck order" activity. Hens seem to be arranged in a social system they would strive for naturally. No doubt some domination still exists, but the lowly bird is not continually hounded

by those outside its own social setup. Furthermore, adequate feeding, watering and nesting facilities are provided, and overcrowding is avoided.

FEEDING SPACE IMPORTANT

When large numbers of birds are housed, peck order trouble can be reduced by the provision of more hopper space. When a bird is being continually hunted away from a single large hopper; a common sight on poultry farms; it has virtually no chance of ever obtaining sufficient food for body maintenance, let alone egg or meat production.

The placement of hoppers in such a way as to defy the efforts of bullies is worthy of consideration. For example, close arrangement of barrel-type feeders should be avoided, and one should aim to provide 30 inch diameter hoppers per 100 birds. Double-sided feeders should be placed in parallel rows to allow a bird to move quickly from one to another when necessary.

THE MOULT

A WELL EARNED REST



Hens just don't look good when in full moult

The moult in poultry, that period of non-production when hens take a rest, similar to the annual vacation of human workers, comes along in the early autumn, and special management should be given to them.

A wthey will be forced to have a rest. If it appears as though they will continue laying, to their own detriment, grain only will probably put them off the lay for the time being. If this fails, they should, be put into another pen and fed body-building food, but not food that will encourage egg production. This method is advised by an old-established and successful local poultry farmer with good egg-laying competition scores to his credit.

Others again will take five or six weeks to come back into lay, with a new coat of feathers, and still others will moult quickly and be laying again within a month. So, as with all other peculiarities of the feathered world, the producer must watch his flock and adapt his management to the conditions encountered.

FEATHER GROWTH

The particular protein required in feather-growth can be obtained from food wisely given. A small amount of meat-meal may be added to the food with advantage. Some breeders add sunflower seeds to the grain. If the weather remains warm a pinch of sulphur in the wet mash will help the feather production.

Generally speaking, it is the younger stock which delay the moult to the end of the season, but their duration is not more than six or eight weeks, while the older the birds are, the earlier is the tendency to moult, indicating the lack of youth to help them in their duties. Some say that poultry cannot produce eggs and grow feathers at the same time, but this is contradicted by some, who submit that this depends on the stock, the feeding and the management accorded them. Male birds take longer to grow their new plumage owing to the long hackle and sickle feathers. They also claim that Nature provides the new feathers so imperceptibly that, if properly fed, the birds will not appear unclad, and therefore subject to cold during the moult, and



Leghorns, a Light Breed, are through the moult quicker than Heavy Breeds

there is no necessity to rush the birds through the moult during the hot weather.

THE SEASON

The moulting season for fowls over twelve months old may be said to cover the months of February to April. Outside of these months it may be classed as too early or too late. Fowls that commence to moult in December are generally the poor layers, or have been subjected to a health disability. Anything that puts hens off laying towards the end of the flush season may precipitate an early moult. Such things as moving them to new environment, change of food, addition of foods to which they are not used or cutting down the rations below requirements are among the most common. Hens allowed to sit late in the season or to remain on the nest in a broody condition are liable to go right into the moult.

Taken all in all, from the viewpoint of the welfare of the birds in respect of stamina, it is best that the fowls moult out naturally and in the proper season, which is autumn. It can be said that late moulters, although the best of the layers, are rarely much good as breeders, due principally to exhaustion following on a long period of laying and too short a spell in which to recuperate.

TONICS

By its very nature, the moult, recognised as the birds' period of minimum vitality, calls for a tonic and easily digested food. A good type of food fed consistently for some weeks previous to the moult enables the birds to build up a reserve of strength

which later stands them in good stead. It will further help to offset the usual heavy falling off in production.

The dose, is one tablespoonful to each gallon of drinking water, and should be given four or five times a week for one month. It is of little use to give only a few doses, a regular course of treatment being necessary to bring about the desired effect. While early moulters are not considered a payable proposition, if the owner wishes to keep them, they should be placed in a separate pen and given a good growing mash instead of a laying mash, to enable them to build up flesh and feathers and so return to laying condition as early as possible.

MANAGEMENT

A few words of advice upon the management of the birds during the moulting season may not be out of place, and may help some of the newer Poultry Keepers who may not have been through a moult. Local conditions, age of the birds, weather conditions, kind of breeds and the method of

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Orpingtons, a Heavy Breed, take longer to get through the moult

housing, all have some bearing upon the moult. Birds should be well housed during this period, and draughts eliminated, since the physical condition of the birds is low. Cold winds should not be allowed to affect the birds as this tends to prolong the moulting period and may also even cause some fatalities. Warm weather will require less time for moult than cold or wet weather, unless extra exercise is provided, during such a spell. The breed has a lot to do with the length of time necessary, since the heavy breeds, such as Orpingtons, will take longer than light breeds, such as Leghorns, owing to being much more heavily feathered. Poor layers generally moult early and take a long time over it, whilst good layers moult late, as a rule, and get through quickly. In their case, in order to keep them laying as long as possible before they moult, an abundance of appetising food, with some animal food and a plentiful supply of live green feed will retain their strength and get them through the moult more easily.

A FEW HINTS

See that the birds have plenty of cool drinking water. Sharp grit should also be provided. Linseed meal, fed in the morning mash, will tend to feather the bird more quickly than if the bird is left to its own resources for the supply of feather growth. Dry dust baths should be available with a handful

of **Poultrynz D.E.** (diatomaceous earth) mixed in, as this keeps the bodies free from pests, and prevents feather plucking. Feathers dropped should be collected from the fowl houses or runs and burned, otherwise feather eating may be started, besides which they encourage insect pests.

As soon as their moult is complete a good laying diet, which will assist them to return to production, should be given, otherwise they may become too fat and their production be delayed. After all the moult is a natural period of rest for the birds, during which they can be toned up, by correct management and feeding, ready for the colder weather and another year of heavy production.

Should cold weather be experienced during the moult and any birds catch cold, they should be isolated and treated.

Poultrynz D.E.

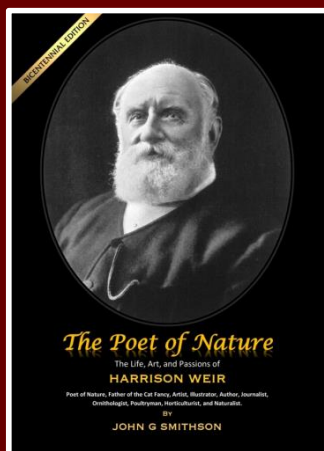
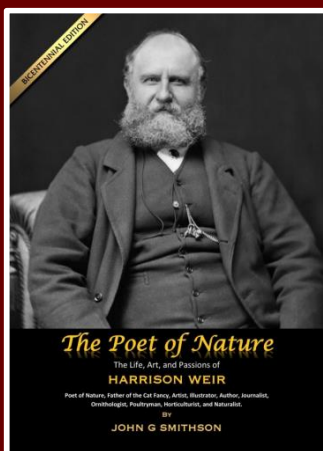
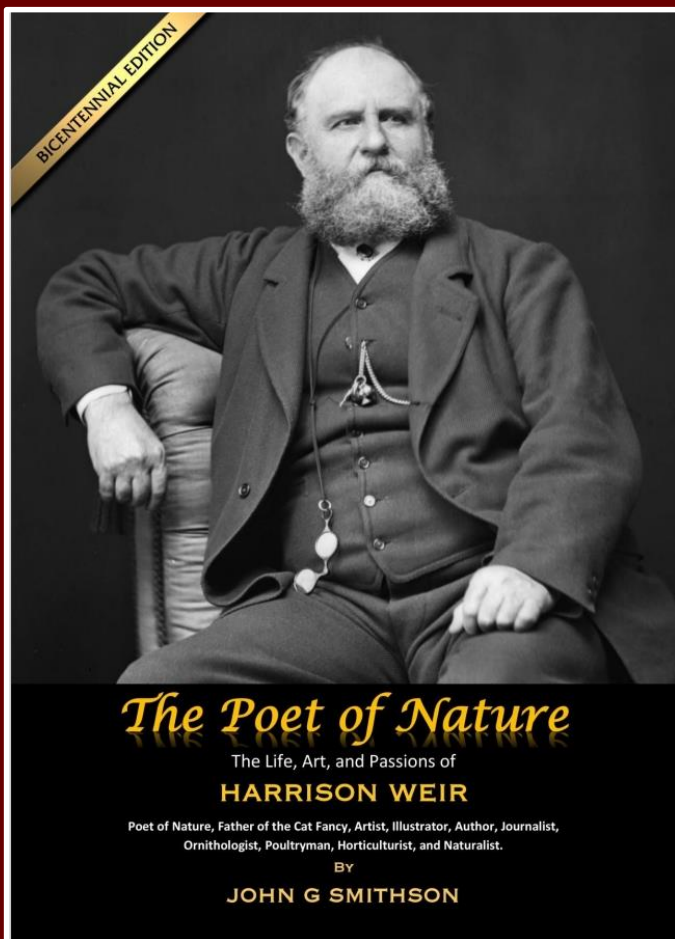
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Avoid inhalation of dust.
Wear a suitable dust mask when using or operating in confined spaces.



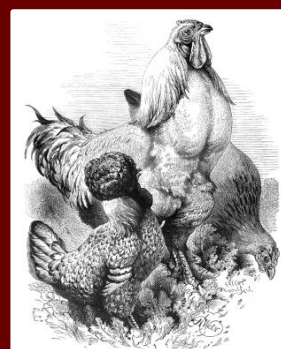
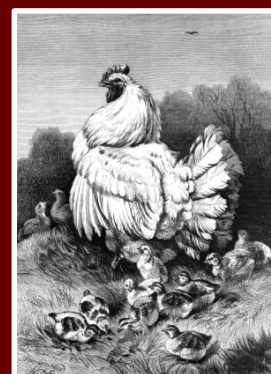
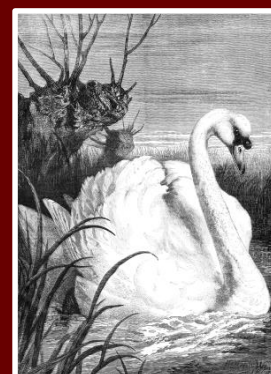
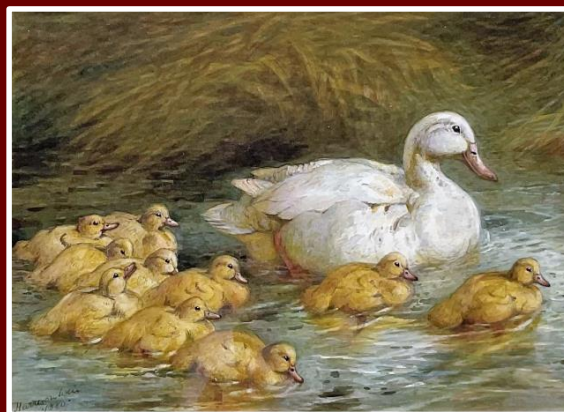
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