

HEALTH MGMT PROGRAMS FOR PIGEONS

[Postweaning Program](#)

[Race Programs](#)

[Moulting Programs](#)

[Prebreeding Health Program](#)

[Prerace Program](#)

[Breeding Season Program](#)

The aim of any health program is simply to keep the birds healthy. Most fanciers don't want to waste time or money on unnecessary or incorrect treatments yet at the same time don't want to compromise the health of their birds by overlooking any beneficial treatment. Programs need not be unnecessarily complex. Mistakes in health management in the long term cause teams not to achieve their full potential and so for a program to be successful it is important that the fancier understands not only what he is doing but also why he is doing it.

For practical purposes, the pigeon year is divided into various stages, and so what should we as fanciers be doing at these various times to manage our birds' health.



The same bird at hatching, and at 7 and 21 days of age

Postweaning Program - 4 - 8 weeks of age

Principal aim: To allow a controlled exposure to disease organisms so that the youngsters can develop a strong natural immunity to them. This is achieved by providing a stress-free environment and by avoiding the use of medication if possible.

The routine use of medication during this time should be avoided. During the first few weeks after weaning, the birds are being exposed to a whole range of potentially harmful organisms. A youngster in a well-managed loft, however, does not become sick but rather through this exposure develops an immunity to the organism. Provided the youngsters are well in themselves, a low level of diseases such as wet canker, respiratory infection or Coccidia at this time can be regarded as beneficial in that it reinforces the growing youngsters' developing natural immunity. The use of medications at this time simply interrupts this exposure with the result that the birds' level of natural immunity is not as high. For this reason, a youngster is only treated if a health problem progresses to the point where the bird is sick in itself and individual bird treatments rather than flock treatments should be given. Flock treatments are only given if there is evidence of a spreading infectious disease or more than 5% of youngsters are affected. Health problems that appear during this time are categorized into one of four types. These are outlined in the chapter Weaning.

For a youngster to mount a good immune response and, in the process, form a strong natural immunity following exposure to disease organisms, it must be stress-free. Stress compromises the

function of the immune system. The avoidance of stress in the postweaning time is also covered in the chapter but essentially it involves weaning batches of youngsters together as groups, being hygienic, avoiding overcrowding and dampness and ensuring that the birds' full nutritional needs are met.

Supplementation

During this time, pink minerals, grit and preferably a picking stone should always be available. A water-soluble multivitamin, eg Multivite Plus, can be placed in the water for 1 - 2 days per week, while a probiotic, eg Probac, in the water for 1 - 2 days per week helps maintain a full beneficial population of bowel organisms, ensuring full digestion and assimilation of nutrients. Seed oil additives, eg PolyBoost Oil, can be used to advantage and increase the energy and calorie content of the seed mix. They can be used either by themselves or with a yeast. Garlic Oil is of particular benefit during this time because it is not only nutritious but contains the compound Allicin, which is a natural immune stimulant.

[>>Back To Top](#)

Moulting Programs

Principal aim: To have a good moult, resulting in the production of a lustrous set of feathers, and to allow on-going development of a strong natural immunity. This is achieved through the maintenance of a stress-free environment, drug avoidance, parasite elimination and a complete diet.

Approximately 3 weeks after weaning, the youngsters will start to moult. The process is accelerated in all birds, irrespective of age, in February in Australia with the shortening daylength. As this total replacement of feathers only occurs once a year, a new set of feathers must last the bird for its entire first year of competition. Poor feather quality compromises performance and so it is vital that everything is done to ensure that the new feathers are good.

Healthy stress-free youngsters moult quickly and the feathers they grow are of good quality. Conversely, birds that are sick for any reason take longer to complete their moult and the feathers they produce are not as lustrous. It is therefore important that the basic principles of on-going good care already established in the postweaning time and discussed in the chapter Weaning continue. During this time, medications are still best avoided if possible, the aim being to further strengthen the birds' developing natural immunity through low-grade on-going exposure to various organisms. The parasites, however, must be eliminated now.

Parasites

Internal parasites rob the birds of nutrition that would otherwise be available to them and compromise the moult. It is therefore vital that the birds are free of roundworm, hairworm and tapeworms and either have a low level of Coccidia or none. A low level of Coccidia is still permissible at this time because the youngsters' natural immunity is still developing. Hairworm, roundworm and Coccidia are all detected in a microscopic dropping analysis and this is often the best time for the fancier to send in his first dropping sample for examination for the season. Tapeworms are not a microscopic diagnosis because they can be seen with the naked eye. The different types of tapeworm vary in size. The small ones look like white pieces of cotton trailing through the dropping, larger ones look like pieces of rice stuck on the surface of the dropping, while the largest ones appear as whitish squares up to 0.5 x 0.5 cm either singly or stuck together as ribbons in or on the droppings. What we are actually seeing here

are the tapeworm egg packets and, though not continually, they are regularly intermittently passed by infected birds.

Many fliers prefer to routinely treat preventatively for worms and Coccidia at this time of year and unless testing is done to confirm that the birds are free of these parasites, this is a good idea. As some wormers can affect feather quality (e.g. Panacur, Synanthic), it is vital that the correct wormers are used. I recommend for roundworm and hair worm Moxidectin 2 mg/ml (5 ml to 1 litre of water for 24 hours) and for tapeworms Moxidectin Plus Liquid (5 ml to 1 litre of water for 24 hours). If Coccidia levels are too high (i.e. more than one every second x100 microscope field), then they are best treated. I recommend Toltrazuril Coccidiocide Solution (1 ml to 2 litres of water for 48 hours). Remember after worming for hairworm and roundworm that the loft must be thoroughly cleaned as any droppings passed before treatment may contain worm eggs and therefore have the potential to reinfect the birds. Hygiene is not as vital for tapeworm infection because they do not transfer directly from pigeon to pigeon through the droppings but are instead carried by insects, particularly slaters. (I think this is because slaters, when disturbed, roll themselves into balls, which the birds then mistake for peas.) To prevent reinfection it is therefore best to spray out the loft with Permethrin Solution (see section on parasitic diseases in The Common Diseases for correct use) the following day.

External parasites must be eliminated before the commencement of the moult, otherwise irreparable damage to the feathers is done. Moxidectin, as well as eliminating roundworm and hairworm, also eliminates all external parasites that suck blood. It therefore clears all mites (including airsac mites) but has only limited action against lice. To eliminate lice totally, the birds need to be dipped. The preferred product here is Permethrin Solution. As all lice live on the bird, a single treatment will eliminate all lice from the loft until they are reintroduced with strays, deliberately introduced birds and late returning race birds. However, only a percentage of mites infecting the birds are actually found on the bird at any one time. Many live in the cracks and crevices within the loft. To prevent reinfection, it is therefore important that the loft is sprayed with Permethrin.

Medication

Many of the common drugs used during this time, including, as mentioned earlier, some of the wormers, affect feather quality. Antibiotics (particularly Baytril and Sulpha AVS, and to a lesser extent doxycycline, Resfite and Doxy-T) if used during this time not only interfere with the development of natural immunity by interrupting the on-going exposure to organisms but also compromise feather quality and so their use is best avoided. They compromise feather quality by killing many of the beneficial bacteria in the bowel. These are necessary for digestion and the assimilation of nutrients. Their disruption by antibiotics interrupts the on-going delivery of nutrients to the growing feather within the feather follicle. Turbosole and other anticanker drugs do not disrupt the bowel bacteria and so can be safely used.

Supplementation

Any nutritional deficiency during this time also results in poor-quality feathers and so suggestions made under Supplement Recommendation in the Postweaning Program hold true here. In particular, the birds need to have good levels of iodine (found in some pink minerals, e.g. PVM Powder, and some vitamin/mineral supplements, e.g. Multivite Plus) in their diet for the moult to proceed quickly. Supplementation with unsaturated fatty acids (found in seed oils) aid in the production of lustrous silky feathers in birds (and interestingly also a glossy coat in mammals) and so their use is particularly recommended during this time.

If disease appears during this time, the same basic principles are followed as in the Postweaning Program. Flock treatments are avoided unless at least 5% of birds become affected. Unwell birds are treated individually. Those that do not respond within 4 days are usually best eliminated.

[>>Back To Top](#)

Prerace Program

Principal aim: Having allowed as much time as possible for the birds to form their natural immunity, it is now a matter of assessing what health problems are persistent and then using drugs if necessary to get the birds completely healthy before the first race.

The veterinary attitude toward health management changes 6 - 8 weeks before the first race. Up until this time, apart from parasite control, medication is avoided unless the birds in themselves become unwell. Low levels of various potential health problems, in particular wet canker and respiratory infection are tolerated so that the birds, through exposure to low-grade disease, can develop as strong a natural immunity as possible to them.

In many well-managed lofts, the birds' natural immunity will be such that, when screened for disease in the last weeks before racing, none is apparent. However, as racing approaches, it is important that any identified health problem be eliminated. I recommend that before fanciers embark on their final long tosses before the first race, and preferably several weeks earlier, droppings and birds be brought to the clinic for a health profile. Any persistent health problem is then cleared with medication so that the birds can be completely healthy at the first race.

For fanciers who are at a distance from the clinic and not able to bring birds to the clinic, droppings can be mailed in. Dropping analysis enables a check for worms (hairworm and roundworm and sometimes tapeworm), Coccidia, E. coli, thrush and fungi. Dropping analysis also gives an indication as to the general health of the birds, in particular whether they are likely to have wet canker or respiratory infection. Presentation of a live bird enables a more accurate assessment of not only wet canker and respiratory infection but also of less common problems such as Hexamita (a canker-like organism that lives in the bowel).

Parasites

Before the start of racing it is essential that the birds are parasite-free. To this end, if parasites are detected in the droppings, or a dropping analysis is not possible, the following protocol is adopted:

- For hairworm and roundworm, external mites and airsac mites: Moxidectin, 5 ml to 1 litre for 24 hours
- For tapeworms: Moxidectin Plus, 5 ml to 1 litre for 24 hours
- For Coccidia: Toltrazuril Coccidiocide Solution, 1 ml to 2 litres of water for 48 hours
- For lice: dipping in Permethrin Solution.

Wet canker

If wet canker is detected on testing, has been a loft problem in earlier years or a test is not possible, all birds are given a 2 - 3 day course of Turbosole. If this is extended to a 7-day course, it will kill any Hexamita that may be present.

Respiratory infection

If respiratory infection (including mycoplasmal airsac infection) has been a problem in earlier years, then a 5 - 15-day course of Doxy-T is given. If respiratory infection purely due to Chlamydia has been a problem, Doxy-T can be replaced by doxycycline 12%. The course of Doxy-T or doxycycline 12% should be completed 2 - 3 weeks before the first race and should be followed by a 2 -3 -day course of Probac. It is best, though not essential, to remove the grit, sand or other minerals during Doxy-T treatment.

Supplementation

In addition to actual medication, other preparations can be used to not only maintain health (which is really just the bottom line) but actually promote fitness. Multivitamins, mineral supplements and conditioning oils can be used to build fitness as race day approaches.

[>>Back To Top](#)



The 5,000 entrants in the VHA 500 Mile Race from Bourke to Melbourne in 1993, head for home.

Race Programs

Principal aim: To maintain winning form through the entire season by good management and the maintenance of health.

During competition, medication is used to maintain health. It is vital that the birds are completely free of any health problems to give their best. Winning birds are always not only fit but also healthy. If the natural immunity they have formed is not strong enough to keep them healthy during the inherent stress of racing, then medication is used to ensure that health is maintained, so that success can be on-going and unnecessary losses avoided.

Unless the genetic base of the birds kept has changed, or the way they are managed has altered, then it is very likely that any health problems that occurred in previous years will predictably reappear in a particular loft. This is why successful preventative programs can be reapplied to particular lofts year after year. Some health problems are more likely to occur in particular types of loft and in lofts in particular locations. This explains why a program that works well in one loft is inappropriate in another.

Medication serves another purpose. Out of the race season, exposure of loft members to birds from other lofts is minimal, while once racing starts there is sudden and immediate high exposure to many birds from many different lofts. In this way, birds become exposed to different strains of disease-causing organisms, in particular strains of wet canker and respiratory infection. Because these strains may not be resident in their own loft, they cannot possibly have developed an immunity to them. For this reason, disease can flare up, even in well-managed lofts, with resultant sudden loss of form and variable losses. Medication is used to minimize the impact of this exposure.

When to treat

Veterinary attitude has changed since 1990 as to how to treat birds on race return. Before 1990, many lofts did not contain the wet canker and respiratory strains that are common today. Treatment was aimed at preventing or delaying the entry of these organisms into lofts that were still free of them. To this end, it was recommended that medications such as Turbosole and Resfite were placed in the water of returning race birds usually at slightly higher doses. The medication that the birds took in with the single big drink that they had upon return, although not enough to treat an active infection, was often adequate to prevent infection establishing following a recent exposure. Since this time, through sales, transfers of birds, etc., wet canker and mycoplasmal airsac infection have become steadily more and more common so that now most lofts do in fact contain some strain(s) of these organisms. Treatment protocols have moved away from treating returning race birds (although this is still worthwhile in some lofts) to periodic short courses of medication to keep resident wet canker and respiratory strains in check during the stress of racing. These short courses also serve to lessen the impact of exposure to a new strain on loft health. Regular short courses keep a new strain under control while the birds establish a natural immunity to it.

There are other practical considerations. To be effective in preventing the entry of disease, medication for returning race birds must be given after their return but before these birds mix with other birds in the loft. This usually means treating them as soon as they return. This makes it impossible to use other useful postrace treatments such as electrolytes and probiotics. If returning race birds are treated the next day, i.e. Sunday, this means they must be kept apart from other birds in the loft until this time. If returning race birds have mixed with other non-race birds, there is no point in treating just them on Sunday. Under most management systems, it is important from the birds' motivation point of view that they be allowed access to their perch, box or mate as soon as possible after return. This can be difficult if medication is delayed until Sunday. In addition, some postrace drugs are bitter, which can deter returning race birds from drinking fully, while in fact it is very important that returning birds drink well in order to rehydrate.

These days, the usual recommendation is to focus on recovery from the race on Saturday and then to use either Sunday and Monday or Monday and Tuesday as the days to give any medication that may be necessary. Usually all birds in the loft, i.e. those that have raced that weekend and those that haven't, are treated. If a fancier tosses non-race birds on Sunday or there are stragglers from Saturday's race, then usually Monday and Tuesday are used.

To speed race recovery on Saturday, I recommend either electrolytes, multivitamins or probiotics be given. If the race has been hot, or especially hard, or if the birds look distressed upon return, I think it is best to give electrolytes. Alternatively, if the race has not been especially taxing, multivitamins or probiotics are preferred. I find that the droppings from returned race birds the following morning are more likely to be brown and tight and that the birds will maintain a feather down drop if probiotics are given as they return

Health monitoring

All disease problems that can affect form, except wet canker and respiratory infection, can be detected from the droppings. Birds that have wet canker or respiratory infection because they are sick are not able to mount a good immune response and so opportunists in the bowel, particularly E. coli and thrush, sometimes take advantage of the birds' run-down condition and multiply. The presence of elevated numbers of these organisms alerts the fancier to the possibility of these problems. However, their presence is by no means specific, and also, to confuse things, not all birds with wet canker or respiratory infection will have these changes. I recommend that droppings be regularly examined microscopically during racing, usually every 1 - 3 weeks. This detects all other problems and not only enables effective treatment for them but also avoids treatments that may be unnecessary.

Wet canker and respiratory infection are the two most serious and common causes of poor race performance and yet are the two most difficult to detect by the fancier in the loft. Both problems are now so common that I feel that it is not possible to achieve consistent success without vigilant monitoring or regular treatment for them. Wet canker and respiratory infection sooner or later will catch up with the lax fancier. Wet canker can be definitively diagnosed and accurately monitored with crop flushing because the causative agent, the living trichomonad, is seen. Respiratory infection can sometimes be diagnosed with a crop flush. In a respiratory infection, inflammatory material drains from the sinuses through the slot in the roof of the mouth into the throat or alternatively is coughed up from the inflamed windpipe lining into the throat. A crop flush gathers this material, which can be detected microscopically.

Wet canker and respiratory infection are very common problems during racing. The fancier who does not control these well, and sometimes this will mean the use of medication, can expect to lose more birds and not clock as many prizewinners as the fancier who does.

Medication

It is important to remember that antibiotics should not be given closer than 2 days before basketing. All cause some disruption to the normal bowel bacteria (more so with Baytril and Sulpha AVS, less so with Doxy-T, Resfite and doxycycline), which then take several days to re-establish. An antibiotic course even of only 1 - 2 days during racing should always be followed by 1 day on Probac in order to replace the normal bacteria as quickly as possible. Turbosole is not an antibiotic, only killing canker organisms, and so therefore can be given any day of the week. However, when wet canker is a problem, Turbosole is best given early in the week so that the birds have a chance to 'lift' after having the trichomonads cleared.

E. coli and thrush during racing are usually treated with Probac. This can be given any day of the week and indeed more and more successful lofts are not only using it for this purpose but are also using it to advantage to maintain a healthy beneficial population of bowel bacteria at all times during racing. I usually recommend Wednesday and Sunday (for Thursday night basketing) as the best treatment days for Probac because the first dose sets the birds up for the race and the second helps them recover. However, Probac should always be the first line treatment when the droppings become green or mushy during racing.

It is worth mentioning here the mixing of drugs. The two most commonly mixed drugs are anticanker drugs such as Turbosole and antibiotics such as Doxy-T. Many fliers do this with success, however, recent evidence shows that mixing any antibiotic with Turbosole does slightly decrease the potency of

both. Also, I am concerned that putting several things in the water makes the water less palatable for the birds. This means the birds drink less and may not receive an adequate dose of either medication. However, there are some instances when these disadvantages have to be weighed against the number of days available. With a limited number of days, we sometimes need to mix medications so that the birds receive all medications that they need.

Supplementation

A range of conditioning agents and multivitamins can be used during the season and, although not directly treating disease, do help the birds resist disease by promoting their health generally. I feel that it is good to incorporate a good-quality multivitamin, such as Multivite Plus, in the loft health protocol once or twice weekly. During racing, birds can miss meals through being late and sometimes eat irregularly through being away from the loft racing. The use of a multivitamin helps ensure that they are not lacking something in their diet. Seed oils together with yeasts when added to the grain increase the energy and calorie content of the seed mix and are a way of making an especially nutritious meal for the birds. Some fliers use such agents always on a particular day of the week; however, I feel this to be a mistake. Such products put condition or weight on the birds, which obviously at particular times is advantageous but at other times is not. An astute fancier can use such products as needed to bring his birds into race condition. Just how often they are used should be based on the birds' condition (assessed by handling and observation of loft flying). As a general rule, however, they are of benefit during cold weather, following hard tossing or hard racing, if the birds are underweight and during disease recovery.

In most lofts, 2 days on Turbosole every 3 weeks will keep wet canker under control while 2 or sometimes 3 days on Doxy-T every 3 weeks will keep respiratory (including air sac) disease under control. If necessary, the week without treatment is eliminated changing the program from a 3-week rotation into a 2-week one. This means that Turbosole and Doxy-T are given on alternate Mondays and Tuesdays.

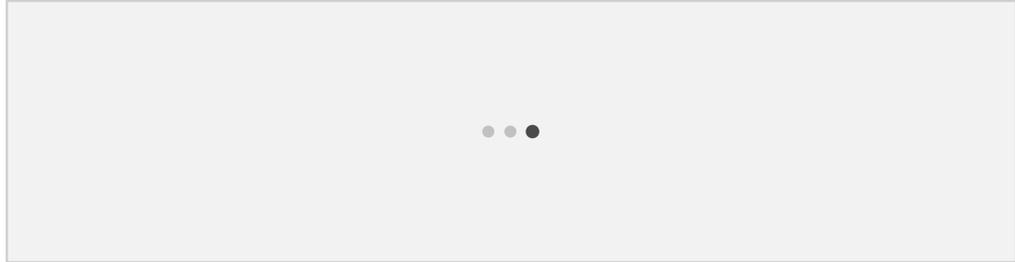
With severe flare-ups of respiratory infection, a longer course of Doxy-T needs to be given, usually 4 - 5 days before reverting to 2 day courses every 2 - 3 weeks until the problem is fully resolved. These shorter follow-up courses keep the problem under control while the birds' natural immunity rises and race fitness re-establishes. The onset, however, of respiratory infection during the race season is always a blow because not only do the birds need to throw off infection and become fully healthy, but they then must re-establish their race fitness. Meanwhile, the races are getting longer and longer, which can make it very hard to catch up. Often a loss of form lasting 4 - 6 weeks is experienced.

Drug resistance is always a possibility. I have not seen this with Doxy-T, as yet, probably because Doxy-T already contains two very effective drugs and so an organism would need to develop a multiple resistance for it not to work. If a flyer feels that Turbosole is not giving quick clearance of trichomonads he has three options:

1. Use Turbosole for longer, ie 3 - 4 days - This is quite reasonable because Turbosole can be given right up to the day of basketing, birds can safely be sent to the race with it in their crop.
2. Substitute every third or fourth treatment with another anticanker drug - All birds can be picked up for 2 days in a row and given 1 Spartrix or 1 Flagyl tablet each day, or alternatively a 2-day course of Emtril can be given in the water. Extreme care, however, must be taken using Emtril during racing because of its narrow safety margin, particularly in hot weather.

3. Turbosole can be combined with other drugs - Turbosole can be placed in the water and at the same time all birds are given a 1 Flagyl or 1 Spartix each daily for 2 days in a row.

Of the three alternatives, I usually recommend option 2.



Summary

- Turbosole for 2 days every 2 - 3 weeks, usually Monday and Tuesday
- Doxy-T for 2 - 3 days every 3 weeks, usually Sunday, Monday and sometimes Tuesday
- Probac -
 - for 24 hours after Doxy-T;
 - when droppings become green or watery; if there is no response, droppings will need microscopic analysis; and
 - considered for use on Wednesday and Sunday as a conditioning agent
- Seed oils and yeasts added to food on any day of week, based on birds' condition
- Water-soluble multivitamin in water is best given by itself and can be given 1 day per week on spare days, e.g. Friday
- Dropping analysis every 1 - 3 weeks. Other treatments, if needed, e.g. for Coccidia and worms, can be given on the third blank week.

This is a good basic program and in most lofts will keep the birds healthy and competitive through the entire season. It must be appreciated, however, that there are many variables affecting health through the season and so modifications to this are sometimes necessary depending on events arising. It is a long season and health varies with time and the change of weather that occurs from the start to the end of the season. Problems that may be present early in the season often disappear as the birds get older, their immunity rises and the weather gets warmer so that the need for certain medications falls away. This occurs with such problems as E. coli. At other times, there can be a sudden drastic change in the loft's health status necessitating a change in health management, eg the introduction of a new Mycoplasma strain.

[>>Back To Top](#)

Prebreeding Health Program

Principal aim: To start the breeding season with healthy stock birds.

Health control in the stock loft is very different from in the racing loft. This is because there is not the continuous potential exposure to disease through strays and returning race birds in the stock loft as there is in the race loft. It should be possible to eradicate many problems, in particular parasites, from the stock loft and then by treating any new birds before introduction to maintain the stock loft as a miniquarantine station. This is not possible, however, if there is exposure to the droppings of wild birds and so, for this reason, any flights should have suspended or grid floors.

Worms

The level of worms in the stock loft should be absolutely zero. Hairworms and roundworms are cleared by giving a 24-hour course of Moxidectin. It is vital that the loft is thoroughly cleaned afterwards to ensure that the birds are not reinfected from droppings containing worm eggs passed before medication. If in doubt, it is best to repeat the worming 3 weeks later and again thoroughly clean the loft. The eggs of these parasites can survive for up to 6 months in the environment, if there are aviaries with dirt floors that cannot be thoroughly cleaned, then to achieve control, Moxidectin can be given for 1 day every 3 - 4 weeks spanning this time. The longer-term answer, however, is to insert a suspended or grid floor or a floor that can be thoroughly cleaned.

Tapeworms are treated with Moxidectin Plus for 24 hours and reinfection prevented by spraying simultaneously with Permethrin Solution.

Coccidia

In lofts with a Coccidia problem, the Coccidia level can be decreased by giving a 2 day course of Toltrazuril Coccidiocide Solution in the 2 weeks before pairing. Repeat 2-day courses in these lofts would need to be given approximately every 4 weeks once the birds are paired to ensure on-going control of this problem. However, on-going coccidial problems are usually associated with environmental or management flaws and often the longer-term answer to controlling this disease is to review these loft factors.

External Parasites

Moxidectin will kill all mites on the birds and most lice. To eliminate all lice completely, the birds are dipped in Permethrin Solution. This is a good idea anyway as it has a 4-month residual effect and provides good-long term protection against the insects causing problems during breeding. It is also a good idea to spray out the nest boxes with Permethrin before pairing. Mosquitoes carry pigeon pox, pigeon flies cause irritation, anaemia and are associated with wet nests, mites breed in the warm conditions of the nest box and all other insects, particularly slaters, carry tapeworm. Therefore, before pairing I always spray with Permethrin.

Respiratory Infections

Various Chlamydia strains are carried latently in some lofts. This means that they are found within the birds' system and flare up, causing problems when the birds come under stress. The outbreaks usually occur during breeding (when the stock birds are under stress) and during racing (when the race birds are under stress). In the stock loft, signs range from infertility, weakened youngsters that die during incubation, during hatching or in the nest, poor babies and excessively run-down parents. In the race loft, we see variable signs of respiratory infection (eg eye colds, dirty ceres), poor performance, occasional sneezing, mushy green droppings and failure to come into condition. In lofts that have experienced problems with Chlamydia in previous breeding seasons, the birds are treated with doxycycline 12%, not to clear the Chlamydia, but rather to reduce it to a level at which it is less likely to cause problems. The usual treatment course is 7 - 30 days. The actual length of treatment for a loft is dependent on problems experienced in earlier years. In lofts without these problems, it is best

not to treat. Because of the long treatment required in some lofts, ensure that preventative programs are started in sufficient time. Doxycycline does interfere with calcium and vitamin metabolism and does disrupt the normal beneficial population of bowel bacteria. For this reason, treatment courses should cease at least 2 - 3 weeks before pairing and courses should always be followed with multivitamins, calcium and probiotic supplements. If you are unsure about the need for medication, please seek veterinary advice before breeding as the problem is difficult to control once the birds are paired. Once the birds are paired, the best we can do is 'band aid' the problem, i.e. patch up the problem after it has arisen through strategic short courses of medication to minimize the effect of the disease.

Canker

Control of this problem before breeding has been dealt with extensively in the chapter Canker. In lofts with a canker problem in last year's breeding season, it is usual to decrease the trichomonad burden of the stock birds by giving a 5 - 7-day course of Turbosole 4 weeks before pairing. This means that it will take more stress before the birds shed sufficient numbers of the organism to give their nestlings the disease. In lofts without a canker problem, it is best to give no medication.

Special Note on Calcium Supplementation

Feeding stock birds have high requirements for calcium. It is therefore vital that they are supplemented with calcium once paired. No matter how much they take in (particularly the hens) once paired, they cannot assimilate as much as they are losing from their system in the production of crop milk and egg shells. The difference is made up by mobilizing calcium stored in the skeleton before pairing. It is important that stock birds have access to calcium all year and particularly once mated. Low levels of calcium lead to soft-shelled eggs, egg binding, postlaying paralysis in hens, poor-quality crop milk, slow-growing babies and babies with undermineralized soft bones (the best way to assess this is by gently pushing the lower beak to the side). I recommend that stock birds have pink minerals, shell grit and a mineral block in front of them all year and that, once paired, in addition have calcium solution in the water 1 - 2 days per week.

Summary

- Hairworm and round worm: Moxidectin 24 hours
- Tape worm: Moxidectin Plus 24 hours
- Coccidia: Toltrazuril Coccidiocide Solution 48 hours
- Dip all birds and spray loft (in particular nest boxes) with Permethrin Solution
- Doxycycline 12% for 7 - 30 days in lofts with Chlamydia problem
- Turbosole for 5 - 7 days in lofts that had canker last breeding season
- Finish program 1 - 2 weeks before pairing
- Upgrade calcium intake once paired.

[>>Back To Top](#)



Stock hen with her recently hatched youngsters

Breeding Season Program

Principal aim: To produce healthy, robust young ready for weaning at 28 days and to maintain the health and condition of the stock birds

During breeding it is best to focus on good management (no overcrowding and good hygiene), good feeding and providing the correct supplements. If health problems appear during breeding, it usually reflects a flaw in the prebreeding management of the stock birds. Water-based medications are hard to administer accurately during breeding because of the variable water intake of stock birds feeding youngsters of different ages. Drugs, in particular antibiotics, should be avoided now as many have adverse effects on the youngsters or parents. For example, Baytril has been associated with embryonic deaths and abnormal joints in growing babies.

Most health problems in breeding relate to canker. In lofts where this is a problem it is managed as discussed in the chapter Canker. In summary, decrease the number of babies that develop canker by decreasing the number of trichomonads shed by the parents with periodic 2-day courses of Turbosole given every 1 - 3 weeks as the need dictates. Monitor the youngsters daily and treat those with canker with a daily dose of Spartrix until well. Feeding stock birds that suddenly become unwell and lose weight almost invariably have an internal canker nodule. Separate these and give 4 drops Baytril, twice daily and 1 Flagyl or 1 Spartrix daily. Disappointingly, many of these, by the time we realize they are unwell, have passed the stage where they will respond to treatment.

Stock birds that desert nests and pale slow-growing youngsters are often associated with red mite. These move on to the birds during the night to drink blood. Look for the tell-tale crusty 'pin pricks' under the babies' wings where the mites were attached and feeding during the night. This problem can be avoided by dipping the birds and spraying the boxes with Permethrin Solution before breeding. These measures can still be implemented, although not as easily, if mites appear after the birds are paired. Further problems are discussed in the chapter Problems of the Breeding Season.

Once stock birds are feeding, the physical and nutritional demands drastically increase. Supplementing with seed oils and yeasts will help them maintain their condition and help them produce robust babies. Pink minerals, grits and pick stones should always be available.