

PARASITE CONTROL

The parasitic worms drain the birds' of nutrition, in the process compromising both health and race performance. External parasites such as lice and mites directly damage the feathers. Control of parasites is therefore vital to the long-term success of the loft. At times, both the information and the enormous array of products available to the fancier can be a bit confusing and so what are the important parasites and what are the current preferred medications available to control them.

The important parasites are basically roundworms, hairworms, tapeworms and lice and mites. Roundworms and hairworms live in the digestive tract of the pigeon, releasing eggs, which are passed in the droppings. After several days, they become infective and, if then accidentally ingested by a bird, hatch in the bowel and grow into a new worm. This new worm then grows into an adult and then produces more eggs. This whole lifecycle can be completed as quickly as 3 weeks. In both the racing and breeding lofts, the number of roundworms and hairworms should be absolutely zero. This can be achieved by worming twice at a 3-week interval and each time following up with a super-thorough clean of the loft. If it is not possible to totally clean the loft, then worming should be repeated every 3 weeks for at least 6 months. Worm eggs cannot survive in the environment for more than 6 months, and treating for longer than this therefore means that there are no further infective eggs in the environment to reinfect the birds. Worm infection is diagnosed by microscopic examination of droppings. Droppings should be regularly checked by a veterinarian or animal technician. If reinfection occurs from introduced birds, returning racebirds or strays, the above protocol should be repeated.

Tapeworms have a different and fascinating lifecycle. The adults live in the bowel, burying their heads deep in the bowel wall and feeding off body fluids. Behind the head stretches a ribbon-like body that is divided into segments. These segments are called egg packets or proglottids. As they mature, one or more of these segments break off from the end of the body and are passed in the droppings. Once in the environment, the egg packets need to be eaten by an insect to become infective. Pigeons, in turn, become infected by eating one of these insects. Tapeworm infection does not require a microscope to diagnose, as the egg packets in the droppings are visible. Most are about the size of a grain of rice and are white to pink in colour. Often a fancier will notice that a bird is a bit quiet and that its droppings are a bit loose. Close examination will reveal the small white glistening egg packets in the droppings. With tapeworm infection, the birds just need to be treated once but the loft should be sprayed with a safe long-acting insecticide (the preferred one is Permethrin) to minimise the chance of the birds eating more insects. The droppings in the loft should then be monitored during cleaning to ensure that infection does not recur.

For roundworms and hairworms, these days there is no reason to use anything else than an avermectin such as Ivermectin ('Ivomec') or Moxidectin. These medications are just so safe and effective and of course have the handy side-effect of also killing all external parasites that suck blood. This includes all mites. Do, however, watch your dose rate. Not all Ivomec is the same. It comes in a variety of strengths. Some large-volume bottles that seem really cheap are probably a fairly dilute preparation. One needs 10 mg of active drug per litre of drinking water for the medication to be effective. To figure out how much to add to the drinking water, multiply the strength on the label by what will become the dose to equal 10. For example, a common strength available is 0.8 mg/ml (0.8 g/litre). 0.8×13 equals approximately 10. So therefore, one needs to add 13 ml to 1 litre to give an effective dose. Similarly, a brand that is 5 mg/ml will only need 2 ml per litre to be added to the drinker.

All avermectins are well tolerated and the birds can be fed and loft flown routinely. These medications can also be used safely during breeding, racing and moulting. In overdose, the birds will become quiet and some may vomit. However, with withdrawal of the drug the birds become normal in 1 - 2 days.

Some fanciers will notice that some worming preparations contain piperazine. This is an older drug that rarely gives 100% clearance of worms and because it has been used a long time some worms are totally resistant to it. Products based on levamisole - and a number of liquids and tablets are available - have the strong disadvantage that food need to be withdrawn for at least 12 hours before and 6 hours after treatment and even then many birds will still vomit. This makes it very hard to use during racing. Wormers based on fenbendazole and mebendazole cause huge frets to form in the feathers if used during moulting and are not conveniently packaged for use in birds.

When using avermectins to treat mites remember that all mites that infect birds are not always found on them at any one time. Many live in the nooks and crannies throughout the loft. Unless the loft is also treated they quickly reinfest the birds. At the same time as treating the birds with Ivomec or Moxidectin, spray the loft to avoid this. Simply scrape the loft out as you normally would and then spray a diluted insecticide (Permethrin is best) on to the scraped surfaces and into the cracks and crevices. Done on a warm day, the loft will be dry in 1 - 2 hours and the birds can be called back in. Try and do such a loft treatment in the morning so as to ensure the loft is completely dry by night.

Tapeworms are best treated with praziquantel. This drug is very safe and like the avermectins can be used at any time of the pigeon year. During treatment the birds behave normally and can be loft flown and fed normally. Praziquantel is available in tablet form and also as a water-soluble solution called Prazivet. Prazivet tends to be fairly bitter and so often it is better to give each bird 0.25 ml of the neat solution individually to each bird in the back of the throat.

Lice live off feather debris and so the avermectins have limited effectiveness against them. When lice are a problem, it is necessary to spray or dip the birds. As lice live always on the bird, treating all birds simultaneously will rid the loft of these. Whatever you do, do not use any of the older preparations such as Malawash. These are based on organophosphates. Organophosphates have a very narrow safety margin in birds and accumulate in their system to their detriment. Having a fancier ring the clinic in a panic after using Malawash or a similar product, with birds dead or dying, happens all too commonly. Organophosphates are absorbed through the skin and as long as the birds remain wet continued absorption will occur. Often fanciers have been lucky and have earlier dipped on a warm day and have had the birds dry quickly. Dipping on a cooler day means the birds stay wet for longer and absorb more of the poison. This prolonged skin absorption coupled with a narrow safety margin tips the birds into a toxic dose range. If a drug company attempted to register an organophosphate for use in birds these days they would have no chance. The few such products that are on the market are therapeutic dinosaurs. Birds with organophosphate poisoning lose muscle control, start to salivate and vomit, develop diarrhoea, become unconscious and die. If overdose occurs, it is important to prevent further absorption by physically washing the birds. If the birds don't start to improve immediately, your veterinarian has an antidote injection. Birds regularly washed in organophosphates gradually accumulate the poison in their system. The drug, although quickly absorbed, is only slowly released and tends to be stored in the body, particularly in the body fat and bones. From here, it is gradually released, interfering with a number of metabolic processes. This is particularly so in hens, in which reproduction is affected, leading to abnormal ovulation and abnormal egg shell formation.

These days use a synthetic pyrethroid such as Permethrin. These are very safe yet just as effective as organophosphates, prevent reinfection for up to four months and do not take the bloom off the feathers. To spray the birds, dilute (usually 10 -20 ml per litre) into a handheld pump bottle and spray the birds liberally. To dip the birds, pick a warm day, fill a bucket with warm water, add Permethrin at the rate of 10 -20 ml per litre together with a wetting agent (e.g. some children's baby shampoo or a few shavings off a cake of pure soap such as "Velvet") and away you go. If done correctly, the vane of the feathers will collapse back to their quills, exposing pink lines of skin. The birds look like drowned rats but after spreading in the sun and a bit of preening look normal in about 1 - 2 hours.

Obviously there is no single way of effectively clearing the birds of parasites, but the system preferred by me is:

Moxidectin, 2 mg/ml, 5 ml per litre for 24 hours

Dip birds in Permethrin

Thorough clean of loft and spray loft with Permethrin

In tapeworm areas or if tapeworm segments are seen in droppings, Prazivet, 0.25 ml to each bird.

After 45 min. Ivomec given to pigeon, Worms are clearly visible in droppings

