Disinfectants

Shed Disinfection

In the wild, birds are migratory and leave their waste products behind. When we keep any animals in the one place for a long period we get a build up of their wastes, and with it the potential nasties that live in the wastes. The trouble is the volume wastes like manure we can see, so it's easy to handle them. Dryness is the best control with lots of litter, and if it remains dry, then annual removal. But bugs live in the very small wastes like feather dander (dust) which sits on the wire and walls, and sometimes manure can get caked on some items. So how do we start? Remember the process for the shed and for utensils is the same. Not a bad idea to deworm the birds a week before we start.

Detergents, that is froth and bubble, are the first parts of a good job. Detergents use surfactants to lift the soil off the surfaces, and once the surface is clean we can then kill the bugs (disinfection). So first we remove all the litter and loose manure.

But we avoid dusting down the surfaces. Dry dusting just mobilises the potential bugs into the air. A little spray of water on the litter will damp down dust as this is removed. A face mask is handy, because, if our aim of keeping the shed dry has been achieved, there will be some dust.

Now we get our detergent to work, a mop and bucket with detergent, or a spray mixing gun which automatically mixes detergent in water will do a great job of getting all the surfaces wet with detergent.

Almost any detergent will do the task, but todays laundry detergents also contain enzymes so they eat up manure, and often provide excellent disinfection as well. So usually we have what we need on hand. Mix up enough to ensure good frothy mix. Now comes the physical bit. With the wet mop, wet rag, or wet broom rub down all the surfaces to ensure the detergent can do its work in contact with the surfaces.

Next, rinse all the surfaces with fresh water, starting from the top down. Allow to dry for a short while. Now all the soil has been removed from the shed surfaces and is on the floor.

Lastly, use an active ingredient which kills any bacteria and virus on the clean surfaces. Though they are clean we cannot see the miro-organisms and so a disinfectant is used to kill what we cannot see. We need only to use enough disinfectant so that the surfaces are wetted. A fine orchard sprayer will make a couple of litres of mixed disinfectant cover the surfaces of a substantial poultry house. Remember to cover all surfaces including the top of roof beams and the wire. Leave the surfaces to dry.

The type of disinfectant will be determined by the need.

If there have been no problems and the flock is small, even domestic bleach will be adequate. As the flock gets larger, the risks get greater, the sheds get bigger, and if there have been disease problems, then the disinfectants will need to be stronger. 3 main categories are used.

1/ The Chlorines (bleaches) they have excellent activity, but are easily inactivated by

organic material and break down quickly.

2/ The Quats which are a more complex disinfectant but work well in most situations. Often hard to get in smaller bottles.

3/ The long chain salts (<u>Virkon</u>) excellent in all activity classes, but expensive. Now available in tablet form which makes it ideal for small users.

The last thing to do is some lime on the floors and around the shed. Contrary to popular belief the lime doesn't disinfect much, but it does change the acid level and some makes the environment less friendly to the "small" bugs. A generous covering of lime on the floor of the shed, and the areas around the shed will assist in maintaining a good environment for the good bacteria in the earth and slowing the growth of bad bacteria. Allow the shed to dry and then reintroduce the birds.

When reintroducing birds check the health check of the birds. Inspect each bird, treat for external parasites, (spray or dust), treat for scaly leg mite even if you can't see it yet (CRC or WD40 on the legs), and check the birds general health of the birds. (good body weight, clean any dirty bottoms, clear eyes, no runny noses, no bad breath, maybe a worm tablet down the throat, check toenails and trim if needed, check spurs on males and trim if needed, check leg rings are not too tight).

Water disinfection

Many diseases can be waterborne, especially when tank water and dam water are used as our water sources. Both these sources have the possibility of wild bird contamination, and the transmission of diseases carries by wild birds. In recent times much attention has been paid to these issues in commercial poultry, and government bodies are concerned with the possibility of disease transmission by wild birds into small flocks especially in times of exotic disease outbreak. So small producers should be aware of that potential, and take precautions, especially if they use dam water and wild waterfowl are also using the dams, and most especially if there is an exotic disease warning.

Most disinfectants will do the job, some have distinct negatives in the taste of the water, some are difficult for the small producer to use, and some are not much good if the base water is cloudy.

Importantly, use disinfects at low concentrations, so the negatives are minimised, we need to have long contact times. So for small users, a residual chlorine like Chloramine T (or <u>Nycex</u>) makes great sense. Just 30 grams per 1000 litres will effectively disinfect the water, about 1 gram per 20 litre drum, and maintain its activity for a long period.

We even use it with pigeons, at the same rate for long term control of Canker (Histomoniasis). The bird gets a mini mouth wash every time it drinks, effectively reducing transmission between adult and young.

1 gram equates to about 1/5 level teaspoon.

CAUTION: all disinfectants should be considered poisonous - handle, use and dispose of strictly in accordance with the labels.

