#### **ROUNDWORMS IN POULTRY**

# Dr. Jeanne Marie Smith, Avian Health Services For UCCE Poultry Unit, UC Davis



Internal parasites are very common in pet, show, and backyard poultry. Probably the most common of the internal parasites are roundworms. There are many different types of roundworms that can infect poultry, but they all cause the same clinical signs and are diagnosed and treated the same. Roundworms are not very host specific, which means that your birds can get roundworms from wild birds and your various species of domestic poultry can pass roundworm infections among them.

#### Clinical signs

Younger birds are more likely to become ill, but birds of any age can be clinically affected. You'll often only see clinical signs in one or two birds in a flock. These may be birds that have habits that cause them to get a more severe infection or they may be of a breed that has a greater susceptibility. Birds suffering from roundworm infections are usually thin with poor feather quality (dull, dark or poorly colored). They may look pale in their mouths. They may have diarrhea or have droppings pasted to the feathers near their vent. Birds can die from severe roundworm infections. If one or two birds are showing clinical signs suggestive of roundworm infection, the whole flock should be treated because the worst birds are only the tip of the iceberg, the other birds are likely infected as well.

#### **Diagnosis**

If your birds are showing clinical signs suggestive of roundworm infection, you can treat the flock and look for a response to treatment. If the clinical signs disappear, you were dealing with a roundworm infection. You can also more precisely and more quickly diagnose roundworms by taking a fecal sample to a veterinarian for a fecal floatation. Any small animal veterinarian should be able to do this for you because roundworm eggs from dogs and cats look like roundworm eggs from poultry. If a different internal parasite is present, the veterinarian can also tell you about that. You need to gather about 1 tablespoon of fresh feces (still moist). Make sure you gather the feces in the droppings not the white urates. Put them in a zip lock baggie to keep them moist until you can take them to the veterinarian. Try to get feces from several droppings, especially from the birds showing clinical signs. You may have to isolate them in a cage or small pen until you get their droppings.

### **Treatment**

There are only two drugs labeled for use in poultry to treat roundworms. Neither is labeled for use in laying hens. You can use them for growing chickens or turkeys or meat birds.

Wazine (Piperazine). Wazine can be given individually by mouth or in the drinking water to a flock. There is a 14 day meat withdrawal. This means you cannot eat meat from treated birds or sell treated birds to be eaten for 14 days after treatment. Purina Liquid Dewormer (Piperazine). This dewormer can also be given individually by mouth or in the drinking water to a flock. There is a 0 day withdrawal for meat.

## **Prevention**

Roundworms are primarily spread by the oral/fecal route, meaning a bird has to eat feces or something contaminated by feces to become infected. Keep waterers and feeders clean. Use feeders and waterers that are designed to minimize fecal contamination of the food and water. Don't allow your birds to eat off the ground, put any food you give them into feeders. You can build 2x4 frames with wire attached to put feeders and waterers on so that the birds don't have access to spilled feed and wet soil. Wet soil attracts earthworms to the surface where birds can eat them. Earthworms are common carriers of some roundworms, so preventing your birds from eating them is also helpful. Use deep litter in coops. This allows droppings to become buried where birds don't have as much access to them and it dilutes out the amount of droppings the birds might ingest if they eat litter. Clean out the coop frequently to prevent a buildup of droppings. Don't overcrowd your birds. Overcrowding exposes the birds to more droppings.

You can use Wazine or Purina Liquid Dewormer as a preventative treatment to keep numbers of roundworms down in your flock. If you practice good preventive management you may not need to do this or you may only need to do it once yearly. If your birds are at high risk of roundworms because of your management, you may need to deworm quarterly or twice yearly. Checking fecal floatations at intervals after deworming can give you an idea when the worm load increases to a point where the birds need to be treated again under your management system.



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