

# Intestinal Roundworms (Ascarids) in Birds: Life Cycle, Signs, Diagnosis, Treatment, and Prevention

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The term "roundworms" actually applies to a number of parasitic worms that belong to the phylum of worms called "nematodes." Nematodes can affect almost any body system, including the digestive tract, respiratory tract, heart and blood vessels, brain, eyes, and connective tissue. "Roundworms" is also the term commonly used to describe "ascarids," which are intestinal nematodes of the genus "*Ascaris*." Intestinal roundworms are a common parasite among companion birds, especially cockatiels, budgies, and imported macaws. They are also more common in birds who are kept outdoors with access to the ground. An infection with roundworms is termed "ascariasis."



## Life cycle

Intestinal roundworms in birds have a direct life cycle. A bird will ingest the eggs of the parasite, usually as a result of eating contaminated food or water. The eggs hatch into larvae in the small intestine. There, they mature into adults. The worms mate, and the females produce eggs which are passed in the feces. The eggs become infective after remaining in the environment for at least 2-3 weeks. They can persist in a moist environment for a long time.

## Signs of roundworm infection

Birds with intestinal roundworm infestations may develop diarrhea, anorexia (loss of appetite), and weight loss. Some birds may regurgitate or have a decreased amount of feces. Young birds may become stunted. In severe infestations, the worms can cause a partial or complete obstruction of the intestine, which can ultimately cause the death of the bird.

## Diagnosis

The adult worms, which are usually 1-1½ inches in length, are rarely seen. Usually an intestinal roundworm infestation is diagnosed by identifying the eggs in the stool of the bird. A flotation solution is used to separate the eggs from the rest of the stool, and the resulting sample is examined microscopically.

## Treatment

To treat a bird with intestinal roundworms, medications containing pyrantel pamoate, piperazine, fenbendazole, or ivermectin are most commonly used. Birds with severe infestations often need supportive treatment and nutritional supplementation. It is often recommended to repeat the treatment in 10-14 days. In addition to treating the bird, the environment must also be treated or reinfection will occur. Cages, food and water bowls, nesting areas, and any toys or other articles possibly contaminated with feces should be washed and dried thoroughly. The eggs are resistant to almost all disinfectants; steam cleaning after removing any visible feces will kill the eggs.

## Prevention

To prevent roundworms, quarantine all new birds, and have a fecal analysis performed. If birds are kept outside, limit their access to the ground and free ranging birds. Use good hygiene, regularly cleaning the cage, bowls, nest areas, and other items. A dry environment will decrease the survivability of the eggs.