

## The wild mink and farm mink (*Neovison vison*) – what are the parasitic threats?

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The parasite pathogens can be present within farm surroundings (e.g. as coccidian oocysts) and/or being transmitted by vectors such as: small rodents, birds, pets, insects/arachnids and farm-workers. Diseases can also be transmitted with feed of both commercial and/or illegal origin (e.g. farm animal disposals or wildlife carcasses). Study revealed that farm mink as definitive hosts are being found affected with coccidia, that is a causative agent of intestinal infection. Farm mink are also potentially at risk of serious infections like toxoplasmosis or toxocarosis as intermediate/paratenic hosts, respectively. These could be transmitted into the farm population by common small rodents, but others like *Dirofilaria sp.* by the mosquitos. General aim of the study was initial recognition and comparison of the gastro-intestinal parasitic infections occurrence in farm and wild mink in some localisations in Poland.

Faecal flotation was used to investigate farm mink originating from several localisations. Research conducted on wild mink included macro- and microscopic analysis of gastro-intestinal content.

Flotation revealed that farm mink were only

found infected with unidentified coccidia species. Parameters of the infections were found at low level. But the parasitological analysis of wild mink from Biebrza National Park showed coccidian oocysts, intestinal flukes and Capillaridae-like eggs. The level of parasitic infections was estimated as a generally low in terms of prevalence and the intensity.

Our findings confirmed that coccidian parasites are mainly involved in gastro-intestinal infection in farm mink. Thus wild mink appear to be much widely infected with different parasites species that occur in Mustelids. So, they may serve as natural reservoir of these. It is concluded that diagnostics and monitoring of parasite infection could be considered as a valuable tool for farm mink health and welfare status assessments. It would also be helpful to discriminate the role of wild mink as invasive predator for the endemic population of wildlife. The detailed data concerning patterns of infections and parasite identification in American mink from selected national parks is being processed for the press publication.