

## Testing Dart Frog Fecal Matter

### How do you test dart frog fecal matter?

*By Margaret A. Wissman, DVM, DABVP*

I am a dart frog breeder in North Carolina. I have had no luck in finding a local vet that will deal with dart frogs. I would like to run fecals on some of the animals in my collection and because I have no one local to do them I am running them myself. I have a microscope with a digital camera attached. What I would like to do is find a vet who is familiar with amphibian medicine, parasites, etc. Then I could e-mail pictures of the samples to them. I realize the hardest part of running fecals is knowing what to look for. Of course I would pay for their services. Do you have any suggestions of how I might proceed?  
Sincerely,  
Robb M.

While I think it is admirable that you would like to tackle running frog fecals yourself, and I'm impressed that you have a microscope with a digital camera attachment, I don't think that you should be attempting this on your own. I don't know your level of experience in working with a microscope or your background in parasitology, and that will have a bearing on how well you attain results with this endeavor.

Many veterinarians no longer run fecals, especially for exotics, such as frogs, in their own practices, and prefer to send them out to a diagnostic laboratory for precise diagnosis. There are many unusual parasites, some that can cause disease in humans that can be found in the feces of exotic species, so proper identification is vital. It is for this reason that many vets now choose to send fecal specimens to a lab that is set up and well-versed in identifying unusual parasites or their eggs, larvae or trophozoites.

All of the large veterinary diagnostic labs perform fecals, and many offer special testing procedures, such as the ELISA test for Giardia. Other labs recommend preserving fecal matter in a dilute formalin solution, which will keep any little cysts intact (often cysts and delicate protozoal forms will shrivel up and die in transit, making diagnosis impossible). Special stains are also available, which are very helpful in diagnosing some of the more elusive parasites.

As you can see, performing a proper fecal parasite exam is a lot more high-tech than just examining feces under the microscope. While that is still an important part of the fecal parasite examination, many other tests are now available. Fecal flotation is usually performed, using a solution that allows the parasite eggs to float to the surface. A fecal wet mount is also employed, using a fresh dropping and saline to examine the sample for any moving, live parasites that may be present. Other tests such as centrifugation or special stains are also used.

What I would recommend for you is that you call a couple of local herp breeders or pet retailers that sell herps, and canvas them to see which vets in the area take care of their herps. The large pet retailer chains all utilize the services of local vets to maintain the health of their charges. Call a few of these herp vets and ask if they send out fecals to a diagnostic lab, and if they do, see if you can set up a plan to properly submit frog fecals through their clinic to the diagnostic lab that they use. If they claim that they don't know anything about your frogs or their parasites, you can suggest (tactfully, of course) that they could utilize the free consultation service offered by their diagnostic lab. You might also have good luck checking with recent vet school graduates who are eager to learn, but may be short on practical experience. The larger diagnostic labs all contract with experienced herp, avian and zoo vets to assist their veterinary clients with their cases, performing consultations at no charge for the vets using the lab. By just making a phone call or two your vet can speak with an experienced herp veterinarian who can provide invaluable advice about husbandry, nutrition, diseases, diagnostic tests and available treatments for your species, as well as providing specific treatment protocols for your animals.

I truly think that this would be the best way to spend your money. I'm sure that you will be able to locate a local herp veterinarian willing to help you with your predicament. Some veterinarians may not be aware of the consultation service offered by the veterinary diagnostic labs, or they may have other reasons why they haven't utilized the service, but it can't hurt to encourage your new vet to use this service.

There are some wonderful parasitology labs that really do an excellent job diagnosing the more unusual parasites that can be found in exotics and herps. Many exotic animal vets utilize the expertise of these labs, as well.

In general, as far as dart frogs go, most have been domestically bred for many generations now, so the chance of

dangerous parasite loads is quite low. Of course, there is a chance that parasites could be introduced through the insects that they consume, and that is why it is prudent that you have fecals performed periodically. You didn't say if you raise your own insects for them or if you purchase them commercially. You have better control to prevent introducing parasites through the intermediate hosts (the insects you feed them) if you raise your own insects, but either way, the risk of intestinal parasites isn't very high in your frogs.

Also, as you know, dart frogs have been domestically bred for so many years in captivity, so that the poison that is secreted through the skin derived from the insects that they consume in the wild is no longer an issue. However, your potential herp veterinarian may not be aware of this fact, and may have unfounded concerns about toxicosis issues with the staff. It wouldn't hurt to let your new herp veterinarian know that there is minimal to no risk involved in dealing with these types of frogs, as long as they have come from captive-bred stock. This may be one reason why you have met with resistance when looking for a herp vet to help you.

Good luck on your renewed search to find a herp veterinarian who can help you with your frogs. It is admirable that you are pursuing having diagnostics performed on your frogs. I hope these suggestions are useful to you.

#### Need a Herp Vet?

If you are looking for a herp-knowledgeable veterinarian in your area, a good place to start is by checking the list of members on the Association of Reptilian and Amphibian Veterinarian (ARAV) web site at [www.arav.com](http://www.arav.com). Look for DVMs who appear to maintain actual veterinary offices that you could contact.