Feed & Parasites, by Al Ellis of Highline Trail Llamas  
  
Llamas have a great reputation as being easy care which is absolutely true; however, that is not the same as “no care”. The traditional just provide shelter, hay and clean water may be valid in some very limited locations, but the vast majority of llamas live in areas and circumstances that require more attention for optimal health. There appears to be quite a lot of “one size fits all” when it comes to feeding and parasite control. Let’s take feeding first. To start with what is the definition of hay? It is about the same as the definition of food. Steak, kale, oatmeal and pop tarts all come under the broad definition of food (sort of). Hay spans the same range of nutritional value, from dairy quality alfalfa to straw, so it important to know the requirements for a llama and how close to meeting those requirements is met by your basic feed, hay and or pasture. This does mean at some point samples of your hay/pasture need to be sent for analysis. This is not an expensive procedure, especially when you consider the cost of shooting in the dark, whether by supplements that are not necessary, or the problems associated with long term deficiencies including poor health and shortened lifespan. Using our circumstances as an example; we put up our hay from our pastures and it is lacking in several respects. Protein is usually 8 to 8.5% and TDN is also a bit low particularly considering the llamas high thermal load throughout our long Wyoming winters. This is good enough for some, but inadequate for pregnant, moms and youngsters. Llamas do however naturally select the more nutritious age class portions of the pasture and in essence they do the same selection with the hay. We maintain heavy beds with the same hay we feed and as long as we don’t force them to “clean up” they leave the less desirable parts, therefor the “as eaten” end up higher quality than the tests show, but we still need to supplement alfalfa and pellets to those with higher needs. That goes a long way toward to solving lack of protein and TDN but we still have the problems of minerals. Our fields are on decomposed granite that has been excessively flood irrigated for over 100 years so the soil is severely lacking in most minerals with the exception of iron which is excessive, which makes the deficiencies of Copper, Zinc, etc. even more exaggerated. The only thing about right is Selenium. We are so low in everything else like Phosphorus and Calcium it is impossible to correct with even the best mineral supplement so we had a pellet supplement formulated to correct our deficiencies. To make sure we are getting it “right” whenever we need a blood draw we pull a little extra for mineral analysis, also this is really the only way to accurately track Selenium. I think we are at the extreme end of the scale when it comes to deficiencies, but the point is you need to know what you are feeding no matter where you live, even if your hay comes from the feed store a few bales at a time. Often the store will have an analysis report for the hay they are selling, and/or they have a constant supplier so an occasional check will work.  
Parasites require the same approach, you need to know what the problems are, or maybe in many cases nothing at all. Fecal samples are absolutely necessary and perhaps even by more than one method if you have the possibility of Liver Flukes or Emac which do not show up well in a traditional centrifuge sugar float test. Emac eggs are so heavy they take an extremely long time to float, and Fluke eggs are delicate and often burst in the centrifuge besides being heavy. Once again, I will use our problems for the example. Our main parasites of concern are Liver Flukes (luckily only occasional years); Emac (mainly crias); and Nematodirus. And here is the main point; they all require different treatment!! Flukes can be treated with an injection (ivomec Plus) but Emac and Nematodirus must be treated orally, injections will be completely ineffective!! Emac and Nematodirus require two different treatments. For our three problems we need three different solutions and some animals may have one or more of the three on one occasion then nothing for years. It would be impossible to just use a typical protocol and even think it may be effective. Remember it is very important when giving any oral treatment the ­­full dose must be completely swallowed, very basic and obvious, but too easy to ignore if spitting is involved.   
Obviously using the examples of our place does not apply to many if any others. What it does show is how variable things can be and how proper care is so individualized by area. To paraphrase a famous old quote, “all politics (and llama care) is local”. Please take care to identify any problems in your feed and parasite control, and do not blindly follow a standard or someone else’s protocol.