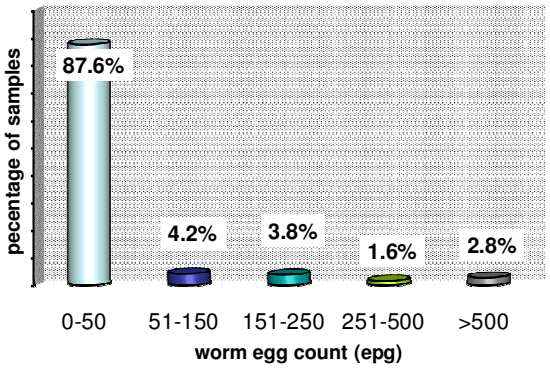
TAKING CONTROL OF YOUR CLIENTS' DEWORMING PROGRAMMES – "TARGETED DOSING"

It is a source of great concern that most equine parasite control programmes are run without reference to the veterinary surgeon under whose care the horses are placed. It may well be no coincidence therefore that most deworming programmes are less than ideal and that cyathostomin resistance to fenbendazole is widespread, resistance to pyrantel is also recognised and preliminary warning signs of resistance to ivermectin (and therefore moxidectin) are also now present.

Many factors contribute to anthelmintic resitance but the prime factor is probably overuse of anthelmintics. "Targetted dosing" describes the protocol by which horses' faecal worm egg counts (FWECs) are checked and only those that need deworming are dewormed. The threshold that decides this is debatable but around 150 eggs per gram (epg) seems reasonable – preventing high levels of parasitism whilst allowing some continued immune stimulation. When checked prior to deworming, the vast majority of adult horses fall below this threshold and do not need treating. Figures from the Liphook Equine Hospital Laboratory suggest that in excess of 90% of planned dewormings may be unnecessary using a threshold of 150 epg (Figure 1) which is in broad agreement with the figure of 85% derived from data from Glasgow. Cost comparison of standard interval dosing programmes with targetted dosing indicates that even with the extra FWEC costs, targetted dosing is usually cheaper due to savings from less drug purchases[2] and, most importantly, is likely to delay development of anthelmintic resistance.



The targetted dosing programme can be customised to particular circumstances. On small premises with only a few (eg 2-6) mature horses in a static population then FWECs performed initially every 3 months and perhaps eventually every 4-6 months can be used to decide whether or not deworming is needed. On larger yards FWECs initially every 2-3 months, followed by 3-4 month intervals when a 'track record' is established, might be more appropriate.

There are two main limitations to targeted dosing. Firstly, tapeworms are not reliably detected by FWECs and therefore a routine annual (or possibly biannual) cestodicide (pyrantelx2 or praziquantel) should be factored in to the programme. Secondly the increased susceptibility of young horses to parasitism (especially cyathostomin encystment) means that a routine interval-type programme may be more suited to these horses especially if their previous deworming history is questionable. At the Liphook Equine Hospital Laboratory we use the "Fecpak" system for FWECs that was recently very favourably reviewed[4].