## Of fleas, ticks, mites and their bites

Tim Hutchinson, from XLVets practice Larkmead Veterinary Group, talks about the complexity of small animal parasitology

> Larkmead Veterinary Group



"Big fleas have little fleas, Upon their backs to bite 'em, And little fleas have lesser fleas, and so, ad infinitum."

The Siphonaptera, a nursery rhyme familiar to many, is itself based on lines written nearly 300 years ago by Ionathan Swift and manages to hint at the complexity of parasite control in pets: discovering something merely opens the door to something else; the more we learn, the more there is to know; the more we know, the more we realise just how complicated a subject this is.

Some 25 years ago parasite control seemed so much simpler than it does today. Fleas were a nuisance, but the status of pets then, coupled with less well-heated and insulated homes, ensured that in most cases they remained just a nuisance and not the endemic problem that they are for many households today.

Ticks were very much a seasonal and geographically specific issue and mites were seen on an ad hoc basis, usually as specific clinical syndromes. Parasite control, too, was rudimentary - a spray for the cat or dog (no mean feat in itself!), another for the house and the occasional dip of something fairly noxious for the odd attack of scabies.

Fortunately for us, as parasitology as a clinical problem has increased in complexity so too has the armoury of treatments become more sophisticated.

Spot-on applications (first developed 20 years ago), which have revolutionised the ability to bring pet and treatment together, let alone in the same room, now not only



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treat the ubiquitous flea, but also have marketing claims for a variety of other parasites. The issue becomes one of establishing what product and what routine of application is appropriate for each animal in its environmental and family circumstances.

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There may still be a role for a narrow-spectrum flea-only treatment, but its use as part of an all-round parasite control strategy is less transparent. The status of pets in our homes (family members that share all our living spaces) together with modern creature comforts (soft furnishings, double glazing, central heating and carbon-limiting insulation) mean that flea control requires an holistic consideration of the whole of the animal's lifestyle including all its four-legged companions.

If we consider that the flea egg may lie dormant for years, only to develop when it senses that environmental conditions are optimal, we can begin to contemplate how an outbreak of fleas today may be a reflection on the efficacy and treatment interval of a product that was used two or three years ago, rather than last week.

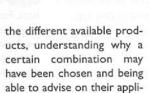
Whether 'man-made global warming' exists or is even a factor is debateable, but changes in climate do influence the viability of parasites and with it the types of parasites to which our pets are exposed and also other diseases that may be spread by them. The protracted life cycle of the tick ensures that by the time it bites our pets it will already have fed from another animal and risk transmitting other bloodborne diseases.

The same is true of other vectors and although we may have considered some diseases to be the preserve of the exotically well-travelled pet, there is evidence to suggest that it is only a matter of time before continental species of parasites (and their associated continental diseases) might become endemic in the UK.

Add in the whole complex issue of allergic skin diseases and the role that fleas may play in this and we can see that parasite treatment and prevention is a clinical issue requiring detailed discussion with a client to create a bespoke regime for them and their pets.

The inter-relation of parasites and associated disease syndromes means that now, more than ever, this is something best discussed in the consulting room by a veterinary surgeon, who can advise and formulate the best strategy for control and protection.

However, there is still a role for an SQP, but this should be in understanding



cation to be able to maximise efficacy.

As one company has started to remark: "It's a jungle out there!"



