



Parasite Forecast

Issue 14

Summer 2020

Welcome

Welcome to the ESCCAP UK & Ireland quarterly newsletter. The COVID-19 crisis is still with us and the veterinary profession is doing an amazing job of continuing to carry out pet health care while keeping risk to staff and clients to a minimum. ESCCAP UK & Ireland has continued to promote routine parasite prevention treatment for cats and dogs as part of this care, which remains vital during the COVID-19 outbreak.



Without routine prevention, flea infestations and worm burdens will increase leading to increases in zoonotic parasitic exposure risk and pet morbidity. This has already been demonstrated in anecdotal reports of increased cases of angiostrongylosis in the face of reduced routine prevention since the outbreak began.

Rescue cats and dogs continue to be imported from abroad during the outbreak and the numbers of dogs entering the country with heartworm and *Leishmania infantum* infections continues to be high. These pets can also harbour a wide range of parasites including tick-borne pathogens, *Mesocestoides* spp., *Dirofilaria repens* and *Thelazia calliapeda*. Many of these parasites are zoonotic with the potential for establishment in the UK. Early diagnosis and treatment therefore remain vital to limit spread as well as improve outcomes for patients.

I would like to thank on behalf of ESCCAP UK & Ireland, all of the veterinary professionals and support staff who have continued to work tirelessly under difficult circumstances to provide healthcare for the nation's pets and wildlife. We will continue support with the best possible evidence-based parasite treatment and prevention advice.

Parasite Forecast aims to keep veterinary practices, industry and academia up to date with ESCCAP UK & Ireland news and activities. We welcome any feedback, including any suggestions for future topics or case studies to cover. Please email info@esccapuk.org.uk.

To sign up to future editions of Parasite Forecast, please visit: www.esccapuk.org.uk/newsletter/subscribe/

Each edition will also be published on the ESCCAP UK & Ireland website: www.esccapuk.org.uk

To your parasite control success!

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Head of ESCCAP UK & Ireland



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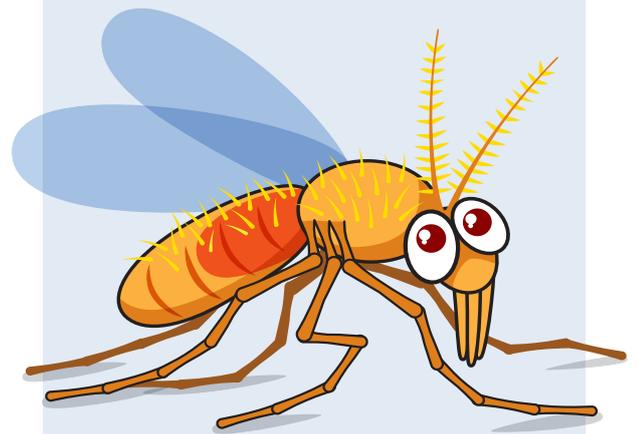
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Summer 2020 Parasite Forecast

Exotic disease in imported dogs from Eastern and Southern Europe

A BVA survey has revealed more than nine out of ten companion animal vets (93%) in the country are concerned about the import of rescue dogs from abroad, with three-quarters feeling the numbers have increased over the last year.

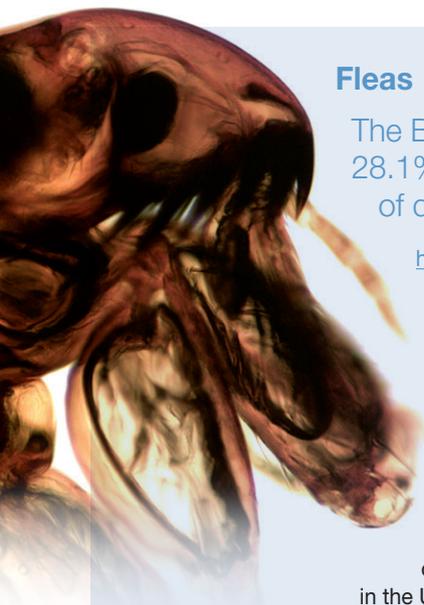
Cases reported to ESCCAP UK & Ireland reflect this with leishmaniosis and heartworm in imported dogs continuing to be high. A fourteen day euthanasia policy for stray dogs in Romania is driving rescue imports into the country and veterinary professionals should be vigilant for these dogs entering the UK and the possible pathogens they may be carrying.



Sandflies are the vectors for *Leishmania* spp.

Heartworm cases have been reported this quarter in dogs imported from Romania, Mauritius and Turkey, demonstrating the need for vigilance in dogs imported from all endemic countries. ESCCAP UK & Ireland continue to recommend four key steps (the "four pillars") in all imported dogs. These are.

1. **Checking for ticks and subsequent identification**
2. **Treating dogs with praziquantel within 30 days of return to the UK in addition to the compulsory treatment, and treating for ticks if a tick treatment is not in place**
3. **Recognising clinical signs relevant to diseases in the countries visited or country of origin**
4. **Screening for *Leishmania*, heartworm and exotic tick-borne disease in imported dogs**



Fleas

The Big Flea Project found 28.1% of cats and 14.4% of dogs positive for fleas.

<https://parasitesandvectors.biomedcentral.com/articles/10.1186/s13071-019-3326-x>

11.3% of these infested pets were found to be harbouring fleas infected with *Bartonella* spp.

In addition, the Big Flea Project is shortly to publish further data showing that approximately 5% of flea infestations on cats and dogs in the UK are positive for *Rickettsia felis*, another significant zoonotic pathogen, particularly in the immune suppressed.

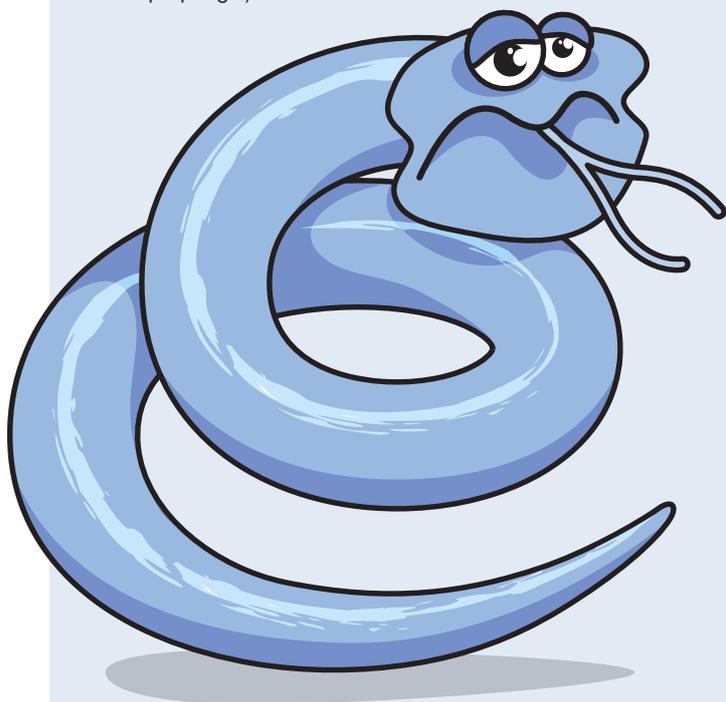
This makes routine flea control essential for all domestic cats and dogs. Veterinary professionals should continue to advise routine year round preventative treatment to prevent house infestations.

Lungworm

Anecdotal reports by vets suggest that routine preventative treatment against *Angiostrongylus vasorum* is dropping in the current crisis and cases of angiostrongylosis are being seen as a result.

This is an example of the importance of maintaining routine parasite prevention treatment for cats and dogs during the COVID-19 outbreak. The combination of fluctuating warm and wet weather is likely to support continuing slug and snail activity.

Veterinary professionals should therefore continue to be vigilant for cases of *Angiostrongylus vasorum* in their area and advise preventative treatment for high risk dogs (previously infected dogs, those dogs living in close proximity to other cases, those ingesting slugs, snails, grass and amphibians and those that are coprophagic).



Ixodes ricinus

Tick-borne disease

Tick-borne encephalitis virus has now established in the UK.

www.bbc.co.uk/news/health-50206382

While pets and their owners should continue to enjoy the beautiful New and Thetford forests where there is evidence for establishment, the need for effective tick prevention has never been more important for those pets and people working there and using the areas for regular recreational activity.

Further recently published data continues to support the view that the current UK climate allows questing and feeding of *Ixodes* spp. ticks all year round (<http://veterinaryrecord.bmj.com/cgi/content/full/vr.104649>) with spring, summer and autumn remaining peak tick activity periods. Checking for and removing ticks within 24 hours and using an effective product that will rapidly kill or repel ticks will greatly reduce the risk of transmission for pets and owners walking in high risk areas such as outdoor areas with tall grass, bracken and those shared with deer or ruminants. Pets with a previous history of tick exposure should also be treated as it is likely their lifestyle will expose them to ticks again in the future.

A recent study has supported an association between Lyme positive dogs and human exposure because of shared environmental exposure <https://geospatialhealth.net/index.php/gh/article/view/750>. Positive dogs are therefore sentinels for human infection and owners of positive dogs should be aware of the possibility that they may also have been exposed.

Toxocara canis

There remains no current data on the prevalence or incidence of human toxocarosis in the UK.

Recorded prevalence of patent infection in untreated UK adult cats and dogs however, continues to be high (5% dogs, 26% cats, most recent figures from Lancashire, 6% dogs, 32% cats most recent figures from Ireland).

Due to the zoonotic risk this represents, and the potential for all cats and dogs to be infected, ESCCAP UK & Ireland continues to advise all UK cats and dogs are treated at least every three months to reduce egg shedding and high risk groups (those cats and dogs on raw unprocessed diets, those that hunt, those living with children or immune compromised adults) should be treated monthly.

A recent survey of UK pet owners suggest that worm treatment frequency in cats and dogs is much lower than this <https://parasitesandvectors.biomedcentral.com/articles/10.1186/s13071-020-04086-2>.

Echinococcus granulosus

Work carried out on behalf of the Welsh Government and FSA offal condemnation figures both demonstrate that the incidence of *Echinococcus granulosus* is much more widespread in Britain than previously thought.

Post-mortem inspections in abattoirs across Britain have produced positive cases with a particularly high incidence on the Welsh border and North Midlands. HyData UK is a 3-year (2016-2018) multi-centre collaborative study investigating the national distribution of *E. granulosus* in high-risk dog populations (hunting hounds, farm dogs and pet dogs in rural areas), livestock (cattle, sheep) and horses at slaughter in England, Wales, Scotland and Northern Ireland. Using a molecular epidemiological approach and GIS methodology, the study aims to build the most comprehensive picture of *E. granulosus* geographic distribution in the UK and explore associated risk factors for animal and human infection. Until these results become available, prevention advice to pet owners must be based on lifestyle risk of the pet, including.

1. Monthly treatment with praziquantel of all dogs in known hydatid endemic areas unless kept on leads and fed cooked diets.
2. Monthly treatment with praziquantel for any dogs outside these areas shedding *Taenia* spp. tapeworm segments (the risk factors for *Taenia* spp. and *E. granulosus* infection are broadly the same), fed raw offal/unprocessed raw diets or have access to fallen livestock.
3. At least 4 times a year praziquantel treatment for dogs in non endemic areas that are out of sight off lead with potential pasture access.
4. Promotion of anti dog fouling, keeping dogs on leads around farms and livestock, and promotion of adequately frozen or cooked diets.

An untraveled UK dog has also been confirmed by the University of Liverpool to be infected with the tapeworm *Mesocostoides literatus*. This tapeworm is common in Southern Europe but not been reported in the UK for 40 years. Although severe complications from the parasite are rare, its larval form can cause severe peritonitis. Abdominal invasion of the parasite with subsequent peritonitis was recently reported to ESCCAP UK & Ireland in a dog imported from Romania. Discovery of this parasite is another compelling reason to recommend routine tapeworm preventative treatments in UK dogs that are at high risk of infection (those that hunt, scavenge carcasses or are fed unprocessed raw meat and offal).



Case report

One of the many consequences of the coronavirus pandemic is that many pet owners have reduced or stopped routine parasite treatment. This could be due to perceived complications in attending veterinary practices to collect prescriptions or falling out of a routine as time appears to stand still. As a result, increased cases of angiostrongylosis are being seen.

This issue's case study revisits a report from a previous issue of *Parasite Forecast* and focuses on an unusual case of *Angiostrongylus vasorum* in a dog from the West Midlands.

This case demonstrates the need for rapid intervention in lungworm cases, with prognosis being much improved with early initiation of treatment.

Given the varied and potentially serious nature of resulting clinical signs, preventative treatments should be advised for dogs whose lifestyle puts them at risk, especially in known endemic areas. Over half of vets in the West Midlands (52%) revealed they had a confirmed lungworm case in their practice in the last 12 months and according to the 'Act Against Lungworm' campaign map, there have been over 204 reported lungworm cases in the Solihull area in the last year.

This case is courtesy of Bayer Animal Health and Willows Veterinary Centre and Referral Service.

Angiostrongylosis in a dog from Birmingham

A one-year-old Cockapoo, Minnie, was admitted at Willows Veterinary Centre and Referral Service, Solihull, West Midlands for an ultrasound scan after she had become withdrawn and lethargic. Minnie was subsequently found to have a number of neurological problems including ataxia and blindness.



These neurological signs were suspected to be due to a CNS lesion, likely bleeding. Routine lungworm testing confirmed *Angiostrongylus vasorum* infection and a presumptive link established.

Georgina Allsopp, Primary Care Clinician at the Willows surgery, said: "Minnie has the worst case of lungworm I've ever seen and the symptoms she displayed were not typical of the infection, which is why it was not our first thought. As lungworm can present itself in so many different ways it can be tricky for vets to diagnose."

Minnie was started on anthelmintic treatment for lungworm infection but deteriorated further so treatment for clotting defects was also initiated. Response to the combined treatment was excellent, with neurological signs resolving in days and some vision being regained after two months.

When treatment is initiated early a full recovery can be expected in many cases, including where vision is affected, as long as there is no permanent damage from thromboembolism or aberrant migration.

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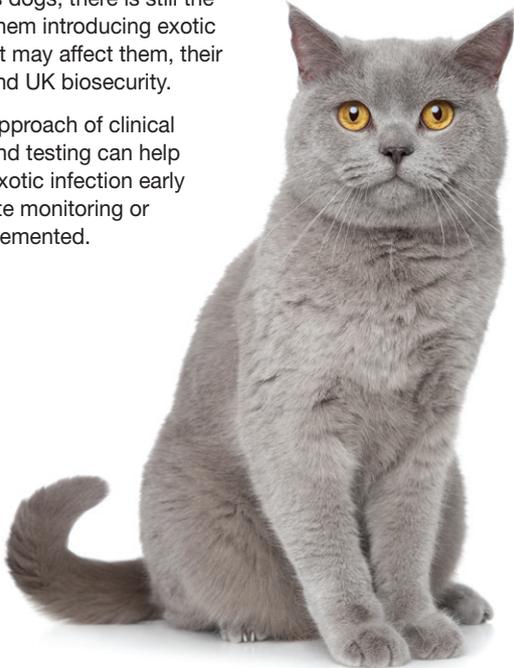
Protocols for imported cats

The RSPCA and ESCCAP UK & Ireland have published protocols for assessing cats imported into the UK as rescues from abroad.

<https://veterinaryrecord.bmj.com/content/186/16/536.2>

While imported rescue cats are not as common as dogs, there is still the possibility of them introducing exotic pathogens that may affect them, their new owners and UK biosecurity.

A consistent approach of clinical examination and testing can help to recognise exotic infection early and appropriate monitoring or treatment implemented.



BSAVA materials for tick bite prevention week

Following tick bite prevention week in March, the BSAVA have excellent advice and materials to share with pet owners in their online library.

<https://www.bsavalibrary.com/content/ticks-and-tick-borne-diseases?>

Dog exercise frequency and duration times have increased as a result of lockdown at a time when tick activity is peaking. This makes vigilance and preventative measures in at risk people and pets essential.

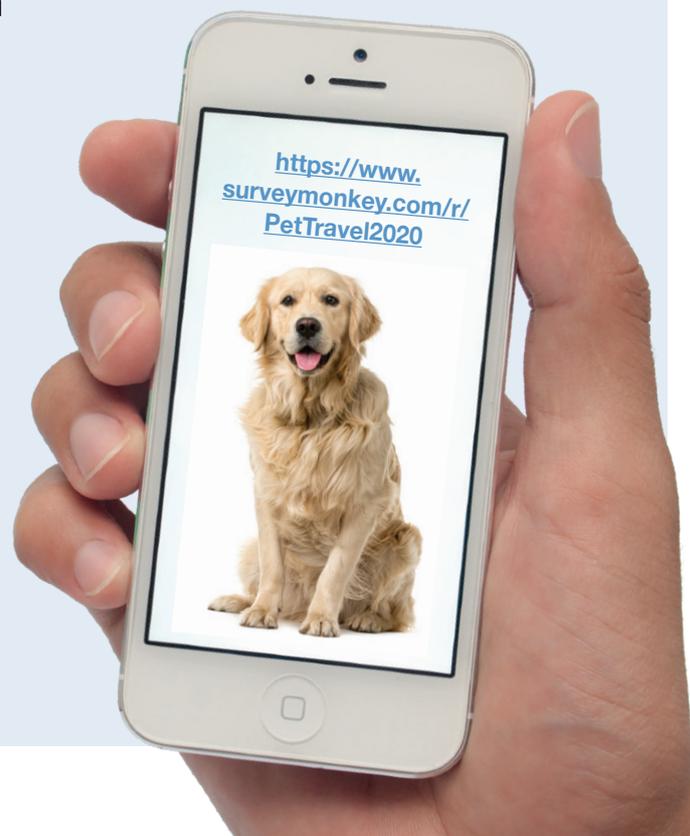


Great Pet Travel Survey 2020

The great pet travel survey is being run again in 2020 to update data on travel destinations for UK pet owners taking their pets abroad.

While there will be little pet travel take place this year, data will be collected from travel destinations from last year to build a picture of whether popular pet travel destinations are high risk areas for parasite exposure.

This data will be particularly useful when combined with ESCCAP parasite maps, as the distribution of parasites and their vectors in Europe are also rapidly changing. Please take a moment to complete the survey and contribute to a vital piece of research.



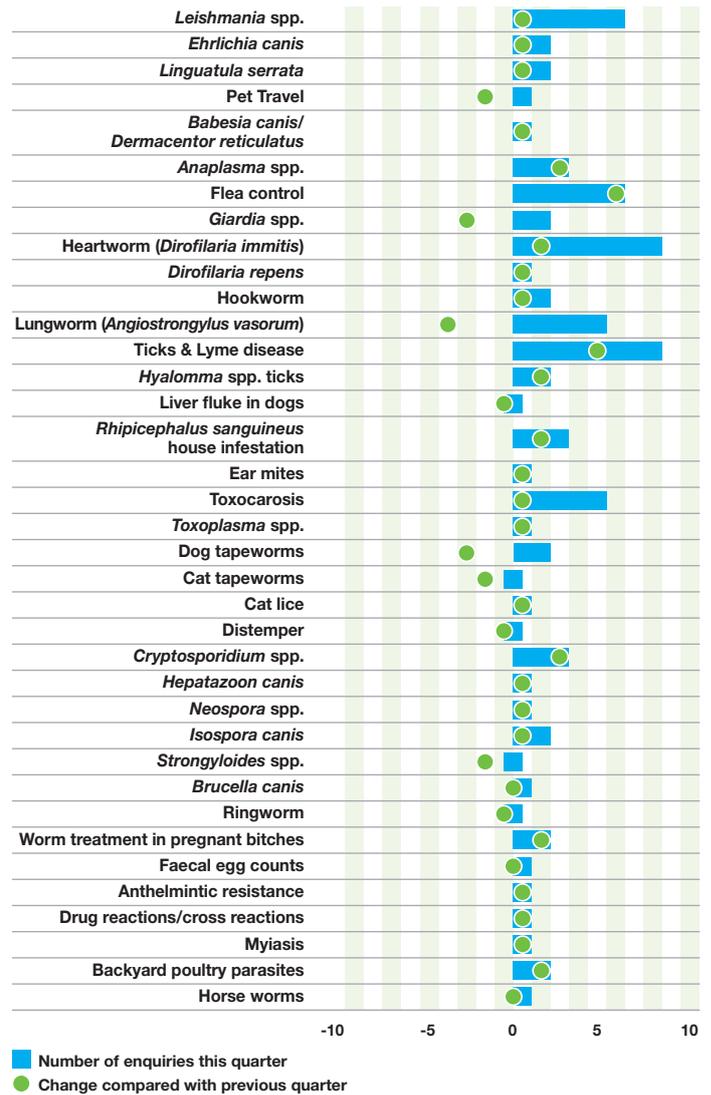
ESCCAP UK & Ireland Enquiries

ESCCAP UK & Ireland received questions from veterinary professionals and the public regarding a wide range of subjects in the last three months. The most enquiries this quarter continue to have a domestic focus, with ticks, fleas, *Angiostrongylus vasorum* and *Toxocara* spp. roundworm predominating.

The sudden increase in tick enquiries may be associated with tick bite awareness week and the increase in tick activity seen at this time of year.

While enquiries regarding exotic parasites remain down compared to last year, heartworm enquiries continue to rise associated with positive dogs entering the UK from abroad.

Early testing and treatment of subclinical carriers improves prognostic outcome and ESCCAP UK & Ireland continues to recommend testing all dogs entering the UK from endemic countries by blood antigen and knotts.



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