

THE CONSEQUENCES OF RISING TEMPERATURES

# Parasites



# Parasites

Rising temperatures are creating a boom in parasite populations. Some species are now surviving as far north as Scandinavia, while others are now active in the highest parts of the Alps and other mountain ranges (*Garcia-Vozmediano et al., 2020*)\*.

Across Europe, this is creating a new threat for our cats and dogs. **Many different parasitic species can target pets, and transmit dangerous diseases.**

## WHICH PARASITES CAN POSE A THREAT TO OUR PETS?

Hundreds of different species can pose a threat to our pets. Some of the most common, and potentially serious, include:



TICKS



MOSQUITOES



SANDFLIES



FLEAS

\*Garcia-Vozmediano, A., Krawczyk, A. I., Sprong, H., Rossi, L., Ramassa, E., & Tomassone, L. (2020). Ticks climb the mountains: Ixodid tick infestation and infection by tick-borne pathogens in the Western Alps. *Ticks and Tick-borne Diseases*, 11(5), 101489. <https://doi.org/10.1016/j.ttbdis.2020.101489>



## WHY ARE THESE PARASITES A RISK TO OUR PETS?

Parasites can be a major nuisance to our pets. **Flea bites can produce nasty skin reactions and cause our beloved companions to scratch constantly**, and therefore be distressing for both our pets and our family. As well as damaging the lives of our pets, **they can erode the pet-owner bond by encouraging cats and dogs to scratch**, which may make them less approachable.

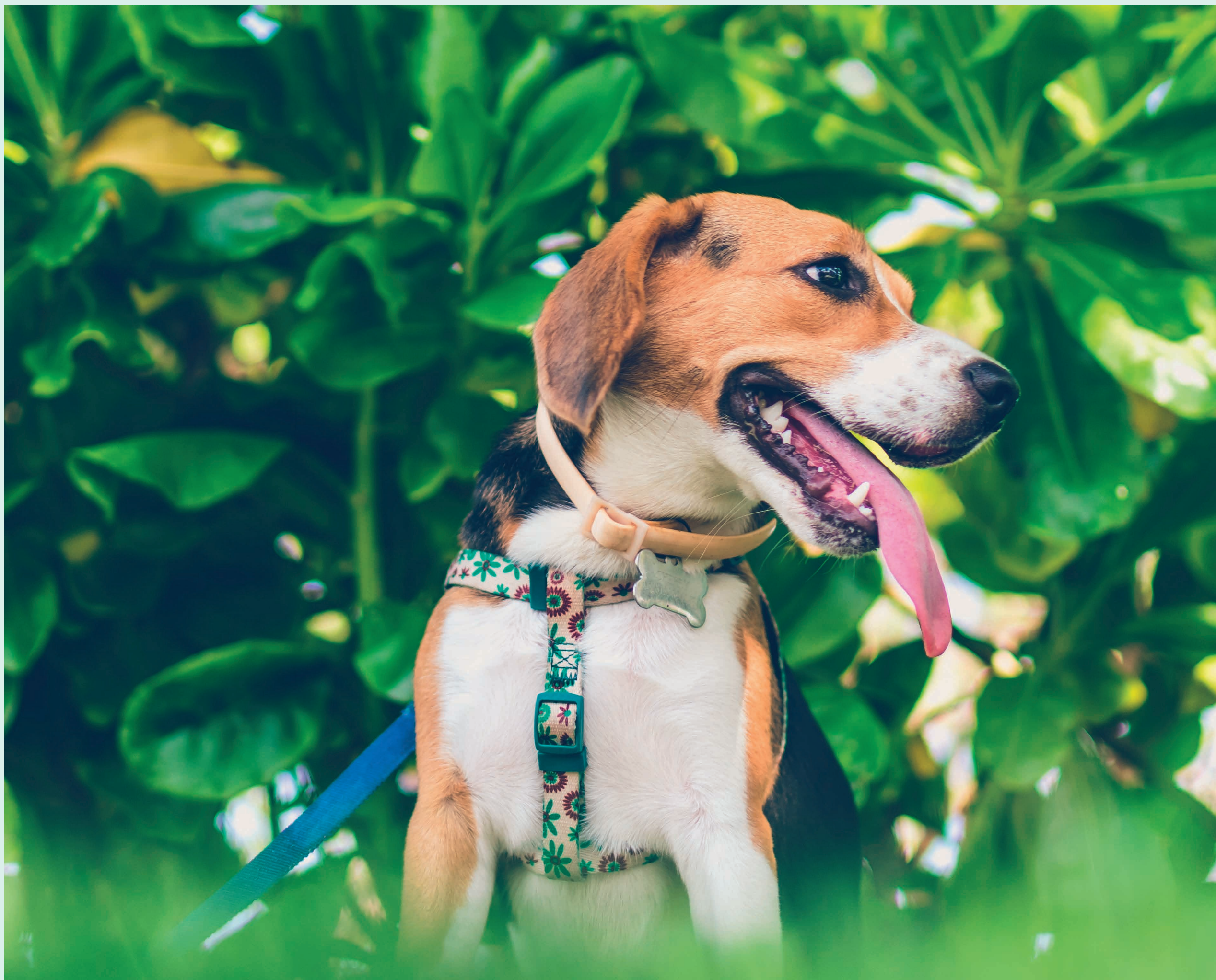
Unfortunately, that's not all: **parasites can also infect our pets with a range of diseases**. When they bite, they can transmit bacteria, viruses and even other parasites, which can cause serious problems once they're inside our pets. **These diseases can be transmitted from one animal to another, and even to people**.

# THE DISEASES TRANSMITTED BY PARASITES INCLUDE THE FOLLOWING:

Name	Which parasite transmits it?	What is it?
Babesiosis*	Ticks	A microscopic parasite which can cause weakness, anaemia and anorexia.
Dirofilariasis* (heartworm)	Mosquitoes	A tiny worm which, when transmitted by mosquitoes, can clog our pets' organs and sadly cause heart failure.
Leishmaniosis*	Sandflies	A parasite that can cause alopecia, create lesions on our pets' skin and even leave them blind. Finally, all the organs can be affected, and the dog often dies from renal failure.
Bartonellosis	Fleas	A bacteria that is transmitted by fleas. It causes lethargy, fever, muscle aches, swelling of the lymph nodes and, in rare cases, it can affect your pet's heart.
Lyme disease (Borreliosis)	Ticks	A bacteria passed through tick bites which can cause stiffness, fever and lethargy in our pets.

\* A risk for pets travelling to continental Europe.





## HOW DO PARASITES SPREAD DISEASES TO OUR PETS?

Parasites have various different ways of targeting our cats and dogs.

Some, like mosquitoes and sandflies, reach our pets from the sky. Others, like fleas, **can jump (up to 100 times their own height) to latch onto our animals' coat and start biting our pets within minutes.** And then there are ticks, which can neither fly nor jump. Instead, they climb onto plants and tall grass and **attach themselves to our pets when they brush past.**

**Parasites can often be found in forests, grassland, parks and even our own homes, gardens and backyards.** Once they have reached their target, the parasite starts feeding – which is when they **infect the host with the diseases they are carrying.**

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**From what we've seen locally, gardens are the second most likely spot to pick up ticks.** ”



**Dr. Paul Overgaauw**

Division of Veterinary Public Health,  
Utrecht University

## HOW DO RISING TEMPERATURES AFFECT PARASITES?

Parasites have always been able to travel huge distances by hitching a ride on animals or in human cargo. **Previously, however, they would be unable to survive in many places** once they were ‘dropped off’ because it was too cold for them. **But as the weather heats up, parasites benefit in two specific ways.**

On one hand they can **expand into countries which would previously have been too chilly.** On the other, they can survive, reproduce and remain active well beyond the warmer months. **Across Europe we are witnessing an increase in parasite populations throughout the year.** In fact, many types of parasite are now reproducing and seeking blood meals all year round.

This means that owners need to forget the idea of a ‘tick and flea season’ and **protect their pets 365 days a year.**



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**Don't think  
seasons when  
protecting your  
pet against  
vector-borne  
diseases, think  
temperature. ”**



**Prof. Laura Helen Kramer**

Associate Professor of Veterinary Parasitology  
and Parasitic Diseases, University of Parma  
Veterinary School, Parma Italy.



# How to protect your pet

**TO GIVE YOUR PET THE BEST POSSIBLE CHANCE OF AVOIDING THESE DISEASES, YOU SHOULD TAKE A NUMBER OF KEY STEPS.**

## **1. VISIT YOUR VET REGULARLY AND GIVE YOUR PET ANTI-PARASITE TREATMENT ALL YEAR ROUND.**

General check-ups with your vet ensure that your pets get the best, year-round parasite protection, as well as dental care, vaccination, dietary advice, and **screenings that will keep your furry friends healthy and thriving.**

## **2. UNDERSTAND THE PRIMARY RISK AREAS TO AVOID FOR EACH TYPE OF PARASITE.**

**To protect your pet, it's important to know where they're most likely to run into parasites.** For example, ticks love dense woodland, which provides plenty of dense vegetation for them to lie in wait and grab passing targets. **So check for ticks after every walk through these areas.**

## **3. CLEANING WORKS BEST TOGETHER WITH PARASITE CONTROL.**

Fleas can reproduce indoors year-round. **For every flea that lives on your pet, there are many more eggs and immature fleas hiding in you home.** Even if you keep you house squeaky-clean, it is difficult to get rid of fleas without parasite-control. Actually, did you know that “dormant” fleas are activated when you vacuum? **Keep your pet protected at all times!**

## **4. DON'T GIVE PARASITES A HIDEOUT.**

**Sometimes, we accidentally create hiding spots for parasites.** Sandflies love decomposing organic matter, mosquitoes need stagnant water to breed and ticks hide in tall grass. **Keep your lawn trimmed short, make sure your composts are hot and healthy, and drain puddles in your property.**

# Key Learning from this guide

Parasites are now a **year-round threat to our pets**. They're spreading across Europe and entering our homes more often than before. **We need to take meaningful steps to protect our pets all year round.**

## TAKE THE NEXT STEPS

### VISIT YOUR VET TO ENSURE

**you get the appropriate prescription to protect your pet all year long.** Your vet will be able to provide advice tailored to your pet's breed, lifestyle and location.

## FURTHER READINGS

### Diseases

What You Need To Know About Fleas, Ticks And The Other Parasites That Can Harm Your Pet When You Travel

### Behaviour

How Does Changing Weather Affect Your Pet?

### One Health

What Are The Diseases That Threaten Both Owners And Their Pets?