



IN YOUR REGION: PARASITOLOGY

The Southeastern United States and Texas

Elizabeth Kowalski, CVT, FFCP
Sycamore, Illinois

The southeastern United States and Texas boast a warm, humid coastal climate that significantly challenges veterinary professionals treating pets infested with parasites. Most parasites thrive here, but some are more prevalent than others. This article highlights the most prevalent parasites veterinary nurses in these regions should be familiar with to facilitate client conversations and improve parasite preventive administration compliance.

1. HEARTWORMS

The South is a hotbed for *Dirofilaria immitis*, which can cause fatal heartworm disease in companion animals. Mosquito populations in the Gulf states are hardy, and warm weather encourages faster larval development.¹ The Companion Animal Parasite Council reports positive test result rates of greater than 4%—or 1 in 25 dogs—in most southeast states.²

Key prevention strategies include¹:

- Administering year-round preventive products containing ivermectin, milbemycin oxime, selamectin, or moxidectin
- Performing annual or semiannual heartworm antigen and microfilariae testing on all dogs

2. GIARDIA

Giardia species are protozoa that infect dogs, cats, humans, and other mammals via contaminated water, soil, or surfaces. A retrospective analysis of fecal flotation and antigen tests revealed that 5.9% of cats and 9% of dogs in the southeast region tested positive for *Giardia* species.^{3,4} Infections may cause diarrhea or result in an asymptomatic carrier state, facilitating subsequent spread.

Key prevention strategies include⁵:

- Treating symptomatic pets with metronidazole or fenbendazole, followed by bathing to remove residual cysts
- Disposing of fecal waste immediately and cleaning contaminated surfaces
- Practicing good hygiene and handwashing

3. HOOKWORMS

Ancylostoma species—hookworms—thrive in subtropical climates, as evidenced by a retrospective analysis showing a 6.4% positivity rate for dogs in the southern United States.³ Hookworm larvae may cause cutaneous larval migrans in humans and anemia and diarrhea in pets. Infection is most common in puppies, which acquire larvae during nursing from infected dams. Drug-resistant hookworms may require long-term, multimodal treatment.⁶

Key prevention strategies include⁶:

- Removing feces from the environment promptly
- Deworming puppies starting at 2 weeks of age
- Administering a year-round heartworm disease preventive that contains milbemycin oxime, pyrantel pamoate, or moxidectin
- Performing fecal flotation or antigen testing 4 times during a puppy's first year and twice yearly for adults

4. FLEAS

Fleas are the most common ectoparasites to affect pets, and they remain active year-round in warm climates. Flea allergy dermatitis is a frequent sequela in dogs and cats, but biting fleas can also transmit diseases and other parasites (e.g., murine typhus, *Bartonella* species, tapeworms) to animal hosts and people in contact with them. Fleas emerge from pupae more rapidly in subtropical climates compared to temperate climates, allowing flea infestations to develop faster.⁷

Key prevention strategies include⁷:

- Administering year-round preventives to all household pets (e.g., imidacloprid, fipronil, isoxazolines, spinosad, selamectin)
- Eliminating fleas from the indoor environment with frequent cleaning and treating all household pets

5. TICKS

The southern United States harbors multiple disease-transmitting tick species. The lone star tick (*Amblyomma americanum*) is a primary vector for ehrlichiosis in dogs and cytauxzoonosis in cats. Brown dog ticks (*Rhipicephalus sanguineus*) thrive in the South and may populate homes or outbuildings, serving as an additional *Ehrlichia* vector.⁸

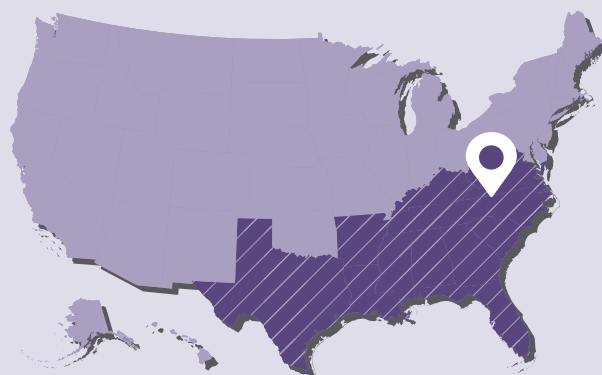
Key prevention strategies include⁹:

- Maintaining dogs on year-round acaricides (e.g., fipronil, amitraz, isoxazolines, pyrethroids)
- Performing thorough checks and safely removing ticks after outdoor activity
- Eliminating tick habitats around the home

Veterinary nurses in the Southeast and Texas can improve patient outcomes and reduce parasite infestations by educating clients on regional parasitic threats, prevention strategies, and screening tests to detect occult infections. **TVN**

References

1. Heartworm. Companion Animal Parasite Council. Updated July 28, 2020. Accessed July 16, 2024. <https://capcvet.org/guidelines/heartworm>



SCAN THE QR CODE

Download a handout you can share with clients to educate them on the top parasites of concern in your region.

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9. Ticks. Companion Animal Parasite Council. Updated March 30, 2023. Accessed July 16, 2024. <https://capcvet.org/guidelines/ticks>



Elizabeth Kowalski

Elizabeth is a writer with Rumpus Writing and Editing, a veterinary copywriting company. Before transitioning to her current full-time role in 2022, Elizabeth spent 11 years in clinical practice. Unwilling to leave “the floor” entirely, she can still be found in the clinic weekly. To contact Elizabeth, visit rumpuswriting.com.