




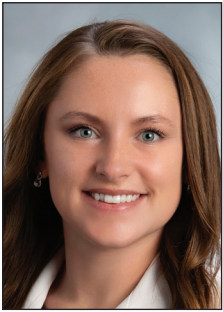


### boards fodder

## Ticks: Common associated organisms and diseases

By Emily Ptasnik, DO, and Alexis Buffington, DO

Vector	Common name	Disease	Organism	
<i>Amblyomma americanum</i>	Lone Star Tick	Human monocytic ehrlichiosis	<i>Ehrlichia chaffeensis</i> and <i>E. ewingii</i>	
		Rocky Mountain Spotted Fever "Brazilian spotted fever"	<i>Rickettsia rickettsii</i>	
		Southern tick associated rash illness (STARI)	<i>Borrelia lonestari</i>	
		Tularemia	<i>Francisella tularensis</i>	
<i>Amblyomma maculatum</i>	Gulf Coast Tick	Rickettsia parkeri rickettsiosis	<i>Rickettsia parkeri</i>	
<i>Dermacentor andersoni</i>	Rocky Mountain Wood Tick	Colorado tick fever	CTF virus	
		Rocky Mountain Spotted Fever	<i>Rickettsia rickettsii</i>	
		Tularemia	<i>Francisella tularensis</i>	
<i>Dermacentor variabilis</i>	American Dog Tick	Human granulocytic ehrlichiosis	<i>Anaplasma phagocytophilum</i>	
		Human monocytic ehrlichiosis	<i>Ehrlichia chaffeensis</i>	
		Rocky Mountain Spotted Fever	<i>Rickettsia rickettsii</i>	
		Tularemia	<i>Francisella tularensis</i>	
<i>Ixodes cookei</i>	Groundhog Tick	Powassan virus disease	<i>Powassan virus</i>	



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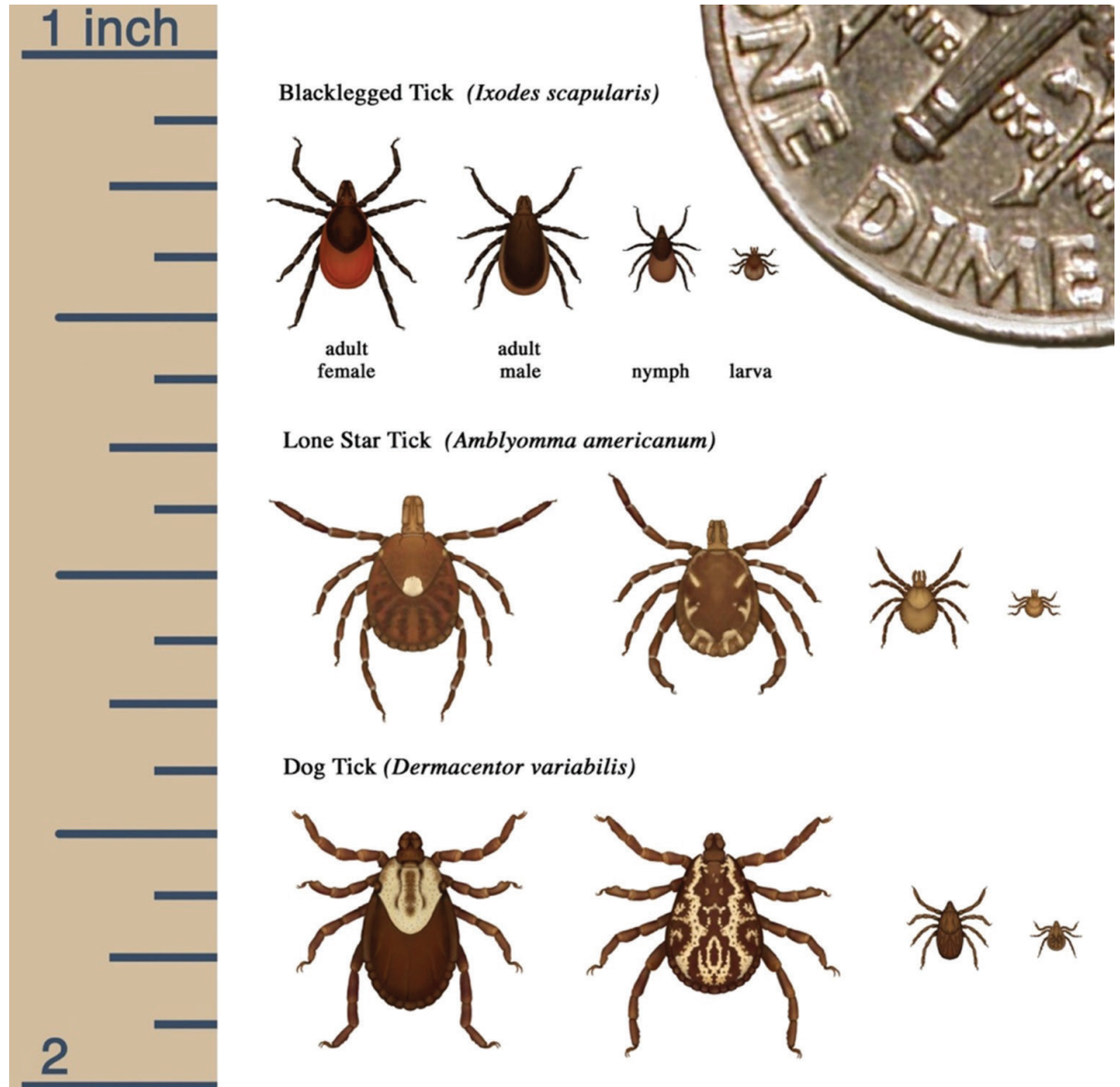
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Vector	Common name	Disease	Organism	
<i>Ixodes pacificus</i>	Western Backlegged Tick	Borrelia miyamotoi disease Human granulocytic anaplasmosis Lyme disease	<i>Borrelia miyamotoi</i> <i>Anaplasma phagocytophilum</i> <i>Borrelia burgdorferi</i>	
<i>Ixodes scapularis</i> (l. dammini)	Backlegged Tick	Babesiosis Human granulocytic anaplasmosis Lyme disease	<i>Babesia microti</i> <i>Anaplasma phagocytophilum</i> <i>Borrelia burgdorferi</i>	
<i>Ornithodoros</i> spp.	Soft Bodied Ticks	Tick borne relapsing fever	<i>Borrelia hermsii</i> <i>Borrelia duttonii</i> <i>Borrelia turicatae</i> <i>Borrelia parkeri</i>	
<i>Rhipicephalus sanguineus</i>	Brown Dog Tick	Mediterranean spotted fever (Boutonneuse fever) RMSF	<i>Rickettsia conorii</i> <i>Rickettsia rickettsii</i>	

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### Illustration of relative sizes of several ticks at different life stages



#### References:

1. Bologna J, Jorizzo J, Schaffer I. Dermatology. 4th Ed. Philadelphia: Elsevier, 2018
2. Alikhan A, Hocker TL. Review of Dermatology. Elsevier, 2017
3. Images courtesy of the CDC Ticks Image Gallery with photo credit to Jim Gathany (*Ixodes scapularis*, *Ixodes pacificus*, *Dermacentor andersoni*, *Dermacentor variabilis*, *Amblyomma Americanum*, and *Rhipicephalus sanguineus*)