***The Wolbachia* Factor**

*Wolbachia* is a genus of rickettsial organisms (sort of like bacteria but not exactly). They live inside the adult heartworm. These organisms seem to be protective or beneficial to the heartworms and treating the dog with the antibiotic[doxycycline](http://www.marvistavet.com/html/vibramycin.html), which kills the *Wolbachia*, seems to sterilize female heartworms (meaning they cannot reproduce). *Wolbachia* is also thought to be involved in the embolism and shock that results when heartworms die. The role of this organism is still being investigated.

http://www.marvistavet.com/html/body\_heartworm\_treatment.html