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Bovine Babesiosis (BB) is a tick borne parasitic disease with worldwide over 1.3 billion bovines at potential risk of being infected. The disease, also called tick fever, causes significant mortality from infection by the protozoa upon exposure to infected ticks. An important factor in the spread of the disease is the dispersion or migration of cattle as well as ticks. In this talk, we study the effect of this factor in both constant and periodic environments. Based on data from Colombia, South Africa and Brazil, we use the model to determine the effectiveness of several intervention schemes to control the progression of BB. (Received September 04, 2013)