When bovine peripheral leucocytes were used in a migration inhibition test to detect sensitization to Theileria parva antigens, 76% of cattle that were exposed to T. parva antigens yielded sensitive cells. The reaction was most efficiently induced by use of living T. parva. Migration of cells from control cattle was not inhibited. In some cattle the presence of sensitive cells in the peripheral circulation persisted for up to 8 months after exposure to experimental T. parva infection. The significance of cells that are sensitive to T. parva antigens in East Coast fever is not known.