The 12 known serotypes of *P. haemolytica* and the two biotypes A and T were found to occur in Kenya. Biotype T was more common in disease conditions than biotype A, which was more common in the nasal passages of healthy animals. Only biotypes A strains were recovered from cattle and the majority were serotypes 1 and 2, but serotypes 4 and 11 were also isolated. All serotypes were found to occur in sheep and goats, but serotypes 3, 4, 6, 8 and 10 were more commonly associated with pneumonia. It was observed that chickens could harbour both biotypes A and T in pathological conditions. Biotype A serotype 2 was isolated from an adult wildebeest, but the prevalence of *P. haemolytica* in wild animals needs further investigation.