The overall objective of the studies included in this dissertation was to improve our understanding of bovine staphylococcal mastitis. Staphylococci are the most common organism isolated from cows milk and, depending on species, can have an impact on milk quality and milk yield. This dissertation includes a literature review, which reviews the mastitis literature related to the identification and characterization of staphylococcal species, the epidemiology of staphylococcal mastitis, and heifer mastitis. The research including in this dissertation pertains to further defining and characterizing staphylococcal species. It also includes studies pertaining to staphylococci species in heifers and understanding the relationship between body site colonization and intramammary infection and the variability in body site colonization throughout the heifer life cycle.