Introduction Although orthopaedic disease is a common complain in beef cattle, the role and the value of ultrasonography is currently unknown. The purposes of this study were to assess the frequency of usage and clinical utility of orthopaedic ultrasound in beef cattle and evaluate the prevalence and nature of the orthopaedic pathologies diagnosed by ultrasound. Material and methods Medical records of 164 cattle referred for an imaging examination between May 2005 and December 2006 were reviewed. Cases presented for orthopaedic disease which received an ultrasound examination were selected. Results 137 bovine patients were referred to the diagnostic imaging unit for orthopaedic disease. 134 were Blue Belgian cattle. The most frequently disclosed abnormalities (56.83%) were of infectious origin. Septic arthritis was the most common diagnosis (48.17%) followed by fractures (21.16%). An orthopaedic ultrasonography was conducted in 56 patients (40.67%). Ultrasonography was mainly performed to confirm or exclude a synovial involvement in cases with local swelling and inconclusive radiographs or to assess thick regions which cannot be evaluated radiographically. Increased amount of echogenic synovial fluid was the most common ultrasonographic finding in calves with septic arthritis, tenosynovitis or bursitis. Meniscal damage and aseptic synovitis of the stifle were seen in adult bulls. In all 56 cases ultrasound was judged necessary to decide the therapeutic strategy. Conclusion When radiographs are inconclusive or impossible to obtain in beef cattle, an orthopaedic ultrasound examination is recommended as it can detect pathologies that will influence the therapeutic strategy.