Introduction: Literature of bovine radiographic evaluation is rare and limited - with the exception of one book dating from 1989 - on publications about selected anatomic regions and clinical cases. Bovine radiographic knowledge however is desired in regions and breeds, where individual bovine medical care is practiced. Furthermore, the comprehension of comparative radiographic findings in different species and the acquisition of bovine radiographic anatomy is of significant value for students’ and residents’ education.

Methods: Normal and abnormal bovine digital radiographs of the appendicular skeleton, the head, the vertebral column, the pelvis, the thorax and the reticulum were chosen and collected from our electronic image archive. Abnormal radiographs originate all from clinical cases. As much as possible, normal radiographs from calves and adult cows were also collected from clinical cases (for example comparative radiographs of the contralateral limb of a cow with LAMENESS). All the missing normal radiographs were performed either on a fresh dead born calf or on an adult cow determined for slaughter. The images of this cow were performed under the supervision and with permission of the national animal protection committee. Image quality optimization, correct image orientation and image labelling were performed with the aid of graphic software. Radiographic anatomic structures were labelled and named under the supervision of an anatomist (MHS) and a board certified radiologist (UG). Then the images were uploaded as jpeg-files on an in house programmed, Microsoft Windows® based image viewing software. Normal images were completed with schemes to illustrate image acquisition technique and with information about exposure and positioning data and used auxiliary radiographic equipment. The radiographs of the clinical cases were completed with labels pointing on the radiographic findings, with a clinical case report and with a radiographic report. The electronic atlas was completed by text chapters about software instructions (handbook), applied radiation protection, and radiographic interpretation guidelines. The atlas is now available as a DVD at www.ruminantclinic.ch; www.cliniqueruminants.ch, or www.wiederkueerklinik.ch.