

Veterinarians can help producers by condition scoring cows at the time of pregnancy examination. They can then design programs that help the producer target cows to a condition score 5 or 6 at calving.

References

Adams, D.C. 1987. Effects of winter weather on beef cattle on rangelands. Proc. The Range Beef Cow Symposium X. Cheyenne, Wyoming. Ames, D.R. 1985. Managing cows during winter. Proc. The Range Beef Cow Symposium IX. Chadron, Nebraska. Bellows, R.A. 1984. Calving management. Proceedings, Annual Meeting of Society for Theriogenolo-

gy, p. 145. Corah, L.R. 1987. Planning a nutrition program for today's productive beef cow. Kansas State Univ. Ext. Rep. C-680. Ferrell, C.L. and T.G. Jenkins. 1988. Influence of biological types on energy requirements. Beef Research Progress Report No. 3. NRC. 1984. Nutrient Requirements of Beef Cattle. Sixth Revised Ed. National Academy of Sciences. National Research Council. Washington, D.C. Odde, K.G. 1988. Survival of the Neonatal Calf. Veterinary Clinics of North America: Food Animal Practice, p. 501. Ritchie, H.D. 1984. Overview of factors affecting beef cow efficiency. Proceedings, Beef Cow Efficiency Forum, CSU, p. 1. Rush, I.G. 1987. Selecting and pricing of supplementary energy and protein for range beef cows. Proc. The Range Beef Cow Symposium X. Cheyenne, Wyoming. Thompson, W.R., J.C. Meiske, R.D. Goodrich, J.R. Rust and F.M. Byers. 1983. Influence of body composition on energy requirements of beef cows during winter. J. Anim. Sci. 56:1241.

Abstracts

Surgical repair of peripheral detachment of the medial meniscus in 34 cattle

D. R. Nelson, J. C. Huhn, S. K. Kneller

Veterinary Record (1990) **127**, 571-573

A detachment of the periphery of the medial meniscus from the joint capsule and medial collateral ligament in 34 cattle was repaired by securing the meniscus to the joint capsule with vertical mattress sutures during arthrotomy. Of 28 cattle with follow-up reports, 20 had recovered satisfactorily by their owners' evaluations; 17 were either not lame or slightly lame after the operation and three were moderately lame. Three of four cattle without follow-up reports were either not lame or slightly lame when discharged from the hospital.

Reproduction of mucosal disease with cytopathogenic bovine viral diarrhoea virus selected in vitro

V. Moennig, H. — R. Frey, E. Liebler, J. Pohlenz, B. Liess

Veterinary Record (1990) **127**, 200-203

Isolates of non-cytopathogenic bovine viral diarrhoea (BVD) virus from 18 persistently infected calves from one herd were compared by using monoclonal antibodies directed against the major viral glycoprotein gp53. All the isolates displayed an almost identical reaction pattern. Based on this antigenic analysis three cytopathogenic BVD and three non-cytopathogenic BVD viruses closely related to the non-cytopathogenic BVD herd isolate were selected. Six of the persistently infected calves were inoculated with a pool of the three closely related cytopathogenic BVD viruses and two with a pool of the three non-cytopathogenic BVD viruses. In addition three animals were infected with one closely related cytopathogenic BVD strain (Indiana) and two animals with the antigenetically different cytopathogenic BVD viral strain A1138/69. Regardless of the inoculation route all the animals superinfected with closely related cytopathogenic BVD viruses developed the characteristic lesions of mucosal disease within 14 days of infection. Animals which were inoculated with non-cytopathogenic BVD viruses which closely resembled the herd isolate, or with cytopathogenic BVD viruses which did not resemble the herd isolate did not develop any signs of disease. However, the latter group produced antibodies to the superinfecting virus.

Evaluation of real time B-mode ultrasound scanning for detecting early pregnancy in cows

J. S. Boyd, S. N. Omran, T. R. Ayliffe

Veterinary Record (1990) **127**, 350-352

A real time B-mode ultrasound scanner with a 7.5 MHz rectal linear transducer was used in two trials to detect whether dairy cows, less than 25 days after insemination at standing oestrus, were pregnant. In the first trial 17 cows were inseminated on the same day, and their reproductive tracts were examined 14, 15, 16 and 17 days after insemination. All the cows were diagnosed accurately as either pregnant or not pregnant. In the second trial 22 cows were inseminated on the day of observed oestrus while 14 were observed at oestrus but not inseminated. The animals were kept as a mixed group and an experienced operator scanned the uterus of each cow on one occasion, without knowing either the dates of observed oestrus or which cows had been inseminated. The rate of correct diagnosis was only 33 per cent in cows up to 16 days after oestrus, but increased markedly after 17 days and was 100 per cent by day 20.

Juvenile bovine angiomas: A syndrome of young cattle

T. D. G. Watson, H. Thompson

Veterinary Record (1990) **127**, 279-282

This report describes the clinical and pathological features associated with angiomas in two calves. In the first case, a single mass located in the atrioventricular ring of the heart was responsible for congestive cardiac failure. The mass was composed of numerous vascular cavities filled with blood and lined by a single layer of well differentiated endothelial cells. The second case had multiple blood-filled cutaneous masses which were confirmed as benign vascular tumours by histological examination of a biopsy specimen. The calf was later euthanased after profuse and uncontrollable haemorrhage from one of the lesions. At necropsy, additional tumours were found in the liver, spleen, kidneys, spinal canal and attached to the pleura, omentum and mesentery. It is proposed that these two cases are representatives of solitary and multiple forms of a syndrome which should be called juvenile bovine angiomas.