

**Pelvi-Measure Device**- used to measure the internal area of the bovine pelvis-

THE AIM SHOULD BE TO CULL OUT HEIFERS WITH ABNORMALLY SHAPED or SMALL PELVIC AREAS.

#### BACKGROUND

Studies have shown –

Several studies show that, (papers on our website)

1. Holstein-Friesian pelvic canals were more flattened in shape than in Jerseys, in which it is more rounded, so rounder pelvic canals are probably superior.
2. There is a high correlation between pelvic size and calving ease.
3. A downwardly sloping rump angle, is correlated with calving ease and increased pelvic area
4. Canadian beef cattle research showed that there was a large overlap in pelvic areas of heifers showing calving difficulty and those not. Obviously the size of the pelvic canal is only one part of the dystocia-jigsaw. Sire selection, nutrition and general management of growth and calving having large effects too.
5. Bull pelvic dimensions can also be measured as they transmit genes to the next generation.

**SAFE USE- Always ensure that handling facilities are safe for people and animals. The device should be used by Vet or following training and satisfactory assessment of skill and accuracy by a Vet.**

#### GUIDE TO ESTABLISHING A PROGRAM

A guide from University of Missouri, on measuring pelvic area is included with the device.

HOWEVER, IT IS BASED ON USA BEEF CATTLE AND THEIR SYSTEM. THE PRINCIPLES ARE THE SAME & THE AIM SHOULD BE TO CULL OUT HEIFERS WITH ABNORMALLY SHAPED or SMALL PELVIC AREAS.

It should be read before starting a program of pelvic measurement. It also suggested a strategy for REDUCING CALVING DIFFICULTY-

In order of importance-

- 1) Use proven easy calving sires, especially for heifers, looking at EBVs for calving ease, birthweight and gestation length.
- 2) Grow your heifers to have large enough frames at service and calving
- 3) Have the heifers in fit, but not fat condition at calving
- 4) Measure pelvis size as yearlings, pre-service **and CULL heifers with abnormally shaped or abnormally small pelvic areas**

**Heifers should have their pelvic shape & area measured at 13 months of age. Pelvic area grows at 8 to 10 cmsq per month, so some age variation can be taken into account.**

Adjusted 365 d Pelvic Area = actual measured area + (0.27 X (365 minus days of age)

**You should develop a program with you Vet and decide cut-off points for removing heifers from your breeding program based on pelvic shape & size.**

**Dr Graham Shepherd**

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