

# Something for everyone at Challara's day

A SMALL but enthusiastic group of sheep producers attended an informative on-property open day at the Wilkinson family's Challara Merino stud at Badgingarra last week. In addition to the line-up of industry speakers, visitors had the opportunity to view displays of Challara stud sheep including stud reserve sires, sale rams, stud ewe hoggets and scanned stud ewes with twins. With winter lambing fast approaching for many of the State's sheep producers, Katherine Ayres, DAFWA, and animal health representatives Gavin Craig, Zoetis, and Murray Green, Virbac, discussed the importance of breeding ewes, lamb and weaner nutrition, optimum vaccination and drench programs for ewes and lambs to maximise resistance and animal productivity while live export representative Mike Curnick, Emanuel Exports, rounded out the day with an overview of the live export industry. *Farm Weekly* livestock journalist KANE CHATFIELD filed these reports.

THE breeding ewe is the engine room of flock production and ewe nutrition, particularly during pregnancy and it affects several areas of the production system, according to Northam-based DAFWA livestock development officer Katherine Ayres.

Ms Ayres said this included wool production in the ewe and its progeny, lamb survival rates, reproduction and effective use of feed.

Ms Ayres focused on the influence condition score has on breeding ewe and lamb productivity and tools to manage nutrition.

She used an example of 100 ewes with a condition score of three had the potential to produce an extra 20 lambs per

joining compared to ewes with a condition score of two.

"This is due to the increase in the number of twins," Ms Ayres said.

"At 120 per cent scanning, about 60pc of the lambs conceived will be one of a twin.

Ms Ayres said a number of processes could be influenced by ewe nutrition during the gestation period including wool follicle development which determined fibre diameter and clean fleece weight.

"The lamb's primary follicles develop between days 60-90 and its secondary follicles from day 90-100 until lambing," Ms Ayres said.

"The secondary wool follicles is one of the most important mechanisms in wool production



□ Challara stud client since 2001 Jason Teakle (left), Northampton, Challara stud co-principal Peter Wilkinson, Badgingarra and Landmark Dandaragan agent Greg Wootten look over some Challara ewes pregnancy tested with twins at the Challara stud's on-property open day last week.

and by lambing, the wool follicle development is permanent and can't be influenced any further by nutrition."

Ms Ayres said it was obvious that ewes in better condition would have a heavier lamb which was important for lamb survival and condition changes during pregnancy could also affect birthweight.

"The average birthweight for a 50kg Merino ewe is 4.9kg for a single lamb and 3.7kg for a twin and a 10kg increase in mature ewe condition can be associated with 200-400 gram increase in birthweight," she said.

"A score condition change of one prior to day 90 during placental development can affect the birthweight by about 300 grams either way but in the later stages of pregnancy, a score change can change birthweight by about 500 grams."

Ms Ayres said around 70pc of lamb mortality occurred in the first 48 hours of its life and could be directly related to birthweight.

She said lightweight lambs in multiple litters were at greater risk of hyperthermia, exposure, lower body fat reserves and ability to regulate their body temperature.

"The optimum birthweight for lamb survival is between 4.5 and 5.5kg but it can be affected by lambing time and environmental conditions," Ms Ayres said.

"If a twinning ewe lamb's average birthweight drops by 500 grams, mortalities increase by up to 20pc."

Ms Ayres said poor nutrition during pregnancy can also affect the mother's maternal behaviour which is associated with colostrum and milk production.

"Ideally the ewe should stay with the lamb for about six hours following birth so disruptions during this period should be avoided such as hand feeding," she said.

Ms Ayres said ewe mortality mainly occurred late in the pregnancy and increased sharply when the ewe's condition score was less than two.

She said twin bearing ewes were at higher risk due to the high energy demands of the two foetuses which could cause pregnancy toxemia and milk fever.

"If the condition score is lifted by half on a condition score two ewe, the mortality rate of single bearing ewes drops from 4pc to 1.4pc and from 6.2pc to 3.6pc for twin bearing ewes," Ms Ayres said.



□ Landmark Dandaragan agent Greg Wootten (left), Tayla Conn, Badgingarra and guest speaker Katherine Ayers, DAFWA livestock development officer, Northam, at the Challara stud's open day at Badgingarra last week.