

Australian sheep farmers are increasing pasture utilisation and reducing risk with easy-to-use tools from lifetimewool

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Introduction:

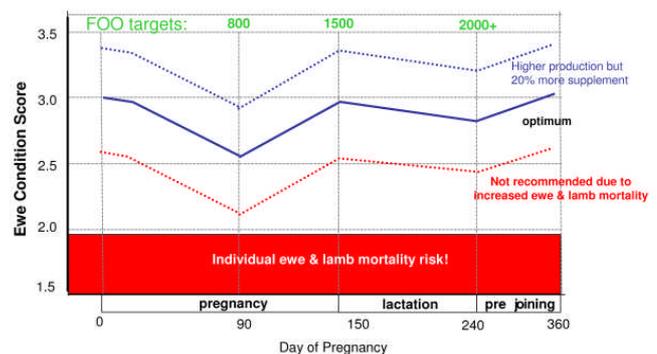
Australian pastures in the broad-acre sheep zone are typically under utilised (25-45%) as producers tend to run stock at levels that would cope with the worst summer season. This strategy limits the need to feed expensive grain in poor years and reduces the risk of soil erosion. The lower stocking rate, however, typically leads to under-utilisation of pasture over the rest of the year. Although some innovative farmers have adopted more efficient grazing practices that lead to higher utilisation, the majority still run stocking rates below the optimum. In addition to this, many producers have stock in sub-optimal condition at critical times and in above-optimal condition in non critical times, compromising productivity and sustainability. Inhibiting factors to producers adopting higher stocking rates (and therefore higher pasture utilisation) are; no simple technique to assess pastures accurately; poor access to effective feed budgeting tools; belief that high pasture utilisation leads to risk of erosion and poor stock health; and beliefs that there is little financial reward for the increased risk and labour input.

Materials and Methods:

New information from lifetimewool research (Thompson 2004) gives specific detail on the impacts of condition of breeding merino sheep on production, concise condition targets for ewes and the amount of pasture and supplement needed to meet those targets. This information, once adopted will allow increased pasture utilisation and stock rate without the risk associated with increased stocking rate beyond the capacity of the farming system. To achieve this lifetimewool set out to develop effective tools to increase skills and knowledge farmers required to manage pastures and sheep flocks more efficiently. Although Pastures from Space (Gherardi 2005) can deliver pasture information directly to producers, a simpler, more direct method was required to get more farmers to assess pasture quantity in order to then convert this pasture information into meaningful feed budget information. Feed budgeting relied on either hand-written calculations or the use of a computer based program. Little uptake of either of these tools had occurred. Infrequent visual assessments of the condition of animals is common (a method that is less accurate than condition scoring), although specific targets for body condition with well documented impacts on animal production are now available to farmers. Access to the method of condition scoring relied on a written set of descriptors or training at farmer field days. This had led to a low uptake of the method, although it was considered 'farmer friendly'. Lifetimewool set out to develop tools that were simple, useable, and valued which would overcome the barriers to higher pasture utilisation.

Results and discussion:

Lifetimewool has successfully developed, and had adoption of, a combination of clear, concise recommendations and targets that relate directly to enterprise profitability with simple easy to use tools that give producers useful information to meet their perceived needs of; reducing their risk of over-grazing and increasing profitability of the grazing enterprise without compromising the health of their sheep and pasture. These were designed to lead producers through the steps but be as close to 'stand-alone' as possible. Tools developed include pasture photo gallery, ewe condition score profile, feed budget tables for both green and dry phases of pasture, condition score models and yard book and handbook on ewe management. Figure 1 shows the ewe condition score profile which provides producers with ewe and pasture targets for pregnancy. These tools give producers confidence to increase pasture utilisation thereby lifting profitability. Supporting these tools is access to local officers and economic analysis of the recommendations.



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References:

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- Gherardi, SG. *et al* (2005) Pastures from Space – Application of satellite-derived pasture predictions improve profitability of Australian sheep producers. IGC Proceedings, XX,859, Wageningen Academic Publ.