SUMMERPACK, AN INTERACTIVE COMPUTER SOFTWARE FOR THE PREDICTION OF LIVEWEIGHT CHANGES OF SHEEP GRAZING DRY PASTURES OR STUBBLES IN THE SOUTH OF AUSTRALIA

*J.-P.G. ORSINI**

SummerPack is a user-friendly computer software designed to assist farmers and agricultural advisers with decisions on stocking rates of sheep and feeding regimes over the summer/autumn period. The simulation model which is the core of the program and some sensitivity analyses are presented elsewhere (Orsini *et al.* 1988).

Using the quantity and the digestibility of the feed on offer and sheep live weights and stocking rate at the beginning of summer, **SummerPack** makes a prediction of live weights till the next autumn break. Supplements can be fed to the sheep and the effect of summer rains and of a delay in the break of the season can be investigated.

SummerPack can be used to answer the questions:

when should I start supplementary feeding,
how much should I feed,
what increase in production will I achieve from a supplementary feeding program.

The estimation of feed requirements well in advance should contribute to some substantial savings as well as a better adjustment of grazing pressure to dry feed on offer.

By using a range of values as inputs, a number of management decisions can be achieved to suit the objectives and the constraints of the farmer- The rate and the time of feeding can be determined in order to maintain sheep live weights above a certain level. Stocking rate and supplementary feeding can be adjusted to prevent an excessive decline in the amount of dry matter attached to the ground, and so overcoming potential erosion problems.

SummerPack is not only aimed at farmers and agricultural advisers as a farm-management tool, but also at agricultural scientists for experimental design and analysis and for project assessment, and at tertiary institutions as a teaching aid in feed budgeting and animal production.

SummerPack Version 1.0 has been released at the beginning of 1990 as a commercial software operating on IBM-compatible microcomputers.

ORSINI, J.-P.G., CASSON, P. and THORN, C.W. (1988). Technote No. 26/88. WADA.
ORSINI, J.-P.G. (1990). Agricultural Systems (in press).

---

* *Sheep and Wool Branch, W.A. Dept Agriculture, South Perth, W.A. 6151.*