

*Illustrations.* The same material should not normally be presented in tables and figures. Legends should be typed on a separate sheet.

- (a) Diagrams should be drawn in Indian ink, about twice the size of the finished figure, on Bristol board, stout tracing paper or plastic film. Photographed diagrams are also accepted. *Lettering inside the framework of the diagram should be avoided as far as possible but if unavoidable it should be included on a fly-leaf. Marginal lettering should be inserted lightly in pencil on the original diagram or on a fly-leaf.*
- (b) Photographs intended for half-tone reproduction should be on glossy paper. They will be accepted only if found necessary by the Editors.
- (c) Colour plates are unlikely to be accepted unless authors bear the cost.

*Tables* should be as simple and as few as possible. Each table should be typed on a separate sheet.

*Abstract.* Every article should have a short abstract (not more than **250** words) complete in itself and understandable without reference to the paper. *The abstract will be printed at the beginning of the paper.*

*References.* Only papers closely related to the author's work should be referred to; exhaustive lists should be avoided. The arrangement of references should be as in recent papers in *Animal Production*; details are given in the notes for guidance.

*Proofs* are supplied once and must be returned corrected to the Editors *within 3 days*. Only essential corrections should be made.

*Reprints.* Twenty-five reprints of each paper will be supplied free to authors on request. Further copies may be purchased if the order is sent at the proof-stage.

*Animal Production* is published six times a year in two volumes. Annual subscription is £49.00 (or \$112.00 in the USA and Canada) and the price for a single part is £9.00 (or \$21.00) net.

*Proceedings of the British Society of Animal Production (New Series)* ceased publication in 1975 and the material is now published as a separate section in the June issue of *Animal Production*.

*Business matters*, including regular subscriptions and sales (current and back numbers of the Journal and the Proceedings), should be addressed to: Longman Group Limited Subscriptions (Journals) Department, Fourth Avenue, Harlow, Essex, England CM19 5AA.

---

*Senior Editor*

J. A. F. Rook, Agricultural Research Council

*Editors*

P. J. Avery, University of Reading  
R. C. Campling, Wye College, University of London  
M. F. Fuller, Rowett Research Institute  
R. B. Land, Animal Breeding Research Organisation  
T. L. J. Lawrence, University of Liverpool  
J. M. Manson, East of Scotland College of Agriculture  
A. M. Raven, Department of Agriculture and Fisheries for Scotland  
J. H. B. Roy, National Institute for Research in Dairying  
A. J. F. Webster, University of Bristol

*Technical Editors*

Jill M. Read  
P. D. Wilson

## CONTENTS

	PAGE
HARE, LOUISE and BRYANT, M. J. Characteristics of oestrous cycles and plasma progesterone profiles of young female sheep during their first breeding season . . . . .	1
JONES, R., FORBES, J. M., SLADE, C. F. R. and APPLETON, M. The effect of daylength on the growth of lambs. 4. Daylength extension to 20 h under practical conditions . . . . .	9
WILKINSON, R., COLE, D. J. A. and LEWIS, D. Amino acid nutrition of the lactating sow: the requirement for dietary lysine . . . . .	15
ZOIPOULOS, P. E., ENGLISH, P. R. and TOPPS, J. H. High-fibre diets for <i>ad libitum</i> feeding of sows during lactation . . . . .	25
HEMSWORTH, P. H., CRONIN, G. M. and HANSEN, C. The influence of social restriction during rearing on the sexual behaviour of the gilt . . . . .	35
HEMSWORTH, P. H., SALDEN, N. T. C. J. and HOOGERBRUGGE, A. The influence of the post-weaning social environment on the weaning to mating interval of the sow . . . . .	41
ROWLINSON, P. and BRYANT, M. J. Lactational oestrus in the sow. 3. The influence of feeding level upon the occurrence of a fertile oestrus in lactating sows . . . . .	49
WOOD, J. D. and RILEY, J. E. Comparison of boars and castrates for bacon production. 1. Growth data, and carcass and joint composition . . . . .	55
WOOD, J. D. and ENSER, M. Comparison of boars and castrates for bacon production. 2. Composition of muscle and subcutaneous fat, and changes in side weight during curing . . . . .	65
MOTTRAM, D. S., WOOD, J. D. and PATTERSON, R. L. S. Comparison of boars and castrates for bacon production. 3. Composition and eating quality of bacon . . . . .	75
HENDERSON, RUTH, WHITTEMORE, C. T., ELLIS, M., SMITH, W. C. and LAIRD, R. Effects of index selection at bacon weight on early growth rate and body composition in Large White pigs . . . . .	81
SOUTHGATE, J. R., COOK, G. L. and KEMPSTER, A. J. A comparison of different breeds and crosses from the suckler herd. 1. Live-weight growth and efficiency of food utilization . . . . .	87
KEMPSTER, A. J., COOK, G. L. and SOUTHGATE, J. R. A comparison of different breeds and crosses from the suckler herd. 2. Carcass characteristics . . . . .	99
GARNSWORTHY, P. C. and TOPPS, J. H. The effect of body condition of dairy cows at calving on their food intake and performance when given complete diets . . . . .	113
GARNSWORTHY, P. C. and TOPPS, J. H. The effects of body condition at calving, food intake and performance in early lactation on blood composition of dairy cows given complete diets . . . . .	121
FRISCH, J. E. The use of teat-size measurements or calf weaning weight as an aid to selection against teat defects in cattle . . . . .	127
ROWLANDS, G. J., LUCEY, S. and RUSSELL, A. M. A comparison of different models of the lactation curve in dairy cattle . . . . .	135
PARTRIDGE, G. G. and ALLAN, S. J. The effects of different intakes of crude protein on nitrogen utilization in the pregnant and lactating rabbit . . . . .	145
HADJIPANAYIOTOU, M. Laboratory evaluation of ensiled poultry litter . . . . .	157
BEN-ASHER, A., ILAN, D., LEVY, M. and HOLZER, Z. A note on the effect of monensin supplementation on growth and food utilization in young calves . . . . .	163