

ANIMAL PRODUCTION

ANIMAL PRODUCTION

JOURNAL OF
THE BRITISH SOCIETY OF ANIMAL PRODUCTION

Edited by

I. L. MASON
GERALD WIENER

VOLUME 1
1959

OLIVER & BOYD LTD.
EDINBURGH AND LONDON

PRINTED AND PUBLISHED IN GREAT BRITAIN BY
OLIVER AND BOYD LTD., EDINBURGH

CONTENTS OF VOLUME 1

(LISTED ALPHABETICALLY BY AUTHOR)

	PAGE
AITKEN, J. N., <i>see</i> CRICHTON, J. A.	
ARMSTRONG, D. G., BLAXTER, K. L., GRAHAM, N. MCC., and WAINMAN, F. W. The effect of environmental conditions on food utilisation by sheep	1
ARMSTRONG, R. H., and CAMERON, A. E. Hexoestrol implantation of Black-face wether lambs	37
BLAXTER, K. L., <i>see</i> ARMSTRONG, D. G.	
BODWELL, C. E., EVERITT, G. C., HARRINGTON, G., and POMEROY, R. W. An investigation of the repeatability of eight measurements of beef carcasses	51
BODWELL, C. E., HARRINGTON, G., and POMEROY, R. W. A note on the measurement of 'eye' muscle area in beef carcasses	97
BOYNE, A. W., <i>see</i> CRICHTON, J. A.	
CAMERON, A. E., <i>see</i> ARMSTRONG, R. H.	
CASTLE, M. E., and WATSON, J. N. A comparison between an early weaning and a more conventional system of rearing dairy calves	31
CRICHTON, J. A., AITKEN, J. N., and BOYNE, A. W. The effect of plane of nutrition during rearing on growth, production, reproduction and health of dairy cattle. I. Growth to 24 months	145
DINDA, P. K., <i>see</i> PRESTON, T. R.	
DODSWORTH, T. L. A report on feeding additional protein to fattening steers implanted with hexoestrol	175
DONALD, H. P. Conformation of twin and quadruplet freemartins	71
EAST, E., TAYLOR, J., MILLER, I. T., and WIDDOWSON, R. W. Measurements of back fat thickness on live pigs by ultrasonics	129
EVERITT, G. C., <i>see</i> BODWELL, C. E.	
EYLES, DUDLEY E. Feeding and management of pregnant sows on pasture	41
GRAHAM, N. MCC., <i>see</i> ARMSTRONG, D. G.	
GRAY, K. W., <i>see</i> WALKER-LOVE, J.	
GREENHALGH, I., <i>see</i> PRESTON, T. R.	
HANCOCK, J. L. Polyspermy of pig ova	103
HARRINGTON, G., <i>see</i> BODWELL, C. E.	
JOUBERT, D. M. Effect of age at which lambs are castrated on carcass weight and quality	163

	PAGE
KING, J. W. B., and ROBERTS, R. C. The effects of inbreeding on carcass traits in the bacon pig	123
LAIRD, R. Jnr., <i>see</i> WALKER-LOVE, J.	
LODGE, G. A., and McDONALD, I. The relative influence of birth weight, milk consumption and supplementary food consumption upon the growth rates of suckling piglets	139
MCBRIDE, GLENORCHY. The influence of social behaviour on experimental design in animal husbandry	81
MACDONALD, I., <i>see</i> LODGE, G. A.	
MCLEOD, N. A., <i>see</i> PRESTON, J. R.	
MILLER, I. T., <i>see</i> EAST, E.	
NEIMANN-SØRENSEN, A., and SPRYSZAK, A. Blood group studies on cattle of Red Polish breed	179
POMEROY, R. W., <i>see</i> BODWELL, C. E.	
PRESTON, T. R., MCLEOD, N. A., and DINDA, P. K. The effect of chlor-tetracycline on growth of early-weaned calves	13
PRESTON, T. R., GREENHALGH, I., and MCLEOD, N. A. The effect of hexoestrol implants on sucking and weaned lambs fattened on farms in the North-East of Scotland	135
PURSER, A. F., and YOUNG, G. B. Lamb survival in two hill flocks	85
PURSER, A. F., and ROBERTS, R. C. The relationship of hogg weight to the subsequent performance of Scottish Blackface ewes	107
ROBERTS, R. C., <i>see</i> KING, J. W. B.	
ROBERTS, R. C., <i>see</i> PURSER, A. F.	
ROBERTSON, ALAN. A simple method of pedigree evaluation in dairy cattle	167
SMITH, C. A comparison of testing schemes for pigs	113
SPRYSZAK, A., <i>see</i> NEIMANN-SØRENSEN, A.	
TAYLOR, J., <i>see</i> EAST, E.	
THOMSON, J. M., <i>see</i> WALKER-LOVE, J.	
WAINMAN, F. W., <i>see</i> ARMSTRONG, D. G.	
WALKER-LOVE, J., LAIRD, R. Jnr., THOMSON, J. M., and GRAY, K. W. Ultra-violet irradiation of fattening pigs	21
WATSON, J. N., <i>see</i> CASTLE, M. E.	
WIDDOWSON, R. W., <i>see</i> EAST, E.	

CONTENTS

vii
PAGE

WIENER, GERALD. Growth of cattle twins on dairy farms with high and low yielding herds	61
YOUNG, G. B., <i>see</i> PURSER, A. F.	

PROCEEDINGS OF THE 28TH MEETING OF THE BRITISH SOCIETY OF ANIMAL PRODUCTION, Edinburgh, 25-26 March 1958	93
PROCEEDINGS OF THE 29TH MEETING OF THE BRITISH SOCIETY OF ANIMAL PRODUCTION, Wye College (University of London), Ashford, Kent, 15-19 September 1958	95
PROCEEDINGS OF THE 30TH MEETING OF THE BRITISH SOCIETY OF ANIMAL PRODUCTION, London, 25-26 February 1959	189

Tables should be as simple and as few as possible; if they are very large or numerous a charge may have to be made to authors.

Summary: Every article should have a short summary complete in itself and understandable without reference to the paper.

References: Only papers closely related to the author's work should be referred to; exhaustive lists should be avoided. Bibliographical details should be in the following order: author's name, initials, year, title of paper, title of journal (abbreviated according to the World List of Scientific Periodicals), volume of journal, first page of paper. References should be listed in alphabetical order.

Examples:

DONALD, H. P., & PURSER, A. F., 1956. Competition *in utero* between twin lambs. *J. agric. Sci.* **48**: 245.

HAMMOND, J., 1932. *The Growth and the Development of Mutton Qualities in the Sheep*. Oliver & Boyd, Edinburgh.

In the text, references should be made by giving author and year.

Proofs are supplied once in galley form and must be returned corrected to the Editors within seven days. Only minor corrections will be accepted, other alterations (apart from those due to printer's errors) will be charged to authors.

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 galley proof stage.

Business matters, including regular subscriptions and sales (the current Journal, back numbers, the *Proceedings of the British Society of Animal Production* [predecessor to *Animal Production*], and reprints), should be addressed to Messrs. Oliver & Boyd Ltd., Tweeddale Court, 14 High Street, Edinburgh, 1.

Editors:

I. L. MASON
Institute of Animal Genetics
West Mains Road
Edinburgh, 9

GERALD WIENER
A.R.C. Animal Breeding Research
Organisation
6 South Oswald Road, Edinburgh, 9

COVER DESIGN BY E. D. ROBERTS
CENTREPIECE: ROBERT BAKEWELL, 1727-1795

CONTENTS

	PAGE
BODWELL, C. E., HARRINGTON, G., and POMEROY, R. W. A note on the measurement of 'eye' muscle area in beef carcasses	97
HANCOCK, J. L. Polyspermy of pig ova	103
PURSER, A. F., and ROBERTS, R. C. The relationship of hogg weight to the subsequent performance of Scottish Blackface ewes	107
SMITH, CHARLES. A comparison of testing schemes for pigs	113
KING, J. W. B., and ROBERTS, R. C. The effects of inbreeding on carcass traits in the bacon pig	123
EAST, E., TAYLOR, J., MILLER, I. T., and WIDDOWSON, R. W. Measurements of back fat thickness on live pigs by ultrasonics	129
PRESTON, T. R., GREENHALGH, ISOLINE, and MACLEOD, N. A. The effect of hexoestrol implants on sucking and weaned lambs fattened on farms in the north-east of Scotland	135
LODGE, G. A., and McDONALD, I. The relative influence of birth weight, milk consumption and supplementary food consumption upon the growth rates of suckling piglets	139
CRICHTON, J. A., AITKEN, J. N., and BOYNE, A. W. The effect of plane of nutrition during rearing on growth, production, reproduction and health of dairy cattle. I. Growth to 24 months	145
JOUBERT, D. M. Effect of age at which lambs are castrated on carcass weight and quality	163
ROBERTSON, ALAN. A simple method of pedigree evaluation in dairy cattle	167
DODSWORTH, T. L. A report on feeding additional protein to fattening steers implanted with hexoestrol	175
NEIMANN-SØRENSEN, A., and SPRYSZAK, A. Blood group studies on cattle of Red Polish breed	179
PROCEEDINGS OF THE 30TH MEETING OF THE BRITISH SOCIETY OF ANIMAL PRODUCTION, LONDON, 25-26 FEBRUARY 1959	189