

CONTENTS

| | |
|---|-----|
| Studies on the Role of Cobalt in Sheep Nutrition, S. N. Ray, W. C. Weir, A. L. Pope, G. Bohstedt and P. H. Phillips | 3 |
| A Study of Cobalt Deficiency in New Hampshire with Sheep, H. A. Keener, G. P. Percival and K. S. Morrow | 16 |
| Further Comparisons of the Utilization of Nitrogen of Urea with That of Some Feed Proteins by Sheep, Tom S. Hamilton, Willard B. Robinson and B. Connor Johnson | 26 |
| Urea as an Extender of Protein when Fed to Lambs, H. M. Briggs, W. D. Gallup, V. G. Heller and A. E. Darlow | 35 |
| Reactions of Southdown Sheep to Two Environments, Ralph W. Phillips and Damon A. Spencer | 41 |
| Single Weight Versus a Three-Day Average Weight for Sheep, H. W. Bean | 50 |
| Linearity of Regression of Milk Energy on Fat Percentage, O. R. Overman and W. L. Gaines | 55 |
| Effectiveness of Carotene and Failure of Ascorbic Acid to Increase Sexual Activity and Semen Quality of Vitamin A Deficient Beef Bulls, Louis L. Madsen, O. N. Eaton, Louis Heemstra, Russell E. Davis, Charles A. Cabell and Bradford Knapp, Jr. | 60 |
| Relation of Typical Postnatal Changes in the Diet of the Dairy Calf to the Concentration of Carotenoids and Vitamin A in the Blood Serum, G. H. Wise, M. J. Caldwell, D. B. Parrish, F. W. Atkeson and J. S. Hughes | 70 |
| Pantothenic Acid Studies with the Horse, P. B. Pearson and H. Schmidt | 78 |
| Effects of Thyroprotein and of Thiouracil Alone and in Sequence in the Ration of Swine, George W. Vander Noot, Ralph P. Reece and William C. Skelley | 84 |
| The Comparative Efficiency of Bred and Open Sows When Fattened and Slaughtered, Leslie E. Johnson and Turner Wright | 92 |
| Methods of Management of a Bromegrass-Alfalfa Mixture, R. F. Fuelleman, W. L. Burlison and W. G. Kammlade | 99 |
| The Apparent Digestibility of Prairie Hay of Variable Protein Content, with Some Observations of Fecal Nitrogen Excretion by Steers in Relation to Their Dry Matter Intake, Willis D. Gallup and H. M. Briggs | 110 |
| Cull Peas as a Protein Supplement for Swine Feeding, T. J. Cunha, E. J. Warwick, M. E. Ensminger and N. K. Hart | 117 |
| Nutrient Utilization by "Compact" and Conventional Type Shorthorn Steers, L. E. Washburn, Johnny Matsushima, Herman F. Pearson and R. C. Tom | 127 |
| Record of Proceedings of the Thirty-Ninth Annual Meeting of the American Society of Animal Production | 135 |
| News and Notes | 152 |

Contents of previous issues of the JOURNAL OF ANIMAL SCIENCE are indexed in the Agricultural Index which is available in most libraries, and in the November issue of each complete volume of the JOURNAL.