Productive Performance Of Holstein Calves Finished In

Blueprints for Tropical Dairy Farming provides insight into the logistics, infrastructure and management required for the development of small and large dairy farms in tropical developing countries. Farmers will learn how to improve the welfare, milk quality and productivity of their dairy herds. This book complements author John Moran’s five previous books on the principles of tropical dairy farming. The manual covers a wide range of topics related to ensuring the sustainability of dairy production systems in tropical developing countries, such as South and East Asia, Africa and Central America. It also provides guidelines for the best management practices of large-scale, more intensive dairy systems. While smallholder farms are the major suppliers of milk in the tropics, many larger farms are becoming established throughout the tropics to satisfy the increasing demands for fresh milk. Blueprints for Tropical Dairy Farming will be a valuable resource for farmers and stockpeople who want to improve the productive performance of their dairy herds, farm advisers who can assist farmers to achieve this aim, educators who develop training programs for farmers or who train dairy advisers in the basics of dairy production technology, and other stakeholders in tropical dairy production, such as local agribusiness, policy makers and research scientists. National and international agencies will learn new insights into the required long-term logistics for regional dairy development, while potential investors will acquire knowledge into intensive tropical dairy farming.

This study was an extension of a study submitted in April 2014 by Sheldon D. Holt entitled 0??Ambient Temperature, Calf Intakes, and Weight Gains on Preweaned Dairy Calves0?+. A major component in a profitable dairy operation is the raising of female calves as replacement heifers; but since no direct income is generated by calf raising alone, it is often overlooked as a potential profit area on a dairy farm. Calf management practices that ultimately impact milk productivity and reproductive performance during a heifer0?9s lifetime begin at birth. This study examines the effect of calf starter intake on calf growth, measuring specifically calf weight. How calf starter intake affected production costs was also examined. Other factors included in the study were seasonal change, hip height, days since birth, and weather conditions. The cost of calf starter is one of the main contributors to total production cost in raising dairy calves. Since the amount of starter intake consumed by the calves in this study was measured by Holt, a cost analysis can be performed using these data. Therefore, the first two objectives of this study are to 1) develop a model which minimizes cost of starter feed (which is a variable controlled by the dairy producer) and 2) use the model developed under objective 1) to find the breakeven point (where the cost of an input is less than or equal to the value gained from that input) and conduct sensitivity analysis with respect to this point. Although an analysis was performed on the data at the close of its collection in 2014 by S.D Holt, there are several econometric issues that were not adequately addressed before these analyses were performed. The following problems have been found in the data: functional form, multicollinearity, heteroskedasticity, and serial correlation. Any interpretation or prediction based on these data, without these issues being resolved, is not reliable. In order for interpretations and predictions based on these data to be valid, the last two objectives of this study are to 3) define in detail the econometric problems that existed in Holt0?9s study and 4) find and implement solutions to econometric problems that existed in that study.

This Book of Abstracts is the main publication of the 65th Annual Meeting of the European Federation for Animal Science 2014 in Copenhagen, Denmark. It contains abstracts of the invited papers and contributed presentations. The meeting addressed subjects relating to science and innovation. Important problems were also discussed during the sessions of EAAP's nine Commissions: Animal Genetics, Animal Nutrition, Animal Management and Health, Animal Physiology, Cattle Production, Sheep and Goat Production, Pig Production, Horse Production and Livestock Farming Systems.

This widely used reference has been updated and revamped to reflect the changing face of the dairy industry. New features allow users to pinpoint nutrient requirements more accurately for individual animals. The committee also provides guidance on how nutrient analysis of feed ingredients, insights into nutrient utilization by the animal, and formulation of diets to reduce environmental impacts can be applied to productive management decisions. The book includes a user-friendly computer program on a compact disk, accompanied by extensive context-sensitive "Help" options, to simulate the dynamic state of animals. The committee addresses important issues unique to dairy science-the dry or transition cow, udder edema, milk fever, low-fat milk, calf dehydration, and more. The also volume covers dry matter intake, including how to predict feed intake. It addresses the management of lactating dairy cows, utilization of fat in calf and lactation diets, and calf and heifer replacement nutrition. In addition, the many useful tables include updated nutrient composition for commonly used feedstuffs.

Factors Affecting Calf Crop summarizes the latest information available from leading cattle physiologists and geneticists regarding factors known to influence the production of live calves at weaning. You get practical information on management techniques for improving reproduction efficiency in the herd. You'll also learn about the functioning of the reproductive system and how this may affect reproductive processes in the cow herd. Managers will benefit from a clearer understanding of the factors known to limit efficient reproduction, while veterinarians and other professionals who advise cattlemen will appreciate the substantial reference material and color photographs for defining cow condition scores. Color photographs are also used to illustrate the discussions of testicular thermographies and their applications. Other chapters in the book cover developments in improving reproductive performance of the replacement heifer, the brood cow, and the bull. Topics on reproduction include physiology/endocrinology, the use of growth promotants, genetics and physiological and economic considerations in selecting the age to breed heifers, heritability of fertility, length of the breeding season, prepartum and postpartum nutrition, nursing by the calf, cloning of embryos, and much more.

Issues in Veterinary Research and Medicine / 2011 Edition is a ScholarlyEditions™ eBook that delivers timely, authoritative, and comprehensive information about Veterinary Research and Medicine. The editors have built Issues in Veterinary Research and Medicine: 2011 Edition on the vast information databases of ScholarlyNews.™ You can expect the information about Veterinary Research and Medicine in this eBook to be deeper than what you can access anywhere else, as well as consistently reliable, authoritative, informed, and relevant. The content of Issues in Veterinary Research and Medicine: 2011 Edition has been produced by the world’s leading scientists, engineers, analysts, research institutions, and companies. All of the content is from peer-reviewed sources, and all of it is written, assembled, and edited by the editors at ScholarlyEditions™ and available exclusively from us. You now have a source you can cite with authority, confidence, and credibility. More information is available at http://www.ScholarlyEditions.com/.

Contains a selection of White Papers, commissioned to better inform the exploration of cattle welfare. These are prepared by notable experts in their field, to help provide factual context around selected topics that impact cattle welfare and production systems. Covers all aspects of cattle use in an accessible style, making this a must have volume for anyone interested in cattle welfare or cattle medicine. Provides an in-depth picture of the distinctive beef and dairy cattle welfare practices and issues, covering topics such as behavior, breeding and genetic manipulation, nutrition and feeding, housing and management, health and disease, and transport and slaughter. Written by acknowledged leaders in animal science, veterinary science, philosophy and animal welfare, presenting a truly multidisciplinary perspective on cattle welfare. Includes a section on understanding and managing animal welfare in both beef and dairy cattle, discussing how cattle perceive the world, animal handling and pain mitigation, and how to assure that the cows have a reasonably good life. The Welfare of Cattle offers an accurate, detailed account of the ethical and welfare concerns related to the human use of cattle. There is currently no significant book dealing with the welfare of cows, animals often seen as archetypal paradigms of 'farm animals'. Covering both beef and dairy cattle, the expert authors provide in-depth information on the husbandry roots of traditional agriculture, the replacement of this system of stewardship by an industrial model, and the resulting welfare challenges associated with industrial agriculture: feedlots, highly industrialized dairies, and

slaughterhouses killing huge numbers of animals who have been transported great distances. This important book explores in detail the ways in which people who are providing care for cattle can take their first step, or their next step, toward enhancing the welfare of these animals. An extra chapter (online only) is available in the 'Downloads' tab on the left: Dairy Nutrition, by Michael Gamroth

In facing ever more limited resources and changing market conditions and in the attempt to enhance productivity for strengthening livelihoods, many technologies have been used to improve feed use and animal performance at the faro level. A particularly successful example, in terms of both geographic range of use and relative simplicity in formulation and preparation, is the urea-molasses multi-nutrient block technology. This publication provides a comprehensive overview of development and use of the block technology in countries around the world and it might be of great practical value to extension workers, students, researchers and those thinking of using such feed supplementation technology or of starting commercial production.--Publisher's description.

Globally, dairy and meat production has become an extremely competitive industry. The world milk production is predicted to grow significantly by 2020 with the emergence of new consumers in developing countries. Yet, there is still intense competition for the industry to attract and retain consumers in the more established markets. Consumers continue to demand safe, high quality milk and meat products at competitive prices compared to other high protein food alternatives. To ensure the sustainability of both dairy and beef industries, producers must endeavour to seek new technologies to improve production efficiency whilst lowering the cost of production to produce a quality product. This edited collection of papers is taken from a seminar that brought together some of the world’s leading authorities in the field of ruminant nutrition and production. The fundamental theme is to re-examine the current trends in productivity within the dairy and beef industries, and to identify nutritional and managerial means to improve competitiveness. The papers also consider the importance of animal health together with novel strategies for disease control. ‘Gaining the edge in ruminant production: Nutritional strategies for optimal productivity and efficiency’ is aimed at nutritionists, veterinarians and animal producers as well as students and researchers studying animal and applied biological sciences

Issue for 1954 accompanied by separately published section with title: Projects listed by agencies.

"Feed efficiency is increasingly seen as an important factor in both the economic viability and environmental sustainability of cattle production. This book provides beef industry professionals and researchers with a thorough yet concise overview of feed efficiency research. Coverage includes efficient production in a wide range of systems and environments, with topics ranging from economic evaluation to the physiological and genetic basis of feed efficiency. The book also looks at how a fuller understanding of feed efficiency is leading to new selective breeding efforts to develop more efficient cattle"--

The greatest challenge of our time is to produce sufficient food ot keep pace with the rapidly growing population. In the opinion of experts, during the next 25 years there will be a need for as much food as was produced in the entire history of mankind to date. Of the various measures available, improvement in agricultural productivity is judged as the ultimate means of augmenting food production and supplies. In this Handbook, an international team of experts consider the most important factors affecting production of both crops and livestock. This Handbook is intended as a scientific guide to practitioners and students, as well as to researchers, who should find here stimulating ideas for further exploration.

Animal Agriculture: Sustainability, Challenges and Innovations discusses the land-based production of high-quality protein by livestock and poultry and how it plays an important role in improving human nutrition, growth and health. With exponential growth of the global population and marked rises in meat consumption per capita, demands for animal-source protein are expected to increase 72% between 2013 and 2050. This raises concerns about the sustainability and environmental impacts of animal agriculture. An attractive solution to meeting increasing needs for animal products and mitigating undesirable effects of agricultural practices is to enhance the efficiency of animal growth, reproduction, and lactation. Currently, there is no resource that offers specific knowledge of both animal science and technology, including biotechnology for the sustainability of animal agriculture for the expanding global demand of food in the face of diminishing resources. This book fills that gap, giving readers all the necessary information on important issues facing modern animal agriculture, namely its sustainability, challenges and innovative solutions. Integrates new knowledge in animal breeding, biotechnology, nutrition, reproduction and management Addresses the urgent issue of sustainability in modern animal agriculture Provides practical solutions on how to solve the current and future problems that face animal agriculture worldwide

"The concept for this text arose from the 18th Discover Conference on Effect of the Thermal Environment on Nutrient and Management Requirements of Cattle, which was held at the Brown County Inn in Nashville, Indiana November 2-5, 2009"--Pref.

This Book of Abstracts is the main publication of the 66th Annual Meeting of the European Federation for Animal Science 2015 in Warsaw, Poland. It contains abstracts of the invited papers and contributed presentations. The meeting addressed subjects relating to science and innovation. Important problems were also discussed during the sessions of EAAP's nine Commissions: Animal Genetics, Animal Nutrition, Animal Management and Health, Animal Physiology, Cattle Production, Sheep and Goat Production, Pig Production, Horse Production and Livestock Farming Systems.

This comprehensive book integrates new technology and concepts that have been developed in recent years to manage dairy farms in a profitable manner. The approach to the production of livestock and quality milk is multidisciplinary, involving nutrition, reproduction, clinical medicine, genetics, pathology, epidemiology, human resource management and economics. The book is structured by the production cycle of the dairy cow covering critical points in cow management. Written and edited by highly respected experts, this book provides a thoroughly modern and up-to-date resource for all those involved in the dairy industry.

Dr. Anjali Aggarwal is working as a Senior Scientist at National Dairy Research Institute, Karnal (India). She holds a PhD degree in Animal Physiology and is involved in research and teaching at post-graduate level. Her area of research work is stress and environmental physiology. She has more than 50 publications, two technical bulletins, four manuals and many book chapters to her credit. She has successfully guided many post-graduate and PhD students. Her major research accomplishments are on microclimatic modification for alleviation of heat and cold stress, mist and fan cooling systems for cows and buffaloes, and use of wallowing tank in buffaloes. Her work involves the use of technology of supplementing micronutrients during dry period and early lactation to crossbred and indigenous cows for alleviating metabolic and oxidative stress and improved health and productivity. Studies are also done in her lab on partitioning of heat loss from skin and pulmonary system of cattle and buffaloes as a result of exercise or exposure to heat stress. Dr. R.C. Upadhyay is working as Head, Dairy Cattle Physiology Division at National Dairy Research Institute, Karnal (India). He graduated in Veterinary Sciences and obtained his PhD degree in Animal Physiology. His area of recent research is climate change, stress, and environmental physiology. His major research accomplishment is on climate change impact assessment of milk production and growth in livestock. His work also involves studying methane conversion and emission factors for Indian livestock and use of IPCC methodology of methane inventory of Indian livestock. Heat shock protein-70 expression studies in cattle and buffaloes are also done in his lab. Draught animal power evaluation, fatigue assessment, work-rest cycle and work limiting factors form the highlights of his work. Studies on partitioning of heat loss from skin and pulmonary system of cattle and buffaloes and electrocardiographic studies in cattle, buffalo, sheep and goat are also undertaken in his lab. He has more than 75 research papers, four books and several book chapters to his credit. Technologies developed and research done by him include methodology of methane measurement: open and closed circuit for cattle and buffaloes; inventory of methane emission from livestock using IPCC methodology; livestock stress index: thermal stress measurement based on physiological functions; and draught power evaluation system

and large animal treadmill system. He received training in Radio-nuclides in medicine at Australian School of Nuclear Technology, Lucas heights, NSW, Australia in 1985 and Use of radioisotopes in cardiovascular investigations at CSIRO, Prospect, NSW, Australia, during 1985-86. He has guided several post-graduate and PhD students. He is recipient of Hari Om Ashram Award-1990 (ICAR) for outstanding research in animal sciences.

Issues in Animal Science and Research / 2011 Edition is a ScholarlyEditions™ eBook that delivers timely, authoritative, and comprehensive information about Animal Science and Research. The editors have built Issues in Animal Science and Research: 2011 Edition on the vast information databases of ScholarlyNews.™ You can expect the information about Animal Science and Research in this eBook to be deeper than what you can access anywhere else, as well as consistently reliable, authoritative, informed, and relevant. The content of Issues in Animal Science and Research: 2011 Edition has been produced by the world's leading scientists, engineers, analysts, research institutions, and companies. All of the content is from peer-reviewed sources, and all of it is written, assembled, and edited by the editors at ScholarlyEditions™ and available exclusively from us. You now have a source you can cite with authority, confidence, and credibility. More information is available at http://www.ScholarlyEditions.com/.

This Book of Abstracts is the main publication of the 69th Annual Meeting of the European Federation of Animal Science (EAAP). It contains abstracts of the invited papers and contributed presentations of the sessions of EAAP's eleven Commissions: Animal Genetics, Animal Nutrition, Animal Management and Health, Animal Physiology, Cattle Production, Sheep and Goat Production, Pig Production, Horse Production and Livestock Farming Systems, Insects and Precision Livestock Farming.

Abstract: The objective of this dissertation was to address animal welfare as a continuous state as it pertains to dairy cattle and their environment. Chapter 1 reviews the concept of animal welfare and how to assess it scientifically, based on the three critical components of welfare proposed by animal welfare scientists: 1) the animal's health and biological functioning, 2) the affective state of the animal, and 3) the animal's ability to display innate behavior. Chapter 2 thoroughly reviews the literature pertaining to Chapters 3, 4, 5, and 6, beginning with the welfare of the dairy calf in utero, continuing through the pre-weaning phase for young heifer calves in relation to the benefits of social companionship, and concluding with the importance of the environment to the welfare of the mature dairy cow. Chapter 3 acknowledges that animal welfare science thus far has primarily considered the homeostatic challenges production animals may encounter after birth; however, it emphasizes that the prenatal period is also of critical importance to mammalian species, as this period of development may significantly influence and predetermine the capability of offspring to respond and adapt to their future environment. Chapter 3 specifically investigates the prenatal period in relation to maternal social stress experienced by overstocking the feeding area for multiparous cows during late gestation and how this may affect the postnatal growth of the offspring. The results of this first experiment indicate that the experimental conditions of overstocking imposed did not compromise the postnatal growth of the offspring through weaning. Chapter 4 continues to examine the effect of pair housing on the behavior and performance of Jersey heifer calves during the milk-feeding phase; the majority of studies have been conducted with Holstein calves, and it is currently unknown if Jersey calves behave the same as Holstein calves when pair-housed. Calves housed in pairs performed better than calves housed individually, especially during the weaning period. However, cross-sucking behavior was prevalent, as calves were fed milk via bucket. Future research should aim to reduce cross-sucking behavior within the Jersey breed through alternative feeding systems or environmental enrichment. Lastly, Chapters 5 and 6 examine the effect of overstocking the feed bunk during the dry period on dairy cow metabolic health, stress, productivity, and indicators of cow temperament. Although the overstocking conditions imposed did not compromise metabolic health or productivity, overstocking the feed bunk made cows less approachable by an approaching experimenter.

This is the book of abstracts of the 16th International Conference on Production Diseases in Farm Animals, held in Wageningen, the Netherlands, June 20-23 2016.

Introduction; Importance of the study; Objectives of the study; Review of literature; Productive performance; Dairy animals for philipine conditions; Some factors affecting milk yield; Milk production records; The performance of holstein and their fractional crosses; Reproductive performance; Number of services per conception; Days open; Calving interval; Age at first calving; Birth weight of calves; Effects of season of calving to milk production; Daily vs. regular interval milk recording; The DTRI farm management system; Feeding management; Breeding and health management; Milking management; Materials and methods; Time and location of the study; Data collection; Statistical analyses; Results and discussion; Productive performance; Actual milk yield; Lactation length; Reproductive performance; Calving interval; Days open; Services per conception; Age at first calving; Information on calves; Calf weight; Sex ratio of calves; Incidence of abortions and stillbirths by blood group; Milk production as affected by season of calving; Daily vs. regular interval milk recording; Summary of results; Conclusions, implications and recommendations; Literature cited; Appendices.

This issue of Veterinary Clinics: Food Animal Practice, Guest Edited by Dr. Nigel B. Cook, in collaboration with Consulting Editor Dr. Robert Smith, focuses on Housing to Optimize Comfort, Health and Productivity of Dairy Cattle. Article topics include: The housing dilemma: natural living vs. animal protection; Calf barn design and management; Lying time and its importance to the dairy cow: impact of stocking density and time budget stresses; Feeding behavior, feed space and bunk design, and management for adult dairy cattle; Maximizing comfort in tiestall housing; Free stall design and bedding management; Maternal behavior and design of the maternity pen; Housing the cow in transition to optimize early lactation performance; Ventilation systems for adult dairy cattle; Cooling systems for dairy cows; Designing dairy herds with automated milking systems; and Low stress handling areas for dairy cow barns.