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Altri autori (Persone)	UpadhyayRamesh
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	CHAPTER 1 Thermoregulation -- CHAPTER 2 Heat stress and Hormones -- CHAPTER 3 Heat Stress and Milk Production -- CHAPTER 4 Heat stress and Reproduction -- CHAPTER 5 Heat stress and immune function -- CHAPTER 6 Biological Rhythms -- CHAPTER 7 Shelter Management for Alleviation of Heat Stress in Cows and Buffaloes.
Sommario/riassunto	The book is on livestock with specific reference to heat stress and its alleviation. The topic is very pertinent in light of the impacts of climate change on livestock production and health. Work related to effect of heat stress on animal productivity, immunity and hormonal levels is discussed in detail. Heat stress occurs in animals when there is an

imbalance between heat production within the body and its dissipation. Thermoregulation is the means by which an animal maintains its body temperature. Under heat stress, a number of physiological and behavioral responses vary in intensity and duration in relation to the animal genetic make-up and environmental factors. In response to stress, mammals set physical, biochemical, and physiological processes into play to try and counteract the negative effects of heat stress and maintain thermal equilibrium. Adaptation to heat stress requires the physiological integration of many organs and systems viz. endocrine, cardiorespiratory and immune system. Heat stress also lowers natural immunity making animals more vulnerable to disease in the following days and weeks. The decrease in fertility is caused by elevated body temperature that influences ovarian function, estrous expression, oocyte health, and embryonic development. The increasing concern with the thermal comfort of dairy cows is justifiable not only for countries occupying tropical zones, but also for nations in temperate zones in which high ambient temperatures are becoming an issue. Improving milk production is, therefore, an important tool for improving the quality of life particularly for rural people in developing countries. The environmental conditions necessitate reduction of heat stress due to solar radiation and heat. The book discusses all these aspects in detail. Recent works related to effect of heat stress on animal productivity, immunity and hormonal levels are also discussed in the book. Information on biological rhythm is also included. The book also discusses the methods for alleviation of heat stress in livestock, especially cows and buffaloes. It is be a ready reckoner for students, researchers, and academia and would pave way for further research.