

LIVESTOCK METEOROLOGY

Weather and climate play an important role in animal husbandry and livestock production. While climate determines the adaptability of a particular animal in a given region, weather determines animal health and day-to-day performance. Altogether twenty seven chapters are included in this book, covering basic aspects of atmospheric phenomena and its applications in the field of animal agriculture.

In nutshell, the textbook revolves around basic concepts of livestock meteorology, effects of various weather elements and indices on animal physiology, relevance of modification of microclimate, livestock advisory based on weather forecasting, effects of weather and climate on diseases including UV radiation effects, meteorological instruments, units and computations, statistical methods in livestock meteorology and climatology of India.

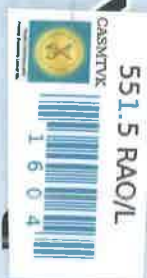
This is unique publication and is of immense use to the students, faculty members, researchers, scientists and students of animal husbandry, livestock meteorology, climate science, climate change and animal agriculture. It will be a reference material to all those who are interested to understand the impact of weather and climate on animal husbandry and livestock management. The Editors' earnest hope is that the textbook will be widely read and discussed among the scientific community in the field of climate change and animal agriculture.

- Introduction to Livestock Meteorology
- Weather and Climate Concepts in Livestock Environment
- Role of Biometeorology in Livestock
- Microclimate and Animal Husbandry
- Role of Weather in Livestock Management
- Thermal Indices and Dairy Cattle Management
- Weather Extremes and Livestock Production Under Humid Tropics
- Different Heat Stress Indices to Quantify Stress Response in Livestock and Poultry
- Temperature Effects on Milk Composition and Production in Livestock
- Temperature Regulation and Heat Exchange Mechanism Under Environmental Stress in Farm Animals
- Physiology of Stress in Animals
- Assessment of Stress in Livestock
- Modeling of Greenhouse Gases and Its Significance in Livestock Farms
- UV Radiation and Sunburns on Animals
- Impact of Climate on Foot and Mouth Disease
- Effect of Climate on Animal Diseases
- Weather Forecasting and Livestock Advisory
- ITK Tools for Weather Forecasting Through Biological Indicators
- Indian Climatology
- Meteorological Instruments for Livestock Management
- Automatic Weather Station and UV-Biometer
- Units and Computations
- Statistical Methods in Livestock Meteorology
- Impact of Climate on Livestock
- Heat Stress Management in Poultry
- Role of Climate in Reproductive Pattern of Small Ruminants in the Humid Tropics
- Diseases and Climate Change

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Editors

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Livestock Meteorology

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