



# AGRI MAGAZINE

(International E-Magazine for Agricultural Articles)

Volume: 03, Issue: 05 (May, 2026)

Available online at <http://www.agrimagazine.in>

© Agri Magazine, ISSN: 3048-8656

## Summer Management of Dairy Animals

\*Dr. K. Vijay

Asst. Professor, Department of Livestock Production Management,  
College of Veterinary Science, Rajendranagar, P.V. Narsimha Rao  
Telangana Veterinary University, India

\*Corresponding Author's email: [vijjuvet@gmail.com](mailto:vijjuvet@gmail.com)

Climate change, rising temperatures, hot winds, and water scarcity are making summers harsher every year. During peak summer months, especially in May, temperatures soar from early morning itself, creating severe stress on dairy animals. High environmental temperatures adversely affect cows and buffaloes, leading to reduced feed intake, decline in milk production, poor heat signs, reproductive disorders, and sometimes even heat stroke-related deaths. However, with proper scientific management practices, farmers can successfully protect their dairy animals from summer stress and maintain milk production even during extreme heat conditions.

### Understanding Heat Stress in Dairy Animals

When the body temperature of an animal rises above its normal physiological limit, the animal experiences heat stress. Crossbred cows, exotic breeds, and buffaloes are particularly vulnerable during summer.

Buffaloes are more susceptible because:

- They possess dark skin, which absorbs more heat.
- They have fewer sweat glands, reducing their ability to dissipate heat efficiently.

During hot weather, animals expend more energy trying to regulate body temperature. As a result:

- Feed intake decreases.
- Water consumption increases.
- Milk yield declines.
- Reproductive efficiency is affected.

Farmers should carefully observe animals daily during summer months for early signs of heat stress.

### Signs of Heat Stress

Common symptoms include:

- Rapid breathing with open mouth
- Excessive thirst
- Profuse salivation
- Weakness and dullness
- Loss of appetite
- Frequent lying down

In severe cases:

- Animals may stagger while walking.
- Body temperature rises significantly.
- Sudden drop in milk yield may occur.

Immediate action is necessary to prevent serious complications.

## First Aid for Heat Stroke

If an animal suffers from heat stroke:

- Immediately move it to a shaded area.
- Wash the body with cool water.
- Place a cold wet cloth, gunny bag, or ice pack over the head.
- Provide water mixed with jaggery and salt.
- If necessary, administer glucose saline under veterinary supervision.

Farmers should contact the nearest veterinarian without delay in severe cases.

## Housing Management During Summer

Providing comfortable housing is one of the most important measures to reduce heat stress.

- Animal sheds should preferably be constructed in an east–west direction to minimize direct sunlight exposure.
- Sheds should remain open and well-ventilated for proper airflow and natural light.
- Roofs made of metal sheets can be covered with dry grass, palm leaves, or coconut fronds to reduce internal temperature.
- Hanging wet gunny bags around the sheds during the hottest part of the day helps create a cooling effect. The bags should be rolled up or removed during the night hours to reduce humidity inside the shed.
- Shade trees such as Neem, Drumstick, and Subabul can be planted around sheds for natural cooling.
- Commercial dairy farms may also use, Fans, Foggers and Sprinklers for evaporative cooling effect.

These cooling systems provide considerable relief to dairy animals during extreme heat.

## Water Management

Water management becomes critically important during summer.

Due to excessive heat, a dairy animal may require 60–100 litres of water per day depending on production level and environmental conditions.

Therefore:

- Clean, cool drinking water should be available round the clock.
- Water troughs must be cleaned daily to prevent digestive disorders caused by contaminated water.
- Buffaloes benefit greatly from bathing two to three times daily or spending some time in ponds or water bodies (wallowing) to reduce body heat.

## Nutritional Management

Reduced feed intake during summer often lowers:

- Total milk production
- Milk fat percentage
- Milk protein percentage

This effect is particularly noticeable in crossbred cows such as Holstein Friesian Cattle and Jersey Cattle. Hence, special attention must also be given to feeding practices during summer because digestion slows down under heat stress.

- Animals should be taken for grazing only before 10 AM and after 4 PM.
- During midday heat, animals should remain inside sheds.
- Green fodder should be supplied as much as possible.
- When green fodder is unavailable, alternatives such as silage, hay, and Azolla may be used.
- Mineral mixture, salt, and electrolytes should be supplemented regularly.
- Easily digestible feeds such as gruel, porridge, and fermented cereal mixtures are especially useful during summer.
- Slightly moist concentrate feed improves palatability and feed intake.

## Reproductive Problems During Summer

Summer stress also negatively affects reproduction.

Common reproductive issues include:

- Weak or silent heat signs
- Reduced conception rate
- Longer calving intervals

To minimize these problems:

- Maintain a cool environment for animals.
- Ensure continuous access to cool drinking water.
- Provide green fodder and balanced nutrition.
- Supplement minerals and vitamins regularly.
- Perform artificial insemination during cooler hours such as early morning or evening.

## Disease Prevention

Heat stress weakens immunity, increasing the risk of diseases such as:

- Foot and Mouth Disease
- Black Quarter
- Haemorrhagic Septicaemia

Hence:

- Vaccinations should be administered on time.
- Deworming should be carried out regularly.
- Animal sheds should be kept clean and hygienic.
- Measures should be taken to control flies, mosquitoes, and ticks.

By taking the above precautions during summer, dairy farmers can greatly improve the health and productivity of their animals. Proper housing, clean drinking water, balanced nutrition, hygiene, and scientific management practices help maintain milk production and reduce economic losses during hot weather.

**“Providing cool comfort to dairy animals during summer means better profits for farmers.”**