

legend Heat Detection Systems

An accurate heat detection program leads to higher pregnancy rates. Higher pregnancy rates result in more pregnant cows, fewer days open and more profitability for the dairy. The Legend Heat Detection system is a radio-telemetric automated heat detection system that records activities of cows ten times per hour, and transmit high resolution data to the Legend Track a Cow software via a receiver.

The Legend Heat Detection System consists of three main components:

1. Pedometers, Legend Track a cow
2. Receiving System
3. Software, Legend Track a cow

1. Pedometers, Legend Track a Cow

Main features:

- Smallest long range pedometer in the market, weighs only 2.65 ounces
- The only long range radio leg pedometer in the market
- Extremely reliable, 5 years prorated regressive warranty
- Teflon alike enclosure with simple strap attachment
- No battery replacement and no IR lens
- Gathers data from the cows in several (6-7) minutes intervals
- Real time telemetry and high resolution data
- In-heat events are detected quickly



2. Receiving Components

a. Antennas

- WIP antenna has a radius of 450 feet
- Yagi antenna, tracking distance of 1,800 feet directionally

b. Receiver

- 433.932MHz ISM band
- Enables frequent data transfer from about 250 cows
- Transmit high-resolution data on activity
- Works with 24 V AC (comes with adapter 110/24v)



c. Connection box

- The interface between receiver and the computer - USB
- Works with 24V AC (comes with adapter 110/24v)



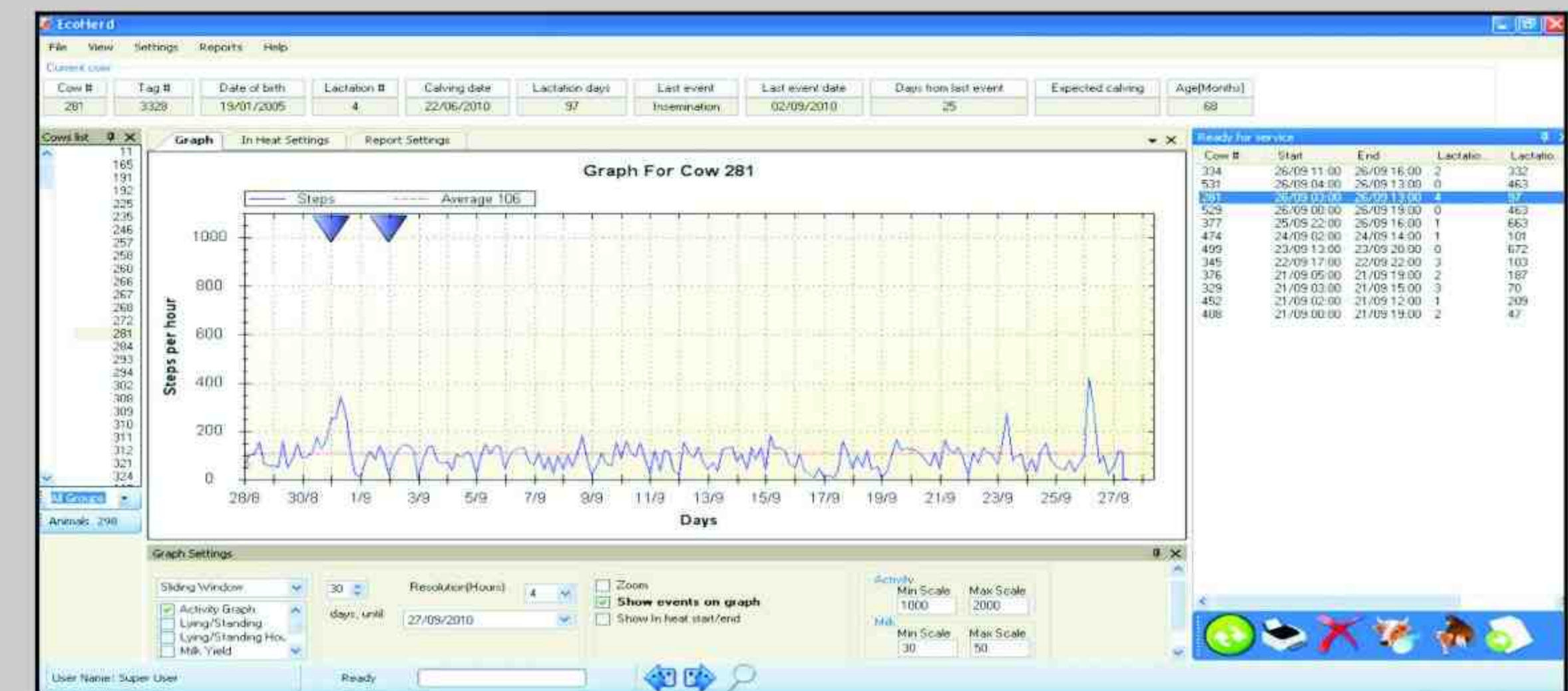
legend Software Track a Cow

Reports

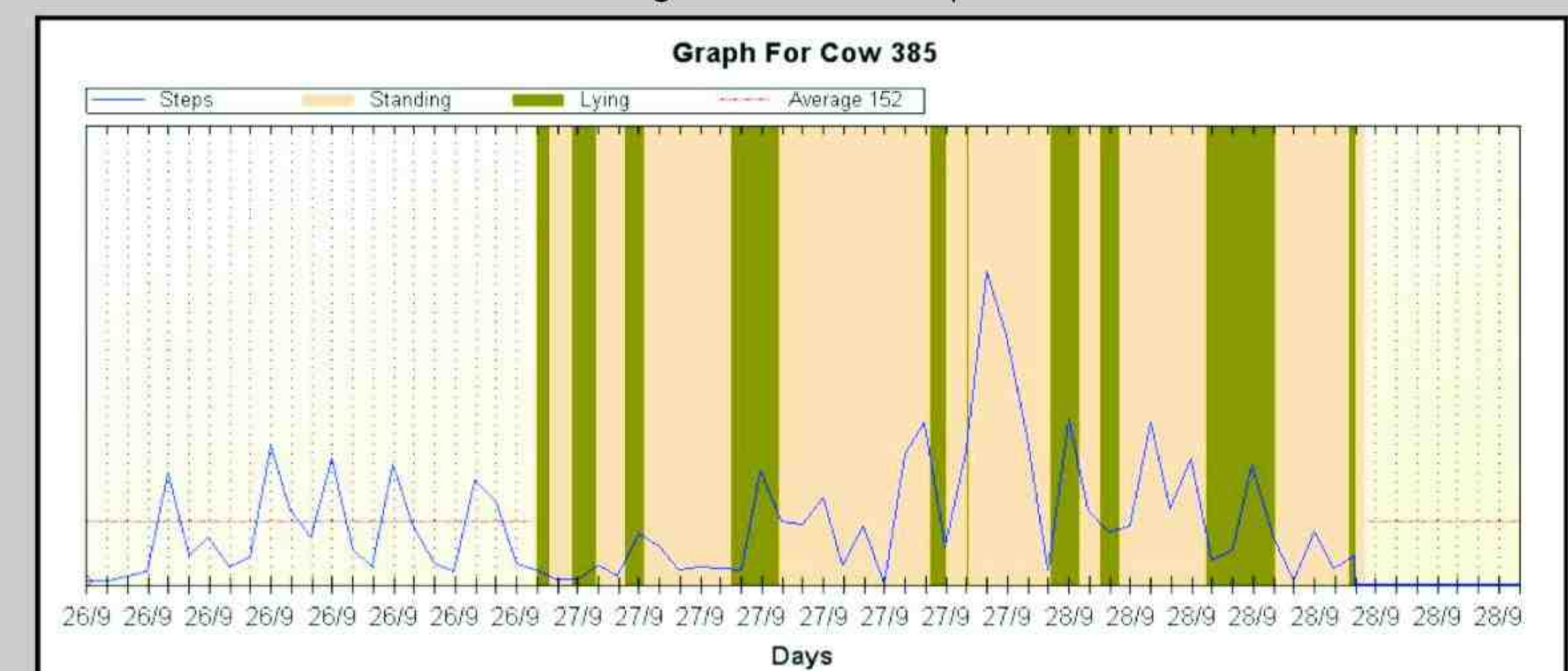
- Ready for service - Cows in-heat that are ready for insemination.
- Suspected for in-heat - Cows with high activity that are suspected to be in-heat.
- Cows in-heat - Cows with in heat or insemination event.
- Irregular behaviour - Exceptions of low activity cows, high activity and activity related to certain hours or animal conditions.
- Daily average steps per hour over the lactation.

Graphs

- Activity in a convenient sliding window. Resolution scale: 1, 2, 4, 6, 8, 12, 24 hours, up to 60 days history.
- Posture (lying/standing) graph in combination with activity.
- Selected lactation.
- Multiple lactations.



High Resolution Graph

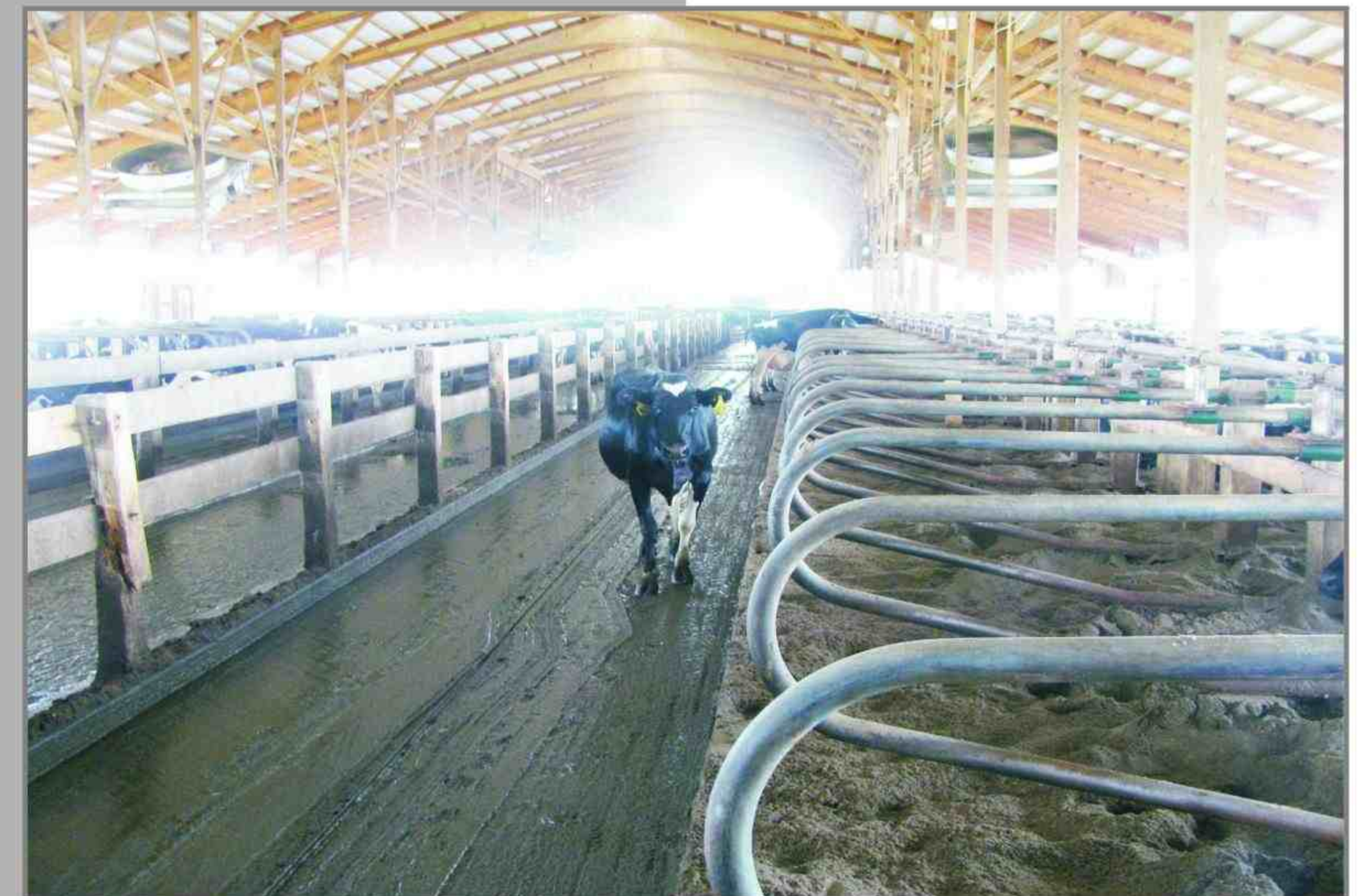
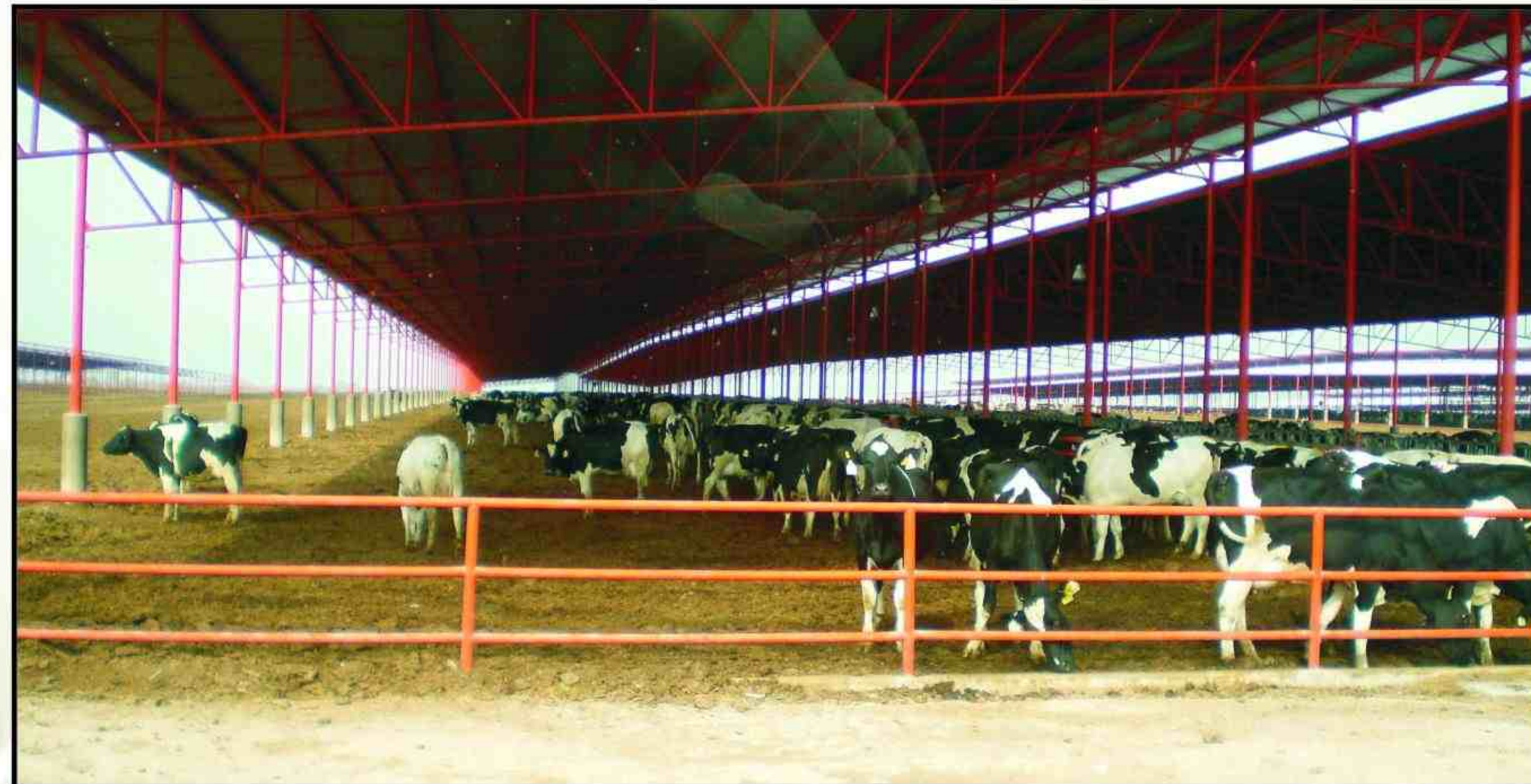
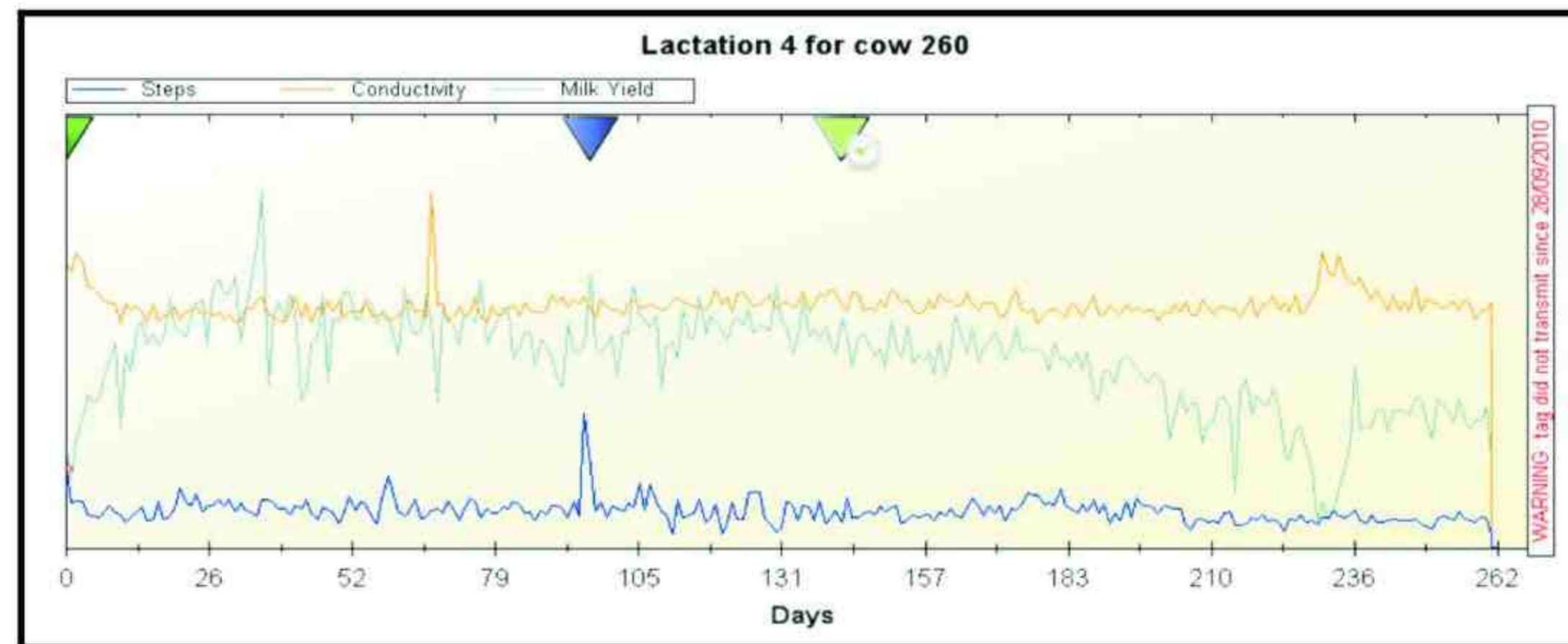


Lying/Standing and Activity Graph

legend Pedometer Track a Cow

Health and Fertility Monitoring:

- Reports showing the status of the animals (dry off date, heat date, and pregnancy diagnosis)
- Herd treatment reports for CIDR, PMSG, and insemination
- Calving report
- Reporting showing irregularities in activities and milking



legend *Connection to cows*

Legend Heat Detection Systems