

## BOVINE BRIEF

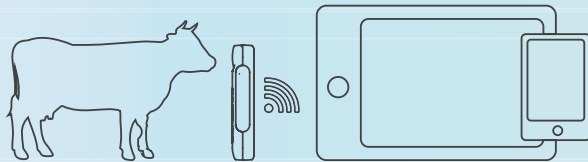
***feveR!*™ IS A UNIQUE WIRELESS VETERINARY THERMOMETER WHICH CREATES PRECISION, REAL TIME, SMART DATA**

that can be immediately reported to an android tablet and the cloud. This data is now available to assist and determine animal health, risk assessments, treatment needs, treatment success, performance decisions, etc.

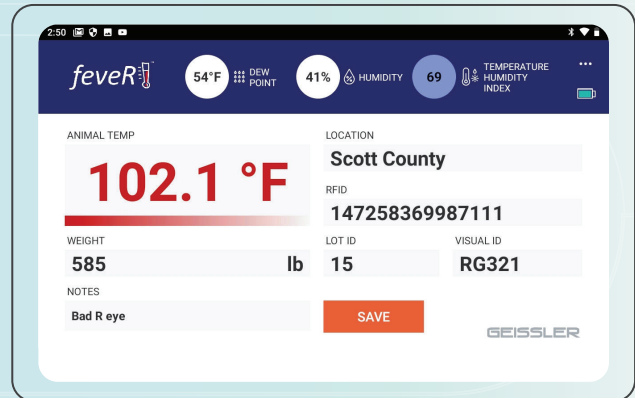
# WHAT FEATURES DOES *feveR!*<sup>™</sup> HAVE THAT ARE 100% UNIQUE OVER CURRENT LARGE ANIMAL THERMOMETERS?

## WIRELESS WHICH ALLOWS FOR

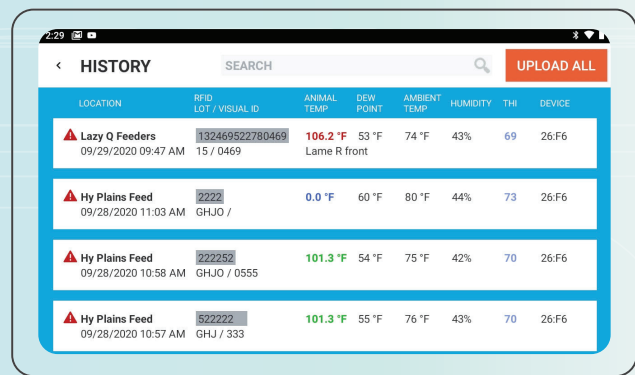
- + Temperature immediately displayed on Android tablet & the cloud
- + The recorded body temperature is linked to a specific individual animal that is **immediately recorded** into the app, cloud, or other animal health software. The animal identification is manually entered or it can be **automatically** entered via feveR's **internal RFID reader**. The feveR app is compatible with other RFID readers.
- + **New level of precision** for data collection, storage, security, and retrieval.
- + All temperature & supporting data will be available on the feveR! app and stored in the cloud.
- + **No limit to number of temperatures and data** which is recorded.
- + Data will be available and useful for deeper evaluation involving the impact and correlation of various other values including animal temperature, ambient temperature, humidity, dew point, Temperature Humidity Index (THI), location, time, weight, and etc.
- + **feveR! can be linked to onsite feedlot, dairy, stocker, research and other animal health software** for immediate data entry.



CLOUD-BASED DATA COLLECTION AND RETRIEVAL



MAIN TEMPERATURE DISPLAY ON TABLET



MAIN HISTORY DISPLAY ON TABLET AND IN CLOUD

## ENVIRONMENTAL HEAT AND HUMIDITY MEASUREMENT & EVALUATION

- + Ambient temperature, humidity, dewpoint will be measured and reported alongside the animal's individual body temperature.
- + feveR! will be able to calculate the **Temperature Humidity Index (THI)** to monitor and alert if dangerous levels of heat stress are present.
- + The **thermal environment** is of interest and importance to the management of bovine health, stress and performance. feveR! brings this information and supportive calculations to the care givers attention and documents this environmental data into the animal's health record.
- + All feveR! data will have **date and time recorded** as part of the record when using the app.
- + feveR! app will provide the **ability to identify the physical location** of the animal examined via the utilization of GPS. This ability to identify the location, along with day and time, will be a unique and potentially valuable part of the feveR! data set.

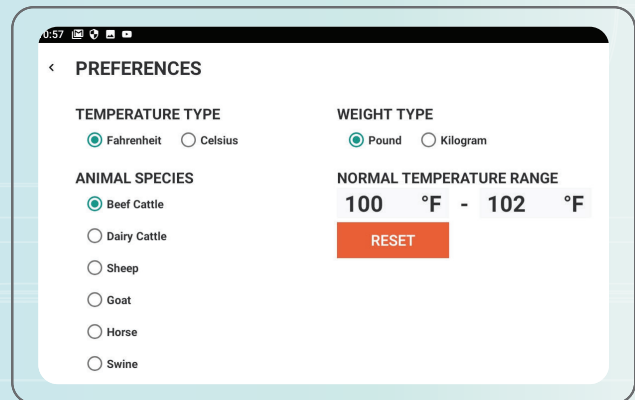
Temp		Relative Humidity (%)																		
F	C	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100			
77	25.0							72	72	73	73	74	74	75	75	76	76	77	MILD	
78	25.6							72	73	73	74	74	75	75	76	76	77	77	STRESS	
79	26.1					72	76	73	74	74	75	76	76	77	77	78	78	79		
80	26.7			72	72	73	76	74	74	75	76	76	77	78	78	79	79	80		
81	27.2		72	72	73	73	74	75	75	76	77	77	78	78	79	80	80	81		
82	27.8		72	73	73	74	75	75	76	77	77	78	79	79	80	81	81	82		
83	28.3		73	73	74	74	75	76	77	78	78	79	80	80	81	82	82	83	SEVERE	
84	28.9		73	74	75	75	76	77	78	78	79	80	80	81	82	83	84	84	STRESS	
85	29.4		74	75	75	76	77	78	79	79	80	81	81	82	83	84	84	85		
86	30.0		74	75	76	77	78	78	79	80	81	81	82	83	84	84	85	86		
87	30.6		75	76	77	77	78	79	80	81	81	82	83	86	85	85	86	87		
88	31.1		75	76	77	78	79	80	81	81	82	83	84	85	86	86	87	88		
89	31.7		76	77	78	79	80	81	82	83	84	85	86	86	87	88	89	89		
90	32.2		77	78	79	80	81	82	83	84	85	86	86	87	88	89	90	90		
91	32.8		77	78	79	80	81	82	83	84	85	86	86	87	88	89	90	91		
92	33.3		78	79	80	81	82	83	84	85	85	86	87	88	89	90	91	92		
93	33.9		79	80	80	81	82	83	84	85	86	87	88	89	90	91	92	93	VERY	
94	34.4		79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	SEVERE	
95	35.0		80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	STRESS	
96	35.6		80	81	82	83	85	86	87	88	89	90	91	92	93	94	95	96		
97	36.1		81	82	83	84	85	86	87	88	89	91	92	93	94	95	96	97		
98	36.7		82	83	84	85	86	87	88	89	90	91	93	94	95	96	97	98		
99	37.2		82	83	84	85	87	88	89	90	91	92	93	94	96	97	98	99		
100	37.8		83	84	85	86	87	88	90	91	92	93	94	95	97	98	99	100		
101	38.3		83	86	86	87	88	89	90	92	93	96	95	96	97	98	100	101		
102	38.9		86	85	86	87	89	90	91	92	96	95	96	97	96	98	101	102		
103	39.4		86	86	87	88	89	91	92	94	95	96	97	98	100	101	102	103		
104	40.0		85	86	88	88	90	91	93	94	95	96	97	99	100	101	103	104		
105	40.6		86	87	88	89	91	92	93	96	96	97	98	99	100	101	104	105	DEAD	
106	41.1		86	88	89	90	91	93	94	95	97	98	99	101	102	103	105	CATTLE		
107	41.7		87	88	89	91	92	94	95	96	98	99	101	102	103	105	106	107		
108	42.2		87	89	90	92	93	94	96	97	98	100	101	102	104	105	106	108		
109	42.8		88	89	91	92	94	95	96	98	99	101	102	103	105	106	107	109		
110	43.3		88	90	91	92	94	96	97	98	100	101	102	104	105	106	108	110		
111	43.9		89	91	93	94	95	96	98	99	101	102	103	105	106	107	109	111		

CATTLE VALUES WITH CRITICAL BREAKPOINTS\*

\*Source <http://veterinaryhandbook.com.au>

## ECONOMIC BENEFITS

- + Body temperature plays a key role in the development and implementation of most antibiotic therapy protocols. Errors in obtaining or reporting the temperature or by **mistakes** in transcribing the data itself **can result in undertreatment or overtreatment**. feveR! will eliminate these reporting and transcription errors and thus potentially improve treatment evaluation and success.
- + With improved temperature data management & accuracy, **along with consideration of local environmental microclimate values** (temperature, humidity, etc.) treatment protocols along with performance evaluations can be refined and compared to ultimately improve risk management and health outcomes.
- + Accuracy of animal temperature readings are economically important as many/most treatment protocols are driven in part by temperature values. Inaccurate or error prone readings in this one small area can have large economic consequences.
- + feveR! technology provides an important and necessary key piece in the development and implementation of efficient Precision Animal Health Care systems.



PREFERENCES SCREEN

## UNIQUE DESIGN

- + feveR! is compact, portable, and offers a unique design. This design allows for the permanently attached probe to be folded into the handle and the instrument easily and safely carried in a pocket if desired.
- + The unique “patent pending” feveR! probe is designed to obtain the animals temperature in **8 seconds or less**. This feature improves efficiency as well as operator safety.
- + A **flexible probe** with 5' of cord will be an additional option. The speed of operation with the device may negate the need for a flexible probe however operator safety may warrant its use.
- + The feveR! app can be programmed (via “Preferences”) to use color codes to indicate when certain measurements reach elevated or dangerous levels.
- + A fully charged feveR! instrument should provide 24 hours of continuous use.



FEVER! WITH ATTACHED PROBE EXTENDED

NOTE: Flexible probe not pictured.