EquiTrace
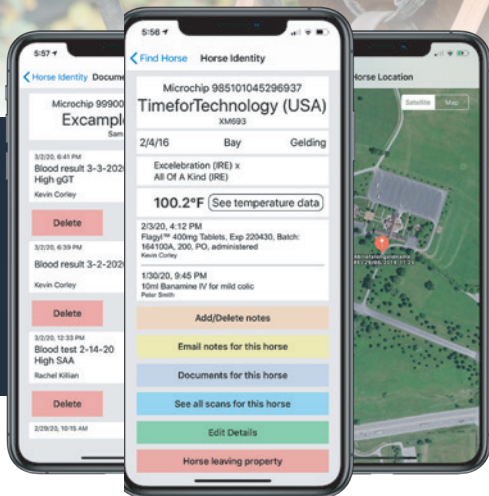
Trace and Track Horse Health

Remotely monitor the health status of horses, no matter where they are or where they go.

MERCK
Animal Health

What are Bio-Thermo® Microchips?

Bio-Thermo microchips are permanent identification devices that consist of a sterile transponder injection system. Each microchip is pre-programmed with a unique identification number, as well as a temperature-sensing functionality.

When Bio-Thermo microchips are used in conjunction with the EquiTrace™ app, temperatures can be quickly recorded and monitored in an easy to read chart directly within the app.

Unique temperature-sensing functionality:

- Bio-Thermo microchips present a patented built-in temperature biosensor[1], which measure an animal's temperature at the implantation site. It is an easy, safe and quick alternative method of taking multiple temperature measurements.

- GPR+ and HomeAgain® UWSR+ microchip readers will read and display the microchip temperature by connecting to the EquiTrace app.

Key structural and identification features:

- Unique identification number is encoded during the manufacturing process. Once the number is encoded, it cannot be altered and is compatible with ISO 11784/11785 readers and universal readers.

- Outer casing of the transponder is comprised of biocompatible glass with polymer sheath on one end called BioBond® anti-migration cap to help keep microchip in place in the animal's body.

- Bio-Thermo microchips measure 13mm long, with a diameter of 2.12mm, delivered in a 12-gauge needle.

APP FEATURES

EquiTrace™ is a complete monitoring and recording system for your practice or farm. It is a revolutionary new horse health app elegantly designed by linking a microchip scanner to your smart phone

🔒 **SECURE COMMUNICATION**

👁 **IDENTIFICATION**

📋 **MEDICATION & HEALTH RECORDS**
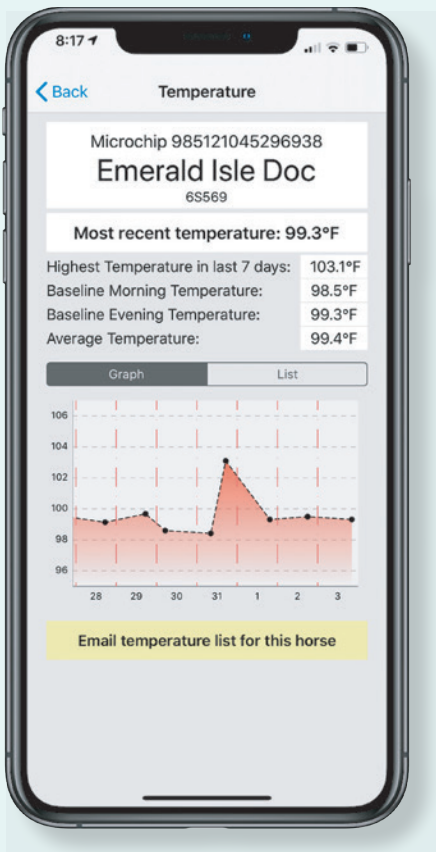
📍 **TRACEABILITY CAPABILITIES***

🌡 **TEMPERATURE MONITORING CAPABILITIES**

🕐 **SAVES TIME & RESOURCES**

✋ **REDUCES HUMAN ERROR**

*Ability to record location, date, and time when a horse's microchip is scanned
**ISO microchips comply with the international standards 11784 and 11785

EQUITRACE APP
FREQUENTLY ASKED QUESTIONS

Q: *Do I need to use a microchip reader with the EquiTrace app or does the app read the microchip implanted in my horse?*

A: A microchip reader is required. Horse microchips are on a different frequency than the Near Field Communication (NFC) chips typically used for retail payments, among other uses.

Q: *Does any microchip reader work with the app?*

A: No. In the USA, the app works with the Global Pocket Reader™ Plus (GPR+) and the HomeAgain® UWSR+ microchip readers.

Q: *If my horse does not have a temperature-sensing microchip, can I still use the EquiTrace app? If so, how would it help with my horse's management?*

A: The app works with ISO**, 15-digit standard microchips used in horses.

The app gives you complete control of your horse's health data with easy access to this information at any time. When treatments, vaccines or dentals are performed for your horse, that information can be immediately recorded within the app. This allows for remote management and sharing of important information with all necessary parties. The only functionality that will not work without the temperature microchip is the temperature-sensing functionality.

Q: *I would like to have everyone on the farm use the app. Do I have to pay a subscription for each person that uses the app on my farm?*

A: One person pays the subscription for the whole farm/training facility. That person can authorize other people on the farm to see and add to the data without others having to pay a subscription fee.

Q: *Can I locate my horse through the app?*

A: If GPS has been enabled for the app, locations for when the horse's microchip was scanned while connected to the app will be visible.

Q: *My farm has a low cell signal. Does the EquiTrace app still work?*

A: Yes. All functions are available with no internet connection. Information is stored on the phone and is synced as soon as there is an internet connection and the app is opened.

A cell signal is only required for looking up a new horse on a database (once they have been scanned once, they will be visible on the farm's account within the app) and syncing notes, temperatures, treatments and scans with other people on the same farm.

Q: What happens if one of the team members from my farm no longer works with us? Will they still see all the information on my horses?

A: The person who pays the subscription and controls the data has complete control of who sees the information on their horses. If a person has left the farm, go to *"Other Features"* then *"Remove A User"* to remove someone. They will lose access to all notes, scans, treatments and temperatures recorded on the farm.

Q: When a horse is sold to another farm, will the new owners have access to that horse's past information?

A: No, the new owner will not automatically have access to the information from that horse or the horse's existing EquiTrace™ profile. The only information that the new owners will be able to see is the identity of the horse. Everything else is private to the farm that created the data. However, if the original owner wants to share the existing data with the new owner, it can be exported as a .csv file and shared with the new owner. If the new owner would like to continue housing that horse's information within EquiTrace, they would need to download the app and create a new profile for the horse in their own account. The horse's original profile within EquiTrace cannot be transferred to the new owner's account.

Q: Is the data secure?

A: Yes. The data is encrypted when it is sent to the secure storage database. Each farm's data is encrypted separately, meaning that it is private to each farm.

Q: If I lose/break/change my phone, is my farm's data lost?

A: No. It is securely stored in the cloud. If you sign back into the app with your Farm Name, Username and Password, the data will sync back to your phone.

Q: Does the EquiTrace app work with both Apple and Android phones?

A: Yes. A farm can have a mix of Apple and Android phones, and the app experience will be virtually identical on both.

Q: Can I be authorized to see the data from more than one farm?

A: Yes. If you are invited to see data from another farm, you can either follow the SMS link, or go to *"Other Features"* then *"Join More Than One Farm"* and enter the new farm name. The person who controls the data will get a notification asking them if they authorized you to see the data.

Once you have joined additional farms, you can switch between them with the *"Change Farm"* button on the home screen. This button only appears if you are a member of more than one farm.

Q: I have a list of horses and their microchip numbers on my computer. How can I upload this into the app?

A: In the app, first go to *"Other Features"* then *"Import Horses From .csv file."* The app lists the column headings that should appear in the import file. Create a .csv file and save it to DropBox or (on iOS devices) iCloud, then import through this page.

An alternative is to send your list of horses in any format to the EquiTrace office (equitrace@equitrace.app). The list should include 15-digit microchip numbers and names of horses at a minimum. The information will be uploaded and ready for use within 72 hours.

Q: How do I authorize someone else to see the data from my farm?

A: There are two ways you can authorize someone to see your data:

The first is to go to *"Other Features"* then *"Invite New Users"* and select someone from your contacts to invite. They will receive an SMS message. They should click on it once to download the app, and then click on the same SMS message again to gain access to your farm. No further action is required by you. You can remove them at any time if you need to by selecting *"Manage Users."*

The second is to ask the person to download the app, and give them the exact name of the farm. If they enter the name of the farm, you will receive an alert telling you that they are applying for access to your data. If you open the app, you will get to a screen that allows you to accept or reject them. If you accept, you can remove them at any time if you need to by selecting *"Manage Users."* Different levels of access can be assigned to different users.

Q: How do I see all the scans / temperatures that have been recorded in the app in the last day / week / month?

A: If you go to *"See All Temperatures And Notes"* on the home page, you can choose a date range and then either view or export all the scans and notes for that date range.

Q: My farm manager is leaving and was the one paying the subscription. Can control of the app be transferred to someone else?

A: Yes. Your farm manager should go to *"Other Features"* then *"Transfer App Management."* They can select another user on the farm to be the controller of the farm's data and app subscription.

Q: A horse has left the farm. How can I remove it, so it doesn't count towards the total number of horses in my subscription?

A: Go to *"Find Horse,"* then type in the name (or dam's name) of the horse. Go to the horse's own page and press *"Horse Leaving Property."* This will remove the horse from the farm total.

BIO-THERMO® AND GPR+
FREQUENTLY ASKED QUESTIONS

Q: What is a Bio-Thermo microchip? What is "microchip temperature"?

A: A Bio-Thermo microchip is primarily a permanent identification device with a patented built in temperature biosensor,[1] which measures the temperature at the implantation site.[2] It is an easy, safe, and quick alternative method of monitoring multiple temperature measurements.[3,4] Multiple Bio-Thermo temperature measurements taken consecutively can establish a trend of individual profile or average temperatures and variability. Atypical variations from this trend can be indicative of changes in an animal's well-being.

Microchip temperature measures the body temperature at the implantation site, on the left side of the neck halfway between the poll and withers, and approximately 1-2 inches below the mane in the nuchal ligament. This value differs from rectal temperature.

Q: How accurate is the temperature reading?

A: The Bio-Thermo microchip is able to measure temperature at the site of implantation with a degree of accuracy of $0.07 \pm 0.12°C$[5].

Q: My horse is already microchipped with a microchip that does not show temperature. Can I place a second microchip?

A: As microchips are primarily a permanent identification device, pre-programmed with a unique identification number, generally we do not recommend implanting a second microchip.

Q: Will the microchip wear out and need to be replaced? Does the temperature measured by the microchip need to be calibrated?

A: Bio-Thermo microchips are passive devices (no internal power source) and do not have any moving parts to wear out; therefore, its lifespan can be many decades. Similarly, the temperature sensing component, being part of its integrated circuit, also has a lifespan of many decades. Furthermore, there is no difference between the longevity of the temperature-sensing microchip and the longevity of the standard microchip. The temperature-sensing microchip is calibrated at production and there is no need for further calibrations.

> " *Invaluable - it's made my life so much easier.*"
>
> Tom Daly, Head Man at Rosewell Racing (D.K. Weld)

Q: Are the Bio-Thermo microchips ISO compliant?

A: Yes, the Bio-Thermo microchip is compliant with the ISO Standards 11784 and 11785 and meets FEI and USEF requirements.

Q: Does the microchip also work as a GPS?

A: No, the microchip does not work as a GPS for location. It is a passive radio frequency device for identification.

> " *The app / chip / scanner combination has saved at least two foals, by finding high fevers early before any other signs appeared.*"
>
> Rachael Kempster
> Kinsale Stud, Yorkshire, UK

1. For patent information: www.merck.com/product/patent/home.html.
2. Displayed temperature range: 91.4°F to 109.4°F. If the temperature is below or above this range, scanners will display "TEMP BELOW RANGE" or "TEMP ABOVE RANGE".
3. Auclair-Ronzaud, J. et al. 2020. No-Contact Microchip Monitoring of Body Temperature in Yearling Horses. J Equine Vet Sci. March 2020: 86(0): 102892.
4. Kang, H. et al. 2020. The Use of Percutaneous Thermal Sensing Microchips for Body Temperature Measurements in Horses Prior to, during and after Treadmill Exercise. Animals 2020, 10, 2274.
5. Langer, F.; Fitz, J. 2014. Ways to measure body temperature in the field, Journal of Thermal Biology 42 (2014) 46-51.

For details about the EquiTrace™ app and all of its powerful features, go to www.equitrace.app or contact your Merck Animal Health representative for more information.

DOWNLOAD EQUITRACE TODAY

Download on the **App Store**

GET IT ON **Google Play**

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