

Livestock Tracking

Satellite with high resolution, megapixel camera captures aerial image of location of RFID tag when signal is received.



Cow with RFID tag submits a signal to the satellite at the last point of contact before entering area out of range.

Broken fence

Cow beyond farm's perimeter



Aerial image captured by satellite showing last location of missing cow and where fence needs to be repaired.

Keeping track of livestock on a multi-acre farm and maintaining fences using traditional methods of cattle herding and patrolling fence lines is time consuming and laborious. An alternate method is needed that will be precise, instantaneous, and reliable.



Solution:

High resolution, megapixel cameras are utilized along with radio frequency identification (RFID) tags.

The livestock are injected with RFID tags, which allow the farmer to easily locate the cattle. When a cow moves outside of the RFID's range, a signal is sent out to a satellite which captures a high quality photo of the location of the signal before it is out of range.

The image is used to immediately locate areas of the fence which need to be fixed. It can also be used to identify livestock thefts, or animals who may be killing the cows.

This system gives the farmer real time surveillance of the livestock and the security of the farm. It is precise and pinpoints the exact area which has been compromised.