

# ***ELECTRONIC REMOTE TRAP MONITORING - WORK SMARTER WITH TRAPSMART™***

by Janet Brey

**W**hen Tom Watson was racing from Vernon to Hackensack, across 45 miles of congested NJ highways, to check his wildlife traps, he just knew there had to be a better way. It was 2006, and gas prices were on the rise, along with increasing regulations on animal protection. Tom, a licensed pest control professional had recently founded Independent Pest Control and was finding it harder and harder to be profitable. Offering good customer service and keeping up with the legal requirement to visit traps once every 24 hours was making it really difficult to make a profit.

Necessity is the mother of invention. Tom had an idea and contacted Jim Burgio, a technology expert who was developing

innovative GPS tracking applications. Jim embraced the challenge and was determined to provide an automated, fail safe system to notify a wildlife control professional as soon as an animal entered a trap. By 2010, the system was perfected and the TrapSmart remote trap monitoring system became commercially available.

## **Why Use Remote Trap Monitoring**

Let's face it; checking multiple wildlife traps in remote areas requires a lot of time and energy. In addition, it can be costly if you do not adhere to state trap visit regulations. Although it varies by state and animal, legal requirements generally require visiting a trap at least once every 24 hours. The penalties for non-

compliance resulting in loss of an animal can be prohibitive. In addition, the negative press from animal rights' groups and a court ruling could be disastrous.

If you have more than a few traps in multiple locations, remote systems are a godsend. Trying to check more than a few remote traps in any given day can be next to impossible. And, the longer the animal is in a trap, the more discomfort is inflicted on the animal. Needless to say, it is a complete waste of time and gas to check empty traps. Remote monitoring systems solve this issue and eliminate the need to visit empty traps.

Robert Waddell, a professional trapper and former instructor at the Fur Takers of America Trapper's

<b>Feature</b>	<b>TrapSmart WorldWide™</b>	<b>TrapSmart Deluxe Plus</b>	<b>TrapSmart Starter Plus</b>
Communication Method	Pure Satellite	GPS and Cellular	Cellular
Internet Maps	Yes	Yes	No
Date/Time	Yes	Yes	Yes
Trap Location	Yes	Yes	No
Connection Status	Yes	Yes	Yes
Multiple Trap Monitoring	Yes	Yes	Yes
Power Source	Battery	120v & Rechargeable Battery	120v & Rechargeable Battery
Battery Life	2 1/2 year	2 weeks	2 weeks
Alert Messages:			
Closed door	Yes	Yes	Yes
Low battery sensor	Yes	Yes	Yes
Low battery control unit	Yes	Yes	Yes
Email or Text Alert	Yes	Yes	Yes
Number of Contacts (text/email)	Unlimited	Unlimited	Unlimited
Solar port connection	No	Yes	Yes
Works with any trap	Yes	Yes	Yes

TrapSmart features and program options chart.

College, traps in 4 to 6 states annually. Using TrapSmart satellite trap sensors, he is able to manage traps in 3 states simultaneously - Missouri Mississippi and Alabama. With these satellite trap checkers (sensors), he is no longer restricted by a lack of cell phone service when working feral hogs in remote rural areas. "These devices allow us to efficiently and economically keep traps set 365 days a year in natural travel routes to intercept transient feral hogs as they move back into areas where they have been removed," says Robert. "Using the TrapsSmart system, all I need to do is make a call to a cooperating landowner, or one of my team, to have a trap cleared and re-set. Without this technology it would not be possible because of the labor and mileage to aggressively manage these feral hogs."

### Worldwide Coverage

TrapSmart offers three remote trapping systems to fit the needs of any wildlife control professional or researcher. Regardless of the system chosen, all are easy to set up. The basic components of the system are sensors, a control unit, lanyard (cord with 2 clips) and a service plan.

**TrapSmart WorldWide™** is the newest system and utilizes pure satellite technology that provides instant computer-based monitoring of trapping sites – 24/7 anywhere in the world. This system uses LEO (Low Earth Orbiting Satellite System) technology that increases the areas where trapping can operate. Since it does not use ground based cellular communication, there are virtually no dead coverage zones. The control unit is self-contained with the sensor and a 2 1/2 year battery. This system provides GPS web based, real time trap information including trap door closed activity, date/time, connection status,

trap address, longitude/latitude, internet maps and low battery alert messages. All trap activity alerts are delivered by text and/or email messaging. There is no limit to the amount of contact cell phone numbers and email addresses that can be notified.

**TrapSmart Deluxe Plus** is a real time trap information system that uses the 4G cellular network and SMS technology as the communication method. It offers alerts, location information, connection status and internet maps. Since this system transmits using both the 4G cellular network and SMS technology, the operating range is extended in areas with poor cell coverage. The **TrapSmart Starter Plus** is also a real time system; however, it removes the GPS/internet maps for a cost savings. It is designed for the professional who knows the location of where he is trapping.

Both operate on 120v power with a rechargeable battery. This allows for a wall outlet connection to recharge the control unit and provide constant power while plugged in. A solar port connection is also available for a solar panel and provides an additional power source. All information is delivered by text and/or email messaging and there is no limit of on contacts.

TrapSmart control units and sensor are purchased, whereas the service plan is paid for on a monthly basis. Jim Brancato, a pest control professional from Affiliated Pest Control located in Sparta, NJ, feels the cost of TrapSmart is inexpensive compared to all the running around he does checking traps on a daily basis. Jim uses it "on a regular basis with great success and would recommend it to any pest professional who is looking to reduce costs, improve performance and show compassion to the animals they trap."

### How TrapSmart Remote Trap Monitoring Works

The concept of remote trap monitoring is simple. A sensor is affixed to a wildlife trap. When an animal enters the trap, the door closes and the system sends a message to the wildlife control professional. However, when you look under the covers, you will find that the technology is quite advanced.

The best part about the TrapSmart system is the technology. While there are several remote monitoring systems available, TrapSmart is the only completely wireless remote trap system that offers a variety of options, including a pure satellite option, along with an extensive information reporting system, coordinated with



**Figure 1: TrapSmart sends a text alert to your mobile when the trap fires.**

an internet web-based interface, with real time internet maps. This means no wires hanging anywhere that will get torn up by animals. The results - a fully functional trapping and record keeping system.

TrapSmart sensors can be attached to any part of a moving cage trap, foothold or snare. To set up the trap, you attach one end of the lanyard (clip provided) to the switch on the sensor. The other end of the lanyard is clipped to the trap. Place your bait. When the wildlife takes the bait, the trap fires by pulling the clip out of the sensor and immediately sends you an alert message.

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Control units can be placed indoors as well as outdoors. There is no limit as to how many sensors can be associated with a control unit. Since the sensor uses radio frequency (RF) wireless technology to send the signal to the control unit, there are no wires to connect the sensor to the control unit. This is important since many traps have been rendered inactive due to wildlife, such as raccoons, chewing tasty wires.

**TrapSmart in Action**

Wildlife Technologies Canadian Expert Darcy Alkerton, is considered one of the top authorities in Canada on wildlife trapping. As an acclaimed CWCP (Certified Wildlife Control Professional), he was hired by Hydro One to administer a wildlife control program that includes trapping to protect Ontario Transformer Stations from wildlife that were damaging wires and causing outages. "I have a large area to protect and it includes mostly unmanned stations. With over 350 traps, I needed a reliable way to check the traps to ensure humane treatment for the animals in the extreme hot and cold weather" states Darcy. "With the TrapSmart system, I can respond quickly and treat the animal fairly.

As a result, we have reduced outages, saving millions of dollars. TrapSmart is the tool of the future for our wildlife control business."

Westchester County, NY faces a coyote control problem. Jim Dreisacker, the President and owner of Westchester Wildlife, has been tasked to help solve this problem. "In a highly populated area, getting to the trap before someone else does is very important," says Jim. "I rely on the immediate alerts from TrapSmart to get me to the trap right away."

The TrapSmart monitoring system enables you to continually monitor the status for all units in the field from any device - desktop, laptop, tablet or smart phone – 24/7. The GPS units transmit when the power is on, thus reducing the possibility of loss through theft. You can easily view locations and status of traps as shown in Figure 2.

**Challenge with Controlling Feral Hogs**

"On new jobs the TrapSmart trap checkers give me real time notifications that a trap has fired so I can check and service the traps during the night. This has increased my efficiency to nearly 100% of specific sounders or family groups of hogs as I can get any remaining hogs not captured in the trap. It allows me to quickly stalk

and shoot them so that the feral hogs near the trap do not become trap shy or educated about traps by witnessing other hogs in a trap. With the intelligence of feral hogs this is extremely important, states Robert Waddell. "TrapSmart's satellite trap checkers also help me separate my professional service to the landowner from "Bubba" down the road who just wants to come shoot hog."

Several US airports use TrapSmart to control birds and wildlife including Seattle Tacoma International Airport. When an alert was received by one of their control units, they discovered a bald eagle had been captured. "The immediate, real-time alert from the TrapSmart unit saved a valued member of a protected species," said James Burgio, co-creator of TrapSmart. "A quick and safe release avoided any danger to the bird and passengers on flights; allowing this national treasure to return to its natural environment unharmed."

**Future Plans for TrapSmart**

Tom and Jim are always improving the traps, communication systems and developing new types of tracking and trapping systems based on customer requests. "We are working on new wildlife tracking collars," states Tom Watson. "Every wildlife professional has their own unique challenges and we make sure we completely address each and every one."

Several states have approved the electronic trap monitoring: Ohio, Indiana, Minnesota, Connecticut, Illinois, Georgia and recently, Pennsylvania. Since it is a "win-win" for wildlife control professionals, wildlife and the environment, more states will likely approve the use of remote monitoring. Visit [www.trapsmart.com](http://www.trapsmart.com) for more information. ■

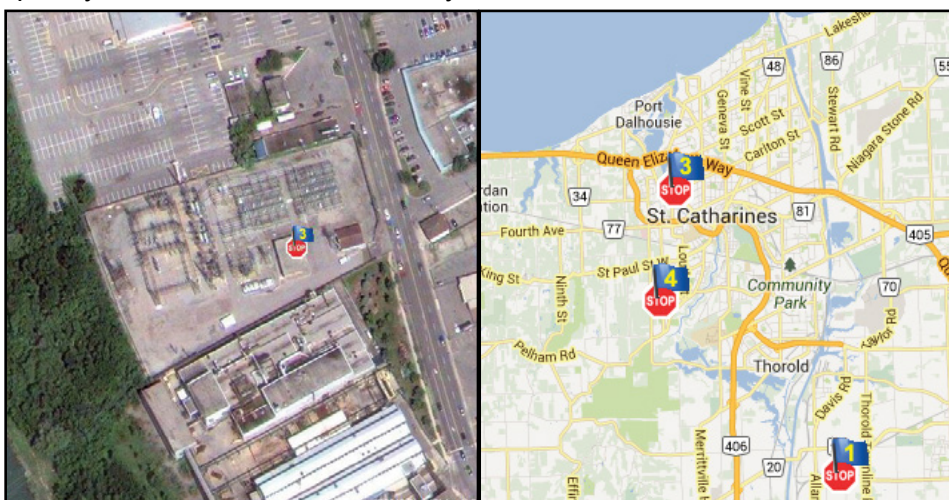


Figure 2: Monitor multiple locations with GPS and Internet Maps.