



Trap Monitors: A Comparison of Commercially Available Systems

Trap monitors are a tool that can potentially increase the efficiency of wildlife trap checks. The devices, which can be used with any type of trap, consist of small radio transmitters that emit unique pulse rates or send messages when an animal is captured. This allows for the remote monitoring of wildlife traps and helps to reduce fuel costs and time spent checking empty traps.



Feral hog caught in trap with Telonics, Inc. monitor.

Wildlife Services (WS) researchers compiled information on commercially available trap monitoring systems to help wildlife specialists determine which system might best meet their needs. Included in this Tech Note is a summary of the various systems' specifications such as approximate costs, activation methods, and notification options.

Though some state wildlife agencies approve commercially available trap monitors as legal methods for checking traps, always check to ensure that remote trap monitoring and the monitoring system used are in compliance with state trapping regulations. If the state has not approved the system as a legal trap check, then all traps must be physically inspected in accordance with the mandated requirements. Always remember that monitoring systems may fail and traps should be manually checked as needed; trap monitors should not be the only method of checking traps.

BENEFITS OF TRAP MONITORS

- Reduces time animals are in traps because it enables an immediate response
- Saves considerable time driving, hiking, or horseback riding to check traps
- Decreases fuel usage
- Enables field crews to prioritize trap checks in areas of high visibility or human use
- Makes 24-hour trap check regulations more logistically feasible

- Potentially saves WS and cooperators time and money if monitors are applied correctly

LIMITATIONS OF TRAP MONITORS

- Locations where specific trap monitoring systems can be used are limited by the method of communication (e.g., satellite or tower transmission)
- Trap monitors may be damaged by animals caught in traps
- Traps sprung without catching animals may activate monitors
- Initial equipment costs are relatively expensive
- Presence of some trap monitors may discourage animals from approaching trap sites
- Certain individual trap sets may not lend themselves to having a monitor attached to them



Before trap monitors were commercially available, many trappers and researchers created their own. This is still an option.

HELPFUL TIPS

- Call the manufacturer to place orders instead of purchasing over the internet; these companies are often able to tailor their products to meet your specific needs
- Always test trap monitors in any area where traps will be set before relying on them
- Place the trap monitor in locations that facilitate their communication system
- Be selective in where trap monitors are used to save on costs; use in areas where access is difficult or human traffic is high

TRAP MONITOR USE SUMMARY

When to Consider Use

When frequent visitation is limited or unwanted

When human and non-target animals frequent the area

When prioritization of checking individual traps is important

When accessing a trap site is difficult because of terrain or other reasons

When Not to Use

In areas where transmission reception is poor or obstructed

In areas where traps are easily accessible

Additional Information

For more information, please contact:
USDA-APHIS-WS
National Wildlife Research Center
Utah Field Station
4200 South 600 East Cache County Rd
Millville, UT 84326

You may also call NWRC at (435) 245-6091 or visit our Web site at www.aphis.usda.gov/wildlife_damage/nwrc.

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Comparison of Seven Commercially Available Trap Monitoring Systems

| Brand | American Wildlife Enterprises Trap Monitoring System | Advanced Telemetry Systems, Inc. Trap Monitor Series M4000 | Moultrie® Game Management System | Spypoint® Live Cellular Trail Camera | Telonics, Inc. Trapsite VHF Transmitters | Trap-Alert™ System | TrapSmart™ |
|--------------------|--------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| Photo |  |  |  |  |  |  |  |
| Approx. Cost | \$200 (not including telemetry equipment) | \$200 (not including telemetry equipment) | \$415 + cellular plan at \$30/mo. | \$399 + cellular plan at \$30/mo. | \$195 (not including telemetry equipment) | \$500 + cellular plan at \$200 for 3 mos. | \$670 + \$120 airtime for 3 months |
| Activation Method | Sprung trap pulls magnet from monitor | Sprung trap wiggles or shakes monitor | Real time photos from trail camera sent to website | Real time photos from trail camera sent to website | Sprung trap pulls magnet from monitor | Sprung trap pulls magnet from monitor | Sprung trap pulls clip from monitor |
| Alert Notification | Radio telemetry | Radio telemetry | Alerts to cellular phone (AT&T only) | Alerts to website account (any 3G provider) | Radio telemetry | Alerts to cellular phone or website account (AT&T or T-Mobile only) | Alerts to cellular phone or satellite |
| Approx. Dimensions | 7" x 3" x 2" | 11" x 57" x 27" | Depends on camera and mounting system | 9" x 7" x 4" | 2" x 2" x 3" | 6" x 4" x 2" | 8" x 7" x 4" |
| Comments | Works in areas without cellular coverage Only produces a signal when trap is sprung | Works in areas without cellular coverage Water-proof Programmable | Limited by camera capabilities (shutter speed, battery life, capture range, etc.) | Limited by camera capabilities (shutter speed, battery life, capture range, etc.) | Works in areas without cellular coverage | Water-proof Wired and wire-less systems available GPS feature | Satellite option available which will work in any location One unit can monitor activities of multiple traps within 1300-ft radius |