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Remote-Sensing Cameras-- More Than Just a Toy

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VERTON – Using remote cameras to photograph wildlife dates back almost 100 years according to Dr. Billy Higginbotham, Texas Cooperative Extension wildlife specialist at Overton.

“Of course, those models were big, unreliable and needed trip wires to catch animals on film,” he said. “Fast forward to today and most hunters and landowners have at least one remote-sensing camera unit in their hunting arsenal. Recent technology advancements have led to a steady increase in camera availability over the past 20 years. Today, no fewer than 25 manufacturers market 35 mm, digital and video models for hunters and landowners interested in wildlife surveillance.”

Higginbotham said initially the cameras were used only to monitor wildlife movements, feeder frequency visits and game trail travel. Most models recorded the date and time of each photograph. The hunter then had an idea when various species were most active.

A Louisiana study 10 years ago showed the cameras’ true value for collecting important deer population data. Researchers individually collared bucks and does so all could be individually identified. Cameras were then setup on the 10,000 acre research site at a density of 160 acres per camera. Within two weeks, almost every collared deer was captured on film.

Higginbotham said the Louisiana project proved the remote-sensing cameras could successfully be used to find buck-to-doe ratios, doe to fawn ratios and even estimate deer population densities. A bonus was having photographs of most of the deer on the property.

“The camera units can be used pre-season (September-October) or post-season (January-

early February),” said the specialist. “The key is to wait until bucks are out of the velvet in the fall to start the camera count. After the season, the count must end before antler drop begins.

“Cameras should be placed at one per 160 acres on sites pre-baited daily beginning one week in advance. Using 200 or 400 speed film, set cameras to shoot every 15-20 minutes, 24 hours a day. Check them daily to replenish film and fill the feeders. Survey sites don’t have to be at established feeders. A five-pound corn pile on the ground works fine if it’s maintained daily over the two-week trial.”

Higginbotham said those with only one camera and 300 acres can run a two-week trial at one location, then move the camera to another site on the property for another two weeks. He said this gives the same results but doubles the time the cameras are set up in the field.

Once the trial ends, all photographed deer are classified as bucks, does, fawns or unidentifiable. The ratio of bucks to does photographed provides a buck-to-doe ratio. Similarly, the total doe photos compared to fawns provides a doe-to-fawn ratio.

“To make a population estimate, go back and closely re-examine all the buck photos. Use antler and body characteristics, camera location, date and time to identify individual bucks.

“Once that’s done, it should be fairly easy to figure how many bucks are on the property. Then estimate the buck-to-doe and doe-to-fawn ratios to determine a total deer population.

“Many will be dismayed to learn most of their feed is probably being eaten by ‘non-target’ species like feral hogs and raccoons. Equally frustrating is the fact that most buck photos occur at night! However, as often as not, landowners often ‘photo capture’ one or more bucks they had no idea they had. When that’s the case, then one picture is truly worth 1000 words!”