



Micromanaging Your Herd: One Deer at a Time by Chase Currie

Introduction

For most outdoor enthusiasts in Texas, early fall is filled with long, hot days working endlessly to finish up last minute chores in preparation for the upcoming deer season, and if time permits, a few afternoons spent by their favorite waterhole anticipating flights of dove. Between filling feeders, rebuilding old deer blinds, and mowing overgrown roads, deer managers often forget that invaluable data regarding their deer herd could be collected at this time. Thankfully trail cameras enable deer managers to continue their preseason chores while photographic data are collected. The objective of this e-newsletter is to discuss use of trail cameras by deer managers to monitor individual deer.

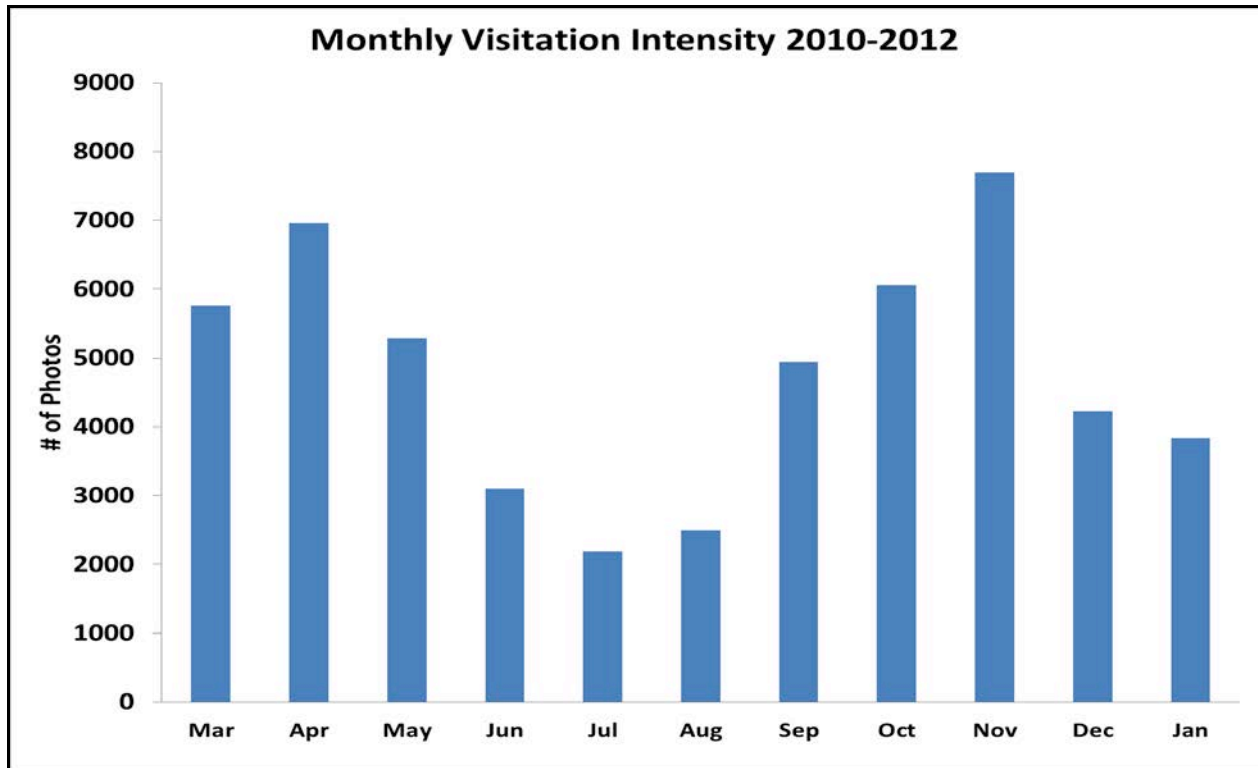
Setting up Cameras

Trail cameras are typically deployed at feed sites where deer congregate, thus increasing the probability of capturing a deer on camera. Cameras can also be deployed at water sources, heavily used trails, or food plots. It is important to face the camera either north or south to avoid a glare in the photos from the sun in early morning or late evening, times when deer activity is high. Cameras should be positioned about 3 feet above the ground on a solid structure 15-20 feet from the site where deer will be photographed. Trail cameras vary in how often they take photos

(30 second, 1 minute, or 5 minute delay). A 30 second or 1 minute delay is best. Remember, it is easy to delete excess photos but you can't delete a photo you never had. Cameras should be deployed at each site for 7-10 days.

Feed site visitation of deer varies seasonally; so when is the best time to deploy your cameras at feed sites for management purposes? There are two periods in which cameras should be used to maximize management efforts. Based on the total number of deer photos captured during a 2-year study in southern Texas, cameras should be deployed at feed sites during early spring (late February-early March) to assess post-rut mortality and antler shedding and during autumn (late September-late October) to make harvest decisions and develop antler/age progressions for individual deer. Deer activity at feed sites peaked in April and November during the study, however most bucks have cast their antlers by April which would eliminate the ability to identify individual bucks at this time, and harvest decisions should be made before November. For example, deer managers who lease their land to hunters or have formed a cooperative management unit can use the photos collected from trail cameras in early autumn to illustrate which deer should or should not be harvested in the upcoming hunting season.

Figure 1. Total number of deer photos captured monthly from March 2010-March 2012 in southern Texas.



Identifying Individual Bucks within a Year and Among Years

As deer age, antlers may change as result of pedicle damage or direct damage to the antler during growth, resulting in an abnormal antler. While hunting, deer managers often have only a few seconds to make a decision on whether or not to harvest a deer. Furthermore, it is difficult to determine whether a deformed antler is genetic based or the result of an injury.

Trail cameras provide deer managers with ample time to uncover fine details that distinguish individual deer from one another. Time at your computer studying photographs of individual deer can be the difference between a good and a poor harvest decision when given only seconds in the field. Characteristics such as scars, torn ears, and facial markings can be used to identify deer from one year to the next using trail cameras regardless of their antler characteristics (Figure 2).

Figure 2. Photos illustrating a unique characteristic of an individual deer from 2010-2012. Note the deer experienced an injury to his left antler in 2010 (top photo) causing an abnormality; this deer was identified in subsequent years (2011-middle photo and 2012-bottom photo) by the small scar below his left ear.





Tracking Antler Changes as a Deer Ages

One of the most important benefits of trail cameras is the ability to follow individual deer from one year to the next (Figure 3). This allows deer managers to assess antler growth each year and determine whether or not a particular deer should be harvested. Furthermore, age progressions can be documented with trail cameras, which give the deer manager a more accurate prediction of an individual deer's age. For example, most deer managers in southern Texas harvest trophy deer at 6-8 years of age; therefore, if a deer can be captured on trail camera at an early age, the deer can be tracked annually until it reaches an age when it can be harvested.

Figure 3. Progression of an individual deer from 2010-2012 using trail cameras. Top left photo was taken in 2010, top right in 2011, and bottom 2 photos were taken in 2012. Deer was aged at 4 years old in 2010.

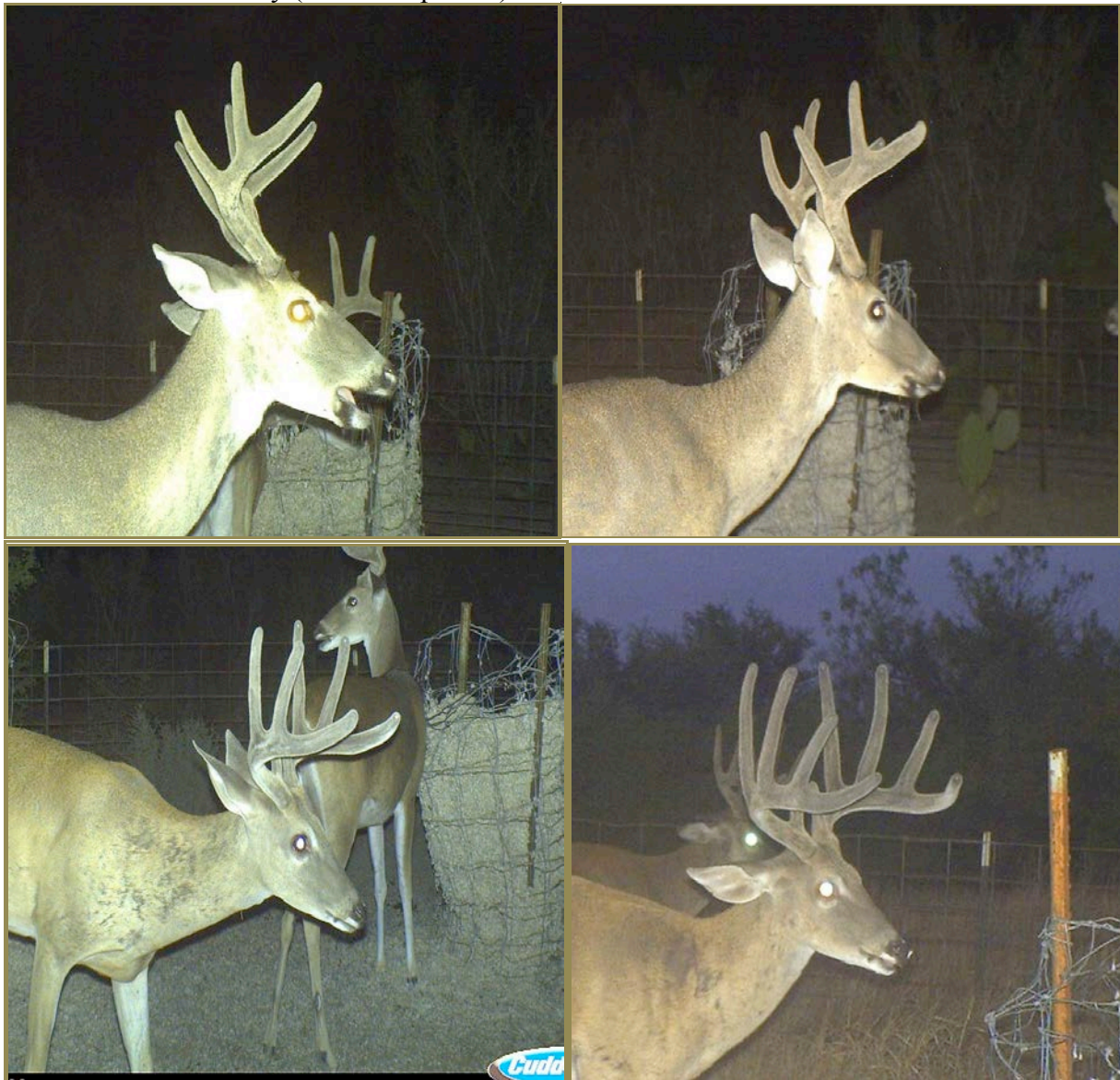


Using Age/Antler Relationships to Make Harvest Decisions

For a deer manager, there is nothing more fascinating than capturing a mature, large-antlered deer on camera. This is Christmas morning in September for deer managers! Even laymen love to see a deer with long tines, sweeping beams, and a wide spread. The decision on whether or not to harvest such a deer is made easier with camera data. However, deer at the other end of spectrum may play an even bigger role in management programs. As a deer manager, it is difficult to make a harvest decision on a young deer. Managers want to harvest cull or management deer before maturity, but don't want to harvest an exceptionally good young deer

on the mistaken belief it was older. With that being said, trail cameras can alleviate the mind numbing decision as to whether not to harvest a young deer simply by comparing photos from one year to the next (Figure 4).

Figure 4. Photos illustrating the antler progression of 2 deer of similar age from 2011 to 2012. Deer A (Top 2 photos) should be harvested in 2012 as a cull deer, whereas Deer B should not be harvested until maturity (Bottom 2 photos).



Assessing Buck Survival Over the Hunting Season

One big advantage of trail cameras is their ability to collect data in the absence of humans. Trail cameras give managers the ability to monitor deer that have an uncanny ability to disappear as a

result of human activity and during the hunting season. Cameras deployed during early spring can be used to assure the deer manager that these “Houdini Bucks” survived the breeding season and could be available for harvest in the upcoming hunting season (Figure 5).

Figure 5. Photos illustrating the same deer captured on trail camera in August 2010 and March 2011 (post-rut). This particular deer was never seen during the hunting season.





Use of Trail Cameras to Increases Effectiveness of Shed Hunting

Deer mangers spend countless hours each spring searching for shed antlers of specific deer. Trail cameras can be used during this time to maximize search efforts of cast antlers. For example, if a particular deer visits a feed site at 12:00 a.m. and then revisits the feed site at 12:45 a.m. with one antler missing, then the antler he cast is probably in close proximity to the feed site (Figure 6). Such information can make shed hunting more efficient.

Figure 6. Trail camera photos illustrating an individual buck who has cast his right antler. The left photo was taken on March 9, 2011 at 11:12 p.m., whereas the right photo was taken the same night at 11:31 p.m. The cast antler was recovered the next morning 150 yards from the feed site.



As indicated above, trail cameras provide deer managers with a cornucopia of options when it comes to monitoring individual deer. The ability to identify individual characteristics of deer, age and antler progressions, post-rut mortality, and antler casting are just a few of the many facets trail cameras provide. Mysteries, such as the sudden appearance of several mature bucks with unusually small antlers, can be addressed with diligent use of trail cameras as occurred in the case of early antler shedding in 2010 (see January 2011 and 2012 editions of the Deer Associates e-newsletter). Finally, trail cameras provide deer managers with unlimited time to study individual deer. For those who spend the time laboring over photographs in the off season, the benefits are far reaching when hunting season arrives. Trail cameras are more than a technologically advanced piece of equipment for photographing deer; they are an invaluable tool that every deer manager should carry in their tool box. When collecting photographic data on your deer herd, the old saying, “A photo is worth a thousand words,” should read, “A photo is worth a thousand words, and no photo is a bad photo.”