Deer populations that are managed throughout Alabama are managed by harvest. Therefore, deer harvest during the hunting seasons will affect population parameters such as density, age structure, sex ratios, and age class. These parameters will be affected at every spatial scale: statewide, regionally, and locally. Also, deer habitat quality and quantity varies widely throughout the state, and these factors – like harvest – will influence deer densities at every spatial scale. Because harvest and habitat have such an effect – positive or negative – on deer populations, harvest data collected via the Deer Management Assistance Program (DMAP) can help managers make sound deer management decisions.

What is DMAP?

DMAP is a comprehensive deer management program that consists of data collection and a cooperative, two-way dialogue between biologists (private or agency) and cooperators (i.e. landowners and hunt clubs) participating in DMAP. This approach is designed to place the cooperator in a position to manage the local deer population – and habitat if possible – to accomplish deer management goals. Clear communication between cooperators and biologists is essential to determine if the goals are realistic and obtainable. Goals usually range from quality deer management to trophy deer management, with specific objectives varying greatly among cooperators.

A biologist will provide cooperators with data sheets (data sheets can be downloaded from an online source) to record biological data from harvested deer. Following each deer hunting season, the harvest data will be submitted to the biologist for analysis. Cooperators will receive a harvest summary report that contains a detailed analysis of the current year’s harvest. Graphs and/or charts showing trends may be included to facilitate data interpretation. Keeping track of data over time to determine trends will help the biologist and cooperator determine progress toward accomplishing desired goals and objectives. Ideally, the biologist will schedule at least one meeting annually with the cooperator to discuss specific harvest strategies and answer questions that will certainly arise. Usually a habitat evaluation will be included in the annual meeting.
Data to Collect

The following information is usually the minimum amount of information required for evaluation and decision-making: deer identification number, harvest date, hunter’s name, harvest location, sex, lactation, weight, age, antler characteristics (number of points, antler spread, beam circumference, and beam length) and comments. Harvest data should be collected carefully from each deer harvested, and cooperators should be consistent in the manner data is collected.

Deer Identification Number

The deer identification number is a number that is assigned to each deer harvested. It can be as simple as 1, 2, 3… Identification numbers should be written on both the data sheet and the tag to be placed on the jawbone. This will allow the biologist to obtain an age from the jawbone and match it with the corresponding data on the data sheet.

Harvest Date

The harvest date is important because it allows biologists and cooperators to determine trends in the deer harvest data.

Hunter’s Name

The name of hunters should be recorded in case a problem or question arises related to the data collected.

Harvest Location

Harvest location information can be useful on properties that are thousands of acres in size, whether the managed area is under single ownership or a deer management cooperative that includes multiple ownerships. Harvest location information can help cooperators determine the distribution of harvest and hunting pressure, and make necessary adjustments to assist in accomplishing deer management goals.

Sex

Although this category is self-explanatory, it is a very important category because much of the data collected is sex specific. Simply record harvested deer as male or female, or buck or doe.

Lactation

Lactation is a term that describes the secretion of milk from the mammary glands and the period of time that a doe lactates to feed fawns. Lactation indicates that a doe gave birth and successfully raised at least one fawn. Documenting lactation rate (percentage of does lactating) is important because it is indicative of the reproductive health of the population being managed. To check for lactation, squeeze the teats and look for the secretion of milk or a yellowish to brownish fluid. If a doe gave birth and weaned a fawn(s) early in the year there may not be evidence of lactation by squeezing the teats. In this case, incise the udder and look for the presence of the yellowish/brownish fluid. Simply mark the data sheet with a “Y” for evidence of lactation and “N” for no evidence.

Weight

Deer weight provides an index of the condition of a population relative to habitat conditions. Changes in body weights over time reflect changes (positively or negatively) in the deer population and/or habitat quality. Dressed weights or live weights can be used; however, for weight data to be useful, cooperators should be consistent with the type of weight used. Weights should be recorded for all deer harvested regardless of sex and age. Quality scales should be used to acquire weights, and they should be checked each year to determine accuracy.

Age

It is very important to determine the age of each deer harvested as age is used to analyze other data such as antler characteristics and body weight. Without age data, the usefulness of the other data collected may be limited. A deer’s age is determined by tooth wear.
and replacement on the lower jawbone. So, at least one of the lower jawbones should be extracted for aging. A tag should be attached to the jawbone that includes a deer identification number that correlates with other information recorded on the data sheet.

**Antler Characteristics**

Improving antler quality is the primary reason for deer management. Therefore, it’s important to track antler characteristics over time to determine if management is positively affecting antler quality. Cooperators should record the total number of points, inside spread, circumference of both main beams, and length of both main beams.

**Comments**

The comments section should be used to record observations related to harvested deer such as injuries (body or antler), presence of parasites, and body condition. Comments related to harvested deer are important and can be used to make management decisions.

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**Rise and Fall of DMAP**

DMAP in Alabama began as a pilot project in 1984 with 10 cooperators throughout the state, and in 1985 the program was made available to all hunt clubs and landowners. The number of cooperators steadily increased to more than 1,500 by 1992, but declined slightly in 1993 when the Alabama Department of Conservation and Natural Resources (ADCNR) initiated a participation fee. However, by 1995, the number of cooperators increased to nearly 1,800. The number of cooperators continued to increase until 1997 at which time the number of cooperators peaked at 2,070. The ADCNR increased the number of either-sex days in most counties beginning with the 1998-1999 gun deer season; consequently, the number of cooperators began to decline. With the progressive expansion of antlerless deer harvest opportunity over the next several years, the number of cooperators plummeted to 148 during the 2009-2010 season. There may be other reasons for the sharp decline, but the liberalized bag limit is considered to be the primary reason. As of the 2011-2012 hunting season, only 64 cooperators representing 164,500 acres participated in DMAP.

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**Conclusion**

I do not understand why a hunt club or landowner who claims to be serious about deer management will not collect harvest data! Yes, collecting harvest data does require work, and for many hunters, the last thing they want to do after a hunt is collect data. **Sound** deer management, however, **requires** data collection, and without data, any management decision will be merely a guess. Why guess? Why not collect the information necessary to make sound and timely decisions regarding the local deer population? Eventually, after implementing a management program, questions about the deer population will certainly arise, and those who have collected real data over time will, without doubt, be more likely to accurately address those questions. Also, DMAP data can provide valuable insight as to what is going on with deer populations regionally and statewide. Biological data collected from 2,070 cooperators (as in 1997) throughout the state will certainly be more useful to the ADCNR to make regional and statewide deer management decisions than information collected from only 64 cooperators (as in 2011-2012). If you are serious about deer management and want to know more about DMAP, contact an ADCNR wildlife biologist near you. Contact information can be found at www.outdooralabama.com.

**Sound deer management, however, requires data collection, and without data, any management decision will be merely a guess.**