



Influence of a Quality Deer Management program on hunter knowledge, perceptions, and satisfaction



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Background

- The white-tailed deer (*Odocoileus virginianus*) is the most recognizable and hunted game species in the United States (USFWS 2011)
- Deer hunters have increasingly expressed interest in Quality Deer Management (QDM) (Collier and Krementz 2006)
- QDM is a management strategy designed to:
 - Increase buck age structure
 - Achieve a balanced sex ratio
 - Maintain deer density within habitat constraints (Brothers and Ray 1975, Miller and Marchinton 1995)

Background

- Hunter harvest data typically guides management goals in a QDM program
- Hunter knowledge, perceptions, and satisfaction concerning QDM can influence harvest levels
- Hunters play a key role in meeting harvest objectives

(Riley et al. 2003, Woods et al. 1996, Enck et al. 2003, Harper et al. 2012)

Hunter Knowledge, Satisfaction, and Perceptions

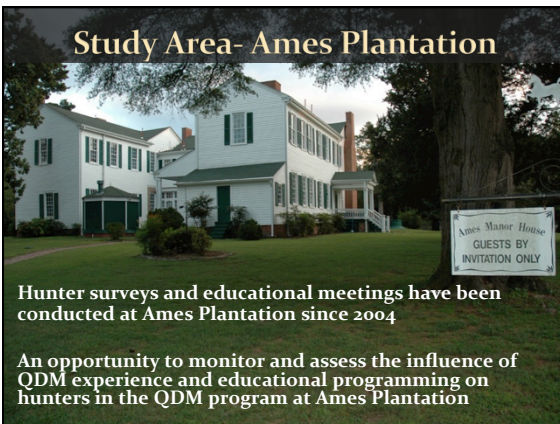
- ❑ Improving hunter knowledge results in more effective management programs
- ❑ Hunter satisfaction has an influence on management strategy
- ❑ Hunter perceptions will influence how well objectives are reached
- ❑ Hunters are influenced by deer management programs

Objective

Determine the influence of experience and educational programming in a QDM program on hunter knowledge, perceptions, and satisfaction concerning deer and deer management

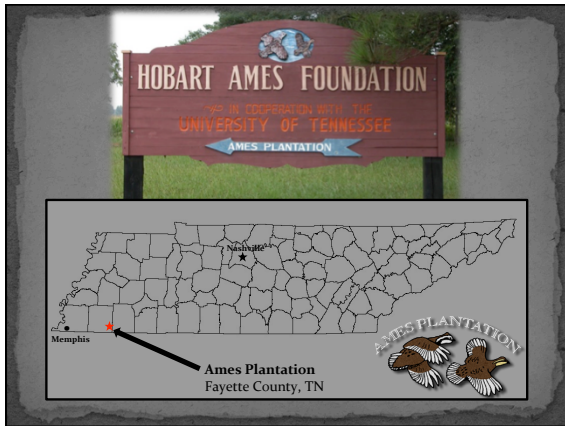


Study Area- Ames Plantation



Hunter surveys and educational meetings have been conducted at Ames Plantation since 2004

An opportunity to monitor and assess the influence of QDM experience and educational programming on hunters in the QDM program at Ames Plantation



Methods

All Ames Plantation Deer Hunting Club members present at the pre-season meeting and banquet were surveyed from 2004-2013

Members completed paper surveys prior to any QDM discussions or educational presentations

532 surveys were completed during the study period

Methods

We divided our survey data into two groups to measure program influence:

New members (137) -first year member	Experienced members (395) -member for 1 or more
-----------------------------------------	----------------------------------------------------

Left photo: A group of people seated at tables in a large room, likely a meeting or banquet. Right photo: A smaller group of people seated at a table, possibly in a different part of the same meeting.

Statistical Analysis

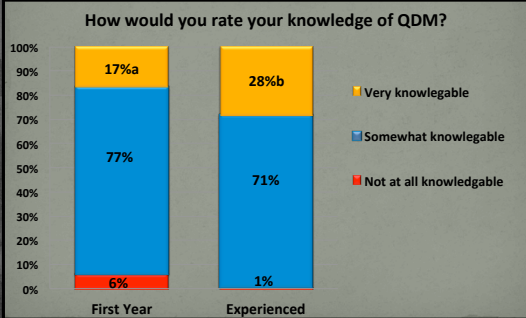
The survey data were analyzed using IBM SPSS 20

We used likelihood ratio (G) with z-tests to compare proportions of responses between new and experienced members

Statistical significance was concluded at $P \leq 0.05$ for all tests

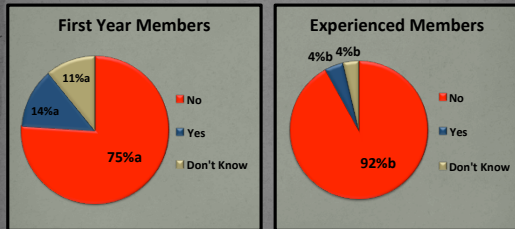


Hunter's Personal Knowledge



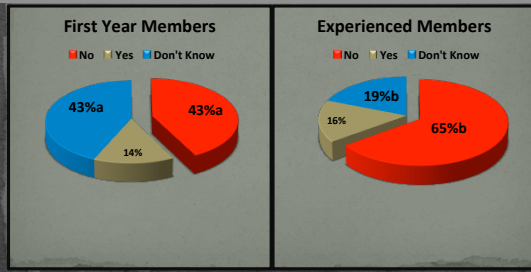
Quality Deer Management vs. Trophy Deer Management

In your opinion, is QDM the same as Trophy Deer Management?



Hunter Perception: Role of Genetics

Do you think genetics is a "problem" for the deer herd on many properties in Tennessee, such as Ames, where QDM guidelines have been put in place?



Herd Management: "Culling" Spikes

Do you think spikes should be killed intentionally (culled) in a QDM program?

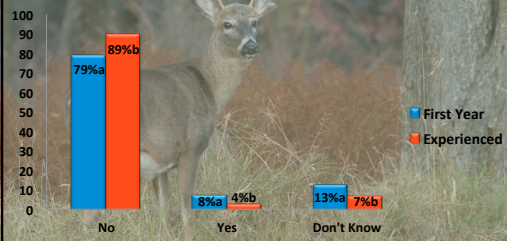


Photo by Chuck Musitano

Herd Management: Antlerless Deer

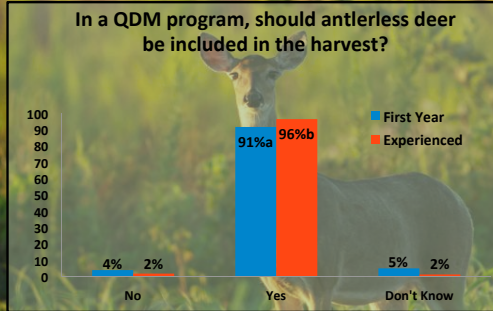


Photo by Steve Creek

Herd Management: Buck Fawns

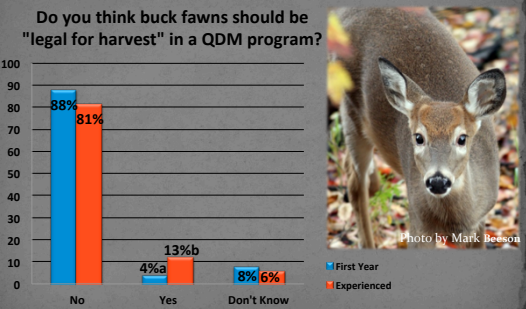


Photo by Mark Benson

Herd Management: Doe Fawns

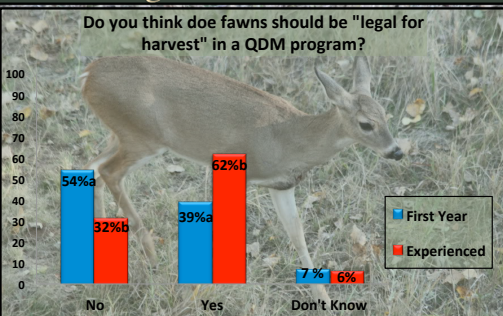
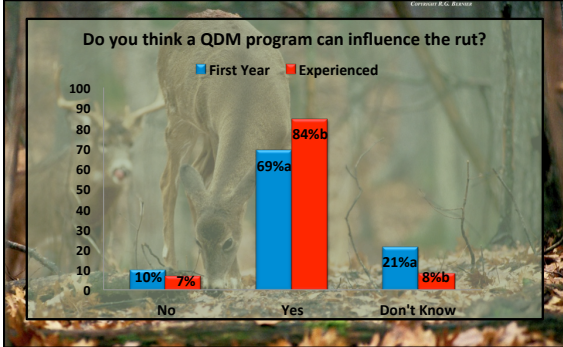
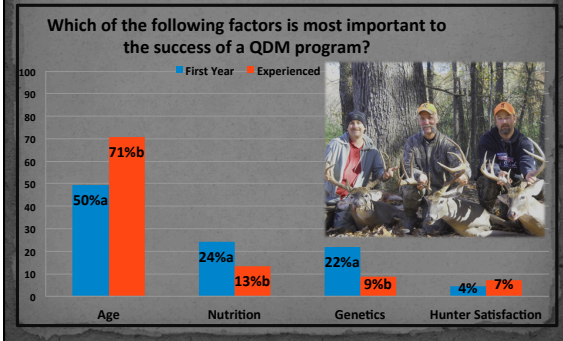


Photo by Fred Up Outdoors

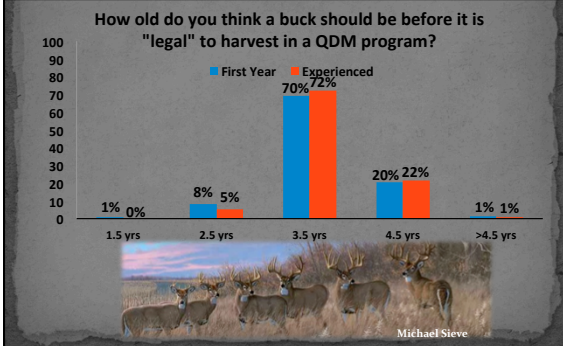
Rut Influence

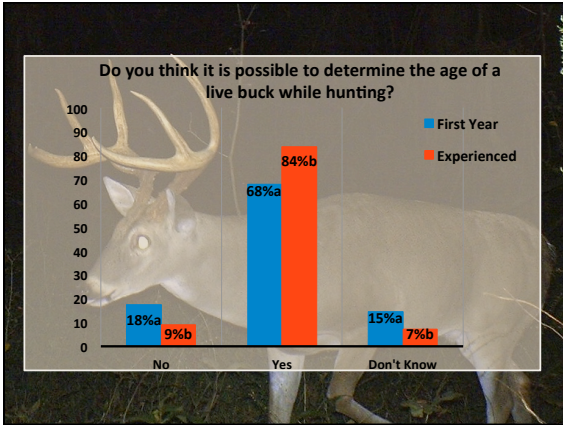


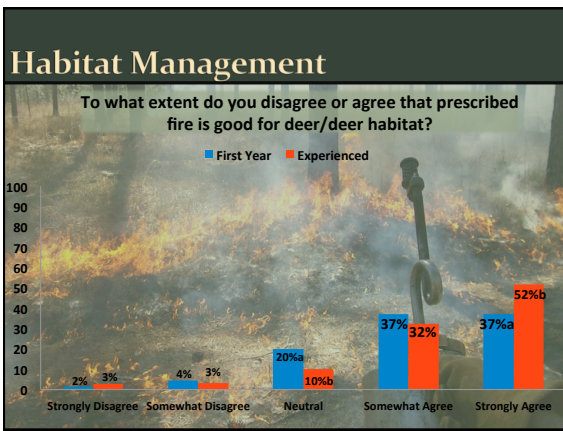
Hunter Perception of QDM Success Factors

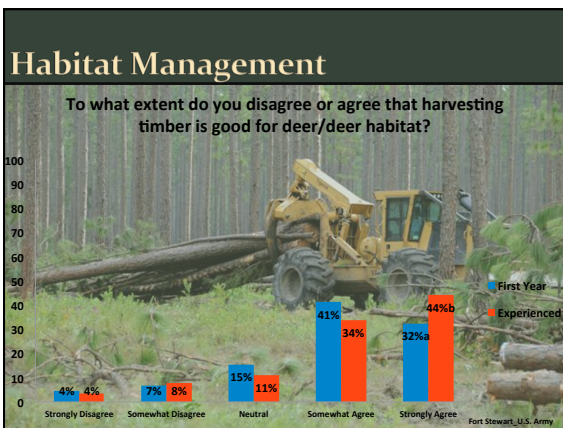


Herd Management: Age

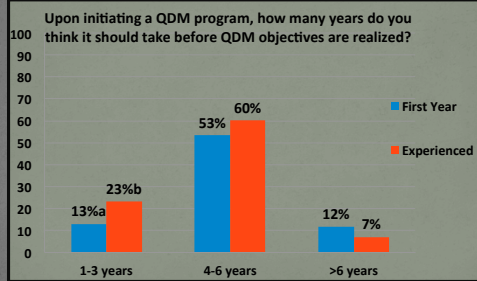




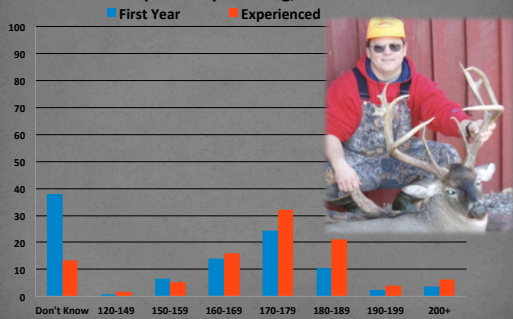




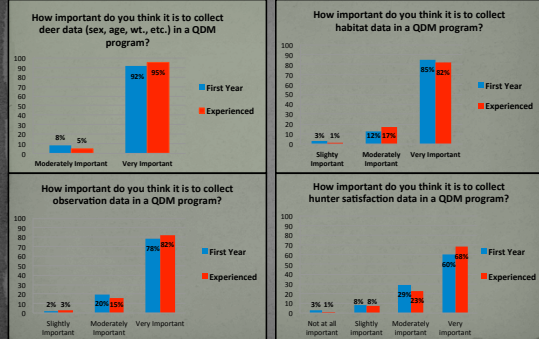
Hunter Perception: QDM Influence



What is the largest gross antler score you think Ames is capable of producing, now or ever?



Data is important



First-Year Members	Experienced Members
1. Hunting on a controlled property	1. Hunting on a controlled property
11. To be with friends 12. Social interaction 13. Venison for food	11. To be with friends 12. Social interaction 13. Venison for food

First-Year Members	Experienced Members
1. Hunting on a controlled property 2. Being a part of a hunting group with a shared management objective 3. Challenge of the hunt 4. Experience nature 5. Antler size/characteristics 6. A place to hunt 7. Hunting under management guidelines 8. Overall deer sightings 9. Opportunity to manage a deer herd 10. Solitude 11. To be with friends 12. Social interaction 13. Venison for food	1. Hunting on a controlled property 2. Challenge of the hunt 3. Experiencing nature 4. A place to hunt 5. Solitude 6. Being part of a hunting group with shared management objectives 7. Antler size/characteristics 8. Overall deer sightings 9. Hunting under management guidelines 10. Opportunity to manage a deer herd 11. To be with friends 12. Social interaction 13. Venison for food

Implications of Results

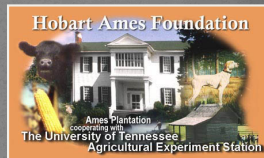
- Our study clearly shows that hunters are able to grasp and absorb science-based information when it is presented to them
- State wildlife agencies should make their biologists more accessible to private clubs
- Insert a QDM module into hunter education courses

Implications of Results

- Survey hunters to learn their deficiencies in knowledge of deer biology and management
- Address areas where increased knowledge and understanding is needed
- Hold annual field seminars and workshop events to increase understanding and provide scientific support for deer management regulations

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