

# The Cooperative Difference

By Anna Mitterling

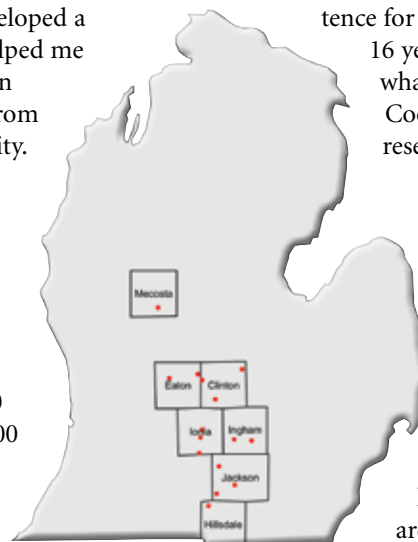


Researchers studied 16 QDM Cooperatives in Michigan and found hunters who were *knowledgeable*, *more connected* with their neighbors, and more satisfied with deer hunting.

In Southern Michigan, numbers of QDM Cooperatives have been on the rise for the last decade. QDM Cooperatives consist of multiple tracts of private land that are managed cooperatively by a group of individuals to produce better deer hunting and healthier deer herds. While the group makes management decisions, the landowners retain legal rights over their individual properties.

According to QDMA, there are more than 50 established QDM Cooperatives in Michigan. I decided to find out how these Cooperatives work, whether deer management is significantly changed by Cooperatives, and whether participation positively affects hunting satisfaction for

those involved, so I developed a research project that helped me earn a Master's degree in Fisheries and Wildlife from Michigan State University. I surveyed nearly 350 members of 16 QDM Cooperatives in south central Michigan (their locations are shown as red dots in the map at right). They range in size from 2,500 to 9,000 acres, and from 25 to 300 members. The newest Cooperative I studied had been in exis-



tence for three years, the oldest for 16 years. This article shares what I learned about QDM Cooperatives through my research.

## What Is a QDM Cooperative?

First, a little more about how Cooperatives function. By joining a QDM Cooperative, members gain the advantages of a larger land-base on which they are able to coordinate man-





Members of the East Olive QDM Cooperative in Michigan posed for a group photo recently to show off their success. This group was one of 16 in the state surveyed for a Michigan State University study of QDM Cooperatives. The red dots on the map below show the general locations and counties of the 16 Cooperatives.

agement and deer harvest strategies based on group objectives, ultimately producing benefits for the entire group that likely could not have been achieved by working separately. Cooperative objectives vary somewhat based on location, deer densities and habitat types; they variously address antler points, deer age, and doe harvest goals.

To aid in developing and meeting shared management goals, membership meetings are typically held once or twice a year. Arrangements often are made to have guest speakers at meetings to talk about deer management, habitat management, or data collection. Often, there are prizes and raffles, buck and doe harvest contests,

sharing of venison dinners, and social time set aside to chat with fellow Cooperative members. While the structure of these meetings varies among Cooperatives, their intent is to support coordination of efforts to improve deer hunting in the area.

QDMA plays a significant role in many of these Cooperatives' management decisions and conversations. Of the members I surveyed, 34 percent of them said they were QDMA members. As of January, Michigan was the No. 2 state in overall QDMA membership, behind Louisiana by about 500 members.

### Cooperative Member Harvest Behaviors

I asked Cooperative members to indicate their buck harvest standards before they joined the Cooperative, as well as their current buck harvest standards as a Cooperative member.

The options for describing their individual buck harvest standards included the number of antler points, the estimated gross score of the antlers, and also the estimated age of the buck. The table below shows the changes in average harvest standards before and after joining a QDM

Buck Harvest Standard	Before	After
Antler Points	6.9	7.8
Antler Score (inches)	110	124
Age of Buck (years)	2.4	3.1

Cooperative.

We were looking to see if there were changes in how hunters were hunting as a result of Cooperative membership, and there certainly were. We found that 58 percent of those surveyed changed their harvest standard as a result of joining a cooperative. In fact, 51 percent of members indicated having no buck harvest standard at all before joining a Cooperative.

The primary goal of many of these Cooperatives is improving the doe:buck ratio. This is primarily achieved by harvesting more does than bucks. According to DNR deer harvest reports, in 2010 and 2011, statewide doe:buck harvest ratios were close to 1:1. However, QDM Cooperatives in my study reported their doe:buck harvest ratios are more than 2:1 (over two does killed for every buck), as

Doe: Buck Harvest Ratio	2010	2011
Bucks	262	181
Does	596	398
Doe:Buck Ratio	2.4:1	2.2:1

seen in the table below.

Another goal of many Cooperatives is to decrease the number of yearling bucks that are harvested to create a more diverse buck age structure. Again, the table below breaks down the percentage of each age class that was harvested over the two years

Cooperative Buck Harvest by Age Class				
Fawn	1½	2½	3½	4½-plus
2%	13%	42%	34%	9%

of my study.

### Cooperative Member Satisfaction

Satisfaction is an important aspect of wildlife management. If hunters are satisfied with their hunting experiences, they are more likely to continue to hunt.

Overall satisfaction was measured in this study, and **overall satisfaction levels rose from 44 percent satisfaction before cooperative membership to 75 percent satisfaction after membership!** Michigan DNR surveys of deer hunters in southern lower Michigan revealed 46 percent satisfaction by comparison. More details are

Satisfaction, 1 (Not Satisfied) to 5 (Very Satisfied)	
Overall Satisfaction	4.4
Satisfaction Before	3.5
Satisfaction After	4.3
Harvest Satisfaction	4.1
Habitat Satisfaction	4.0
Knowledge Satisfaction	4.3

shown in the table below.

I measured agreement among Cooperative members about management practices. Cooperative members were asked to rank on a scale of 1 (no agreement) to 5 (strongly agree) how strongly they agreed or disagreed with a statement. For harvest management, for example, the statement was worded as following: "There is agreement in my Cooperative about harvest management practices." Agreement was high in all areas including importance of deer hunting (4.8), habitat management agreement (3.9), harvest management agreement (4.0), agreement on doe harvest (4.3), as well as agreement on passing young bucks (4.3).

I also asked Cooperative members how well they felt they fit with their Cooperative. "Fit" was calculated by taking the mean of the responses to the following statements. Members indicated on a scale

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### Details About the 16 QDM Cooperatives Studied

Membership*	Year Started	Acres
90 (20)	2008	4,900
35 (25)	2009	5,500
90 (40)	1999	9,134
300 (75)	2005	5,000
116 (80)	2006	8,000
50 (10)	2009	5,000
250 (23)	2005	7,500
100 (35)	2009	9,000
50 (45)	2006	2,500
55 (35)	2004	2,500
116 (23)	1997	7,000
72 (6)	2008	5,000
40 (20)	2008	3,500
50 (30)	2010	4,000
25 (10)	2005	5,000
35 (20)	2009	2,500

\* First number includes entire membership list, while estimated numbers of regular meeting attendees are shown in parenthesis.

2010 and comparing them to 2011, we were able to run statistical analysis on the influence the friends of an individual had on the individual's harvest. We were able to find that within the period of one year, harvest behavior did change as a result of their friends' harvest behaviors. In other words, Cooperative members tended to change their behaviors to match those of their friends. For example, if the group harvested fewer does than an individual member one year, that individual took fewer does the next year.

### What Changes Were Seen?

Studying QDM Cooperatives, I witnessed many benefits. The social interactions, camaraderie, sharing of hunting stories, and hardy discussions were of greatest note to me. In a world where the culture of hunting is under scrutiny, it is crucial that we come together and stay connected. The deer management changes that occurred were made possible because of the social interactions within these groups.

This results of my study showed one primary thing: QDM Cooperatives

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of 1 (no agreement) to 5 (strongly agree).

- 1) I fit in well with my Cooperative.
- 2) My Cooperative has affected the way I see myself as a deer hunter.
- 3) My opinions on deer management matter to other members of my Cooperative.
- 4) Other members of my Cooperative have similar interests to me.
- 5) Other members of my Cooperative have values similar to mine.

The average level of "fit" was 4.1 out of 5. Fit was also found to be strongly correlated with satisfaction levels. Those who had high levels of satisfaction with their Cooperative experience also felt like they fit within the Cooperative.

### Member Influence on Behavior

The other part of my study looked at how the hunting behaviors of those with whom individuals hunt affect the individual's own hunting behavior. To gather this information, we asked members to list up to five individuals with whom they interact socially outside of deer hunting. We found that Cooperative members tended to be friends outside of times when they were hunting, and there were higher levels of influence compared to those they seek deer hunting information from. We were then able to map out these interactions and pair them up with the deer-harvest behaviors of each of the individuals. Essentially, we mapped out a "social network" for each Cooperatives.

Taking the doe harvest behaviors in



### About This Article

This article was published in *Quality Whitetails* magazine, the journal of the nonprofit Quality Deer Management Association (QDMA). To become a QDMA member and receive *Quality Whitetails* six times a year, or to learn more about deer and habitat management, visit:

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are influencing the deer management choices of members. Most hunters in a Cooperative will make doe harvest decisions based on what friends in the Cooperative are doing. Also, Cooperative members are increasing their harvest standards for bucks.

These accomplishments are something to be proud of and are indicative of something different coming for deer management in Michigan.

### **Advice for Cooperative Leaders?**

Education is important. Hunters

need to know why different management choices are desirable and what benefits can be achieved through QDM. But relationships are what open ears. The Cooperatives that focused primarily on *social* engagement had better attendance and seemed to do well at engaging in conversations about deer management and Cooperative goals.

Every Cooperative leader I interviewed shared one thing in common (other than a passion for deer hunting), and that was they all wished for more time and more support to help make the Cooperative the way they envisioned. If you are thinking

about starting a QDM Cooperative, don't take all the work on your shoulders. First, recruit other dedicated and motivated people to form a leadership team who will share the workload and help you hit the ground running. Leaders need help with organization, communication and outreach.

The best "outreach specialist" is often an individual who grew up in the neighborhood. Every successful Cooperative has one or two people who know the territory and the people in the area better than anyone else. If these individuals are brought into the leadership team, they are able to fuel the growth of the Cooperative with more prospective members and acreage.

Organization and communication are essential to maintaining your group of hunters. The groups that handle logistics as well as maintain good records regarding progress have something tangible to communicate during meetings. Communication at meetings, in the off-season (by e-mail or printed newsletter), and during the season allows the group to understand and make informed decisions about their harvest choices and stay on track to attain the Cooperative's goals.

### **Why are QDM Cooperatives Important?**


At a time where hunting is under scrutiny, wildlife agencies are short on funds, and demand for information is at an all-time high, it is extremely important to have local groups of educated hunters advocating for our wildlife resources. Groups like QDM Cooperatives are vital to maintaining advocacy groups, informed citizens, and active participants in a very special tradition.

Because of the close connections among the Cooperative leaders in Michigan, and continued growth in Cooperative participation, Michigan's QDMA Branches and the QDMA State Advisory Council have been able to significantly increase their efforts to share the benefits of protecting young bucks and work with the state agency to change deer management in Michigan.

During recent EHD outbreaks in Michigan, QDM Cooperatives were instrumental in working with the state agency to share information concerning deer deaths, as well as disseminate information from the agency back to hunters about the disease outbreak. Having community leaders who are connected with the state wildlife



agency and stay informed on various wildlife issues (regulations, disease, political conflicts, etc.) creates a communication bridge superior to that of traditional communication.

In short, QDM Cooperatives improve deer management, increase hunter satisfaction, and provide an avenue for better education and communication. When QDM Cooperative members feel they fit with the group, hunting behaviors can be changed to incorporate the needs of the deer population and local habitat needs. Within these social networks, information spreads quickly, and grassroots advocacy for sound deer management is more effective. QDM Cooperatives may be the key to a successful future for deer hunting in Michigan and throughout the whitetail's range. 

**About the Author:** Anna Mitterling of Lansing, Michigan, is a QDMA member, a recent Michigan State University graduate with a master's of science degree in Fisheries and Wildlife, and she is an avid deer and turkey hunter. This article is based on her thesis research on the social dynamics of QDM Cooperatives in Southern Michigan. Anna's research adviser was Dr. Daniel Kramer.

## QDM Cooperatives: Great for Wildlife Agencies Too

QDM Cooperatives continue to pop up in Michigan, and they represent an opportunity for hunters and DNR to learn from each other. In December, QDMA member Ken Kozminski hosted a third annual deer check station at his property in Sodus, Michigan, which is part of the 3,000-acre, 36-member Pipestone Creek QDM Cooperative. Biologist Steve Chadwick, Southwest Region Supervisor for Michigan DNR, was invited to age deer and gather harvest data (the photo below shows some of the jawbones and antlers brought to the event by Cooperative members). Over time the data collected will aid the Pipestone Creek Cooperative in



achieving its goals, and Steve is able to use the data for his work as well – especially since budget cuts have reduced the number of official deer check stations in the area. After Steve finished aging and measuring deer, an open discussion period followed, allowing Steve to respond to many of the members' concerns about EHD, crop damage and future changes in deer hunting regulations.



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